



The 3rd National and 2nd International Conference on Education 2022
การประชุมวิชาการระดับชาติ ครั้งที่ 3 และนานาชาติ ครั้งที่ 2

Teachers Competency Building to the New Normal Future

การสร้างสมรรถนะครู สู่อนาคตในยุคปกติใหม่

รวมบทความและบทคัดย่อ

E-PROCEEDINGS

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เล่ม 6 นำเสนอรระดับนานาชาติ

หอประชุมมหาธีรราชกุมาร



จัดโดย คณะครุศาสตร์ ร่วมกับบัณฑิตวิทยาลัย
และสถาบันวิจัยและพัฒนา มหาวิทยาลัยราชภัฏสกลนคร



รายงานสืบเนื่อง

การประชุมวิชาการและนำเสนอผลงานวิจัย
ระดับชาติ ครั้งที่ 3 และนานาชาติ ครั้งที่ 2

“การสร้างสมรรถนะครูสู่นาคตในยุคปกติใหม่”
“Teachers Competency Building to the New Normal Future”

วันที่ 25 กุมภาพันธ์ พ.ศ. 2565 ณ หอประชุมมหาชิราลงกรณ
จัดโดย คณะครุศาสตร์ บัณฑิตวิทยาลัย สถาบันวิจัยและพัฒนา
มหาวิทยาลัยราชภัฏสกลนคร





คำนำ

มหาวิทยาลัยราชภัฏสกลนคร โดย คณะครุศาสตร์ บัณฑิตวิทยาลัย สถาบันวิจัยและพัฒนา มีความภูมิใจและยินดีเป็นอย่างยิ่ง ที่ได้มีส่วนร่วมในการสร้างสังคมแห่งการเรียนรู้ โดยจัดเวทีให้นักศึกษา บุคลากรของมหาวิทยาลัย นักวิจัย ทั้งในและต่างประเทศ รวมถึงผู้สนใจทุกท่าน ได้นำผลงานสร้างสรรค์ด้านการวิจัย มาเผยแพร่และนำเสนองานวิจัยไปใช้ประโยชน์ รวมถึงการสนับสนุนและสร้างเครือข่ายความร่วมมือ ด้านการวิจัยกับหน่วยงานภายในและภายนอกมหาวิทยาลัย และเพื่อเป็นการตอบสนองต่อพันธกิจดังกล่าว มหาวิทยาลัยราชภัฏสกลนคร โดย คณะครุศาสตร์ บัณฑิตวิทยาลัย สถาบันวิจัยและพัฒนา จึงได้จัดประชุมวิชาการและนำเสนอผลงานวิจัยระดับชาติ ในหัวข้อ “การสร้างสมรรถนะครูสู่อนาคตในยุคปกติใหม่” “Teachers Competency Building to the New Normal Future” ในวันที่ 25 กุมภาพันธ์ พ.ศ. 2565 นี้ขึ้น

ในการจัดการประชุมวิชาการครั้งนี้ เป็นการจัดการประชุมวิชาการระดับชาติ ครั้งที่ 3 และเป็นการจัดการประชุมวิชาการระดับนานาชาติ ครั้งที่ 2 ซึ่งได้รับการตอบรับเป็นอย่างดี จากบุคลากรทางการศึกษา นักวิชาการ นักวิจัย และนักศึกษาในระดับอุดมศึกษา ดังปรากฏเป็นผลงานวิจัยในเล่ม

การดำเนินงานจะประสบความสำเร็จได้ หากปราศจากความร่วมมือจากบุคลากรทุกฝ่ายที่เกี่ยวข้อง ซึ่งมาจากหน่วยงานภายในของมหาวิทยาลัยราชภัฏสกลนคร ทั้ง คณะครุศาสตร์ บัณฑิตวิทยาลัย สถาบันวิจัยและพัฒนา สถาบันภาษา ศิลปะและวัฒนธรรม สำนักวิทยบริการและเทคโนโลยีสารสนเทศ งานประชาสัมพันธ์และโสตทัศนูปกรณ์ และงานอาคารสถานที่ รวมถึงฝ่ายต่าง ๆ ที่ไม่ได้กล่าวไว้ ณ ที่นี้ จึงขอขอบคุณเป็นอย่างสูงในความร่วมมือของทุกฝ่าย ทั้งในส่วนผู้จัดงานประชุมวิชาการและผู้เข้าร่วมงานที่ได้เสียสละกำลังกาย ความคิด เวลา และทรัพยากรต่าง ๆ เพื่อการส่งเสริมพัฒนาการศึกษาของชาติ ด้วยความตระหนักในความสำคัญของการวิจัย และร่วมเป็นส่วนหนึ่งของการสรรค์สร้างสังคมให้เป็นสังคมแห่งการเรียนรู้ในรูปแบบการเรียนรู้วิถีใหม่ (New Normal)

มหาวิทยาลัยราชภัฏสกลนคร หวังเป็นอย่างยิ่งว่า ประมวลบทความวิจัย สืบเนื่องจากการนำเสนอผลงานวิจัยระดับชาติ ในหัวข้อ “การสร้างสมรรถนะครูสู่อนาคตในยุคปกติใหม่” เล่มนี้ จะเป็นส่วนหนึ่งของการพัฒนาความก้าวหน้าในองค์ความรู้ทางการศึกษา รวมทั้งเป็นประโยชน์แก่การศึกษาของผู้ที่สนใจได้ตามสมควรสืบไป

คณะครุศาสตร์ บัณฑิตวิทยาลัย สถาบันวิจัยและพัฒนา
มหาวิทยาลัยราชภัฏสกลนคร





สารจาก

คณบดีคณะครุศาสตร์ ผู้อำนวยการบัณฑิตวิทยาลัย ผู้อำนวยการสถาบันวิจัยและพัฒนา

มหาวิทยาลัยราชภัฏสกลนคร โดย คณะครุศาสตร์ บัณฑิตวิทยาลัย สถาบันวิจัยและพัฒนา ได้จัดการประชุมวิชาการและนำเสนอผลงานวิจัยระดับชาติ ครั้งที่ 3 และระดับนานาชาติ ครั้งที่ 2 ในหัวข้อ “การสร้างสมรรถนะครูสู่อนาคตในยุคปกติใหม่” “Teachers Competency Building to the New Normal Future” ในวันที่ 25 กุมภาพันธ์ พ.ศ. 2565 ณ หอประชุมมหาวิทยาลัยราชภัฏสกลนคร โดยมีวัตถุประสงค์เพื่อนำเสนอผลงานวิจัยและผลงานวิชาการของคณาจารย์ นักวิจัย นักวิชาการ ครูและบุคลากรทางการศึกษา รวมถึง นักศึกษา นอกจากนี้ ยังเป็นเวทีแลกเปลี่ยนเรียนรู้และประสบการณ์ทางการวิจัยและสร้างเครือข่ายความร่วมมือทางวิชาการ ตลอดจนพัฒนางานวิจัยไปสู่ชุมชนและสังคมต่อไป

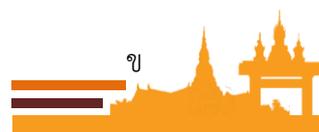
มหาวิทยาลัยราชภัฏสกลนคร ขอขอบพระคุณ ผู้ช่วยศาสตราจารย์ชาคริต ชาญชิตปรีชา รักษาการแทนอธิการบดีมหาวิทยาลัยราชภัฏสกลนคร ที่ได้ให้เกียรติมาเป็นประธานในพิธีเปิดการประชุมวิชาการ ในหัวข้อ “การสร้างสมรรถนะครูสู่อนาคตในยุคปกติใหม่” รวมถึงผู้ทรงคุณวุฒิ ทั้งจากคนไทยและต่างประเทศทั้ง 3 ท่าน คือ รองศาสตราจารย์ ดร.ทศนา แคมมณี, Dr. Wang Yanyan Kunming Medical University Yunnan China, Prof. Dr. Dwi Sulisworo Ahmad Dahlan University ที่ได้ให้เกียรติมาบรรยายพิเศษในหัวข้อ “การสร้างสมรรถนะครูสู่อนาคตในยุคปกติใหม่” ซึ่งเป็นการจุดประกายความคิดใหม่ ๆ ให้กับผู้เข้าร่วมการประชุมในครั้งนี้ ได้ตระหนักถึงการจัดการศึกษาในสถานการณ์ปัจจุบัน ให้มีคุณภาพเหมาะสมตามแนววิถีใหม่ (New Normal) มากที่สุด และขอขอบคุณท่านผู้ทรงคุณวุฒิที่ให้ความกรุณาพิจารณาและประเมินบทความที่นำเสนอในการประชุมทางวิชาการให้มีคุณภาพ

หวังเป็นอย่างยิ่งว่า การจัดการประชุมในครั้งนี้จะเป็นประโยชน์ต่อทุกท่านที่เข้าร่วมการประชุมวิชาการในการนำองค์ความรู้และประสบการณ์ที่ได้รับ ไปประยุกต์ใช้ให้เกิดประโยชน์ต่อตนเอง สถาบัน และสังคมต่อไป ขอขอบคุณ คณาจารย์ นักศึกษา และบุคลากรทุกฝ่ายที่มีส่วนร่วมในการวางแผนและดำเนินการจัดงานในครั้งนี้ด้วยดี ทำให้การจัดการประชุมวิชาการและการนำเสนอผลงานวิจัยครั้งนี้ดำเนินการด้วยความเรียบร้อยและบรรลุวัตถุประสงค์ทุกประการ

(รศ.ดร.ศิกานต์ เพียรธัญญกรณ์)
ผู้อำนวยการบัณฑิตวิทยาลัย
มหาวิทยาลัยราชภัฏสกลนคร

(รศ.ดร.ไชยา ภาวะบุตร)
คณบดีคณะครุศาสตร์
มหาวิทยาลัยราชภัฏสกลนคร

(รศ.วาสนา เกษมสินธ์)
ผู้อำนวยการสถาบันวิจัยและพัฒนา
มหาวิทยาลัยราชภัฏสกลนคร





ผู้จัดทำรวมบทความวิจัยจากการประชุมวิชาการและนำเสนอผลงานวิจัยระดับชาติ
“การสร้างสมรรถนะครูสู่อนาคตในยุคปกติใหม่”

“Teachers Competency Building to the New Normal Future”

วันที่ 25 กุมภาพันธ์ พ.ศ. 2565 ณ หอประชุมมหาวิทยาลัยราชภัฏสกลนคร

ที่ปรึกษา

อธิการบดีมหาวิทยาลัยราชภัฏสกลนคร
รองอธิการบดีฝ่ายวิจัยและนวัตกรรม

บรรณาธิการ

ผู้ช่วยศาสตราจารย์ ดร.ภัทรดร จันวันดี

ผู้ช่วยบรรณาธิการ

บุคลากรบัณฑิตวิทยาลัย บุคลากรคณะครุศาสตร์ บุคลากรสถาบันวิจัยและพัฒนา

กองบรรณาธิการ

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รองศาสตราจารย์ ดร.จิณณวัตร ปะโคทั้ง

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อาจารย์ ดร.ธีระ ภูดี

คณบดีคณะครุศาสตร์

ผู้อำนวยการบัณฑิตวิทยาลัย

ผู้อำนวยการสถาบันวิจัยและพัฒนา

ประธานหลักสูตรปรัชญาดุษฎีบัณฑิต

สาขาวิชาวิจัยหลักสูตรและการสอน

อาจารย์ประจำหลักสูตรครุศาสตรดุษฎีบัณฑิต

สาขาวิชาการบริหารการศึกษา

ผู้ช่วยอธิการบดีฝ่ายภาษาและวิเทศสัมพันธ์

อาจารย์ประจำสาขาวิชาภาษาต่างประเทศ

คณะมนุษยศาสตร์และสังคมศาสตร์

มหาวิทยาลัยราชภัฏศรีสะเกษ

มหาวิทยาลัยราชภัฏศรีสะเกษ

มหาวิทยาลัยราชภัฏนครสวรรค์

มหาวิทยาลัยราชภัฏมหาสารคาม

มหาวิทยาลัยกาฬสินธุ์

เจ้าของ

คณะครุศาสตร์ บัณฑิตวิทยาลัย สถาบันวิจัยและพัฒนา มหาวิทยาลัยราชภัฏสกลนคร

ออกแบบปก

นายบุญเกื้อ ครุฑคำ

สำนักงานกองบรรณาธิการ

คณะครุศาสตร์ มหาวิทยาลัยราชภัฏสกลนคร

เลขที่ 680 ถนนสกลนคร-อุดรธานี ตำบลธาตุเชิงชุม อำเภอเมือง จังหวัดสกลนคร 47000

โทรศัพท์ 042-970026 โทรสาร 042-743793 เว็บไซต์ <https://edu.snru.ac.th/>

หมายเหตุ: ทัศนะ แนวคิด และข้อความที่นำเสนอในบทความของเอกสารสืบเนื่องจากการประชุมนี้
เป็นความรับผิดชอบของผู้เขียน





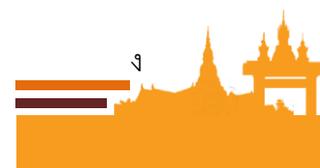
คณะกรรมการพิจารณาบทความวิจัย (ระดับชาติ)

ผู้ทรงคุณวุฒิภายนอก

- | | |
|---|----------------------------------|
| 1. รองศาสตราจารย์ ดร.กนกอร สมปราษฎ์ | มหาวิทยาลัยขอนแก่น |
| 2. รองศาสตราจารย์ ดร.จิณณวัตร ปะโคทั้ง | มหาวิทยาลัยราชภัฏอุบลราชธานี |
| 3. รองศาสตราจารย์ ดร.อุดมพันธ์ พิษณุประเสริฐ | มหาวิทยาลัยราชภัฏศรีสะเกษ |
| 4. ผู้ช่วยศาสตราจารย์ ดร.ชยากานต์ เรืองสุวรรณ | มหาวิทยาลัยราชภัฏมหาสารคาม |
| 5. ผู้ช่วยศาสตราจารย์ ดร.รชฎ สุวรรณภูมิ | มหาวิทยาลัยนครพนม |
| 6. ผู้ช่วยศาสตราจารย์ ดร.สาธิต ทรัพย์รวงทอง | มหาวิทยาลัยราชภัฏนครสวรรค์ |
| 7. ผู้ช่วยศาสตราจารย์ ดร.ปณิธาน วรรณวัลย์ | มหาวิทยาลัยราชภัฏชัยภูมิ |
| 8. ผู้ช่วยศาสตราจารย์ ดร.ประยุทธ์ ชูสอน | มหาวิทยาลัยภาคตะวันออกเฉียงเหนือ |
| 9. ผู้ช่วยศาสตราจารย์ ดร.กุหลาบ ปุริสาร | วิทยาลัยบัณฑิตเอเชีย |
| 10. ผู้ช่วยศาสตราจารย์ ดร.ปนัดดา ญวนกระโทก | มหาวิทยาลัยขอนแก่น |
| 11. ผู้ช่วยศาสตราจารย์ ดร.วายุ กาญจนศรี | มหาวิทยาลัยขอนแก่น |
| 12. อาจารย์ ดร.มาริยา เถาอินปาก | มหาวิทยาลัยราชภัฏเลย |
| 13. อาจารย์ ดร.อัจฉราพรรณ กันสุขะ | มหาวิทยาลัยราชภัฏพระนครศรีอยุธยา |
| 14. อาจารย์ ดร.กัญญาวดี แสงงาม | มหาวิทยาลัยราชภัฏร้อยเอ็ด |
| 15. อาจารย์ ดร.ธีระ ภูดี | มหาวิทยาลัยกาฬสินธุ์ |

ผู้ทรงคุณวุฒิภายใน

- | | |
|---|-------------------------|
| 1. รองศาสตราจารย์ ดร.ไชยา ภาวะบุตร | มหาวิทยาลัยราชภัฏสกลนคร |
| 2. รองศาสตราจารย์ ดร.ศิกานต์ เพียรธัญญกรณ์ | มหาวิทยาลัยราชภัฏสกลนคร |
| 3. รองศาสตราจารย์ ดร.ธนาพันธ์ กุลไพบุตร | มหาวิทยาลัยราชภัฏสกลนคร |
| 4. รองศาสตราจารย์ ดร.สำราญ กำจัดภัย | มหาวิทยาลัยราชภัฏสกลนคร |
| 5. รองศาสตราจารย์ ดร.สายัณต์ บุญใบ | มหาวิทยาลัยราชภัฏสกลนคร |
| 6. รองศาสตราจารย์ ดร.ธวัชชัย ไพไพหล | มหาวิทยาลัยราชภัฏสกลนคร |
| 7. รองศาสตราจารย์ วาสนา เกษมสินธ์ | มหาวิทยาลัยราชภัฏสกลนคร |
| 8. ผู้ช่วยศาสตราจารย์ ดร.วัฒนา สุวรรณไตรย์ | มหาวิทยาลัยราชภัฏสกลนคร |
| 9. ผู้ช่วยศาสตราจารย์ ดร.เพลินพิศ ธรรมรัตน์ | มหาวิทยาลัยราชภัฏสกลนคร |
| 10. ผู้ช่วยศาสตราจารย์ ดร.ภัทรดร จันทวันดี | มหาวิทยาลัยราชภัฏสกลนคร |
| 11. ผู้ช่วยศาสตราจารย์ ดร.สถิตย์ ภาคมฤค | มหาวิทยาลัยราชภัฏสกลนคร |
| 12. ผู้ช่วยศาสตราจารย์ ดร.จินดา ลาโพธิ์ | มหาวิทยาลัยราชภัฏสกลนคร |
| 13. ผู้ช่วยศาสตราจารย์ ดร.ปัญญา นาแพงหมื่น | มหาวิทยาลัยราชภัฏสกลนคร |
| 14. ผู้ช่วยศาสตราจารย์ ดร.วันเพ็ญ นันทะศรี | มหาวิทยาลัยราชภัฏสกลนคร |
| 15. ผู้ช่วยศาสตราจารย์ ดร.ศิริลักษณ์ ศรีพระจันทร์ | มหาวิทยาลัยราชภัฏสกลนคร |
| 16. ผู้ช่วยศาสตราจารย์ ดร.วิจิตรา วงศ์อนุสิทธิ์ | มหาวิทยาลัยราชภัฏสกลนคร |
| 17. ผู้ช่วยศาสตราจารย์ ดร.ไพสิฐ บริบูรณ์ | มหาวิทยาลัยราชภัฏสกลนคร |
| 18. ผู้ช่วยศาสตราจารย์ ดร.ศตวรรษ มะละแซม | มหาวิทยาลัยราชภัฏสกลนคร |





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| 19. ผู้ช่วยศาสตราจารย์เบญจพร อุผา | มหาวิทยาลัยราชภัฏสกลนคร |
| 20. ผู้ช่วยศาสตราจารย์สุพัตรา ปสังคโท | มหาวิทยาลัยราชภัฏสกลนคร |
| 21. ผู้ช่วยศาสตราจารย์อภิวัฒน์ ปานทอง | มหาวิทยาลัยราชภัฏสกลนคร |
| 22. อาจารย์ ดร.อภิสิทธิ์ สมศรีสุข | มหาวิทยาลัยราชภัฏสกลนคร |
| 23. อาจารย์ ดร.เยาวลักษณ์ สุตะโคตร | มหาวิทยาลัยราชภัฏสกลนคร |
| 24. อาจารย์ ดร.อุษา ปราบหงษ์ | มหาวิทยาลัยราชภัฏสกลนคร |
| 25. อาจารย์ ดร.ปิ่นจิตา อินทร์รักษา | มหาวิทยาลัยราชภัฏสกลนคร |
| 26. อาจารย์ ดร.เพ็ญผกา ปัญจนะ | มหาวิทยาลัยราชภัฏสกลนคร |
| 27. อาจารย์ ดร.พรพิมล ศิวินา | มหาวิทยาลัยราชภัฏสกลนคร |
| 28. อาจารย์ ดร.ลดาวัลย์ มะลิไทย | มหาวิทยาลัยราชภัฏสกลนคร |
| 29. อาจารย์ ดร.สุมัทนา หาญสุริย์ | มหาวิทยาลัยราชภัฏสกลนคร |
| 30. อาจารย์ ดร.รัชดาพรรณ อินทรสุขสันติ | มหาวิทยาลัยราชภัฏสกลนคร |
| 31. อาจารย์ ดร.ผกาพรรณ วัฒนานาม | มหาวิทยาลัยราชภัฏสกลนคร |
| 32. อาจารย์ ดร.กฤตภาส วงศ์มา | มหาวิทยาลัยราชภัฏสกลนคร |
| 33. อาจารย์ ดร.อัจฉรา ไชยสี ชูรีรัง | มหาวิทยาลัยราชภัฏสกลนคร |
| 34. อาจารย์ ดร.วาทีณี แกสमान | มหาวิทยาลัยราชภัฏสกลนคร |
| 35. อาจารย์ ดร.อรุณรัตน์ คำแหงพล | มหาวิทยาลัยราชภัฏสกลนคร |

คณะกรรมการพิจารณาบทความวิจัย (ระดับนานาชาติ)

ผู้ทรงคุณวุฒิภายนอก

- | | |
|-----------------------------|--------------------------|
| 1. Dr. Nguyen Thi Huynh Loc | The University of Danang |
| 2. Ms. Le Thi Phuong Loan | The University of Danang |
| 3. Dr. Vo Thi Dung | Quang Binh University |
| 4. Dr. Phan Van Thanh | Quang Binh University |
| 5. Dr. Tran Thi Le Thanh | Tan Trao University |
| 6. Ms. Do Hai Yen | Tan Trao University |





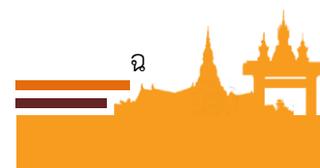
ผู้ทรงคุณวุฒิภายใน

- | | |
|--|---|
| 1. ผู้ช่วยศาสตราจารย์ ดร.วัฒนา สุวรรณไตรย์ | อาจารย์ผู้รับผิดชอบหลักสูตร
และอาจารย์ประจำหลักสูตรครุศาสตรบัณฑิต
สาขาวิชาการประถมศึกษา
อาจารย์ประจำหลักสูตรครุศาสตรมหาบัณฑิต
และหลักสูตรครุศาสตรดุษฎีบัณฑิต
สาขาวิชาการบริหารการศึกษา |
| 2. ผู้ช่วยศาสตราจารย์ ดร.วิจิตรา วงศ์อนุสิทธิ์ | อาจารย์ประจำสาขาวิชาภาษาต่างประเทศ
คณะมนุษยศาสตร์และสังคมศาสตร์ |
| 3. ผู้ช่วยศาสตราจารย์ ดร.ไพสิฐ บริบูรณ์ | อาจารย์ประจำสาขาวิชาภาษาต่างประเทศ
คณะมนุษยศาสตร์และสังคมศาสตร์ |
| 4. ผู้ช่วยศาสตราจารย์ ดร.ศิริลักษณ์ ศรีพระจันทร์ | อาจารย์ประจำสาขาวิชาภาษาต่างประเทศ
คณะมนุษยศาสตร์และสังคมศาสตร์ |
| 5. อาจารย์ ดร.พรพิมล ศิวินา | ประธานสาขาวิชาการสอนภาษาอังกฤษ
คณะครุศาสตร์ |

ผู้ทรงคุณวุฒิวิพากษ์การนำเสนอบทความวิจัย

การนำเสนอระดับชาติ (นำเสนอเป็นภาษาไทยทั้งแบบบรรยายและแบบโปสเตอร์)

1. รองศาสตราจารย์ ดร.ไชยา ภาวะบุตร
2. รองศาสตราจารย์ ดร.ศิกานต์ เพียรธัญญกรณ์
3. รองศาสตราจารย์ ดร.สายัณต์ บุญใบ
4. รองศาสตราจารย์ ดร.สำราญ กำจัดภัย
5. รองศาสตราจารย์ ดร.ธวัชชัย ไพไธล
6. รองศาสตราจารย์ ดร.ธนานันต์ กุลไพบุตร
7. ผู้ช่วยศาสตราจารย์ ดร.เพลินพิศ ธรรมรัตน์
8. ผู้ช่วยศาสตราจารย์ ดร.ภัทรดร จันวันดี
9. ผู้ช่วยศาสตราจารย์ ดร.วันเพ็ญ นันทะศรี
10. ผู้ช่วยศาสตราจารย์ ดร.จินดา ลาโพธิ์
11. ผู้ช่วยศาสตราจารย์ ดร.ศตวรรษ มะละแหม
12. ผู้ช่วยศาสตราจารย์เบญจพร อุฬา
13. ผู้ช่วยศาสตราจารย์สุดประไพ บุษศิริ
14. ผู้ช่วยศาสตราจารย์อภิวัฒน์ ปานทอง
15. อาจารย์ ดร.อภิสิทธิ์ สมศรีสุข
16. อาจารย์ ดร.ลดาวัลย์ มะลิไทย





17. อาจารย์ ดร.ปิ่นจิตา อินทร์รักษา
18. อาจารย์ ดร.เพ็ญผกา ปัญจนะ
19. อาจารย์ ดร.สุมัทนา หาญสุริย์
20. อาจารย์ ดร.รัชดาพรรณ อินทรสุขสันติ
21. อาจารย์ ดร.ผกาพรรณ วัฒนานาม
22. อาจารย์ ดร.กฤตภาส วงศ์มา
23. อาจารย์ ดร.อัจฉรา ไชยสี ชูริรัมย์
24. อาจารย์ ดร.วาทีณี แกสमान
25. อาจารย์ ดร.อรุณรัตน์ คำแหงพล
26. อาจารย์ ดร.เยาวลักษณ์ สุตะโคตร
27. อาจารย์ ดร.ทรัพย์หิรัญ จันทร์กำ
28. อาจารย์ ดร.ฤทัยทรัพย์ ดอกคำ
29. อาจารย์ ดร.บดินทร์ นารถโคษา

การนำเสนอระดับนานาชาติ (นำเสนอเป็นภาษาอังกฤษ แบบบรรยาย)

1. Asst. Prof. Dr. Watana Suwanatrai
2. Asst. Prof. Dr. Siriluck Sriprachan
3. Asst. Prof. Dr. Vjitttra Vonganusit
4. Asst. Prof. Dr. Paisit Boriboon
5. Dr. Pornpimon Siwina
6. Dr. NGU THIEN HUNG





รายชื่อมหาวิทยาลัยเครือข่ายความร่วมมือ
การประชุมวิชาการระดับชาติ ครั้งที่ 3 และนานาชาติ ครั้งที่ 2
คณะครุศาสตร์ บัณฑิตวิทยาลัย สถาบันวิจัยและพัฒนา มหาวิทยาลัยราชภัฏสกลนคร
ประจำปี พ.ศ. 2565

เจ้าภาพหลัก

มหาวิทยาลัยราชภัฏสกลนคร
คณะครุศาสตร์ บัณฑิตวิทยาลัย สถาบันวิจัยและพัฒนา



เจ้าภาพร่วม (ภายในประเทศ)



คณะครุศาสตร์
มหาวิทยาลัยราชภัฏ
เลย



คณะครุศาสตร์
มหาวิทยาลัยราชภัฏ
ร้อยเอ็ด



คณะครุศาสตร์
มหาวิทยาลัยราชภัฏ
เชียงใหม่



คณะครุศาสตร์
มหาวิทยาลัยราชภัฏ
นครสวรรค์



คณะครุศาสตร์
มหาวิทยาลัยราชภัฏ
หมู่บ้านจอมบึง



มหาวิทยาลัยกาฬสินธุ์



มหาวิทยาลัยนครพนม



มหาวิทยาลัย
ภาคตะวันออกเฉียงเหนือ



คณะศึกษาศาสตร์และศิลปศาสตร์
วิทยาลัยบัณฑิตเอเชีย



วิทยาลัยพิษณุบัณฑิต



คณะครุศาสตร์
มหาวิทยาลัยราชภัฏ
เพชรบูรณ์



คณะครุศาสตร์
มหาวิทยาลัยราชภัฏ
นครศรีธรรมราช



คณะครุศาสตร์
มหาวิทยาลัยราชภัฏ
สวนสุนันทา



คณะครุศาสตร์
มหาวิทยาลัยราชภัฏ
ชัยภูมิ



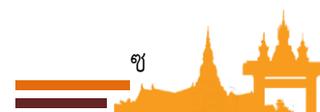
คณะครุศาสตร์
มหาวิทยาลัยราชภัฏ
สงขลา



คณะครุศาสตร์
มหาวิทยาลัยราชภัฏ
อุบลราชธานี



คณะครุศาสตร์
มหาวิทยาลัยราชภัฏ
เทพสตรี





เจ้าภาพร่วม (ต่างประเทศ)



University of
Southeastern
Philippines



Tan Trao University,
Vietnam



Quang Binh University,
Vietnam



University of Foreign
Languages Studies,
DA NANG, Vietnam



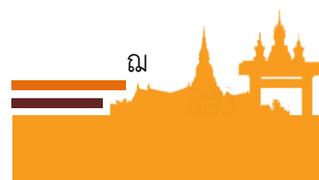
Ahmad Dahlan
University, Indonesia



Kunming Medical
University, China



Savannakhet
University, Laos





The 3rd National and 2nd International Conference on Education 2022
Faculty of Education, Research and Development Institute and Graduate School

SAKON NAKHON RAJABHAT UNIVERSITY
NRU

กำหนดการประชุมวิชาการ



The 3rd National and 2nd International Conference on Education 2022
การประชุมวิชาการระดับชาติ ครั้งที่ 3 และนานาชาติ ครั้งที่ 2

Teachers Competency Building to the New Normal Future
การสร้างสมรรถนะครู สู่อนาคตในยุคปกติใหม่

25 กุมภาพันธ์ 2565
ณ ห้องประชุมท้าวศรีลาสงคราม มหาวิทยาลัยราชภัฏสกลนคร

NICE 2022, SNRU



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Ahmad Dahlan University
Yogyakarta, Indonesia



Dr. WANG Yanyan
Director of the Thai Language Teaching
and Research Office, Foreign Language Department,
Kunming Medical University, China



Assoc. Prof. Dr. Tissanana Khammanee
External Luminaries Faculty of Education
Chulalongkorn University, Thailand

ลงทะเบียนเข้าร่วมฟังการบรรยายและรับเกียรติบัตร

ฟรี



ลงทะเบียน



ห้องรับฟังการบรรยาย

การสร้างสมรรถนะครูสู่อนาคตในยุคปกติใหม่

Teachers Competency Building to the New Normal Future

on 25th February 2022 at Maha Vajiralongkorn Auditorium, Sakon Nakhon Rajabhat University

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ข้อมูลสำคัญของการบรรยายพิเศษจากผู้ทรงคุณวุฒิ

การสร้างสมรรถนะครูสู่อนาคตในยุคปกติใหม่

ข้อเสนอแนะวิธีการเพื่อการพัฒนา สู่ความเป็นครูที่มีสมรรถนะแบบมืออาชีพ

- On the job training
- Whole school development
- Coaching and mentoring
- Professional learning community: PLC
- Community of practice: COP
- Lesson study: LS
- การจัดประชุมทางวิชาการ
- การจัดอบรมเชิงปฏิบัติการ
- การศึกษา สังเกต สัมภาษณ์ ฝึกปฏิบัติ
- เรียนรู้จากบุคคลต้นแบบ
- เรียนรู้จากแหล่งเรียนรู้ต่างๆ
- เรียนรู้ผ่านระบบเครือข่ายและแพลตฟอร์ม
- การจัดเพื่อนร่วมเรียนรู้ (buddy)



“

ไม่ว่าเทคโนโลยีจะมีความจำเป็นเพียงใดก็ตาม
แต่ยังก็ไม่สามารถทำหน้าที่แทนครูที่ดีได้
แต่เทคโนโลยีในมือของครูที่ดี
สามารถที่จะเปลี่ยนแปลงอนาคตได้”

”

รองศาสตราจารย์ ดร.ทิจนา แชมมณี





Teachers Capacity Building to the New-Normal Future

แนวปฏิบัติในสถานการณ์ปัจจุบัน (Teachers Action Guidelines)

กระบวนการพัฒนาครู (Teachers Development Process)

การส่งเสริมการพัฒนาความสามารถ
ในการสอน การวิจัยทางวิชาการ และ
ความสามารถในการให้บริการสังคม
ถือเป็นสิ่งสำคัญที่สุด ในการพัฒนาครู



Dr. Wang Yanyan
Kunming Medical University
Yunnan, China

1. ด้านวิชาชีพ

- 1.1 ส่งเสริมทางวิชาชีพ ความเป็นครูมืออาชีพ
- 1.2 ส่งเสริมทางมนุษยศาสตร์และสังคมศาสตร์

2. แผนการดำเนินงาน

- 2.1 สร้างทีมงาน ด้านการจัดการเรียนการสอนและงานวิจัย
- 2.2 การขยายหลักสูตร





The mobile learning implementation in Indonesia

The trend of Mobile Learning Implementation



Send information quickly and in a considerable number including Internet of Things



Student got more comfortable using mobile devices in learning activities



Digital Native and Digital Immigrant gap on education

THREE APPROACH



Differentiation



Individualization



Personalization



Prof. Dr. Dwi Sulisworo

AHMAD DAHLAN UNIVERSITY

CRITICAL SUMMARIES

The education system of Indonesia is still in the transition process from the national exam score oriented to learner competency oriented.

In terms of ICT literacy of the teachers is good, the utilization of mobile technology for learning tends to be low



There are many schemes from the government on providing internet access. But the low access is still felt by the some remote islands





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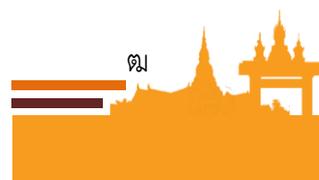
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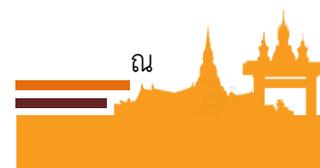


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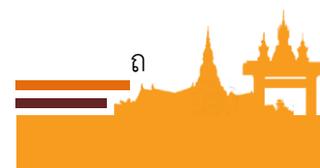


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THE DEVELOPMENT OF COMPUTER ASSISTED INSTRUCTION ON THE TOPICS OF THAI CONSONANT CLUSTERS IN THE THAI LANGUAGE TEXTBOOK, GRADE 3

Supatcha Sri-iam¹
Anupong Tuaynak²
Pimrada Lawanwong³

Abstract

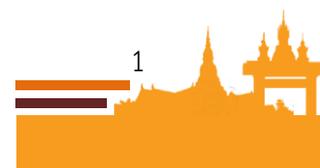
This research aimed to 1) develop computer-assisted instruction on consonant clusters in the textbook of grade 3 students to be effective according to the 80/80 criteria and 2) compare the achievements of grade 3 students on consonant clusters by using computer-assisted lessons before and after classes. The population were Prathomsuksa 3 students in the first semester of the academic year 2021, Wat Hong Pathumawas School consisted of 154 students. The sample selected by using cluster random sampling consisted of 37 students in grade 3 in the first semester of the academic year 2021. The instruments used in the research consisted of Computer-assisted lessons on consonant clusters achievement test. The statistics used to analyze the data were percentage, mean, standard deviation, and t-test. The results showed that 1) the computer-assisted instruction on true consonant clusters in the curriculum of Prathomsuksa 3 students had an efficiency equal to 90.5/80.2; After school was significantly higher than before at the .01 level.

Keywords: Computer Assisted Instruction, Thai Consonant Clusters,
Thai Language Textbook, Grade 3 Students

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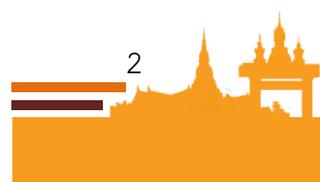


1. Introduction

Thai language is a cultural uniqueness which expresses the cultural and linguistic growth of Thailand. Thai individuals should make an effort to preserve and carry on the cultural uniqueness to the future proud generations. According to His Royal guidance of the King Rama the ninth given on the Royal graduation at Chulalongkorn University on 1959, 19 July, it is said “Nowadays, there are frequent redundancies of Thai and semantic misuses. Also, the distorted phonemic orthography cannot be neglected to solve seriously. We, Thai nationals, have our own language, which is an invaluable asset inherited from our ancestors. All of us, therefore, must preserve Thai language as well as the students and teachers must do their best to promote the accurate Thai to reassure our national development.” Moreover, Her Royal Highness Princess Maha Chakri Sirindhorn gave her royal guidance on 1987, 11 November at the academic conference of Thai Language and National Development, assembly hall, Chulalongkorn University. It is said “Thai language is vitally important in passing on the cultural heritage and promoting the national unity. Scholars who know Thai well will benefit the most from learning other subjects, and they will be able to use Thai to seek more knowledge.” It is evident that Thai language is a paramount communicative tool in everyday life. The language is delicate, beautiful, full of varieties and rules and unique.

Consonant clusters are one of the unique characteristics of Thai. Consonant clusters are two consonants merged in one vowel with /ร/, /ล/, or /ว/. It can be divided into two types of consonant cluster. 1) True consonant cluster is two consonants of one vowel such as the one with /ร/, /ล/, or /ว/. They both must be pronounced as one sound. 2) False consonant cluster is two consonants of one vowel that comes before or after /ร/. Only one main sound is pronounced, /ร/ is not pronounced, or some exception refers to pronouncing the cluster as the other sound for both initials and codas (Thonglor, K. 2013, pp. 85-86)

Teaching consonant clusters through folk tales and fables creates more pleasurable learning environment. The folk tales and fables were invented from local wisdom and human’s imagination, which is considered a tool for passing on the cultural heritage of the society. They reflect thoughts, beliefs, values, customs, traditions and cultures in the society. Somsak Paripurana (2000) defined a tale as a story invented for giving pleasure and relaxation to retell to kids by various techniques. It is specifically for the children, and it also includes general tales and contemporary folklores which were reinvented, adopted, added, edited and changed for a more appropriate version for the kids.



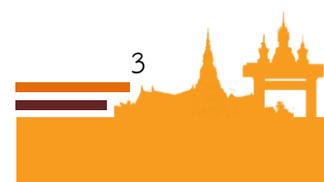


The tales written in the course book of grade 3 students consist of two types. (1) Fables are generally short stories that have main characters as lion, wolf, dog, fox, crow, swan, talking tree and angel. Aesop's fables were originally ancient fables in Europe. They have been retold since the 6th century before Christ. Aesop did not invent all of the fables. Some stories were told or added, so there have been thousands of Aesop's fables until today. They aimed at instructing kids about moral lessons at the end of the story (Maknual, C., 1975) (2) Aesop's fables are the most globally popular and well-known as well as in Thailand. They not only have joyful stories but also have moral lessons at the end of the stories. Furthermore, Tamra Na Muangtai (1999) mentioned the history of Aesop's fables as from the ancient Greek. Aesop is an African man who lived in Greek and wanted to sell himself as a slave; unfortunately, his appearance did not attract the market customers who mainly seek fighting skills from the slaves. However, God gave him excellent intelligence, so he used his intelligence to make a living instead of the physical fighting skills. Eventually, he won the Greek people's hearts by telling simple stories, but he embedded easy-to-understand philosophy and moral lessons that can be applied in everyday life. The distinct characteristic of Aesop's fables is the fact that they use animals as the main characters such as A wolf and a sheep, A dog and its' shadow, A lion and a mouse, or a fox and the crow.

Since the pandemic of COVID19 has affected the teaching and learning to be online, or the students did the assigned task at home, which limited the quality of learning accessibility, demotivated the learners and resulted in less lesson reviewing.

The development of teaching and learning materials to facilitate the students' learning which could be done whenever needed is computer-assisted instruction (CAI). CAI is used in order for the students to study freely and more effectively because it enhances knowledge and skills. CAI consists of text, video and sound that are relevant to learners' experience. The relatability of those materials makes it easier to understand, lasts longer in the learners' memory about the abstract concept, and increases their motivation, which the learning objectives are eventually succeeded. CAI also provides the students an opportunity to interactively revise and review the lesson based on student-centeredness and individual learning. CAI together with normal classroom teaching will enhance learning (Mamom, J., 2014)

As aforementioned statement, the researchers brought up the tales from the coursebook of Fundamental Thai, Language for Life, LamNam Literature for grade 3 students. Since the literature book is compulsory to be used in Thai language subject according to the national core curriculum, Thai Ministry of Education, the researchers used it to teach about consonant clusters with the help of CAI to enhance and practice learning more effectively.





2. Research Objectives

2.1 To develop a computer-assisted instruction and lesson of Thai language subject on true and not true consonant clusters in grade 3 students to be effective according to the 80/80 criteria.

2.2 To compare the achievements of grade 3 students on consonant clusters by using computer-assisted lessons before and after classes.

3. Literature Review

3.1 Consonant Clusters are two or more than two joint with the same vowel, so the clusters are pronounced as one syllable. The tone of that syllable will vary depending on the first consonant of the clusters. The consonant clusters are created from two consonants that has /ร/, /ล/ and /ว/ in it. It can be simultaneously pronounced the first consonant with the following consonant of the clusters. (Phanturat, N., 2013)

The contents for teaching with consonant clusters in Lamnam Literature for grade 3 are 1) The Foolish Rabbit, 2) The Rabbit and The Tiger, 3) The Shepperd Boy and The Wolf, 4) The Wolf and The Lamb

3.2 Computer-assisted instruction or CAI is a teaching material which learners can learn by themselves with the computer program containing subjects and steps of teaching based on individual differences. CAI functions as a teacher in delivering informative content to the learners in the way of reviewing lessons as well as assessing, evaluating and giving feedback by the programs in the computer.

3.3 Stages of designing a CAI lesson

Wiboonyotsarin, W. (2013, pp. 104-109) stated that there are four stages of designing the CAI lesson

1. Planning stage is composed of

1.1 Select the appropriate content and area to be taught.

1.2 Set the objectives as a framework and guideline for writing the content, which can be classified as:

1.2.1 general objectives

1.2.2 behavioral objectives

1.3 Analyze, synthesize and arrange the content from easiest to the most difficult and what the students already knew to the totally new knowledge, which can also be called “task analysis”.

1.4 Create both pre-test and post-test by using the framework of behavioral objectives to assess whether the learners can learn and perform according to the objectives or not.



2. Development stage is the presentation of content which was analyzed according to the learning objectives and used to assess the learners' set behavioral achievement through the formative assessment that aligned with the pre and post-tests.

3. Try out stage is when developing the CAI is complete but not ready to be implemented because the researchers have not assured the effectiveness of the CAI; therefore, the pilot study is necessary to be tried out and improved accordingly for a better quality research instrument.

4. Implementation stage is to use the improved CAI in the class with 90/90 or 80/80 criteria and follow the effectiveness of it.

4. Research Framework

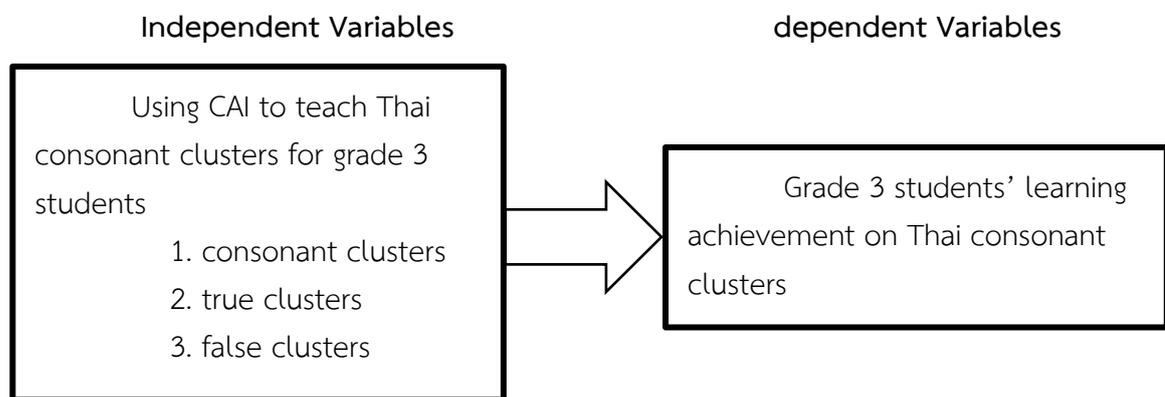


Figure 1: Conceptual Framework

5. Research Methodology

The study was conducted as the following methodology.

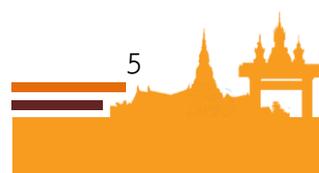
5.1 Participants

1) Participants are 154 grades 3 students of Hongprathumawas school in academic year 1/2020.

2) Purposive sampling was used to recruit the 37 grades 3/1 students of Hongprathumawas school in academic year 1/2020.

5.2 Methodology

This study is semi-experimental of Thai language subject on consonant clusters, and then the data are used to find the effectiveness by E_1/E_2 . Later, the pilot study was tried out with the 30 students before eventually implemented with the sample group of 37 grade 3 students of Hongprathumawas school. T-test was used for the data analysis using The One-Group Pretest-Posttest Design.





5.3 Research Instrument

1) Three computer-assisted instruction lessons on consonant clusters which are 1. Consonant clusters, 2. True clusters and 3. False clusters.

2) Fifteen items of a 4-M/C learning achievement test

5.4 Data collection

The data of this study were collected from the pre and post tests score of the sample group of 30 grade 3/1 students Hongprathumawas school in academic year 1/2020. The data collection procedures are as follows:

1) Give instructions and guidance about using CAI for the sample group of participants to study.

2) Assign a M/C 15-item pre-test to the participants and use the score to compare with the post-test.

3) Assign the sample group with CAI on the consonant clusters lessons: 1. Consonant clusters, 2. True clusters and 3. False clusters, respectively. All of the lessons were online and taught in fifty minutes per class for two weeks. There were two classes each week, so totally the participants were taught for four classes

4) Assign the post-test which is similar to the pre-test to the sample group after the four classes were completed.

5.5 Data analysis

Creating CAI lessons on “consonant clusters” has its own design, and writing the story board for the content to be relevant to the learning objectives requires the analyzed appropriate unit arrangement considering of the principles of learning management in the classroom to engage and motivate the learners. To illustrate, there should be pre-test and post-test, visual aids, constantly arousing audio as well as learning theory and pedagogy involved. Then, the CAI lessons were distributed to the three experts for indicating the Index of Item Objective Congruence or IOC between the tests and objectives (Saiyod, L. and Saiyod, A., 1995, pp. 197-199). The IOC gained is between 0.60–0.95, the discriminating power of the item (r) is 0.27, and Kuder-Richardson 20 (KR-20) is 0.57.

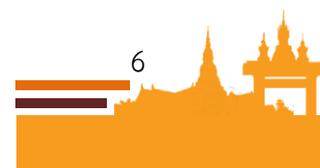
5.6 Statistics

The statistics used in this study were Mean and Standard deviation (S.D.) Statistics used to test the instrument are as follows

1) Effectiveness of the teaching lessons (Mekaew, K., 2003) = E_1/E_2

When E_1 functions as learning effectiveness during lessons, which was calculated from the exercise scores as percentage.

E_2 functions as learning effectiveness after the lessons, which was calculated from the exercise scores as percentage.





2) T-test dependent sample is used to test the difference between mean scores of the pre-test and post-test (Thaweerat, P., 2000, p. 165) with statistical significance level at .01

3) IOC is used to find the content validity of the test by index of item-objective congruence (Saiyod, L. and Saiyod, A., 1995, p. 249)

6. Findings

Part 1 The effectiveness of the CAI lessons on the consonant clusters of grade 3 students

Table 1: The effectiveness of the CAI lessons on the consonant clusters of grade 3 students according to 80/80 criteria

N	exercise			Effectiveness of the post-test		
	<i>A</i>	Σx	E_1	<i>B</i>	ΣF	E_2
37	20	670	90.5	15	445	80.2

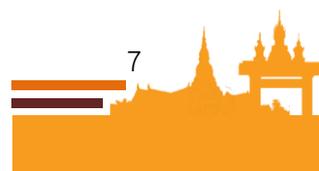
From table 1, it can be seen that the effectiveness of the exercise (E_1) is 90.5, and the effectiveness of the post-test (E_2) is 80.2. It can be inferred that the effectiveness of exercise on both of the true and false consonant clusters is 90.5/80.2. Therefore, CAI lesson on the true and false consonant clusters for grade 3 students is effective over 80/80 criteria.

Part 2 The comparison of pre and post tests scores of CAI lessons on the consonant clusters of grade 3 students

Table 2: The comparison of pre and post tests scores of CAI lessons on the consonant clusters of grade 3 students

Test	N	\bar{X}	S.D.	t	Sig.
Pre-test	37	7.22	1.75	14.4	.000*
Post-test	37	12.03	1.01		

* statistical significance level at .01, df = 36





From table 2, it was found that the mean scores of learning achievement on the consonant clusters of grade 3 students with CAI from pre-test and post-test are 7.06 and 12.03, respectively with the significance level at .000* which is below .01. It means that the mean score after the CAI lesson is higher with significance level at .01. Therefore, CAI lessons result in students' higher learning achievement on the consonant clusters.

7. Discussion

This study on the development of computer assisted instruction on the topics of Thai consonant clusters in the Thai language textbook, grade 3 will be discussed in three issues.

7.1 The CAI lessons on the true and false consonant clusters in Thai language textbook, grade 3 are effective as E_1/E_2 is 90.5/80.2 in accordance with 80/80 criteria. As the set hypothesis, it means the students gain 90.5 percentage of scores from the CAI lessons and the mean score of the post-test is 80.2 percentage. The success seems to derive from the appropriate and systematic teaching design which began with reviewing the previous literatures, techniques, theories and research studies on CAI for teaching consonant clusters as a guideline in creating CAI lessons. Then the researchers analyzed the content based on the curriculum and divided it into three units which are practical in terms of time and students' characteristics. The contents were arranged from the easiest to the most difficult and also based on the student's self-access learning. Moreover, the CAI lessons in this study were considered of the individual differences because the teacher will act as a facilitator who suggest and assist the learners. Also, the CAI lessons were evaluated by the experts and piloted to precisely determine their effectiveness and appropriateness before implementing in the class. When the students learn with the CAI lessons, they show better learning development according to Wanthanee Meeboonya (2015) on the development of CAI on Thai language, Ngo Pa or Romance of the Sakai for grade 4 students at Nakprasit school, Nakhonpathom. She found that CAI on Ngo Pa showed effectiveness at 81.15/82.56 which is higher than 80/80 criteria. Therefore, CAI is the learning material that promotes students' systematic learning and serves their learning styles and individual differences. It is also relevant to the learning standards and indicators for promote students self-access learning, which can be applied in their daily life.

7.2 The grade 3 students' learning achievement after CAI is higher with significance level at .01, which implies CAI lessons on the consonant clusters in Thai language textbook, grade 3 is effective in enhancing the students' learning achievement . The CAI lessons increase the students' motivation and promote their self-access learning. Moreover, the lessons are suitable for learners in terms of clear content, appropriate





level of difficulty, engaging visual aids and practical activities provided, which aligned with the study from Praserttham, P. and Khongkakoon, M. (2017) on CAI lessons for creating E-Books with FilpAlbum program. The findings revealed that the students have higher learning achievement after learning with the CAI at .01 statistical significance level. Therefore, learning with CAI lessons helps the students learn based on their individual differences, enhances students' learning motivation to maximize their learning ability and gives immediate feedback and score from CAI for further improvement.

8. Suggestion

The researchers conducted the study of the development of CAI lessons on consonant clusters in Thai language textbook, grade 3 and suggested as follows:

Suggestion for pedagogical implication

1. When students participate in the learning activities where there are always inevitable obstacles, teacher should give suggestion and provide assistance as well as morale support for the them to learn happily and effectively. In addition, teacher should spread positive feedback, compliments and attention to all students.
2. Teacher should not rush the students when they are on their self-access learning path which leads to natural learning based on their capacity.
3. For more suitable learning environment, teacher should be flexible with the time spent during the activities which can be uncertain sometimes.

Suggestion for future research

1. CAI lessons on other subjects such as mathematics, science, social studies, and foreign languages in the same learners' level should be developed for their more effective and continuous learning.
2. More studies on comparison or combination between CAI and other teaching approaches should be conducted.
3. The study on factors hindering CAI should be conducted for further research contribution.





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USING COLLABORATIVE STRATEGIC READING TO IMPROVE PRATOMSUKSA 6 STUDENTS' ENGLISH READING COMPREHENSION ABILITY

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Abstract

The purposes of this research were to study and compare English reading comprehension ability before and after studying English reading comprehension using collaborative strategic reading of Pratomsuksa 6 students and to investigate Pratomsuksa 6 students' attitude towards teaching English reading comprehension using collaborative strategic reading. The sample in the study consisted of 31 Pratomsuksa 6 students at Bannongbuangern School, Sakai District, Nongkhai province, Nongkhai Primary Educational Service Area Office 1 in the first semester of the academic year 2021, selected by cluster random sampling. The research design was a one-group pretest-posttest design. The research instruments were twelve lesson plans, an English reading comprehension ability test and an attitude questionnaire. The experiment lasted twelve weeks, two hours a week, or twenty-four hours in total. The mean, percentage, standard deviation, t-test for Dependent Samples, and a one sample t-test were employed to analyze data.

The findings of this research were as follows: 1. the students' pretest and posttest mean scores on English reading comprehension ability were 11.77 or 29.43 percent and 30.06 or 75.15 percent respectively. The students' posttest mean score on English reading comprehension ability was higher than the set criterion of 70 percent and the students' English reading comprehension ability after the experiment was significantly higher than that of the pretest. 2. The students' attitude towards teaching English reading comprehension using collaborative strategic reading was at a good level.

Keywords: English Reading Comprehension Ability, Collaborative Strategic Reading, Attitude

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1. Introduction

In Thailand, students encounter problems in reading comprehension. As Chawwang (2008, p. 4) states that students' problems when reading texts are vocabulary and sentence structure. They have read all the texts but cannot understand the idea of them. As NIETS (2021, p. 4) reports that the students' scores in Ordinary National Education Test or ONET were ineffective with their reading result in 33.75 percent. The overall score of the country is lower than 50 percent, which is the objective, so it shows that students lack in English reading comprehension ability.

In the context of Bannongbuangern School, students' English reading comprehension ability was quite low. The school O-NET (NIETS, 2021, p. 4) result of Pratomsuksa 6 students of Bannongbuangern School, which was 38.46 %, was lower than the school criteria of 50 %. The problems can be classes of a large size, the methods of teaching reading comprehension in Thai classrooms, the limited reading comprehension strategies, and others. Likewise, from the (Bannongbuangern School, 2020, p. 22) the mean score of the summative test of Pratomsuksa 6 students at Bannongbuangern School in 2020 academic year in English reading comprehension was 30 percent which was very low. According to the score, it shows that students lack English reading comprehension ability, which is the reason why the researcher wants to study in their lacking English reading comprehension strategies. As Choobua (2009, p. 2) recommends that the first and foremost aim for formal teaching English is reading comprehension. Hence, the use of suitable strategies will be one of the factors in teaching reading comprehension. The method or strategy used should be able to improve students' reading comprehension.

There are several methods used for teaching reading comprehension. Collaborative strategic reading is regarded as one of the effective strategies that might enhance learners' reading comprehension ability. Klingner & Vaughn (1999, p. 738) suggest that collaborative strategic reading (CSR) was developed to help students with learning disabilities and limited English proficient students; moreover, collaborative strategic reading has positively impacted the standardized reading comprehension tests scores for average and high average achieving students. Furthermore, collaborative strategic reading improves reading comprehension, develops cooperative skills, and enhances students' overall performance and achievement in any subject. Collaborative strategic reading, suggested by Vaughn & Klingner (1998, pp. 284-292), comprises four strategies which are preview, click and clunk, get the gist, and wrap up. The first strategy, preview the text, aims to motivate the students' interest in what they are reading, to activate background knowledge, and to assist the students in generating predictions about the text. The second strategy, click and clunk, aims to teach students to monitor





what they are reading and to think about information in the text that they know more about and information that is causing them difficulties. The third strategy, get the gist, aims to teach students how to determine the main idea of the passage. The last strategy, wrap up, comes last after students finish their reading. The students have to identify the most important ideas from the entire section they have read.

Additionally, Rozac (2013, p. 165) conducted the research on the effectiveness of collaborative strategic reading to teach content area reading comprehension viewed from students' intelligence in Turkey. The result showed that the collaborative strategic reading is an effective strategy in teaching English reading skill. Likewise, Zagoto (2016, p. 72) conducted the research on collaborative strategic reading for better reading comprehension, the result showed that collaborative strategic reading assists students to get involved in activities which are important to get better understanding and comprehension of a text. Furthermore, Sroinam (2017, p. 58), who conducted the research on the development of English reading comprehension ability using collaborative strategic reading of graduate students, the result of the research showed that teaching English reading comprehension using collaborative strategic reading significantly improves students' English reading comprehension ability. According to the research studies mentioned, using collaborative strategic reading in teaching English reading comprehension is effective.

Due to the lack of reading comprehension ability of the students, the researcher would like to develop students' English reading comprehension ability using collaborative strategic reading of Pratomsuksa 6 students at Bannongbuangern School, Nongkhai. The researcher would like to study whether collaborative strategic reading could assist students' English reading comprehension ability and at what level of their attitude towards teaching English reading comprehension using collaborative strategic reading is. The research findings will be guidelines for teaching English reading comprehension in Thailand in the future.

2. Objectives

2.1 To study and compare the English reading comprehension ability of Pratomsuksa 6 students before and after studying English reading comprehension using collaborative strategic reading.

2.2 To study the students' attitude towards teaching English reading comprehension using collaborative strategic reading.





3. Literature Review

Collaborative strategic reading or CSR is a technique to enhance the reading comprehension skills of students.

Klingner & Vaughn (1999, p. 32) define collaborative strategic reading as an excellent technique for teaching students reading comprehension and building vocabulary and working together cooperatively.

Vaughn & Klingner (1998, pp. 284-292) state that collaborative strategic reading consists of four reading comprehension strategies as follows:

1. Preview

The purpose of the preview is to motivate the students' interest in what they are reading, to activate background knowledge, and to assist the students in generating predictions about the text to be read. There are two steps of previewing.

1.1 Brainstorming: Think about what you already know about the topic.

1.2 Predicting: Find clues in the title, subheadings, or pictures about what you will learn. Skim the text for key words that might give you hints.

2. Click and clunk

The purpose of click and clunk is to teach students to monitor what they are reading and to think about information in the text that they know more about and information that is causing them difficulties. There are six fix-up strategies to help students figure out when they get a clunk.

2.1 Reread the sentence with the clunk and the sentences before or after the clunk, looking for clues.

2.2 Reread the sentence without the word. Think about what would make sense.

2.3 Look for a prefix or suffix in the word.

2.4 Break the word apart and look for smaller words.

2.5 Use a picture.

2.6 Ask for help.

3. Get the gist

The purpose of getting the gist is to teach students how to determine the main idea of a passage. There are two steps of getting the gist strategy.

3.1 Decide who or what the paragraph or mostly about the topic.

3.2 Name the most important idea about the topic.



4. Wrap-up

Wrap-up is like preview that it occurs once during the process. However, wrap-up is different from preview because it is conducted at the end of reading the text rather than at the beginning. Wrap-up strategy includes:

4.1 Asking question about the passage.

4.2 Reviewing by thinking about what was important that students have learned from the day's reading assignment.

4. Conceptual Framework

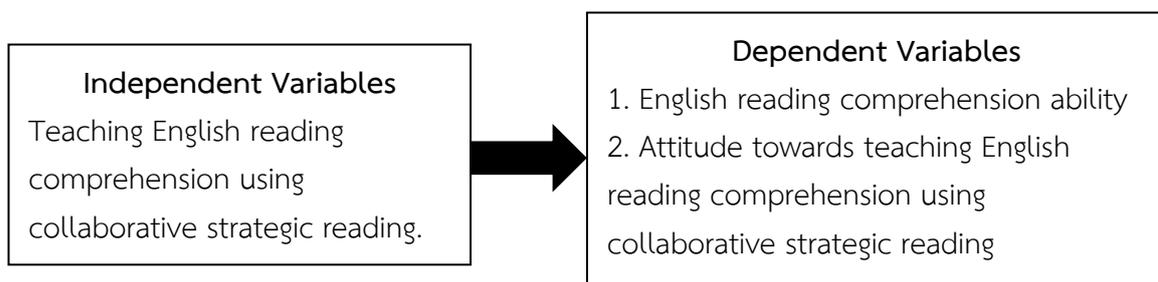


Figure 1: Conceptual framework

5. Research Methodology

5.1 Population and Sample

5.1.1 The population of this study was 300 Pratomsuksa 6 students from 17 schools in Sakai 15 Group, Sakai District, Nongkhai, under Nongkhai Primary Educational Service Area Office 1, who were studying in the first semester of 2021 academic year.

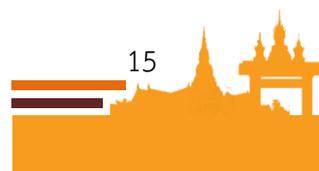
5.1.2 The sample of this study consisted of 31 Pratomsuksa 6 students who were studying the first semester of 2021 academic year at Bannongbuangoern School, Sakai District, Nongkhai, under Nongkhai Primary Educational Service Area Office 1.

These students were chosen using cluster random sampling.

5.2 Research Instruments

There are three types of research instruments employed in this study as follows:

5.2.1 Lesson plans of teaching English reading comprehension using collaborative strategic reading consisted 12 lesson plans in 12 weeks, 2 hours a week, 24 hours in total. The value of the Index of Item Objective Congruence (IOC) was 1.00 for every lesson plan.





5.2.2 An English reading comprehension ability test with 40 items developed by the researcher, asking students to choose one choice as the pretest and posttest. The value of the Index of Item Objective Congruence (IOC) was 1.00 for every lesson item. The difficulty value of the items was between 0.47-0.80 and the discrimination value was between 0.27-1.00. The reliability of the test was at 0.93.

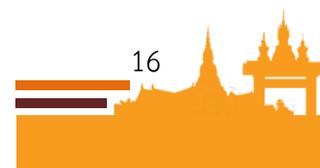
5.2.3 The students' attitude questionnaire towards teaching English reading comprehension ability using collaborative strategic reading consisted of 25 items related to contents using a five point Likert's rating scales. The value of the Index of Item Objective Congruence (IOC) was 1.00 for every item.

5.3 Data Collection

The teaching program of using collaborative strategic reading to improve reading comprehension of Pratomsuksa 6 students conducted steps of data collection which can be classified into 5 steps. The first step, the students took the pretest using an English reading comprehension test with 40 items, which was a multiple-choice test, within 60 minutes. Then, the teacher conducted the teaching program of 12 lesson plans in 12 weeks, 2 hours a week, and in total 24 hours. Next, the students took the posttest using an English reading comprehension ability test, which was the same as the pretest. After the study, the students assessed the attitude questionnaire of teaching English reading comprehension using collaborative strategic reading. The last step, the data were analyzed using the computer program.

5.4 Data Analysis

The data obtained from teaching English reading comprehension using collaborative strategic reading, the English reading comprehension ability test, and the students' attitude questionnaire were statistically analyzed using the computer program as the following steps. First, the researcher analyzed data to study English reading comprehension ability using mean (\bar{X}) percentage (%), and standard deviation (S.D.). Then, the researcher analyzed data to compare English reading comprehension ability using collaborative strategic reading before and after teaching English reading comprehension from the pretest and posttest. Finally, the researcher analyzed data to investigate students' Attitude towards teaching English reading comprehension using collaborative strategic reading using the mean (\bar{X}), and standard deviation (S.D.) to interpret the meaning of the criteria's average.





6. Results of the research paper

Table 1: The Results of Students' English Reading Comprehension Ability Before and After Studying English Reading Comprehension Using Collaborative Strategic Reading

Number	Pretest (40 scores)		Posttest (40 scores)	
	Score	Percent	Score	Percent
\bar{X}	11.77	29.43	30.06	75.15
S.D.	2.72	-	4.16	-

From Table 1, the students' pretest mean score on English reading comprehension ability average was 11.77 or 29.40 percent and the students' posttest mean score on English reading comprehension ability was 30.06 or 75.15 percent, respectively.

Table 2: Mean standard Deviation Percent and a Comparison of the Students' English Reading Comprehension Ability after studying English Reading Comprehension Using Collaborative Strategic Reading and a Set Criteria of 70 Percent

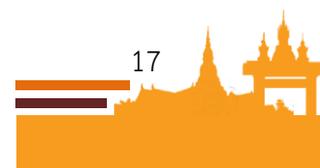
Test	n	\bar{X}	S.D.	t
Posttest	31	30.06	4.16	2.77**

** $p \leq .01$

From Table 2, it presents that the students' posttest mean score on English reading comprehension ability was 30.06. The results explain that the students' English reading comprehension ability after studying English reading comprehension using collaborative strategic reading was significantly different at the .01 level. The posttest score was significantly higher than a set criteria of 70 percent.

Table 3: A Comparison of Students' Score on English Reading Comprehension Ability Before and After Studying English Reading Comprehension Using Collaborative Strategic Reading

Test	N	\bar{X}	S.D.	%	t
Pretest	31	11.77	2.72	29.43	20.02**
Posttest	31	30.06	4.16	75.15	





From Table 3, it shows that the students' pretest mean score was 11.77 and that of the posttest mean score was 30.06. The mean score on the posttest was significantly higher than of the pretest at .01 level.

Table 4: An Investigation of Students' Attitude towards Teaching English Reading Comprehension Using Collaborative Strategic Reading

Attitude Test	n	\bar{X}	S.D.	Interpretation
Students' attitude towards teaching English reading comprehension using collaborative strategic reading	31	3.74	0.50	Good

From Table 4, it can be seen that the mean score representing the students' attitude towards teaching English reading comprehension using collaborative strategic reading was 3.70. This indicates that the students' attitude towards teaching English reading comprehension using collaborative strategic reading was at a good level.

7. Conclusion and Discussion

7.1 It was found that teaching English reading comprehension using collaborative strategic reading could improve students' reading comprehension ability. Their pretest and posttest mean scores were 11.77 or 30.06 percent and 29.40 or 75.15 percent, respectively. This finding supports the second hypothesis. The students' posttest mean score on English reading comprehension ability after studying English reading comprehension using collaborative strategic reading was higher than prior. The students' pretest score on English reading comprehension ability was at a low level. The reasons of the above condition might have been occurred due to the students lacked skill in English reading comprehension such as literal comprehension, interpretation comprehension, and critical comprehension. The students' English reading comprehension ability after studying English reading comprehension using collaborative strategic reading was higher than prior because the students had a chance to practice English reading comprehension using collaborative strategic reading. The students could predict information they were to be encountered in new learning, identify the meanings of the words that they knew and the words that they did not know in the reading text, find and write the main idea of the reading text. Therefore, the students' posttest mean score on English reading comprehension was higher than that of the pretest since they could comprehend the reading texts as the literal, interpretation and critical levels. Moreover, students were able to understand the text precisely because they had a chance to practice English reading comprehension cooperatively with their friends while studying English reading comprehension using collaborative strategic reading.





The students' English reading comprehension ability after studying English reading comprehension using collaborative strategic reading was significantly improved with a mean score higher than the set criteria of 70 percent. The finding supports the first research hypothesis of the study. This may cause from the following results. Firstly, teaching English reading comprehension using collaborative strategic reading helped develop students' English reading comprehension ability because teaching English reading comprehension using collaborative strategic reading was an interesting technique. There were activities to encourage students to learn by working together as a group. Students were assigned roles and duties to do in the group. Therefore, teaching English reading comprehension could help students to have a better understanding of what they were reading, which was consistent with the concept of Klingner & Vaughn (1998, p. 4), who state that learners, who read in a small group cooperatively with their duties, tend to help each other while reading the text. Therefore, they can help each other to conclude the text. These findings showed that students' posttest mean score was 75.15 percent. It was higher than the pretest because students were trained through various activities in studying English reading comprehension using collaborative strategic reading such as the students predict the reading text, identify the meanings of the words that they know and the words that they do not know, find and write the main idea of the reading text.

In addition, students had duties and worked cooperatively in group. This supported the idea stated by Bryant (2001, p. 252) that collaborative strategic reading is a teaching strategy for reading comprehension that allows learners to use effective reading strategies whilst doing reading activities with an emphasis on cooperation in exchanging ideas while reading among learners with mixed abilities. Secondly, teaching English reading comprehension using collaborative strategic reading supported the students to develop their English reading comprehension ability.

The study had conducted the following stages according to teaching English reading comprehension activities using collaborative strategic reading based on the ideas of Brown (2001, p. 315), and Vaughn & Klingner (1998, pp. 284-292). In the Pre-reading Stage, Preview activity, the teacher led the class to the topic by showing a picture related to the topic and asking questions to activate students' background knowledge. The teacher taught sentence structures related to the reading text by explaining the form and usage. Then, the teacher gave examples and asked students to write down in their notebooks. The teacher distributed students the reading texts and asked them to preview the text. The teacher divided students into group of 4-5 with mixed ability and distributed CSR Learning Log to the students. The teachers asked students to predict the text, brainstorm the text, and write down on CSR Learning Log. These activities could help to prepare students for the next stage. In the While-reading Stage, Click & Clunk activity, the teacher





distributed a role card and assigned each student a role as a leader, a clunk expert, a gist expert, a reporter, and a timekeeper. The teacher distributed worksheet to each group and asked them to read the text. Then, the students wrote the word that they knew into the worksheet. The teacher guided students to reread the text, look for clues, look for prefix or suffix, use a picture, and break the word apart. In Get the gist activity, the teacher distributed students a worksheet and asked them to read the text individually and write down the main idea of each paragraph into the worksheet. The teacher let students share their answers from the worksheet with their friends in the group. The teacher asked students to discuss their answers and asked them to write down the main idea of each paragraph into CSR Learning Log. In the Post-reading Stage, Wrap up activity, the teacher let students ask and answer questions about the main information in the text to check their understanding. Students wrote down questions and answers in CSR Learning Log. The teacher distributed students a worksheet and asked them to answer questions individually. The teacher and the students summarized the lesson orally together. Finally, the teacher asked students to write down what they have learned from the reading text on CSR Learning Log. Therefore, it could improve the students' English reading comprehension ability and initiate the higher score of the posttest than the pretest one. These findings supported to the idea of Brown (2001, p. 315) who states that the processes of teaching reading, which are pre-reading, during-reading, and post-reading, help teachers in teaching reading skill appropriately.

7.2 The finding indicated that the students' attitude towards teaching English reading comprehension using collaborative strategic reading was at a good level. The attitude questionnaire specified that students agreed that the atmosphere of studying English reading comprehension using collaborative strategic reading was fun and was not boring because students had to work in group with their friends who helped them exchange more information and ideas. Moreover, in pre-reading stage, students liked to preview the text from the pictures and questions because they helped students to predict the text. Furthermore, in while-reading stage, students thought that Click & Clunk activity helped them recall their background knowledge and learn new vocabulary, therefore, they can understand the article. The example of this activity was that the teacher distributed Worksheet Click & Clunk to each group and asked students to read the text. The teacher asked students to write the words that they knew into the Click column and the words they did not know into the Clunk column. Then, the teacher guided students to reread the text, look for clues, look for prefix or suffix, use a picture, and break the word apart to figure out the clunks. The activity gave students chances to monitor what they were reading and to think about information in the text that they knew more about and information that was causing them difficulties. Furthermore, the students also liked





working in group with their friends in order to share their thoughts with their friends because they felt comfortable to speak and share ideas. However, students also liked to work individually in order to write the topic sentence in Get the Gist activity to re-check their own understanding. Besides, doing English Comprehension quiz helped students understand the reading text. This supports the idea of Ellis (1994, pp. 198-199), who states that learners' attitude effect second language acquisition depends on learners' beliefs in learning languages. The learners with positive attitude have reinforced in language learning and acquisition, and the learners with negative attitude lack of success. In addition, this finding also supports the idea of Sroinam (2012, p. 100) who states that attitude means one's feelings and thoughts towards something which affects one's decision, selection to do something, for example; like or dislike to do something.

8. Suggestions

8.1 From the research results, it was found that the students' English reading comprehension ability after studying English reading comprehension using collaborative strategic reading was higher than prior. This was caused from the result that teaching English reading comprehension using collaborative strategic reading helped students activate their background knowledge while doing Preview activity, learning vocabulary and expressions while doing Click & Clunk activity, find the main idea of the text while doing Get the gist activity, and analyze the text while doing Wrap up activity. Therefore, English teachers should apply collaborative strategic reading to teach English reading comprehension to improve students' English reading comprehension ability.

8.2 From the research results, it was found that the students' attitude towards teaching English reading comprehension using collaborative strategic reading was at a good level. This was caused from the result that the students enjoyed doing activities through collaborative strategic reading. Collaborative strategic reading delivered activities that let students work cooperatively with their friends. They could share ideas and help each other while doing activities. Therefore, collaborative strategic reading should be promoted in teaching English reading comprehension by English teachers.





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USING THE FLIPPED CLASSROOM APPROACH TO IMPROVE MATTHAYOMSUKSA 3 STUDENTS' ENGLISH READING COMPREHENSION ABILITY

Anan Chuaysaeng¹

Kittiporn Nonkukhetkhong²

Abstract

The purposes of this research were to study and compare the English reading comprehension ability of Mathayomsuksa 3 students before and after studying English reading comprehension using the flipped classroom approach and to investigate students' attitude towards teaching English reading comprehension using the flipped classroom approach. The sample consisted of 20 Mathayomsuksa 3 students who were studying in the second semester of the 2021 academic year at Bantatprachanukool School, Banphue, Udon Thani, under the Office of Udon Thani Primary Education Service Area 4. They were obtained by cluster random sampling. The design of this research was a one group pretest-posttest design. The research instruments included 12 lesson plans, an English reading comprehension ability test, and an attitude questionnaire. The experiment lasted 12 weeks, 2 hours a week, or 24 hours in total. Statistics used in the study were mean, percentage, standard deviation, a one-sample t-test, and t-test for Dependent Samples. The findings of the research were: 1) the students' pretest and posttest mean scores on English reading comprehension ability were 15.45 or 38.63 percent and 29.90 or 74.75 percent respectively. The students' posttest mean score on English reading comprehension ability was higher than 70 percent and it was higher than the pretest one. 2) The students' attitude questionnaire towards teaching English reading comprehension using the flipped classroom approach was at a good level.

Keywords: The Flipped classroom approach, English reading comprehension, Attitude towards teaching English using the flipped classroom

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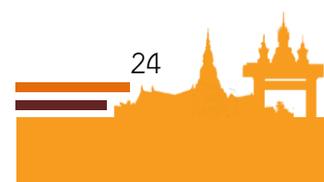
1. Introduction

English is one of the most important languages for people around the world because it is used as a means of communication among people whose English is not their native language. It could be said that the English language has been thoroughly used around the world for international communication as Crystal (2003, pp. 1-5) states that English is now the language that is the most widely used and taught as a foreign language in over 100 countries. Furthermore, the English language has been emerged as the chief foreign language for language learners who are non-native speakers to have ability of daily communication. Similarly, Harmer (2015, p. 1) claims that English has become one of the world's main languages of international communication and commerce. In Thailand, Ministry of Education (2008, p. 221) identifies that learners are required to study English and expected to be able to apply the language for daily life communication, and use it for studying in the higher levels and pursuing their career as well as signifying their ideas and the Thai culture to the world society creatively.

According to the Basic Education Core Curriculum (Ministry of Education, 2008, p. 266) English is required for students to study from Grade 1 to 12 to develop four English skills: listening, speaking, reading and writing. Among the four English skills, reading skill is one of the important and essential skills for learners since it is used for seeking information and develop their knowledge. Reading helps learners increase their knowledge, intelligence, and development of experiences. Correspondingly, Anderson (1999, p. 125) explains that reading is an essential skill for learners as it is a basic skill for learning all subjects so learners need to develop their reading skills to fully understand the reading texts. Therefore, reading is needed for students to be successful with their learning because they can develop their knowledge from what they have read in both inside and outside the classroom.

Nevertheless, in the process of reading comprehension, most students still face difficulties to understand the reading texts. Accordingly, Lapp & Flood (1986, p. 780) explain that most students have less ability of reading for comprehension because they lack of vocabulary knowledge and teachers do not appropriately use the reading strategies and activities to assist the students' comprehension. Moreover, Thai students have low English vocabulary knowledge and lack of opportunities to practice reading texts outside the classroom.

The flipped classroom approach is one of teaching and learning solutions to help improve students' English reading comprehension ability. According to Bergmann & Sams (2012, pp. 13-17), they identify that the traditional learning activity starts and ends in the class or students' assignments as homework. However, in the flipped classroom, what is traditionally done in class is now done at home, and what is traditionally done as





homework is now completed in class. Before the class begins, students are assigned to view the video clip or learning materials created by teachers and given on the day before the class—they view it at home where their parents can point out which part they need helps, and they then make some notes or questions for asking and then summarize their learning. In the class, the teacher provides some activities to activate students to collaborate with their friends through various activities such as active learning activities, group discussion and other student-centered activities. Furthermore, Mehring (2015, p. 1) indicates that the flipped classroom approach is one of student-centered learning activities as it is a learning management which provides a foundation for understanding the influences, motivations, challenges, and benefits involved in adapting technology in combination with this instructional method. Also, it helps teachers develop student-centered courses by detailing the experiences of students who have taken a flipped course. However, the flipped classroom approach is challenging for students since they have to take responsibility of their learning both inside and outside the classroom. Some students may have difficulty to complete their assignments, so teachers need to activate and provide scaffoldings to students before they complete their assignments at home. Hence, the researcher would like to use the flipped classroom approach to develop students' English reading comprehension ability with Mathayomsuksa 3 students at Bantatprachanukool School, Banphue District, Udon Thani and investigate the students' attitude towards teaching English reading comprehension using the flipped classroom approach.

2. Purposes of the Study

The purposes of the study were to study and compare the English reading comprehension ability of Mathayomsuksa 3 students before and after studying English reading comprehension using the flipped classroom approach and to investigate students' attitude towards teaching English reading comprehension using the flipped classroom approach

3. Literature Review

The study of using the flipped classroom approach to improve Mathayomsuksa 3 students' English reading was conducted in the second semester of the 2021 academic year at Bantatprachanikool school under the Office of Udon Thani Primary Education Service Area 4. The researcher studied for this study as follows:

3.1 Reading Comprehension is a process of interactions between a reader and a writer. Understanding the written texts depends on individual capability of readers and reading comprehension through readers' schema knowledge can help them predict





the information or meaning of the texts. This is consistent with Gunning (1992, p. 188) who defines that reading comprehension is the abilities to understand words or language which a writer needs to communicate through writing.

3.2 The Flipped Classroom Approach was developed by Bergmann & Sams (2012, pp. 13-17). This concept of reading is adapted from the flipped model which students needs to ask the questions about the content that has been delivered through videos before class to assign students the reading texts with essential guidelines. Therefore, students generally answer questions during the first few minutes of class. This allows students to clear up misconceptions before they are practiced and applied incorrectly. The reminder of the time is used for more extensive hands-on activities and/or directed problem-solving time as shown in Table 1.

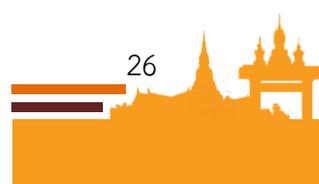
Table1: Comparison of Class Time in Traditional versus Flipped Classrooms

Traditional Classroom		Flipped Classroom	
Activity	Time	Activity	Time
Warm-up activity	5 minutes	Warn-up activity	5 minutes
Go previous night's homework	20 minutes	Q&A time in the reading texts	10 minutes
Lecture new content	30-45 minutes	Guided and independent practice and/or activity	75 minutes
Guided and independent practice and/or activity	20-30 minutes		

3.3 Related Researches

Roth (2016) conducted the study on the effects of pre-university students' interests in listening skill by using the flipped classroom as ESL students at Pannasastra University of Cambodia. The finding showed that the students' posttest score was 83.31 percent and the students' pretest score was 72.88 percent. The results explained that the students' English listening ability was significantly higher than that of the pretest.

Beside, Huang & Hong (2015) conducted the study to explore the use of the flipped classroom approach integrated with Information Communications Technology (ICT) to improve Taiwan secondary students' English reading comprehension. The finding showed that the students' English reading comprehension ability was significantly improved.



In addition, Khamchoo (2018) also conducted a study about the development of English reading comprehension ability using the flipped classroom approach of grade 12 students at Yungthongpittayakhom school, Nayung district, Udon Thani. The research findings of this study were as follows: students studied by the flipped classroom approach had mean score of the post-test on learning achievement and analytical thinking were higher than the pre-test mean score at the significant level of .01, and students' satisfaction towards instruction using the flipped classroom approach was at high level.

4. Conceptual Framework

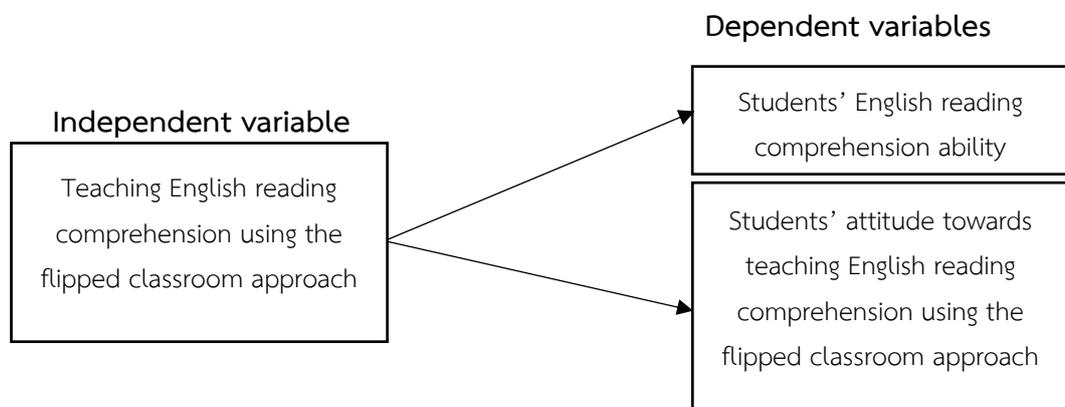


Figure 1: Conceptual Framework

5. Research Methodology

5.1 Population and Sample

5.1.1 Population

The population in this study was 145 Mathayomsuksa 3 students from 6 classrooms in Nonthong-Haisok group, Banphue, Udon Thani, under the Office of Udon Thani Primary Education Service Area 4.

5.1.2 Sample

The sample in this study was 20 Mathayomsuksa 3 students who were studying in the second semester of the 2021 academic year at Bantatprachanukool School, Banphue, Udon Thani, under the Office of Udon Thani Primary Education Service Area 4. These students were obtained by cluster random sampling using the flipped classroom approach in accordance with the developed lesson plans.

5.2 Research Design

This study was an experimental research with a one group pretest-posttest design. It was a quantitative research design. (Fraenkel & Wallen, 2000, pp. 94-97)





	T_1	X	T_2	
T_1	means			Pretest
X	means			Teaching English reading comprehension using the flipped classroom approach
T_2	means			Posttest

5.3 Research Instruments

In order to construct this study, three research instruments were employed as follows:

5.3.1 Lesson plans of teaching English comprehension using the flipped classroom approach, the lesson plans consisted of 12 units, 2 hours per unit.

5.3.2 The English reading comprehension ability test, the English reading comprehension ability test was developed by the researcher. This test was a multiple-choice test with 40 items. This test was used to investigate the students' English reading comprehension ability using the flipped classroom approach.

5.3.3 The students' attitude questionnaire towards teaching English reading comprehension using the flipped classroom approach. The attitude questionnaire was developed in Thai based on five points of Likert's rating scales which consisted of 20 items.

5.4 Data Collection

The researcher performed collecting data in the second semester of 2021 academic year. The details were as follows:

5.4.1 Students took English reading comprehension test before studying through the flipped classroom approach with 40 items. It took an hour.

5.4.2 The teaching process was carried out according to the 12 lesson plans for 12 weeks, 24 hours in total.

5.4.3 After the whole teaching process using the flipped classroom approach completed, students took the posttest which was the same test of the pretest.

5.4.4 Attitude questionnaire was used to investigate students' opinion towards teaching English reading comprehension using the flipped classroom approach.

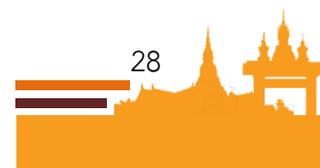
5.4.5 The collected scores from the pretest and posttest, and students' attitude data were statistically analyzed and summarized.

5.5 Data Analysis

5.5.1 The process of data analysis

The following three steps were implemented to analyze the data:

1) Analyzed the data to study the teaching English reading comprehension of Matthyomsuksa-3 students.





2) Analyzed the data to compare the teaching English reading comprehension of Mathyomsuksa 3 students before and after learning English reading comprehension using the flipped classroom approach.

3) Analyzed the data to investigate the students' attitude towards teaching English reading comprehension using the flipped classroom approach.

6. The Statistics Used in the Study

The data obtained from the English reading comprehension ability test and the students' attitude questionnaire were analyzed using three types of statistics as follows:

6.1 The basic statistics used to analyze the data included: Percentage, Mean (\bar{X}), and Standard Deviation (S.D.).

6.2 The statistics used to evaluate the quality of the instruments included: the Index of Item Objective Congruence (IOC), Difficulty Index (p), Discrimination Index (r), and Reliability.

6.3 The statistics used to analyze hypotheses

6.3.1 The first hypothesis compared the students' pretest scores with the criterion of 70 percent using a one-sample t-test, analyzed by using SPSS program for Windows.

6.3.2 The second hypothesis compared between the students' pretest and posttest scores using t-test for Dependent Samples. The hypotheses were analyzed by using SPSS program for Windows.

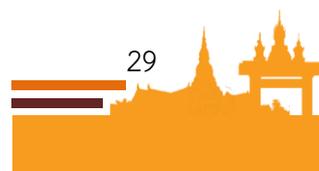
7. Results of the research study

The results of the study of using the flipped classroom approach to improve Mathayomsuksa 3 students' English reading comprehension ability are shown in the following Tables:

Table 1: Mean, Standard Deviation, Percent and a Comparison of Pretest and Posttest Mean Scores of the students' English Reading Comprehension Ability Before and After Studying English Reading Comprehension Using the Flipped Classroom Approach

Test	n	\bar{X}	S.D.	70 Percent	t
Pretest	20	15.45	4.5	38.63	32.11**
Posttest	20	29.90	3.14	74.75	

** $p \leq .01$





From Table 1, it shows that the students' pretest mean score on English reading comprehension ability was 15.45 or 38.63 percent and the posttest was 29.90 or 74.75 percent. The results explain that the students' English reading comprehension ability before and after studying English reading comprehension using the flipped classroom approach was significantly higher than the prior at the .01 level.

Table 2: Mean, Standard Deviation and Investigation of Students' Attitude towards Teaching English Reading Comprehension Ability Using the Flipped Classroom Approach of Mathayomsuksa 3 Students

Questionnaire	n	\bar{X}	S.D.	Interpretation
Students' attitude towards teaching English reading comprehension using the flipped classroom approach	20	4.43	0.11	Good

From Table 2, it presents that the mean of students' attitude towards teaching English reading comprehension using the flipped classroom approach was at 4.43. It indicates that students' attitude towards teaching English reading comprehension using the flipped classroom approach was at a good level.

8. Conclusion and Discussion

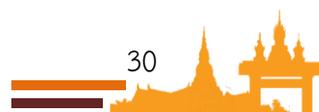
From the research results, they can be explained as follows:

8.1 Conclusion

A study and comparison of pretest and posttest scores on English reading comprehension ability and an investigation of Mathayomsuksa 3 students' attitude towards teaching English reading comprehension using the flipped classroom approach can be summarized as follows:

1. The students' pretest mean score on English reading comprehension ability was 15.45 or 38.63 percent and the posttest was 29.90 or 74.75 percent respectively. The students' posttest mean score on English reading comprehension ability after studying English reading comprehension using the flipped classroom approach was significantly higher than that of the pretest and the mean score on the posttest was higher than the set criterion of 70 percent. The students' English reading comprehension ability was found to be significantly different at the .01 level.

2. The students' attitude towards teaching English reading comprehension using the flipped classroom approach was at a good level.





8.2 Discussion

This study was an experimental research with a one group pretest–posttest design. This research was aimed to study and compare students' English reading comprehension ability before and after studying English reading comprehension using the flipped classroom approach. The results of the study can be discussed as follows:

1) The results of the study of English reading comprehension ability of Mathayomsuksa 3 students at Bantatprachanukool School before and after studying English reading comprehension using the flipped classroom approach showed that the students' pretest and posttest mean scores were 15.45 or 38.63 percent and 29.90 or 74.75 percent respectively. The results revealed that the posttest mean score was higher than the set criterion of 70 percent which was in accordance with the first hypothesis. It showed that teaching English reading comprehension using the flipped classroom approach was very effective to develop students' reading comprehension ability. After the instruction of teaching English reading comprehension using the flipped classroom approach based on Bergmann & Sams (2012, pp. 13-17) for 12 weeks, the students have improved their reading comprehension ability because they could independently read the reading text handouts and preview related videos and PowerPoints and learning materials assigned by the teacher before class. During before-class activity, each student could activate their background knowledge by surveying, reading the reading texts and complete their assignments at home in order to discuss through active learning activities with the teacher and friends in class. Furthermore, it is combined with the provided outside-class reading tasks and in-class active reading activities. It is very suitable and successful for learning management in term of the limitation of the in-class time. In the flipped classroom, what they traditionally study in class is now done at home, and what the traditionally study as homework is now completed in class. During the experiment, after the students self-studied at home, they then studied, discussed and checked their correctness with the teacher and friends through various active learning activities in both individual and group work to develop their English reading comprehension ability. As a result, after the students learned English reading comprehension using the flipped classroom approach, it is shown that the students have a significant improvement in their posttest score.

2) The results of the comparison of the students' scores on English reading comprehension before and after studying English reading comprehension using the flipped classroom approach indicates that the students' reading comprehension ability was significantly different at the .01 level. The posttest mean score was higher than that of the pretest which was in accordance with the second hypothesis. This might be because of these following reasons:



Firstly, flipped classroom approach is an instructional approach that promotes learner-center learning activities in both outside and inside class. The students are actively engaged in reading individually before class and reading collaboratively during class. Before-class activity, it is suitable for them to self-study, recheck their answers and then make a conclusion of their works. The ultimate goal is to assist students to become autonomous learners who can take responsibility of their own learning. Whereas in-class activity promotes students' group-work assignment collaboratively to complete their work. Collaborative projects make students cooperate, learn from each other and help each other. In the same way, Gerlach (1994, p. 59) states that collaborative learning is an educational approach to teaching and learning that involves groups of students working together to solve a problem, complete a task, or create a product.

Secondly, the students learned English reading comprehension using the flipped classroom approach through the steps of following stages integrated according to teaching English reading comprehension activities using the flipped classroom approach based on the idea of Bergmann & Sams (2012, pp. 13-17) and Williams (1994, pp. 37-44). The first step of teaching, in the pre-reading stage as the before-class activities, the teacher provides students Worksheets with video clips or PowerPoint and the reading text, and assigns them to watch video clips or PowerPoint related to the reading text, and do the assignments at home. They survey the reading text by underlining the unknown words and find their meanings. Then, they read the reading text, find the main idea and important details, and create some questions related to the reading text in order to discuss and find the answers during class. The teacher elicits and activates their prior knowledge in the reading text by showing a picture and asking them some questions. The teacher presents other new vocabulary and the structures found in the reading text, and give some examples of them. The second step of teaching, in while-reading stage as the during-class activities, the teacher divides students into group of four students with mixed abilities. Each student in group discusses and shares the main idea, important details, and the questions that they have created. Then, teacher helps them explain some unclear parts of the reading text. They help each other find the answers in Worksheet and check the answers with the teacher. The teacher asks each them to read the reading text again and answer the questions as gap-filling, short answer, or matching. The final step of teaching, in post-reading stage, the teacher and students discuss and summarize the reading text orally. Then, the teacher asks them to take a quiz to check their reading comprehension about the reading text individually and then check the answers with the teacher. In after-class activities, the teacher asks each group to make a summary of the reading text by creating mind-mapping or drawing a picture. Then, the teacher checks and gives feedbacks of their summary and asks them to share their work on the notice board or





social network group. These teaching steps of English reading comprehension using the flipped classroom approach were effective. It could enhance the students' English reading comprehension ability and gain the higher score of the posttest than the pretest.

The results were consistent with the study of Khamchoo (2018) who conducted a study about the development of English reading comprehension ability using the flipped classroom approach of grade 12 students. The samples of the study were thirty students who were studying in the second semester of 2018 academic year at Yungthongpittayakhom school, Nayung district, Udon Thani. These students were obtained by cluster random sampling using classroom as the sampling unit. The study was an experiment research with a one group pretest-posttest design and it was a quantitative research design. The three research instruments consisted of: twelve lesson plans, the English reading comprehension ability test, and the students' attitude questionnaire towards teaching English reading comprehension using the flipped classroom approach. The research findings of this study were as follows: students studied by the flipped classroom approach had mean score of the posttest on learning achievement and analytical thinking were higher than the pre-test mean score at the significant level of .01, and students' satisfaction towards instruction using the flipped classroom approach was at high level.

3) The result of students' attitude towards teaching English reading comprehension using the flipped classroom approach presents that the mean of students' attitude was at 4.43. It indicates that the students' attitude was at a good level. These indicated that the results of the students' English reading comprehension ability after studying English reading comprehension using the flipped classroom approach was higher than before because they were interested in this reading process. If students have positive attitude towards teaching English reading, they can actively engage in the learning process and get a higher English reading language learning achievement as Krashen (1981, p. 112) states that attitude and language skills are concerned with students' language learning achievement. Moreover, on matter how students have positive or negative attitude, the students' attitude towards language learning certainly affects their behavior or language learning achievement.

In summary, the flipped classroom approach is one of effective teaching approaches which can be used for developing English reading skill because its learning process is suitable for students to get involved with both individual and group work. After they studied English reading comprehension using the flipped classroom approach, their English reading comprehension ability was higher than before because active learning activity enhanced students to improve their English reading ability and become autonomous





learners. Also, they had positive attitude towards teaching English reading comprehension using the flipped classroom approach which was at a good level.

9. Recommendations

The recommendations from the study are as follows:

9.1 Recommendations from the study

In order to make use of this study, the research proposes the following recommendations as follows:

9.1.1 From the research results, the students' posttest score on English reading comprehension ability was higher than the set criterion of 70 percent and the students' posttest score of reading comprehension ability was higher than the pretest score. It showed that the students learned English reading comprehension through active learning activities which they could self-study, make questions related to the reading text, and write in main idea and supporting details before the class began. The flipped classroom approach enhances students to improve their English reading comprehension ability in three levels which are textually explicit comprehension, textually implicit comprehension, and critical reading. Therefore, the flipped classroom should be considered to use for developing English reading comprehension by English teachers

9.1.2 From the research results, it was shown that the students' attitude towards teaching English reading comprehension using the flipped classroom approach was at a good level because the learning process activates students' attention in the English reading learning activity. Before-class activity activated their background knowledge and experiences, so they could independently read and comprehend the reading text as well as get motivated with learning materials such as Videos and PowerPoints. In-class Activity promoted their collaborative learning which students would help each other to complete their group-work assignment. Therefore, alternative materials should be provided to help them activate their active learning effectively and prepare their prior knowledge for in-class discussion.

9.1.3 From the research results, it was shown that collaborative learning helps students get involved with the lessons by sharing their main idea, supporting details and helping their group work to discuss and finish their assignments. Students were divided into group of four with mixed-ability students, so each student in the group had to take their responsibility to help others complete their work. Therefore, collaborative learning activity should be considered to use in a big class because group-work activity would help teachers manage active learning activity effectively.





9.1.4 From the research results, it was shown that after-class activity helped students create their work after learning. Their creativity was expressed through a mind-mapping or a picture drawing and presented it through social network group. Therefore, summarizing the lessons after class is to remind what students have learnt and to check their understanding. Also, creating and presenting their work is to make them proud of themselves and promote their confidence in learning English. As a result, the English teachers should implement the flipped classroom approach in teaching English reading comprehension to develop their students' reading ability.

9.2 Recommendations for further study

According to the results discussed earlier, some suggestions are proposed here for further studies.

9.2.1 Researchers should investigate using the flipped classroom approach to develop other English language skills: speaking, listening, and writing.

9.2.2 Researchers should integrate the flipped classroom approach with other social media in teaching English reading comprehension ability for interacting and giving suggestions with learners, for instance, Facebook or Line application and so on.

9.2.3 Researchers should apply the flipped classroom approach to other subjects and other students' levels.

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USING TASK-BASED LEARNING APPROACH TO IMPROVE MATTHAYOMSUKSA 6 STUDENTS' ENGLISH READING COMPREHENSION ABILITY

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Worawoot Tutwisoot²

Abstract

The purposes of this research were to study and compare the students' English reading comprehension ability using a task-based learning approach before and after the intervention and to investigate the students' attitude toward teaching English reading comprehension using a task-based learning approach. The sample consisted of 40 students of Mathayomsuksa 6/1 students at Thatnaraiwittaya School, Sakon Nakhon Province under the Sakon Nakhon Secondary Educational Service Area Office in the first semester of the academic year 2021, selected by cluster random sampling. The research was a one-group pretest-posttest design. The research instruments included 12 lesson plans, an English reading comprehension test, and an attitude questionnaire. The experiment lasted 12 weeks, 2 hours a week, or 24-four hours in total. The mean, percentage, standard deviation, one-sample t-test, and t-test for Dependent Samples were used for data analysis. The findings were as follows: 1) The students' pretest and posttest mean scores of English reading comprehension ability were 15.38 or 38.44 percent and 31.58 or 78.94 percent, respectively. The posttest mean score was also higher than the set criterion of 70 percent, and the students' English reading comprehension ability was significantly higher than that of the pretest, and 2) The students' attitude toward teaching English reading comprehension using a task-based learning approach was at a very good level.

Keywords: Task-based Learning Approach, English Reading Comprehension

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1. Introduction

English becomes a global lingua franca, also known as a bridge language or a common language (Crystal, 2003, p. 69). People all over the world use English to communicate with others from foreign countries in education, economy, society, transportation, and culture. Therefore, the English language has become increasingly important and influential, especially for member states in the ASEAN.

The Basic Education Core Curriculum indicates that the English language is taught as a foreign language and that students are required to learn English from primary to secondary school levels to develop their four English skills. Foreign languages can be used as a tool for communication, education, seeking knowledge, and creating awareness of the diversity of cultures. The learners are thus able to learn foreign languages for communication and understand others from different languages and cultures (Ministry of Education, 2008, p. 252). Reading is considered a basic life skill and one of the most essential skills for students among the four English skills in both classroom contexts and extracurricular environments (Carrell 1989, p. 120). Also, Williams (1994, p. 37) mentions that reading allows learners to further improve language skills already acquired through the acquisition of listening, speaking, and writing skills. Reading also helps students understand the text effectively.

The English reading comprehension ability is important and educates people in various fields in effective ways to gain knowledge. Also, reading comprehension is an essential ability in daily life, such as reading newspapers or magazines, understanding properties and usage guidelines on prescription drug labels, making personal choices based upon advertisement claims. In addition, reading comprehension raises the bar for communicating fluently in English and improves individual development and lives in general.

Since Thailand is a non-native English-speaking country, there are not many opportunities for Thai learners to interact with other people by using English. According to Anderson (1999, p. 39), with strengthened reading skills, readers will make greater progress and attain greater development in all academic areas. Although reading is considered to be a meaningful language learning activity, many language learners encounter reading difficulties in reading class. In English reading class, most of the time, the teacher asks and pays much attention to the explanation of vocabulary and grammar items. From the report on the learning achievement of English reading courses for Matthayomsuksa 6 students (Thatnaraiwittaya School, 2020, p. 24), it was found that the learning achievement of English reading and writing courses among Mathayomsuksa 6 students average score was 40.30 percent which was considered below the criterion of





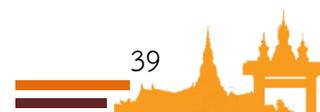
70 percent. It demonstrates that the learners have problems in reading English. The success of the learning process depends on the methods of the instructor. Therefore, teachers need to develop and improve teaching techniques and provide an atmosphere conducive to learning.

Task-Based Learning (TBL) indicates how tasks can be used as the central focus in a supportive methodological framework. The task aims to create a real purpose for language use and provide a natural context for language study. Students prepare for the task, report back after the task, and then study the language that arises naturally out of the task cycle and its accompanying materials (Willis, 1996, pp. 56-57). Furthermore, Littlewood (1981, pp. 17-18), Taylor (1983, pp. 69-83), Brumfit (1984, p. 65), and Willis (1996, p. 137), mention the benefits of the task-based learning approach as it allows students to use language that corresponds to real situations, practice using natural language, practice problem-solving skills, motivate them to perform tasks, and build confidence in reading. It also creates a good relationship between teachers and students and between students.

In conclusion, task-based learning by Jane Willis (1996, pp. 23-24) tends to be an effective approach for a communicative purpose, and students will be able to achieve an outcome by using speaking and listening abilities. Even though task-based learning has a tendency to be compatible with speaking and listening abilities, many English learners still have problems with reading comprehension ability which is rarely found in any studies. That was the reason why the researcher decides to study whether the task-based learning approach could assist EFL students reading comprehension ability or not and to investigate the level of attitude toward teaching English reading comprehension using a task-based learning approach. The research findings can be guidelines for teaching English reading comprehension in Thailand in the future.

2. Purposes of the study

The purposes of the study were to study and compare the English reading comprehension ability of Matthayomsuksa 6 students before and after the intervention using a task-based learning approach and to investigate students' attitude toward teaching English reading comprehension ability using a task-based learning approach.





3. Literature Review

AN experimental study was conducted in the first semester of the 2021 academic year at Thatnaraiwittaya school under the Sakon Nakhon Secondary Educational Service Area Office. The definitions of terms and relevant research studies regarding task-based learning and reading comprehension are presented as follows:

3.1 Definitions of Reading Comprehension

Reading Comprehension is a process of interactions between a reader and a writer. Understanding the written texts depends on the individual capability of readers and reading comprehension through readers' schema knowledge can help them predict the information or meaning of the texts. This is consistent with Wallace (1992, p. 4) who defines reading comprehension as a process of interpreting what the writer has written in the reading text and readers' purpose is to understand the writer's aim.

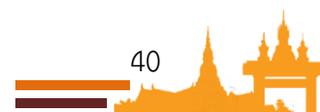
3.2 Definitions of Task-Based Learning Approach

The task-based learning approach was developed by Willis (1996, pp. 56-57). The task-based learning approach focuses on the use of authentic language. The assessment is primarily based on the task outcomes rather than the accuracy of language forms. The task-based learning approach is advantageous to the students because it is more student-centered, allows for meaningful communication, and provides for practical language skill-building.

3.3 Related Research about Task-Based Learning and reading comprehension

For the empirical part, the researcher presented some studies that had been investigated and highlighted in the areas of task based-learning and English reading comprehension.

Torky (2006) examined task-based instruction programs for developing the speaking skills of first-year secondary students. This study was conducted on two intact first-year secondary classes in a governmental Egyptian school. The results of the study emphasized that task-based instruction was effective in enhancing the experimental group students' overall speaking performance. Besides, Plianckham (2008) studied the development of English reading comprehension ability using task-based learning of 25 Mathayomsuksa 3 students at a school in Sakon Nakhon Province. The findings revealed that the students' pretest and posttest English reading comprehension ability scores were 48.90% and 75.90%, respectively and the student's attitude toward teaching English reading comprehension using a task-based language learning was at a good level. In addition, Pannop (2016) studied and compared the English speaking ability before and after using task-based learning of 29 Mathayomsuksa 3 students at a school in Udon Thani, under



Nakhon Udon Thani Municipality Education Office. The results showed that the students' posttest mean score on English speaking ability was higher than a set criterion of 70 percent and the students' posttest mean score on English speaking ability was higher than the pretest one. Moreover, the students' attitude toward teaching English speaking using task-based learning was at a very good level.

4. Conceptual Framework

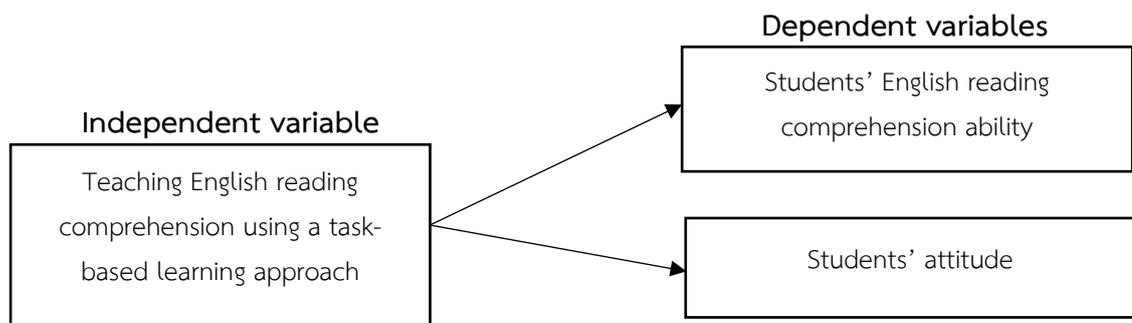


Figure 1: Conceptual Framework

5. Research Methodology

This study was an experimental research with a one-group pretest-posttest design. It was a quantitative research method (Cambell & Stanley, 1969).

5.1 Population and Sample

The population in this study was 432 of Mattayomsuksa 6 students of 12 classrooms enrolled in the course, Additional English (EN 33203), in the first semester of the academic year 2021 in Thatnaraiwittaya school under the Sakon Nakhon Secondary Educational Service Area Office, Muang district, Sakon Nakhon Province. The sample in this study was 40 students of Matayomsuksa 6/1 students studying English course (EN 33203) in the first semester of the academic year 2021 at Thatnaraiwittaya school, Muang, Sakon Nakhon Province selected by cluster random sampling using the classroom as a sampling unit.

5.2 Research Instruments

To construct this study, three research instruments were employed as follows:

5.2.1 Lesson plans of teaching reading comprehension ability using task-based learning approach, the lesson plans consisted of 12 units, 2 hours a unit.



5.2.2 A reading comprehension ability test, the reading comprehension test was developed by the researcher based on Miller (1990, pp. 3-5) to examine the reading comprehension ability of students in 4 levels: literal level, interpretive level, critical level, and applied level. This test was a multiple-choice test with 40 items in an English version.

5.2.3 A students' attitude questionnaire toward teaching reading comprehension ability using task-based learning approach. The attitude questionnaire was developed in the Thai version consisted of 20 items related to the contents using a five-point Likert rating scale.

5.3 Data Collection

The researcher collected the data in the first semester of the academic year 2021 to perform data collection. The details of data were as follows:

5.3.1 Students took the pretest using the developed test with 40 items before studying for 60 minutes.

5.3.2 The teaching process was carried out according to the 12 lesson plans for 12 weeks, 2 hours a week, 24 hours in total.

5.3.3 After the whole teaching process using the task-based learning approach was completed, the students took the posttest which was the same English reading comprehension ability test as the pretest.

5.3.4 The attitude questionnaire was administrated to examine the students' attitude toward teaching English reading comprehension using a task-based learning approach.

5.3.5 The collected scores from the pretest and posttest and the students' attitude data were statistically analyzed and interpreted.

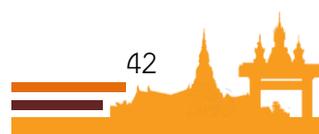
5.4 Data Analysis

The collected data of a reading comprehension ability test and the students' attitude questionnaire were statistically analyzed as follows:

5.4.1 The researcher analyzed the data to study the teaching English reading comprehension using mean (\bar{X}), percentage, and standard deviation (S.D.).

5.4.2 The researcher analyzed the data to compare the teaching English reading comprehension after the intervention with the criterion of 70 percent using t-test for Dependent Samples.

5.4.3 The researcher analyzed the data to investigate the students' attitude toward teaching English reading comprehension using a task-based learning approach using mean (\bar{X}) and standard deviation (S.D.).





5.5 The Statistics Used in the Study

The statistics for analyzing collected data from the reading comprehension ability test and students' attitude questionnaire are the basic statistics included: Percentage, Mean (\bar{X}), and Standard Deviation (S.D.). The statistics used to evaluate the quality of the instruments included: the Index of Item Objective Congruence (IOC), Difficulty Index (p), Discrimination Index (r), and Reliability. The statistic for analyzing hypotheses is a one-sample t-test, and t-test for Dependent Samples. The hypotheses were then analyzed using a software program for Windows.

6. Results of the research study

The results of the study of using a task-based learning approach to improve Matthayomsuksa 6 students' English reading comprehension ability are shown in the following tables:

Table 1 A Comparison of Pretest and Posttest Mean Scores

Test Scores	n	\bar{X}	S.D.	70 Percent	t
Pretest	40	15.38	2.88	38.44	57.37**
Posttest	40	31.58	3.28	78.94	

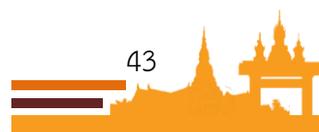
** $p \leq .01$

Table 1 shows that the students' pretest mean score on English reading comprehension ability was 15.38 or 38.44 percent and the posttest was 31.58 or 78.94 percent. The results explain that the students' English reading comprehension ability before and after the intervention was significantly higher than that of before the intervention at the 0.01 level.

Table 2 Students' Attitude Toward Teaching English Reading Comprehension Ability

Item	n	\bar{X}	S.D.	Interpretation
Students' attitude	40	4.95	0.55	Very Good

Table 2 presents that the mean of students' attitude toward teaching English reading comprehension using a task-based learning approach was at 4.95. It indicates that students' attitude toward teaching English reading comprehension using a task-based learning approach was at a very good level.





7. Conclusion and Discussion

The study and the comparison of the pretest and the posttest on English reading comprehension ability and the investigation of the student's attitude toward teaching English reading comprehension ability using a task-based learning approach can be summarized as follows:

7.1 The students' pretest and posttest mean scores on English reading comprehension ability were 15.60 or 38.44 percent and 31.63 or 78.94 percent, respectively. The students' posttest mean score on English reading comprehension ability was higher than the set criterion of 70 percent and the students' English reading comprehension ability after the intervention was significantly higher than that of the pretest, which supports the first hypothesis.

According to learning theories, schema theory is a key factor, as seen by Willis (1996, pp. 23-24), who stated that a pre-task step of a task-based learning approach should be focused on relevant knowledge, some language points, and vocabulary to make sure other steps of the task would be comprehended. In addition, teaching English reading comprehension using a task-based learning approach recalled students' background knowledge at the beginning using relevant pictures and asking questions. Then, the meaning of vocabulary is provided in reading before starting a reading. Moreover, Anderson (1983, p. 87) stated that schema theory is based on the belief that "every act of comprehension involves one's knowledge of the world as well". Thus, the students could follow the trace to comprehend the overview of the reading. Likewise, the study of Jariya (2013) found that English reading comprehension ability using schema theory of Pratomsuksa 6 students after the intervention was higher than that of before the intervention. Similarly, teaching English reading comprehension using a task-based learning approach in the while-reading step provided a brainstorming step for sharing their ideas with friends to help them more understanding. As a result, they could improve their English reading comprehension ability. According to Hilke (1992, p. 44), cooperative learning is a strategy to help students work in a group to achieve both cognitive and emotional goals.

Also, Supapak (2007) found that the results of reading English comprehension using a collaborative method of Mathayomsuksa 5 students found the students' posttest scores were higher than pretest scores at the .05 level. Likewise, the English reading comprehension using task-based learning approach is active learning which allows students to learn it themselves with teachers as facilitators. Moreover, the tasks used in the study which are listing, ordering and sorting, and comparing helped students understand easier. The tasks provided the aims for students to read and provided students better understandings





by guiding the students to meet the outline of the reading. The advantages of each task can be described as follows:

The simplest type of task is listing. According to Willis & Willis (2011, p. 36), it may seem at first sight far too simple, but the linguistic challenge can vary according to what you ask the learner to list; it could result in a list of words or short phrases or even quite complex sentences. Also, Pliankham (2008) studied the development of English reading comprehension ability using task-based learning of Mathayomsuksa 3 students. The findings of this research are; the students' pretest and posttest English reading comprehension ability scores were 48.90% and 75.90%, respectively. Another benefit of starting with a listing task is that items on the list could be ordered or sorted or compared in some ways or others.

Moreover, the second task type was ordering and sorting meaning that the learners would be sequencing, categorizing, ranking, and classifying. All these activities could help to sort and order information according to specified criteria. This type of task provided the same category or the storyline to lead their understanding by following the timeline in the reading. Following Willis (1996, pp. 23-24), the outcome would be the capacity of ordering and sorting information according to specific criteria. In addition, the comparison task was the task to find similarities or differences.

Lastly, according to Willis & Willis (2011, p. 36), one of using comparison tasks is that students gain a very rich exposure to language within the security of a tight and well-defined framework. Also, Arsairach (2014) illustrated the students' reading ability after studying by English reading achievement through task-Based reading activity model was significantly higher than that before at the 0.05 level.

7.2 The students' attitude toward teaching English reading comprehension ability using a task-based learning approach was at a very good level. It can be described as follows:

Firstly, the students were inspired to pay attention to reading text by looking at the relevant pictures and asking questions related to prior knowledge which were able to stimulate students' prior knowledge and link them to the reading task they were going to read. The students preferred teaching English reading comprehension ability by using a task-based learning approach and showing their attitude on their success of the posttest scores after studying. This supports the idea of Anderson (1983, p. 87) who stated that schema theory is based on the belief that "every act of comprehension involves one's knowledge of the world as well".

Secondly, one of the highest mean scores of the students' attitude was the task provided to students to work in groups. It was shown that students like to do tasks or study with their friends in the steps of brainstorming, presenting, and helping each





other. Moreover, the small-group tasks not only reduced students' anxiety and stress but also gave them spaces to talk, enjoy and share opinions with their friends about the reading text. This might be a more fun approach to engage and stimulate students' interest in learning English. This idea supports by Willis & Willis (2011, p. 36) who stated that brainstorming was an extremely effective way of getting even shy learners involved in topics and promotes richer task interaction.

Lastly, the task-based learning approach led the students to comprehend overall a better overview of the reading by listing, ordering, sorting, and comparing. Plus, the task helped students find answers from reading tasks faster and more accurately. And specific tasks encouraged students' participation.

In summary, the students have a positive attitude toward teaching English reading comprehension ability because students felt comfortable reading with friends, being motivated by recalling background knowledge or doing tasks.

8. Recommendations

To make use of this study, the researcher recommends the following:

1. Using a task-based learning approach to improve English reading comprehension motivates students to be able to list, order, and compare the passage to understand the overall reading text instead of detailing text reading. This would also improve students' confidence to accomplish the tasks.

2. Implementing a task-based learning approach to improve English reading comprehension should be at least two hours per reading text so that the students can spend time in each step effectively.

3. Using a task-based learning approach to improve English reading comprehension requires the teachers to prepare more extensive knowledge and deep understandings about the reading text to discuss and explain the answers in class, and the necessity and usefulness of preparing lesson materials and reflection.

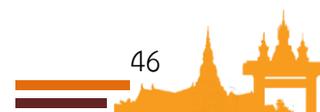
Recommendations for further study

The researcher's recommendations for further study were as follows:

1. The researcher recommends conducting further studying with all learners of different levels by integrating the tasks into the topics of other English skills.

2. Researchers should conduct further studying using a task-based learning approach to students in various levels and educational backgrounds.

3. Researchers should apply new activities or tasks to activate students' prior knowledge, such as telling stories, watching videos, playing games, etc.





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USING KWL-PLUS STRATEGY TO IMPROVE MATHAYOMSUKSA 5 STUDENTS' ENGLISH READING COMPREHENSION ABILITY

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Napasup Lerdpreedakorn²

Abstract

The purposes of this research were to study and compare the English reading comprehension ability of Mathayomsuksa 5 students before and after studying English reading comprehension using KWL- Plus strategy and to study the students' attitude towards teaching English reading comprehension using KWL- Plus strategy.

The sample consisted of 40 Mathayomsuksa 5 Students enrolling in Basic English (E32101) course in the first semester of 2021 academic year at Chumpholphonphisai School, Phonphisai District, Nongkhai, under the Secondary Educational Service Area Office Nongkhai selected by cluster random sampling. The design of this research was one group pretest-posttest design. The research instruments were 12 lesson plans, an English reading comprehension test and a students' attitude questionnaire. The experiment lasted 12 weeks, 2 hour a week, 24 hours for all. The mean, percentage, standard deviation, One Sample t-test and t-test for Dependent Samples were used for data analysis.

The findings of this research were as follows:

1. The students' pretest and posttest mean scores on English reading comprehension ability were 17.93 or 44.81 percent and 30.98 or 77.44 percent respectively. The students' English reading comprehension ability was significantly different at the .01 level. The students' posttest mean score was higher than the pretest mean score and the mean score on the posttest was higher than the set criterion of 70 percent.

2. The students' attitude towards teaching English reading comprehension using KWL- Plus strategy was at the good level.

Keywords: Reading comprehension, KWL Plus strategy, Attitude in Language Learning

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1. Introduction

In the world of globalization, one of the most important languages is the English language, and it is considered as a way of communication for people so that people who have different nationalities, regions, cultures and languages can contact each other all over the world. In addition, the Ministry of Education of Thailand (2008, p. 266) states that English is used as an essential tool for communication, seeking new knowledge, education, and livelihood. In today's global world, people cannot deny and ignore the importance of English because English is the greatest common language spoken universally. Thus, knowing the English language is a good way for people to express their ideas, share their thoughts with others, and access films, music, and literature from hundreds of countries around the world. According to Broughton, Brumfit, Flavell, Hill & Pincas (2003, p. 1), they mention that more than 60 percent of the radio programs in the world are broadcast in English, and 70 percent of the world's mails are written in English also. For these reasons, English is an essential language to learn all over the world.

In the context of Thailand, according to Chandavimol (1998, p. 31), English is taught as a foreign language (EFL) in schools and the aim of learning English is for communication. Hence, the four language skills which are listening, reading, speaking and writing are the goal of learning and teaching English. English not only has been a part of the Thai education curriculum from the primary schools to the university levels but also has played an important role in Thai education for more than a century. Among the four language skills, reading is one of the English skills which are taught to students in the classroom. Reading ability is often needed by learners of English as a foreign language, as well as of other foreign languages. In addition, Carrell (1989, p. 120) points out that reading is the most important skill for ESL/EFL learners in both a classroom context and extracurricular circumstance. Furthermore, Brown (2007, p. 185) mentions that reading is the most important skill as it can be the evaluation for students' general language ability. In the educational context, English has become essential in the globalized for students to access knowledge and new information. Therefore, students who have knowledge about reading strategies can read the written texts as meaningful and achieve the aims of independence, comprehension, and fluency.

Additionally, the fundamental of learning of Thai EFL students is reading because they have to read textbooks, articles, newspapers, magazines or documents written in English to absorb the knowledge. According to Pardo (2004, p. 272), reading comprehension is the process of interacting with the text to construct the meaning through the integration of the reader's background knowledge and experience and content of the text. Every subject cannot separate from the act of reading so reading





comprehension is required in every lesson. In English as a second language and as a foreign language context, students should have good understanding capabilities to interpret the reading texts. Students can struggle in their learning if they lack prior knowledge and reading comprehension skills. In addition, Xue (2019, p. 59) claims that reading is a complex process in which learners must not only understand the surface structure of reading materials such as words and sentences but also have to know the deep structure of them, like the cultural background, main ideas and writing styles. Thus, before selecting the methods or strategies for each learning, the teachers have to know the individual's learning style of students. Especially, the methods or strategies used should be able to help students improve their reading comprehension. However, reading skills have been taught at public and private schools in Thailand for a long time, the findings from many previous studies of Thai students' English reading ability cannot reach a high level of proficiency. Students have problems with reading comprehension when they encounter. According to Chandavimol (1998, p. 41); Mejang (2004, p. 28) and Chawwang (2008, p. 4), the students' problems while reading texts may come from many causes such as vocabulary, sentence structure, the method of teaching reading and the materials for the reading class.

KWL-Plus strategy is one of the interesting strategies that can help students improve their English reading comprehension ability because it is one of the reading metacognitive strategies. According to Carr & Ogle (1987, pp. 626–631), the KWL-Plus strategy focuses on the learners and this strategy can encourage students to construct the meaning from the reading text and help students develop their transfer skills. Besides, Flavell (1979, pp. 907-909), states that metacognitive strategies promote learners to monitor and take control of their own cognitive and learning processes. Furthermore, Sittikun (2009) conducted a study on the English reading comprehension ability of Mathayomsuksa 5 students Kumpawapi School using KWL-Plus a technique. The result showed that the KWL-Plus strategy is an effective strategy in teaching English reading skill. Moreover, Atumchai (2015, p. 81) studied the development of English reading comprehension ability using KWL-Plus technique of Mathayomsuksa 3 students. The result showed that the KWL-Plus strategy assists students to improve their reading ability. Therefore, the researcher would like to study if the KWL- Plus strategy could be used as the key tool for increasing students' English reading comprehension ability of Mathayomsuksa 5 at Chumpholphonphisai School or not and study the students' attitude towards this teaching method. The research finding may be guidelines for teaching English reading comprehension in Thailand in the future.





2. Objectives

The purposes of the research were:

2.1 To study and compare the English reading comprehension ability of Mathayomsuksa 5 students before and after studying English reading comprehension using KWL-Plus strategy.

2.2 To study the students' attitude towards teaching English reading comprehension using KWL-Plus strategy.

3. Literature Review

3.1 Reading Comprehension

The main element of reading is reading comprehension and it refers to understanding, the ability to get the meaning of the texts. The reader who can comprehend the written text is successful in reading hence teaching reading aims to develop the students' reading skills. There are some definitions of reading comprehension accepted from some writers and linguists. According to Harris & Hodges (1995, p. 39), reading comprehension is the construction of meaning of the written text or spoken message through reciprocal, holistic interchange of ideas between the readers and the message. The readers' prior knowledge and experiences have the influence on the content of meaning. Nuttall (1996, p. 3) suggests that reading comprehension is a reading for acquiring the information from the written text. It is also reading for gaining the general information from the text such as the facts, entertainment, ideas and feelings. In addition, Champagnoen & Maneekan (2000, p. 94) suggest that reading comprehension is a reading for getting the main ideas which cover all the text. The other ideas of the text are only details and complements. The main ideas of the text can be a simple sentence or the complex sentence. Therefore, reading comprehension is the comprehension of the meanings embedded in the written texts or message through the process of interpreting, constructing meaning from texts, and interacting between the readers and the written text. In addition, the readers' background knowledge and experiences influence on the content of meaning.

3.2 KWL-Plus Strategy

The KWL Plus strategy is the strategy intended to provide students with better opportunities of comprehending reading texts. KWL-Plus strategy was developed by Carr and Ogle in 1987. They revise the KWL strategy into a reading-thinking strategy called KWL-Plus, which focuses on the learners. Carr & Ogle (1987, p. 626) introduce the KWL-Plus strategy through three letters which represent the strategy main components. The first letter is recalling or "K" which stands for "What I Know". The second letter is determining or "W" which stands for "What I Want to Learn" and the last letter is

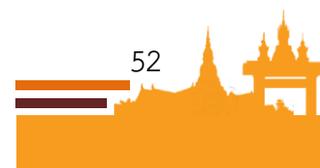




identifying or “L” which stands for “What I Learned”. Besides, to help students remembering the information, the word “Plus” is added to be the fourth component that is mapping and summarizing the text or information. The mapping that they make is based on the column L in KWL Chart. KWL-Plus strategy is the way to activate students’ prior knowledge or recall what is known (K); determine what students want to learn (W); identify what is learned (L), and transform the information by mapping and summarizing the text (Plus). Moreover, the KWL-Plus strategy of questioning, monitoring and reflecting helps to ensure that students understand the text and set their goals for reading. The activities of the KWL-Plus strategy help students become independent readers, activate students to review their background knowledge and engage students to gain the new knowledge. According to Weisendanger (2001, pp. 100-102), KWL-Plus strategy can help students to activate their prior knowledge and allows them to manage and reflect on what they have learned from reading text. Students focus on what is important in the text to develop their understanding. In addition, Stahl (2008, p. 366) suggest that KWL-Plus strategy promotes students to share the knowledge they know about the topic, open the door for discussing with more breadth and depth of their knowledge. Hence, the KWL-Plus strategy encourages students to comprehend the texts through the chart that consists of three columns: recalling what they have known, determining what they want to know, and identifying what they learned.

3.3 Attitude in Language Learning

Attitude is a factor influenced on one’s behavior in learning English and the positive attitude can make better achievement and language ability. According to Ellis (1994, pp. 197-201), learners' attitudes that influence on second language acquisition depend on their beliefs in leaning languages. The learners that have a positive attitude will have reinforced in language leaning and acquisition, and the learners who have a negative attitude are unsuccessful. In addition, Chambers (1999, p. 67) states that attitude is very essential in learning a language because a positive attitude towards language contributes to easier learning. Therefore, attitudes which are positive and negative attitudes can have a powerful influence on second language acquisition.



4. Conceptual Framework

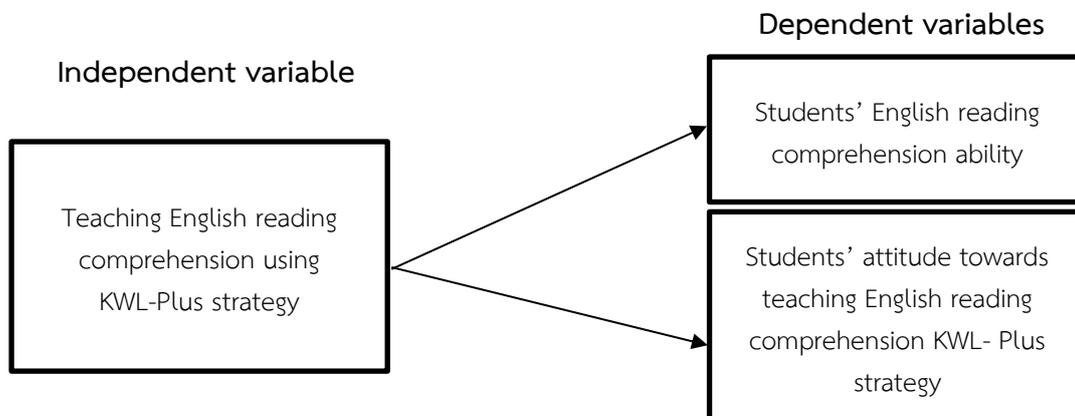


Figure 1: Conceptual Framework

5. Research Methodology

5.1 Population and Sample

5.1.1 Population

The population of this study was 280 Mathayomsuksa 5 students from 8 classes, enrolling in Basic English (E32101) course in the first semester of 2021 academic year at Chumpholphonphisai School, Phonphisai District, Nongkhai, under the Secondary Educational Service Area Office NongKhai.

5.1.2 Sample

The sample of this study was 40 Mathayomsuksa 5 students enrolling in Basic English (E32101) course in the first semester of 2021 academic year at Chumpholphonphisai School, Phonphisai District, Nongkhai, under the Secondary Educational Service Area Office NongKhai. These students were selected using cluster random sampling.

5.2 Research Design

The one group pretest-posttest design is selected for this experiment (Fraenkel & Wallen, 2000, pp. 94-97)

		T ₁	X	T ₂
T ₁	means	Pretest		
X	employed	Teaching English reading comprehension using KWL-Plus strategy		
T ₂	means	Posttest		



5.3 Research Instruments

In order to conduct this study, three research instruments were employed:

5.3.1 Lesson plans of teaching English reading comprehension using KWL-Plus strategy. The lesson plans consisted of 12 lesson plans for 12 weeks and 2 hours of each lesson plan.

5.3.2 The English reading comprehension ability test. The English reading comprehension ability test was developed by the researcher to examine the students' English reading comprehension ability as the pretest and the posttest. The test was a multiple-choice test with 40 items.

5.3.3 The attitude questionnaire towards teaching English reading comprehension using KWL-Plus strategy. It consisted of 20 items related to the content using a five point of Likert's rating scales.

5.4 Data Collection

After the three research instruments were developed by the researcher, the researcher was conduct the research on the purposes of teaching English reading comprehension KWL-Plus strategy to improve the students' English reading comprehension ability. All research instruments were employed to collect data. Data collection was explained as the follows:

1. The students took the pretest using an English reading comprehension ability test with 40 items before studying English reading comprehension ability using KWL-Plus strategy.

2. The teaching process was carried out according to the 12 lesson plans for 12 weeks, 24 hours in total.

3. After completing the whole teaching process using KWL-Plus strategy, students took the posttest which the same test as the pretest.

4. The researcher distributed the students the attitude questionnaire to examine the students' attitude towards teaching English reading comprehension using KWL-Plus strategy.

5. The collected scores from the pretest and posttest and students' attitude data were statistically analyzed and summarized.

5.5 Data analysis

The data obtained from the English reading comprehension ability test and the students' attitude towards teaching English reading comprehension using KWL-Plus strategy were statistically analyzed by using SPSS for windows as follows.

- 5.1 The researcher analyzed the data to study and compare the English reading comprehension ability of Mathayomsuksa 5 students using mean (\bar{X}), percentage, and standard deviation (S.D.).





5.2 The researcher analyzed the data to compare the English reading comprehension ability of Mathayomsuksa 5 students before and after teaching English reading comprehension using KWL-Plus strategy using t-test for dependent samples, and the researcher also analyzed the students' posttest mean score after learning English reading comprehension using KWL-Plus strategy with the criterion of 70 percent using One-Sample t-test.

5.3 The researcher analyzed the data to investigate the students' attitude towards teaching English reading comprehension using KWL-Plus strategy using mean (\bar{X}) and standard deviation (S.D.)

6. Results of the Research Paper

The findings of data analysis of this study are as follows:

6.1 Results of the Study and Comparison of Scores on English Reading Comprehension Ability Before and After Teaching English Reading Comprehension Using KWL-Plus Strategy

Before the treatment, the researcher used an English reading comprehension ability test with 40 items as a pretest in order to collect the scores. Then, after the teaching program, the sample took the posttest in order to study and compare scores on English reading comprehension ability after teaching English reading comprehension using KWL-Plus strategy of Mathayomsuksa 5 students. The findings of this research are displayed in Table 1 and Table 2.

Table 1: The Comparison of the Students' English Reading Comprehension Ability After Teaching with the Criterion of 70 Percent.

Test	n	\bar{X}	S.D.	t
Posttest	40	30.98	2.36	7.98**

** $p \leq .01$

From Table 1, it shows that the students' posttest mean score on English reading comprehension ability was 30.98. The results explain that the students' English reading comprehension ability after teaching English reading comprehension using KWL-Plus strategy was significantly different at the .01 level. The posttest score was significantly higher than the set criterion of 70 percent.

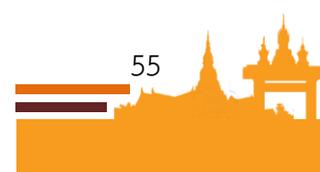




Table 2: The Comparison of the Students' English Reading Comprehension Ability Before and After Teaching English Reading Comprehension Using KWL-Plus Strategy

Test	n	\bar{X}	S.D.	t
Pretest	40	17.93	4.60	32.74**
Posttest	40	30.98	2.36	

** $p \leq .01$

From Table 2, it presents that the students' pretest mean score on English reading comprehension was 17.93 and the posttest mean score was 30.98. The students' English reading comprehension ability after teaching English reading comprehension using KWL-Plus strategy was significantly higher than the prior at the .01 level.

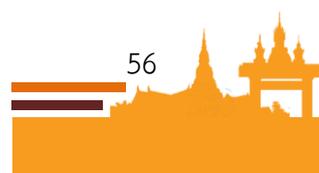
6.2 Results of the Investigation of the Students' Attitude towards Teaching English Reading Comprehension Using KWL-Plus Strategy

To study students' attitude towards teaching English reading comprehension, the researcher examined the students' attitude towards teaching English reading comprehension using KWL-Plus strategy with an attitude questionnaire. The attitude questionnaire consisted of 20 items, and the attitude questionnaire used a five-point Likert's rating scale, ranging of positive and negative from strongly agree, agree, disagree, and strong disagree. The questionnaire was administered after completing the teaching program. The result of the students' attitude towards teaching English reading comprehension using KWL-Plus strategy was shown in Table 3.

Table 3: The Investigation of the Students' Attitude towards Teaching English Reading Comprehension Using KWL-Plus Strategy

Attitude Test	n	\bar{X}	S.D.	Interpretation
Student's attitude towards teaching English reading comprehension using KWL-Plus strategy	40	4.45	0.11	Good

From Table 3, it shows that the mean score of the students' attitude towards teaching English reading comprehension using KWL-Plus strategy was 4.45 and a standard deviation was 0.11. It indicates that the student had attitude toward teaching English reading comprehension ability using KWL-Plus strategy at a good level.





7. Conclusion

The study and the comparison of the pretest and the posttest scores on English reading comprehension ability of Mathayomsuksa 5 students and their attitude towards teaching English reading comprehension using KWL- Plus strategy can be summarized as follows:

7.1 The students' pretest and posttest mean scores on English reading comprehension ability were 17.93 or 44.81 percent and 30.98 or 77.44 percent respectively. The students' English reading comprehension ability was significantly different at the .01 level. The students' posttest mean score was higher than the pretest mean score and the mean score on the posttest was higher than the set criterion of 70 percent.

7.2 The students' attitude towards teaching English reading comprehension using KWL-Plus strategy was at the good level.

8. Discussion

This study was the experimental research with a one group pretest-posttest design. The purposes of this study were to study and compare the students' English reading comprehension ability of Mathayomsuksa 5 students before and after using KWL-Plus strategy and to investigate the students' attitude towards teaching English reading comprehension using KWL-Plus strategy. The results of the study can be discussed as follows:

8.1 Results of the study and comparison of English reading comprehension ability of Mathayomsuksa 5 students at Chumpholphonphisai School before and after studying English reading comprehension using KWL-Plus strategy.

8.1.1 It was found that teaching English reading comprehension using KWL-Plus strategy could improve students' English reading comprehension ability. Their pretest and posttest mean scores were 17.93 or 44.81 percent and 30.98 or 77.44 percent respectively. This finding supports the second hypothesis. The students' posttest mean score on English reading comprehension ability after studying English reading comprehension using KWL-Plus strategy was higher than the prior. The students' pretest score on English reading comprehension ability was at a low level. The reasons of the above condition might be that the students lacked appropriate English reading strategies and the knowledge of reading comprehension namely literal comprehension, interpretation comprehension, critical comprehension, and applied comprehension. The students cannot tell the meaning of the words, find the main idea and identify the specific details of the text. They cannot link their background knowledge with the new information from the text to construct the meanings. This finding supported the ideas of Zhaol & Zhu (2012, p. 113),





who state that the efficient comprehension is the interactive process which works between reader's background and the new information of the text they read. However, the students' English reading comprehension ability before and after studying English reading comprehension using KWL-Plus strategy was significantly different at the .01 level. The posttest mean score was higher than the pretest. This finding was in accordance with the second hypothesis. Seeing that the students had a chance to practice English reading comprehension using KWL-Plus strategy, they could comprehend the text as literal, interpretation, critical, and applied levels. Besides, the students could tell the meanings of the new words of the text, identify the main idea and the specific details, answer the questions of the text, and reflect on what they learned. Therefore, practicing English reading comprehension using KWL-Plus strategy helps students to better understand the content of the text.

8.1.2 The students' English reading comprehension ability after studying English reading comprehension using KWL-Plus strategy was significantly improved with a mean score higher than the set criterion of 70 percent. The finding supports the first research hypothesis of the study. According to the results of the study, two conclusions are drawn as follows:

Firstly, teaching English reading comprehension using KWL-Plus strategy could develop students' English reading comprehension ability because teaching English reading comprehension using KWL-Plus strategy was encouraging and students enjoyed studying English reading comprehension. This finding was consistent with the concept of Carr & Ogle (1987, pp. 626-631), who state that KWL-Plus strategy focuses on students as the learners and the reading activities; before, during and after reading promote students to think critically. Students are encouraged to recall their background knowledge, set their goals to read by listing questions, record the information they learned, reconstruct information of the text and reflect on what they learned. Moreover, KWL-Plus strategy helps students to construct the meaning of the text they read by connecting the prior knowledge with the new information of the text and trains students' independence by developing their transfer skills.

These findings showed that students' posttest mean score was 77.44 percent. It was higher than the pretest because students were trained through various activities in studying English reading comprehension using KWL-Plus strategy; students gain their background knowledge about the topic, brainstorm and discuss about the text in group, identify the meanings of the words, set their goals to read by listing questions, read and answer the questions, record the information they learned from the text, Moreover, students made their mind mapping and wrote a summary about the text. These findings supported the idea of Weisendanger (2001, pp. 100-102), who states that





KWL-Plus strategy can help students activate their prior knowledge and allows them to manage and reflect on what they have learned from reading text. Students focus on what is important in the text to develop their understanding. In addition, Carr & Ogle (1987, pp. 626-631) state that the written component, the mapping and summarizing, promote students to think critically about the information they have learned.

Secondly, teaching English reading comprehension using KWL-Plus strategy supported students to develop their English reading comprehension ability. The study had been conducted the following stages according to teaching English reading comprehension activities using KWL-Plus strategy based on the ideas of Williams (1994, pp. 37-44) and Carr & Ogle (1987, pp. 626-631).

In the Pre-reading Stage, K (What I know): the teacher shows a picture of the reading passage and specifies some questions to elicit the students' background knowledge. The teacher distributes the reading passage and the learning log to students and asks each group of the students to read the title of the passage, brainstorm and discuss the ideas, and write down what they know related to the topic in Column K of the learning log. In W (What I want to learn), the teacher presents students the new vocabulary of the passage and explains the meanings of the words by writing some examples on the board. After that the teacher distributes students the worksheet of vocabulary and asks them to match the words with their meanings. The teacher teaches the structure found in the reading passage and gives students some examples of the sentences by writing on the board. Then, the teacher asks each group to write questions what they want to know about the passage in Column W of the learning log. The teacher and students discuss the listed questions from Column W together. In this stage, these activities could help students recall their background knowledge, increase their vocabulary and set the goal of their reading for the next stage.

In the While-reading Stage, L (What I learned): the teacher distributes students the worksheet, asks each group to read the passage to find out the main idea and answer the questions in the worksheet. Then, the teacher lets each group share the ideas together. The teacher asks students to write the new information they have learned from the passage in Column L of the learning log. In this stage, students had a chance to monitor their learning, exchange their ideas with friends and identify what they have learned. All activities in this stage promoted students to comprehend the text better.

In the Post-reading Stage, Mapping: the teacher distributes students the worksheet of a word map and lets students make their own word map individually by using the information in Column L. Summarizing: the teacher distributes students the worksheet and asks students to write a summary of the passage by using the information in the word map. Then, the teacher distributes students the quizzes and lets each student





answer the questions about the passage. After that the teacher and students discuss and summarize the lesson together orally. In this stage, students had a chance to reorganize the text information and express what they learned by their own words. Besides, this stage promoted students to become independent learners. These findings supported the idea of Carr & Ogle (1987, pp. 626-631), who mentions that KWL-Plus not only improves comprehension and summarize abilities, but it also enhances students' self-concept.

These results of this research support the study of Atumchai (2015, p. 81), who studied on the development of English reading comprehension ability using KWL-Plus technique of Mathayomsuksa 3 students. The findings of research found that the students' English reading comprehension ability was significantly different at the .01 level. The mean score on the posttest was higher than the pretest. In addition, the results of this study were consistent with the study of Samikomsuk (2012, pp. 48-49), who studied on the effect of KWL-Plus technique on reading comprehension of Mathayomsuksa 3 students at Watratcho-o-rot. The findings of research found that the students' English reading comprehension ability was significantly different at the .01 level. The mean score on the posttest was higher than the pretest. The results were also consistent with the study of Sittikun (2009) conducted a study on the English reading comprehension ability of Mathayomsuksa 5 students Kumpawapi school using KWL-Plus a technique. The findings showed that the students' English reading comprehension ability after the experiment was significantly higher than that of the pretest at the .01 level.

8.2 Result of the investigation of Mathayomsuksa 5 students' attitude towards teaching English reading comprehension using KWL-Plus strategy

The finding indicated that the students' attitude toward teaching English reading comprehension using KWL-Plus strategy was at a good level. The attitude questionnaire specified that students strongly agreed that studying English reading comprehension using KWL-Plus strategy could help students understand the content of the text better and it was not boring because students liked making a mind mapping and writing a summary of the text they read. In addition, in pre-reading stage, the students agreed that listing questions before reading encouraged them to be interested in the text and try to find answers, and knowing the meaning of the vocabulary before reading the text increased their reading confidence. Moreover, in while-reading stage, the students agreed that the steps of learning activities could develop their reading ability, and this strategy made it easier for students to find the keynotes and the specific details of the text. Furthermore, students liked recording the information they learned from the text in the Learning Log because it helped them develop their thought process and understand the reading text better.





The results were consistent with the idea of Ellis (1994, pp. 197-201) who mentions that learners' attitudes toward second language acquisition are influenced by their beliefs about learning languages. Learners with a positive attitude are more likely to succeed in language learning and acquisition, while those with a negative attitude are less likely to succeed. In addition, the results were also consistent with the idea of Chambers (1999, p. 67) who states that attitude is very important in learning a language because a positive attitude toward language contributes to easier learning.

Therefore, the students with the positive attitude towards reading will pay their attention to read the reading text.

9. Recommendations

The recommendations from the study are as follows:

Recommendations from the study

1. From the research results, it was found that the students' English reading comprehension ability after studying English reading comprehension using KWL-Plus strategy was higher than prior. This was caused from the result that teaching English reading comprehension using KWL-Plus strategy helped students gain their background knowledge by brainstorming and discussing about the title of the passage. The students had a chance to learn the new vocabulary and expressions of the text when the teacher presented on the board. The students had a chance to set their goal of reading by listing questions that they want to know before reading and find the answers while reading. Besides, the students had a chance to make the mind mapping and write a summary of the text that made students comprehend the reading text better. Therefore, KWL-Plus strategy should be promoted in teaching English reading comprehension by English teacher.

2. From the research results, it was found that the students' attitude towards teaching English reading comprehension using KWL-Plus strategy was at a good level. This was caused from the result that students enjoyed doing activities through KWL-Plus strategy. KWL-Plus strategy delivered activities that encouraged students to be interested in the text while reading and let them control their learning. Therefore, KWL-Plus strategy should be promoted in teaching English reading comprehension by English teacher.





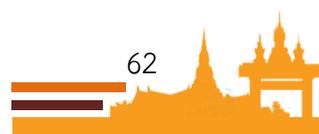
Recommendations for further study

According to the results discussed earlier, the researcher's recommendations for further studies are as follows:

1. Researchers should apply the KWL-Plus strategy with other subjects.
2. Researchers should apply the KWL-Plus strategy with other learning skills such as critical reading and writing.
3. Researchers should apply the KWL-Plus strategy to other class levels to investigate the efficiency of the strategy.

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EFFECT OF USING DIGITAL GRAPHIC ORGANIZERS IN ENGLISH GRAMMAR LEARNING OF ESL UNDERGRADUATE STUDENTS

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Abstract

Graphic organizers (GOs) have drawn great attention in English as a Second Language (ESL) teaching and learning. This study aimed to investigate the students' English grammar learning ability after using digital GOs as online learning tool that 80% of the students pass the criterion (get the scores on the test over 80%), and to explore the aspects of using digital GOs to improve the students' English grammar learning. The participants of this study were 60 undergraduate students from English major were selected using purposive sampling technique. The pre-experimental research design with a one-shot case study was employed. There are 2 phases of data collection. At the first phase, the students were assigned to create digital GOs to explain and generate their ideas about what they had learned after each lesson. After that, a 60 item English grammar test was used to evaluate the quantitative data. At the second phase, a set of semi structured interview questions was used to explore the qualitative data. The results of this study showed that in terms of the academic achievement performance, the students' average score reached to determined criteria (82.13 percent). It is suggested that GOs is as an effective tool to revise the learning content. GOs also raised the students' creativity and positive learning atmosphere. However, instructors should explore the deeper understanding of using GOs in various learning contexts.

Keywords: Digital graphic organizers, English grammar learning, ESL learners

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1. Introduction

English language has become significantly important since it is considered as the most common language spoken internationally in the world nowadays. As well as Thailand is the country that used English as second language (ESL) also finds a lot of benefits from using English language to communicate to others in various purposes (Sudathip et al., 2020). Moreover, English language helps transform the educational experiences and business to other people around the world. Therefore, English is not only a subject studied in schools, but also a center of knowledge in global society.

English grammar has been a focus in ESL learning research for longtime. The on-going debate about the best way to teach grammar has significant influenced on the development of language teaching practice. The concept of pedagogical grammars is intended to provide those involved in language teaching and learning with grammatical presentation of the language for the purpose of teaching and learning, syllabus construction, and materials development (Namaziandost & Çakmak, 2020). Hence, various perspectives, methods, and techniques for teaching grammar have emerged for ESL teachers to choose from in order to suit their own learners and classroom environment. Therefore, empowering students today to learn and become productive, students requires educators to use approaches that engage them on a personal level with their learning (Tavakoli, 2021).

The digital technologies of information and communication are having a growing role in university educational processes (Carpenter, Green, & LaFlam, 2011). Thus, it is recommended that university lecturers are required to teach effectively in different environments, and to make effective use of information and communication technology on their teaching (Phantharakphong, Sudathip, & Tang, 2019). Today's language teaching and learning require a lot of digital platforms to support ESL learners in achieving their target language, especially when society faces the situation of the Covid 19 pandemic. In addition, many online tools are implemented in various language classes including graphic organizers (GOs), which combine linguistic forms like words and phrases with non-linguistic forms like symbols and arrows that show relationships of information. Ausubel (1963) who firstly developed Graphic Organizers (GOs) believed that the methods used by teachers to represent information can stimulate learning; a suitable organizer can help students to establish associations between new information and what they have previously learned. Egan (1999) defined GOs as "visual representation of knowledge, a way of structuring information, and of arranging essential aspects of an idea or topic into a pattern using labels". It is also believed that GOs effectively lead learners to unify new concepts and propositions in an active way (Kansizoğlu, 2017). GOs can also serve as a brainstorming tool to activate prior knowledge and to connect what students know with





new information (Manoli & Papadopoulou, 2012). The GOs are used as a tool to explain and organize ideas and relationship of each grammatical structure and rule in the students' learning process which represents in various ways, such as, concept maps, mind maps, fishbones maps, Venn diagrams and network trees (Dexter & Hughes, 2011). Many studies on GOs are conducted by many researchers (Odegaard, 2015; Robinson, 2015; Khalaji, 2016; and Rahmat, 2020). The results show that the students are motivated and preferred working with the various strategies since GOs are more interesting and up to date than using textbooks alone. Even if there are a lot of evidence showing positive effects of using GOs in Language learning, there are still little information about using digital GOs to improve English grammar ability in ESL learners. Therefore, it is needed to investigate in order to clarify the use of digital GOs as online learning tool that actually suites to English grammar learning for ESL learners or not. Thus, this study has the purposes to answer the questions:

1. Can digital GOs as online learning tool help the students to improve their English grammar learning ability?
2. To what aspects of digital GOs can help the students to learn English grammar?

2. Objectives

2.1 To investigate the students' English grammar learning ability after using digital graphic organizers as online learning tool that 80% of the participants pass the criterion (get the scores on the test over 80%).

2.2 To explore the aspects of using digital graphic organizers to improve the undergraduate students' English grammar learning ability.

3. Literature Review

David Ausubel (1963, 1968) developed an educational psychology that is intimately related to learning as it typically occurs in schools. At the core of this psychology is the proposition that a principal variable influencing new learning in a subject matter field is one's existing background of knowledge, or cognitive structure. Ausubel maintained that new meanings in any discipline are acquired only in relation to a previously learned background of relevant concepts and principles. Thus, if existing cognitive structure is clear stable, and organized, new learning will be enhanced. The use of "advance organizers" has been proposed as one means of strengthening existing cognitive structure. As developed by Ausubel, advance organizers are introductory arose passages written at a higher level



of “generality, abstraction, and inclusiveness”. Graphic organizers (GOs) were after suggested under the rubric of “structured overviews” (Barron, 1969, as cited in Barron, 1971). They have been defined as “visual and verbal presentations of the key vocabulary in a new learning task in relation to subsuming and/or parallel terms that presumably have previously been incorporated into the learner’s cognitive structure” (Barron, 1971).

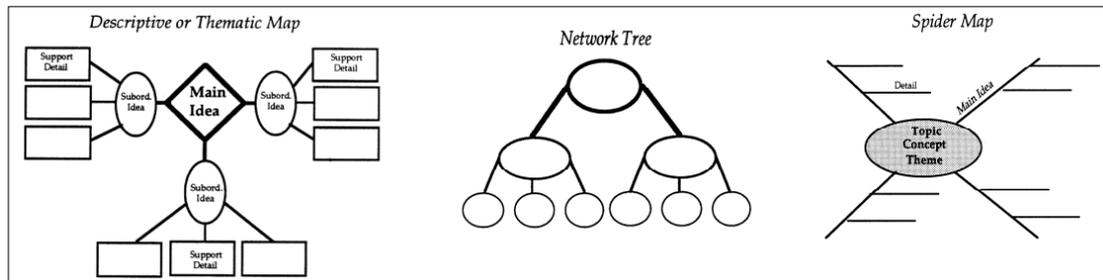


Figure1: Some types of graphic organizer: Descriptive or Thematic Map, Network Tree, Spider Map
Hall & Strangman (2008)

Digital graphics organizers in this study refer to computer based and online visual devices that depict information in a variety of ways. Most commonly, they employ lines, circles, and boxes, to form images which depict four common ways information is typically organized: hierarchic, cause/effect, compare/contrast, and cyclic or linear sequences. These images serve as visual cues digitally designed to facilitate communication and/or understanding of information by showing how essential information about a topic is organized.

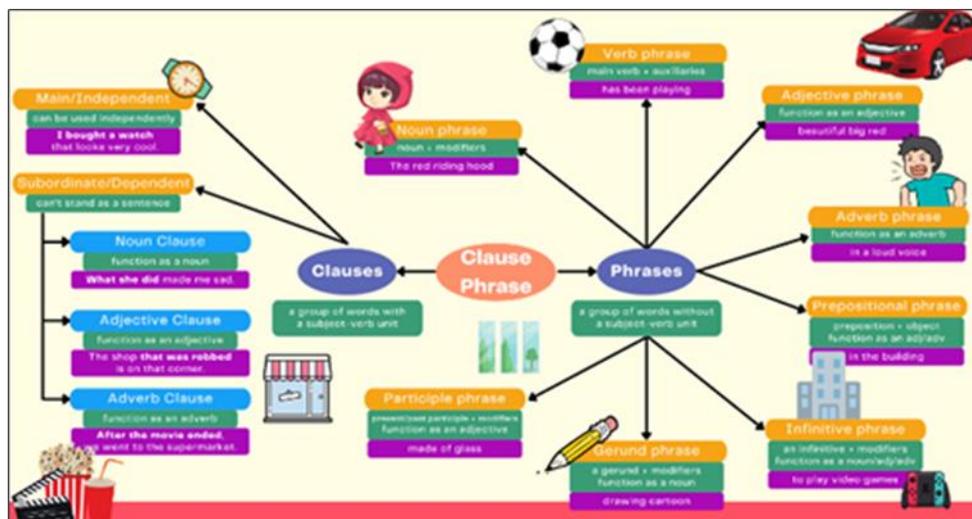


Figure 2: an example of the participant’s digital graphic organizer



There are many studies pertaining the use of GOs in language teaching and learning. Wang (2019) studied the application of mind map in English grammar, which is also considered as one of GOs, can enhance the students' initiative, promote the students' interest in learning, the efficiency of learning and the ability of grasping grammar knowledge. Secondly, a study by Trisusana & Susanti (2020) explored the use of GOs in students' descriptive and narrative writing. There were 16 participants joined in a paragraph writing class in English Education Department of UNESA, Surabaya, Indonesia. GOs were used to help students in the process of writing, and this showed that GOs can improve students' writing ability especially in descriptive and narrative texts and most of the students reached good score in their writings. Yamagichi (2021) found that using GOs as learning materials during the students' task activity to promote the acquisition of English language production. This study found that implementing an unfocused task with a set prompt and clear boundaries, in a form of visual aids by using GOs to generate useful expressions and patterns over the treatment period, results showed an improvement in the participants' vocabulary knowledge, grammatical knowledge and overall L2 output. Furthermore, Styati & Irawati (2020) were investigating the effect of GOs on ELT students' writing quality. The participants were the students of English Department, in a private university in Indonesia. The results showed that the students in the experimental group who used GOs performed better on writing quality in terms of content, vocabulary, and mechanics than the students from the control group which can be concluded that GOs have a significant effect on ELT students' writing quality. Then, Alsuhaymi & Haydar (2019) investigated the effectiveness of using GOs strategy to improve grammatical knowledge for 40 intermediate students at Al-Imam Abdulaziz bin Mohammad School. The students belonging to class A who represented the control group were taught using grammar translation way while those belonging to class B who represented the Quasi-experimental group were taught by using GOs Strategy. The results indicated that using GOs strategy in teaching grammar improved students' proficiency in learning English grammar.

4. Research Methodology

This study aimed to investigate the students' English grammar learning ability after using digital GOs as online learning tool that 80% of the participants get the scores on the English grammar test over 80% and to explore the aspects of using digital graphic organizers to improve the undergraduate students' English grammar learning ability. The participants of this study are 60 undergraduate students (40 females and 20 males) from English major, who enrolled in Fundamental English Grammar Course of the academic year 2021 from the Faculty of Education, Khon Kaen University, were selected using





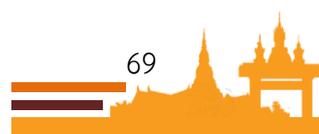
purposive sampling technique. Their ages ranged from 18 to 19 years old. These participants had learned English when they were in high school for six years before entering to this university. The pre-experimental research design with a one-shot case study was used in this study. The data collection was collected in the first semester of academic year 2021. At the first phase, the 3 teaching lessons were taught, each lesson last 3 hours (9 hours in total). At the end of each lesson, the students were assigned to create digital GOs to revise, explain and generate their ideas of understanding about what they had learnt. After that, a 60 item English grammar test was used to evaluate the quantitative data in order to answer the first research question that after using digital GOs as learning tool, the students can improve their English grammar ability or not. At the second phase, a set of semi structured interview questions was used to explore the qualitative data in terms of gaining a better understanding about aspects of digital GOs help the students to learn English grammar to answer the second research question. The average score (%), mean score (\bar{X}) and the standard deviation (S.D.) were employed for the data analysis. The process of collecting data is presented as the following table.

Table 1: Teaching topic, learning activity and research instruments

Lesson	Topic	Student Activity	Instrument
<i>Phase 1: Quantitative data collection</i>			
1 st lesson (3 hrs.)	Articles	After each lesson, students create a digital graphic organizer to revise learnt content	A 60 item English grammar test
2 nd lesson (3 hrs.)	Clause and Phrase		
3 rd lesson (3 hrs.)	Comparative and Superlative		
<i>Phase 2: Qualitative data collection</i>			
Semi-structured interview			A set of Interview questions

5. Results

The results are presented according to the research objectives as indicated above. The initial results demonstrate the students' English grammar ability after using digital GOs as their learning tool and reveal the students' points of view in relating to learning experiences using the digital GOs after each learning topic.





Results of English grammar test

After conducting the 3 teaching lessons and using digital GOs intervention, the 60 item English grammar test was employed to check the students' English grammar learning ability which the results as shown in the table 2.

Table 2: the results of the students' English grammar test after using digital GOs

Number of students	Total score	Students' average score (\bar{X})	Students' average score (%)	Std. Deviation	The highest score	The lowest score	Number of students passing the 80% criteria
60	60	49.28	82.13	4.44	57	38	41 (63.3%)

It can be concluded that after the intervention, the students' average score of the quantitative data is 49.28 (82.13%). The standard deviation is at 4.44. The highest score of the students test is 57 (out of 60) and the lowest score is 38. The results show that the number of students who passed the 80% criteria is 41 people (68.3 %).

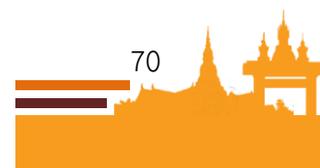
Qualitative Results

To explore the aspects of using digital GOs for the students' English grammar learning, the second phase is constructed. The set of semi structured questions was used to explore the students' perspective on how digital GOs help them in learning English grammar. The nine students who participated in the second phase were labeled as S1 to S3 (Excellent category), S4 to S6 (Moderate category), and S7 to S9 (Weak category).

Qualitative results revealed that the majority of students agreed that digital GOs create positive effects on their learning. The following verbatim responses indicate their experiences in using digital GOs after each lesson.

“In my opinion, it is a good way to make me understand grammars better because I can ‘see everything from the high view’ like an eagle. Digital GO is the way to make the information neat, easy to read and easy to understand as it is summarized and selected only the cores of the information to be in the graphic organizer..... without GOs my grammars knowledge would be mixed up.” (S1)

“I like to use digital GOs because they help me organizing my knowledge which lead to deeper understanding the lessons. They also represent information in a pattern, and I can stay focus on the learnt information and put it in boxes..... I can apply this in every subject I want”. (S2)





“.....making graphic organizer can make me remember the lesson by summarizing it into a mapping on one page. So, I can see the connections between the topics I feel pretty relaxed when I can express my own ideas and my style on it.... the result after making graphic organizer is I got a good grade for the grammar class.” (S3)

“..... It makes the whole lessons go through easily by just summarizing the whole materials into clarification boxes. Importantly, it's a better way to study grammar making it shorter and specifying the color of each box and other details of each topic, gives me a simple explanation to be clear on every lesson”. (S5)

“.... creating a graphic organizer is beneficial because it makes me subconsciously revise what I've learned. In addition, it improves my creative skills and making a graphic organizer is easier to read than reading a whole thing. In short, summarizing the lesson by making a graphic organizer is one of the efficient ways to review the lesson.” (S7)

Generally, results revealed that there is no obvious difference in using digital GOs as English grammar as learning tool. When the students were required to explain how digital GOs help them to learn English grammar, most of them refer to their positive impacts. For example, they help organizing the students' knowledge, their features such the variation of using colors and boxes deliver clear and simple explanation which help the students to easily revise their learning in a shorter time. The cute cartoon and the ways they want to decorate the organizers motivate, engage and interest them to learn more.

“I prefer reading texts from the graphic organizer instead of a very long information. Also, graphic organizer is easy for memorization. I can remember all of the information in shorter times instead of reading the whole boring thing.” (S4)

“I always excited after you (the instructor) asked us to create the digital GOs after the lessons because I would search for some cute stickers to put on my work. This is so much fun. I love it! (S8)”



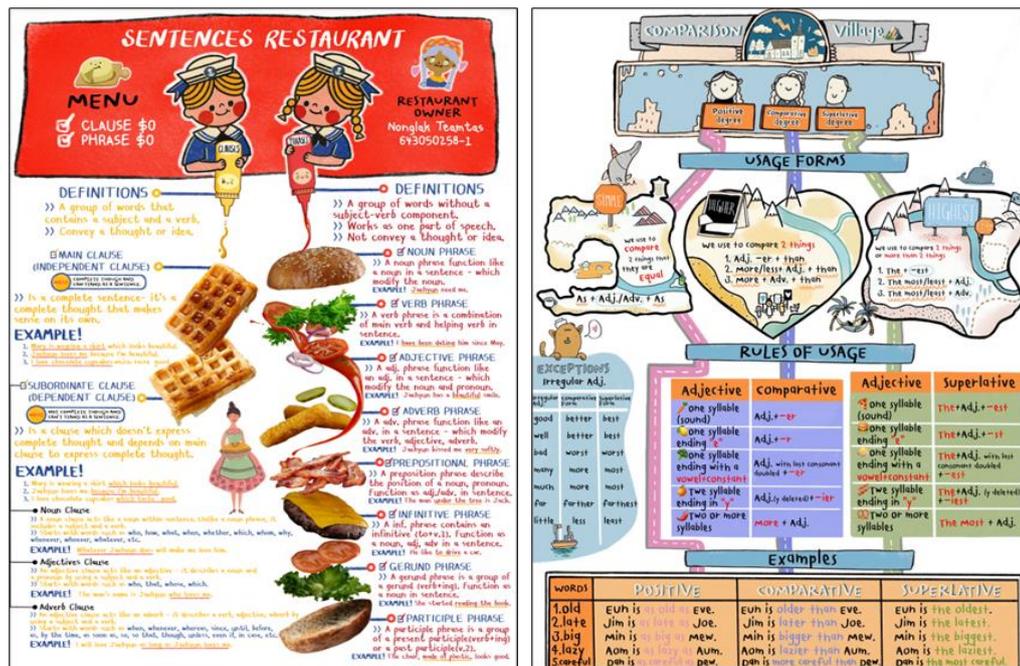


Figure 3: The examples of the decorated digital GOs created by the participants

However, when the students were asked to analyze if there is any limitation in using digital GOs, there were little limitations mentioned. The first limitation is to create digital GOs, some students had to spend quite a long time to complete it and other reasons is one of the students was not familiar with transferring long piece of information into a page. The following verbatim responses from students can support the identified limitations:

“... And I usually grab graphic organizers to help me revise before the test. However, some topics that I used to do the graphic organizers have a lot of required materials, so it was not easy to make it concise in one paper.” (S6)

“Although it makes me fun and enjoy summarizing information every time I make it, it’s hard to compile all of my knowledge in 1 page.” (S9)

6. Conclusion and Discussion

This study examined the effects of using digital graphic organizers in English grammar learning of ESL undergraduate students. Analysis of the quantitative data showed that after the intervention, average score of the students’ English grammar ability was 49.28 (82.13%). In terms of English grammar ability, the students’ average score meets the set criteria (the test score over 80%). This result exposes that after using digital GOs as the learning tool, the students performed well on the grammar test, which can be said that digital GOs did help the students’ English grammar ability. This is considered





that digital GOs are effective in helping the students to generate ideas and revise the learnt content. This line with Styati & Irawati (2020) that using GOs, the students can perform better in using target language in accordance to the aspects of content, vocabulary, and mechanics. As well as Yamagishi (2021) also found that there is a substantial difference in the grammatical content like words and phrases used in the posttests.

On the other hand, the number of the passed students did not meet the goal. Even if the results of the students' English grammar test after using digital GOs successfully reached the determined criteria which students' average score was at 82.13 percent, the number of students who met the determined criteria was only 63.3 percent (41 out of 60 students). As the results, it was necessary to explore the aspects of using digital GOs for English grammar learning in order to gain deeper understanding if there were any supported reasons of using digital GOs related with the quantitative results. Therefore, the qualitative data collection was employed as the second phase. The results of the interview showed that the majority of students agreed that digital GOs created positive effects on their learning. There were several reasons had been mentioned, for example, digital GOs help organizing the students' knowledge, their features such the variation of using colors and boxes delivered clear and simple explanation which help them to revise their lesson within a shorter time. It is line with Baxendell (2003) that says GOs create students more creative since they can express their ideas consistent, coherent, and integrated. Moreover, Egan (1999) also supports that GOs is an effective method to help students to explore their learning. Learners tried to make flow chart to connect relationship of each grammar points. It is an important way for students to draw upon experiences from lessons, observe what is going on around their thoughts, and recognize the learnt content which helps students complete their gap of knowledge. The cute cartoons or the ways the students decorated their digital GOs also engage and motivate them to learn more. As Fredericks et al. (2004) claimed that students can behaviorally engage in the learning task by creating a visual aid freely as the way they want.

However, there were some limitations had been mentioned such as time consuming and unfamiliar strategy which required a lot of tools to convert amount of data into limited space. As the students 6 and 9 referred to their difficulty when they try to transform information into one page, it did take some time to finish the task. Trisusana & Susanti (2020) also pointed out that using GOs in creating narrative composition was quite difficult for students since there were many components or aspects that had to be completed. It was different from descriptive text that was easier.





7. Suggestions

This study has some limitations. It is hard to tell if digital GOs could successfully lead more than 80 percent of the students to reach the set goal. It needs to be caution that sometimes the academic achievement test itself does not tell or has relationship to the number of the passing students. According to the results on the other hand, there is no obvious evidence showing why there were only 41 students passed the determined criteria. Therefore, the higher statistical analysis is needed to prove if there is any relationship between number of students and their academic achievement performance. It is also recommended that the instructor should conduct deeper interview in order to gain a better understanding about using GOs as a language learning tool. However, it is obvious that this study has shown several positive effects of using digital GOs on the undergraduate students' English grammar learning ability. Digital GOs help the students' academic performance as they can see the overall content and its connections of difference topics on one page. Digital GOs also bring creativity and comfort learning environment by giving chance for the students to express their likes and ideas. It is recommended that instructors can implement digital GOs into any teaching and learning activity for different ESL contexts.

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THE DEVELOPMENT OF SCIENTIFIC SKILLS USING GAMES-BASED LEARNING ACTIVITIES OF STUDENTS IN KINDERGARTEN 1, WAT BOROMNIWAS SCHOOL

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Sirimanee Banjong³

Duangkamol Chongcharoen⁴

Abstract

The purpose of this research was to compare the scientific skills of Kindergarten 1 students, Wat Boromniwas School before and after using Games-Based Learning Activities. The population for this study was 17 students in kindergarten 1, Wat Boromniwas School during semester 2, academic year 2021. The research instruments used in this study were the Games-Based Learning plans, which the quality of suitability was the highest level ($\bar{X} = 4.94$, S.D. = 0.19) and the scientific skills assessment form has an index of consistency with the reliability of all the assessments being passed in between 0.67 and 1.00. The data was analyzed using frequency and percentage. The research revealed that the students had improved their scientific skills after engaging with Game-Based Learning Activities higher level than before the activity provided and the level of improvement was 83 - 100 percent, which met all assessment criteria.

Keywords: Science Skills, Games Based Learning, Kindergarten

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1. Introduction

To come up with scientific knowledge or ideas, it is essential to learn skills or abilities to search for knowledge and scientific or psychic attitudes that can help society and businesses. Therefore, organizing science learning experiences should encourage learners to do the same activities as scientists by pursuing knowledge (The Institute for the Promotion of Teaching Science and Technology, 2020, p. 46). This is consistent with the early childhood education philosophy that early childhood education is the holistic development of children from birth to 6 years, based on the upbringing and promotion of the learning process. To the fullest extent of their age-appropriate potential, taking into account individual competence and differences, as well as the environment and culture in which the child lives, to lay the groundwork for the child's quality of life as they develop into a fully human being (Ministry of Education, 2017, p. 2). Developing scientific skills in early childhood is essential to intellectual development, including collective thinking, rational thinking, decision-making, and problem solving. Significant experience is observing the details, changing and relationships of things and places from different perspectives (Ministry of Education, 2017, p. 39). Critical thinking can be compared, distinguished similarities and differences, and evaluated based on how early childhood performance should be developed, highlighting the importance of promoting and developing scientific skills for early childhood (Office of the Education Council, 2018, pp. 46-47).

In this study, the author was a pre-service teacher in Kindergarten 1, Wat Boromniwas School, under Bangkok Education Office and runs kindergarten to sixth grade with 136 students and 12 teachers and staff. This school emphasizes the students' reading habits and their focus on the four developmental priorities of early childhood: physical, mental-emotional, social and intellectual aspects. Similarly, the school are consistent according to the context and society in which the students live. Due to the coronavirus 2019 outbreak in the academic year 2021 has resulted in the school's inability to provide regular teaching and learning, so it is necessary to adjust the style of education at home to ensure continuous learning for students. Seventeen students found that their scientific skills had issues with observation and classification by comparison. A joint assessment with teachers and parents also found that students could not match relative images, group items by category, and classify the characteristics of what they saw as similar or different.

Consequently, if the student does not have observational skills, it has an intellectual effect on the subject of rationality, and rationality, the students will not be able to compare the differences caused by different actions with the same items. They will not be able to tell what is wrong in the picture or the wrong position, including





critical thinking. Likewise, distinguishing similarities, differences and evaluating any status will be problematic.

Therefore, the author is interested in improving the scientific skills of kindergarten 1 students, Wat Boromniwas School using the games-based learning to promote basic scientific skills to enhance advanced skills and provide children with the development that meets the standards indicators set by the early childhood education curriculum.

2. Objective

To compare the scientific skills of kindergarten 1 students, Wat Boromniwas School before and after using the games-based learning.

3. Literature Review

The author studied the concepts, document theories, and related research found according to Games-Based Learning (GBL), another form of learning material. It is designed to keep entertained while students can gain knowledge by inserting learning content in the form of games for players to take action through Active Learning in scenarios as well as practical performs and being linked to situations, thus up to 90% of learning can be improved. Therefore, GBL is a new modern learning material that increasingly plays a role in educating society and human development. Thus, it is ideal to use game-based activities as a learning material to promote the development of scientific skills (Wratt Inthsra, 2019, pp. 1-6).

Early years are always curious to know everything and prefer challenging games in which they can use their critical thinking and problem solving. These abilities reflect the observational skills and the learning abilities of early childhood, which their experience must discover from the action in real situations. Organizing practical learning processes is an activity in the form of a group of practices learned with first-hand experience from real problems and problem-solving, which knows from the action and also investigats skills together as a team. The problem-solving learning process is an instructional activity that students have to focus on learning for themselves to think and solve problems by adopting scientific methods. This method of teaching is sometimes called scientific teaching. American philosophers believe that early years study from action, allowing them to develop permanent learning. Thus, the philosophers find that early childhood has the same potential as thinker and scientist. To deliver children with science learning methods are therefore organizing learning experiences that are consistent with early childhood learning. John Dewey (John Dewey, 1910 cited in Rungthip Janmune, 2018). Children have taken





real-life problem solving with 3 stages of learning management which are 1) recognizing problems and solutions, 2) assessing and choosing solutions, and 3) taking action to solve problems (Little Scientists House Thailand, 2021, p. 4).

The game-based learning is used as a learning pathway to develop scientific skills for early years students as the study of Nualchan Budda (2021, p. 44) studied title a set of experience-enhancing activities to improve science process skill by using objects fun coupled learning for preschool children kindergarten year 2. This studied a set of actions to enhance the experience using nearby things known in conjunction with fun for early childhood in Kindergarten Year 2 and the results show that the score after engaging with the activity is higher than before using the activity provision. Similarly, Ratklaow Meesil (2020, p. 103) study reveals that arranging knowledge-based science involvements is an experience provision that calls child-centred instructional delivery to develop early childhood's thoughts, rationality, and understand things from observation, research, and data collection. Then, they have a chance to express and discuss by using communication skills and integrating their skills to engage with meaningful experiences with children and the experience can be used in their everyday lives.

4. Research hypothesis

Kindergarten 1 students, Wat Boromniwas School, have scientific skills after using the games-based learning as a higher skill than before engaging with the activity.

5. Research Methodology

According to this research, the author conducted a study of the entire population which were 17 kindergarten 1 students, Wat Boromniwas School who are studying in semester 2, the academic year 2021. Data collection tools included games-based learning plans and scientific skills assessments form, which included the process of creating and investigating quality as follows:

5.1 Games-based learning plans

5.1.1 The author reviewed the existing literature and research around using game-based learning to develop scientific skills to underpin the design of the activity learning plans.

5.1.2 Creating a learning unit used game-based learning to develop scientific skills, one of the instructional materials designed to deliver early years with fun and knowledge. Besides, the author inserted learning content in games for early years to play, which required the observation, classification and comparison skills process.





5.1.3 The author created 18 games-based learning plans to develop scientific with the following 6-step activity plan elements, 1) name of activities, 2) objectives, 3) learning content, 4) progressions, 5) learning materials, and 6) evaluation.

5.1.4 The author created the learning plans and to assess the content validity and the comply with objectives, the author sent the learning plans to 3 experts from Wat Boromniwas School. The assessment form adopted a 5 rating scale of quality assessment criteria and the results showed that the learning plans were suitable at the highest level ($\bar{X} = 4.94$, S.D. = 0.19). Then, the author revised the learning plans following the experts' comments.

5.1.5 The author conducted the data with the research population using revised games-based learning plans.

5.2 Scientific skills assessment form

5.2.1 The author reviewed the existing literature and research around using game-based learning to develop scientific skills to underpin the design of the scientific skills assessment form.

5.2.2 The author created a scientific skills assessment form with 3 skills; a selective assessment provided the most accurate circles and matching lines. There are assessment forms named 1) the observational skill assessment form, 2) the classification skill assessment form and 3) the comparison silk assessment form and each form have 2 sections with 1 point separately, so in each assessment, the form has 10 points 30 points in total.

5.2.3 Then, the author created scientific skills assessment scoring criteria

1) The scoring criteria are as follows:

1 score means children answered correctly or did the right answer

0 score means children answered wrongly or did not answer

2) The author created criteria for assessing the scientific skills of

kindergarten 1 students which has competent scientific skills criteria as follows:

75-100% mean good level

50-75% mean moderate level

00-49% mean improved level

5.2.4 The author sent the scientific skills assessment forms to assess the content validity and comply with the Item Objective Congruence (IOC) between 0.67 and 1.00. Then, the author revised the learning plans following the experts' comments.

5.2.5 The author conducted the data with the research population using revised games-based learning plans.





Experimental plan

This study is semi-experimental research which the author chose one group pretest-posttest design (Pisnu Fongsri, 2016, p. 128) as a symbol as follows:

Table 1: Experimental plan

Pretest	Treatment	Posttest
O ₁	X	O ₂

O₁ means evaluation before performing activities

X means Experimenting with games-based learning

O₂ means Evaluation after the activities provision

Data collection and analysis

1. Firstly, the author assessed the population using the assessment form before providing the games-based learning activity.

2. Then, the author conducted the data from the games-based learning activities and the learning plans during September and December 2021, 6 weeks on Monday, Wednesday and Friday at 3 pm. – 3.30 pm., so 18 times in total through online learning and on-demand.

3. Once completed the 6 weeks of data conducting, the author evaluated and recorded the results of scientific skills for individual students using the same post-trial assessment form as before the trial.

4. The data were analysed with statistical methods and summarized the overall results before and after the trial.

5. The statistical used to analyse the data in this study were frequency and percentage.

6. Results of the research paper

The results of the development of scientific skills of students in kindergarten 1, Wat Boromniwas School by using Games-Based Learning Activities which revealed as follows:

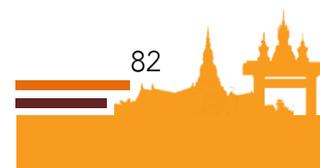




Table 2: the comparison of scores and percentages of scientific skills of kindergarten 1 students, Wat Boromniwas School using Games-Based Learning Activities before and after the experiment provision

Students	Before the experiment			After the experiment			Difference	
	score (30)	percentage	level	score (30)	percentage	level	score (30)	percentage
1	18	60.00	moderate	25	83.33	good	7	23.33
2	16	53.33	moderate	30	100.00	good	14	46.67
3	17	56.67	moderate	30	100.00	good	13	43.33
4	21	70.00	moderate	27	90.00	good	6	20.00
5	15	50.00	moderate	30	100.00	good	15	50.00
6	17	56.67	moderate	30	100.00	good	13	43.33
7	20	66.67	moderate	26	86.67	good	6	20.00
8	15	50.00	moderate	30	100.00	good	15	50.00
9	16	53.33	moderate	28	93.33	good	12	40.00
10	18	60.00	moderate	30	100.00	good	12	40.00
11	15	50.00	moderate	29	96.67	good	14	46.67
12	19	63.33	moderate	26	86.67	good	7	23.33
13	17	56.67	moderate	30	100.00	good	13	43.33
14	15	50.00	moderate	30	100.00	good	15	50.00
15	19	63.33	moderate	30	100.00	good	11	36.67
16	15	50.00	moderate	30	100.00	good	15	50.00
17	18	60.00	moderate	27	90.00	good	9	30.00

From table 2, kindergarten 1 students, Wat Boromniwas School has the ability of scientific skills after acquiring Games-Based Learning Activities higher than before using the Games-Based Learning Activities. Before using the activities, there was a moderate level of scientific skills between 50-70% and after the activities provided, the students have improved their scientific skills at a good level, which was between 83.33 and 100%. This revealed that the Games-Based Learning Activities significantly promoted the scientific abilities of kindergarten 1 students.

7. Conclusion and discussion

The results of the development of scientific skills of students in kindergarten 1 from Wat Boromniwas School by using Games-Based Learning Activities which after engaging with the Games-Based Learning Activities have scientific skills higher than before the activities provision. According to this result, the summary can be discussed as follows:





The results from the comparison scientific skills of kindergarten 1 students, Wat Boromniwas School before and after enchanting with Games-Based Learning Activities revealed that the students had scientific skills after delivery Games-Based Learning Activities higher than before the activities provision, 83.33-100.00 percentage which they were passed through all assessments. Due to before the Games-Based Learning Activities offering, the kindergarten 1 students had issues about telling the shape of an object, components of things, classifying things, and comparing things, all of which are fundamental science skills and essential to the next level of learning. Regarding the author running the Games-Based Learning Activities, the students have improved their scientific skills, including explaining the shape and component of an object by using their observational skills and classifying things in details that were better than before the Games-Based Learning Activities delivery.

This was a similar case in the study conducted by Chuleeporn Sngaunsri (2019, p. 65), who studies the development of thinking potentiality of the early childhood children using the integration of the mosques scientific model. Her research was to compare the early childhood's the thinking potentiality before and after for the development with the mosques scientific model which the result after running the activity was higher than before the activity provision. This can be exposed that the mosques scientific model was an activity that trains early childhood to develop their thinking potential and intellectual development. Similarly, the study conducted by Ratklaow Meesil (2019, p. 103) studied the inquiry method provision of learning experiences to the problem-solving ability of kindergarten. The results showed that the ability of problem solving of kindergarten was at a high level after the inquiry method provision. The activity emphasized the students to learn by doing and to develop scientific skills in terms of convincing students to explore, explain, expand and evaluate their knowledge. Besides, this current study is in line with the research of Siripen Kitkrajang (2019, p. 155), a study of the results of learning experiences emphasizing engineering design towards science process skills and creativity skills of pre-school children and the results showed that after arranging the experience using engineering design was higher than before the arranging. The organised experience using engineering design processes towards scientific process skills is an activity that trains children to identify problems and concepts related to problem solutions. Besides, the students have developed intellectually and practised thought processes.





8. Suggestions

suggestions for applying the findings

1. Teachers who would like to implement Games-Based Learning Activity should study the learning plans to understand and prepare learning materials and be adapted to the context of students and school. Due to the coronavirus pandemic (COVID-19) in the academic year 2021, the school's inability to deliver regular teaching is necessary to adapt the teaching style at home as online teaching to ensure a continuous learning process.

2. Implementing Games-Based Learning Activity as learning-based, teacher, therefore, should have questions to encourage students to develop their intellectual by using stimulating questions, which will help them build their knowledge. Also, the teacher should use the question that suits the games activities to convince them to engage with the Games-Based Learning Activity and review what they have learned before using high-level questions to allow children to develop a higher level of thinking.

3. Adopting the Games-Based Learning Activity, the teacher should consider the duration of data conducting approximately 6-8 weeks and use Games-Based Learning, which appropriately aligns with the development of students.

suggestions in the following research

1. There should study comparing the results of scientific skills development for students using games as diverse learning-based.

2. There should be studied using Games-Based Learning to develop other skills for students such as language, mathematics, and critical thinking abilities.

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REQUIREMENTS FOR THE MANAGEMENT OF INFORMATION TECHNOLOGY FOR TEACHING AND LEARNING IN SAVANNA KHET UNIVERSITY

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Chaiya Pawabutra²
Sikan Pienthunyakorn²

Abstract

This research aims to study current conditions, problems and needs of information technology management for teaching and learning in Savanna khet University. The sample group is university-level executives. Faculty and heads of departments in Savannakhet University, Academic Year 2021 the total of sample is 15 people, classified as 4, Savannakhet University Presidents, 7 Dean of Faculties, and 4 heads of departments at Savannakhet University. The instrument used for data collection was a structured interview. The results showed that:

The current state of information technology management for teaching in Savanna khet University found that information technology administration in educational institutions Savanna khet University has established the University's ICT policy as an annual plan. To focus on the implementation of ICT to be used as a driving factor for organizational development, teaching, learning, response to the strategy of Savannakhet University in terms of information technology infrastructure, the university has set up a network of hardware and software for teaching and learning. Providing modern tools and equipment to access teaching and learning materials electronically. Teaching and learning management Information and communication technology is used to create an atmosphere in the university that is conducive to the use of information technology and communication in teaching. Providing teaching and learning in information and communication technology subjects according to the curriculum in all disciplines and teaching online to promote job delivery and learning through the network to develop courses to facilitate application, use information technology to manage classes. In terms of personnel development, there is a personnel structure for the assignment of tasks to technical personnel. Information technology that is appropriate for the rate and position. University personnel have knowledge and experience in information technology. The problem of information technology management for teaching in Savanna khet University found that information technology

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administration in educational institutions. The ICT policy of the university and the departments affiliated with the university are not in the same direction. There is still a lack of a central information unit of the university and an ICT center to support teaching and learning. Lack of management of building design and improvement to take advantage of information technology in classrooms and learning spaces Budget allocation for ICT development for teaching and learning is not enough. The existing information technology infrastructure, equipment, software and network systems have been used for a long time, and some are obsolete and not suitable for existing systems, system development is slowly and lack of participation. It also does not give importance to adjusting the university structure to suit the situation and the need for ICT for teaching and learning as it should be. The planning of teaching and learning management on ICT in Savannakhet university is still unclear and lacking in applying information technology to work on curriculum preparation and curriculum development in each field of study, Personnel Development Staff of Savannakhet University Lack of knowledge and understanding of information technology systems, especially the computer programming and new innovations. So, the resulting of performance and responsibility for work are still poor. The need for information technology management for teaching in Savanna khet University found that information technology administration in educational institutions The university should be clearing of ICT policies for the development of teaching and learning in the same direction within the university, the university's central information department should be established as well as an ICT center to support teaching and learning, information technology infrastructure Equipment, software and networking should be provided for an effective to use in university to improve the quality of Internet network service Computers and teaching aids Teaching and learning management Technology should be used an information technology in the practice of curriculum preparation and curriculum development in each field of study. To enhance the necessary skills to prepare graduates to the labor market, provide the facilitates learning system (Smart Library). Personnel development should be developed and promoting an ICT for teachers and students. Regularly held on the training for teacher and students in the topic of how to use an ICT in teaching and learning continuously.

Keywords: Information technology management, Information technology for teaching and learning





1. Background

Nowadays, information technology has played a huge role in education, especially in computer and communication technology, the important role of information technology in the development of education contributes to learning management, there are many various tools to support teaching and learning management and modern education. Information is required for planning, implementing, monitoring, evaluating of computers and telecommunication systems, and gather the information technology with traditional classroom learning to modify the learning behavior of learners by encouraging learners to learn interactively and it's real sight (Eakkaew Kaewpratana, 2019, p. 3)

The use of information technology for educational administration is an important aspect of education management in the modern era. If there is a good management plan, it will make the administration of the educational institution systematic, convenient, fast, reliable in applying the information to improve and develop the educational institution (Renu Chanthaphan, 2014, p. 10) and administration. Manage and apply the ICT system in education (Educational Applications) in the education system. The ICT system has been used to help develop better education by would like to implement the ICT system to support education So that students can learn a lot; quickly and efficiently, therefore ICT directly affects the education system (Pongsak Phakamas, 2010, pp. 111-113).

To meet the objectives and goals of the National Education System Reform Strategic Plan as a whole and to resolve the quality problems of administration and education management especially the expansion of enrollment opportunities to access to education system. Under the leading of the government of the Ministry of Education and Sports Therefore, the ICT implementation project was established to improve the quality of education and expanding study opportunities which has been in operation since the beginning of 2011 and was completed successfully in the end of 2013. In the scope of the developing ICT infrastructure, thus creating an ICT Information and Communication Technology Center unit in the Ministry of Education and Sports. which is a center that uses technology to develop, administrate and service information and communication systems in education and sports as a tool for the protection of electronic education and sports administration to establishment of teaching, training and electronic conferences for research. Information and Communication Technology, Education and Sports Center (Ministry of Education and Sports, 2022, p. 7).

Therefore, the aforementioned problem, the researcher is interested in studying information technology management for teaching and learning in Savannakhet University because the researcher is a teacher at Savannakhet University and work directly related





to information technology management. So, I have an interest and desire to study and research on the aforementioned topics for further development of information technology management for teaching and learning in Savannakhet University.

2. Research Questions

What are the current conditions, problems and needs of information technology management for teaching and learning in Savanna khet University?

3. Research Objectives

To study the current condition, problems and needs of information technology management for teaching and learning in Savanna khet University.

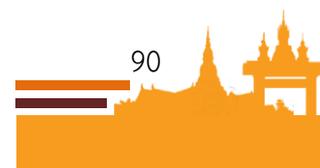
4. Scope of Research

In this research, the researcher studied the information technology management for teaching and learning in Savanna khet University as follows:

components of information technology Management for teaching and learning the researcher has synthesized academic papers of academics and studies from related research as follows: There are 4 aspects of information technology management for teaching and learning, namely 1) information technology administration in educational institutions 2) information technology infrastructure 3) teaching and learning management 4) personnel development

5. Research Conceptual Framework

Conceptual framework of information technology management for teaching and learning in Savanna khet University The researcher has defined the conceptual framework of the research as follows:



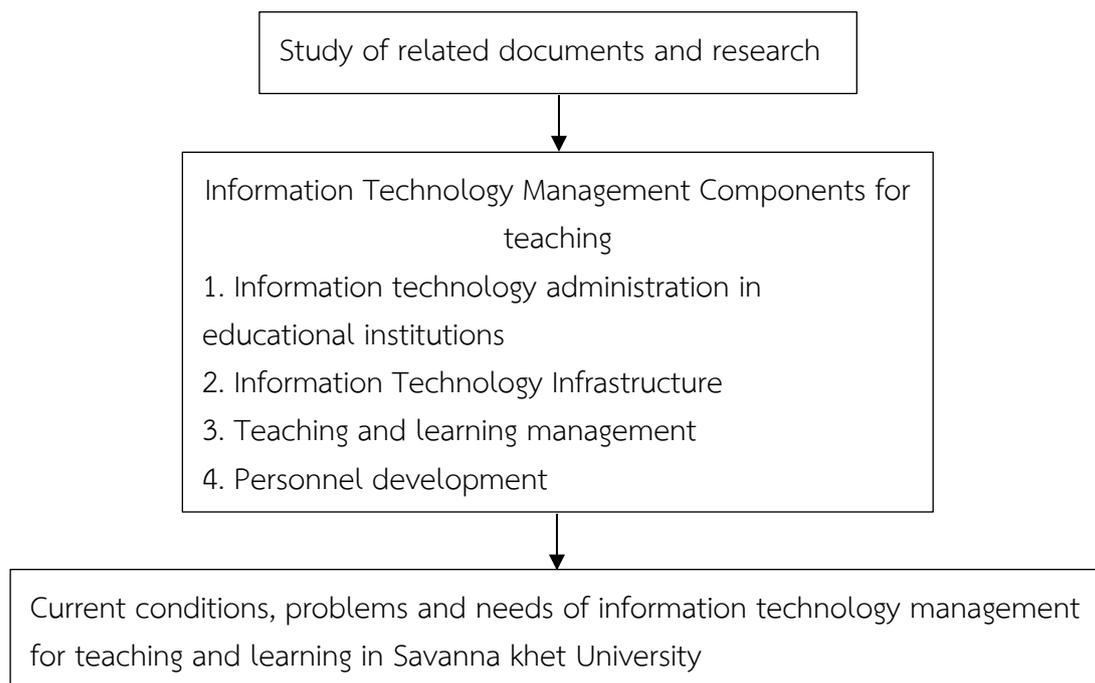


Figure 1: Conceptual framework

6. Population and sample

6.1 Population

The population used in this research was 15 qualified experts using Purposive Random Sampling.

6.2 Samples

The sample group used in this study were 1) 4 presidents of Savannakhet University, consisting of Acting Rector of Savanna khet University. Vice President for Research and Graduate Studies Vice Rector for Academic Affairs and Vice Rector 2) 7 members of the Dean of Savanna khet University, consisting of the Dean of the Faculty of Agriculture and Environment, Dean of the Faculty of Business Administration, Faculty of Linguistics and Humanities, Dean of the Faculty of Food Science, Dean of Faculty of Education, Dean of the Faculty of Natural Sciences and the Dean of the Faculty of Information Technology; 3) Heads of Savanna khet University, consisting of 4 people, consisting of Heads of General Affairs and Cooperation Office. Head of Audit and Policy, Acting for the head of the Office of Academic Affairs and Science Administration and Head of Quality Assurance.





6.3 Data Collection Tools

tools used in qualitative research The researcher developed a structured interview form with issues concerning current conditions, problems and needs for information technology management for teaching and learning. as well as recommendations for the development of policy proposals for the development of information technology for teaching and learning in 4 areas.

6.4 Data Collection

Data Collection in Qualitative Research The researcher proceeds as follows, Prepare an interview form that will be used to collect information, made a request for cooperation in collecting data from the Director of Graduate School Sakon Nakhon Rajabhat University to request assistance from qualified persons Data were collected through interviews and observations with comprehensive study subjects and photographs. using a digital imaging machine Record and gather information from the results of the interview. In important issues consistent with the policy proposals for the management of information technology for teaching and learning in 4 areas and complete the data collection for data analysis. Synthesize and draw conclusions.

6.5 data analysis

The researcher conducted an analysis of the data during the research process. both from the interview observation processing from interviews and photographs obtained from observations and notes, then analyzed, synthesized and summarized.

7. Summary of research results

7.1 Current state of information technology management for teaching and learning in Savanna khet University.

7.1.1 Information technology administration in educational institutions Savanna khet University has established the University's ICT policy as an annual plan. To focus on the use of ICT as a driving factor for organizational development and teaching and learning development and in response to the strategy of Savanna khet University and the university has a policy to develop an electronic office system for managing work within the university. Including the promotion of building a network of cooperation with the community and other organizations. in supporting information technology for teaching and learning and most importantly, the university also attaches importance to the formulation of policies, guidelines, and measures to promote teachers and students have access to electronic media for standardized learning.





7.1.2 Information technology infrastructure in Savannakhet University has set up a network of hardware and software for teaching and learning, provided modern equipment to access teaching and learning materials electronically, A network of information technology and communication among departments within the university has been developed to be able to connect with each other.

7.1.3 Teaching and learning management in Savannakhet University has supported the Information and communication technology to used in teaching and learning to create an atmosphere in the university that is conducive to the use of information technology and communication in teaching. Learning materials are developed that can be used with modern electronic devices. Information and communication technology courses are provided according to the curriculum in all disciplines, and online teaching and learning are organized to promote job delivery and learning through the network to develop courses that are conducive to application of information technology with classroom management.

7.1.4 Personnel Development Savanna khet University has set up a personnel structure for the assignment of tasks to IT personnel who are suitable for the rate and position. University personnel have knowledge and experience in information technology, information technology system security and Internet network management information system development, media and repair and maintenance of computer systems.

7.2 Problems in the management of information technology for teaching and learning in Savanna khet University

7.2.1 Information technology administration in educational institutions The ICT policy of the university and the departments affiliated with the university are not in the same direction, The university also lacks a central university information department including an ICT center to support teaching and learning. The policy for developing programs, software or systems used to store and process information for education is unclear. Lack of management of building design and improvement to take advantage of information technology in classrooms and learning spaces and the university manages the budget allocation for the development of ICT for teaching and learning that is not enough.

7.2.2 Information technology infrastructure, equipment, software and network systems have been in use for a long time. and some are obsolete and not suitable for existing systems and some databases are not complete, out of date information, Lack of integration of IT resources sharing, including lack of coordination of work/data/IT systems between departments slow system development and lack of participation it also does not give importance to adjusting the university structure to suit the situation and the need for ICT for teaching and learning as it should be. The provision of modern wireless





technology networks such as high-speed Internet networks and computer labs is not sufficient for campus service areas.

7.2.3 Teaching and learning management The university has a plan for ICT management to develop teaching and learning that is still unclear and lacking in applying information technology to work on curriculum preparation and curriculum development in each field of study. including the equipment used in teaching is not up-to-date and the number of equipment is insufficient for students.

7.2.4 Personnel development Staff of Savanna khet University lack of knowledge and understanding of information technology systems, especially in technical matters of programming and new innovations in teaching resulting in ineffective performance and responsibility for work as they should, some personnel use the software with negligence or lack of knowledge of security. Security in the use of information systems and Internet networks the ability of IT personnel for individual education in the university departments is unequal and lacks continuity in self-development. and does not allow personnel to fully demonstrate their abilities.

7.3 The need for information technology management for teaching and learning in Savannahkhet University.

7.3.1 Information technology administration in educational institutions the university should set up ICT policies for the development of clear teaching and learning in the same direction at the university level, faculty level, and other departments. on campus the university should establish a central university information agency, including an ICT center, to support teaching and learning.

7.3.2 Information technology infrastructure Universities need to provide equipment, software and networking. effective for use in universities to improve the quality of network services, the internet, computers and teaching support equipment. and providing replacement services for the old ones that have deteriorated and are sufficient to meet the needs demand of the number of students

7.3.3 Teaching and learning management Universities should apply technology to teaching and learning and to apply information technology to work on curriculum preparation and curriculum development in each field of study. To enhance the necessary skills to prepare graduates to the labor market, There is a support system that facilitates learning (Smart Library) to improve the computer laboratory. Providing software to support teaching and learning services such as CAD/CAM/CAE system, Software Engineering system to be up-to-date

7.3.4 Personnel Development Universities should develop and promote up-to-date ICT skills for teachers and students. Training on how to use ICT in teaching and learning is organized regularly and continuously for teachers and students.





8. Discuss the results of the research

research subject Information Technology Management for Teaching and Learning in Savanna khet University The researcher discussed the results according to the research results as follows:

The current state of information technology management for teaching in Savanna khet University found that information technology administration in educational institutions Savanna khet University has established the University's ICT policy as an annual plan. To focus on the implementation of ICT to be used as a driving factor for organizational development and teaching and learning development and in response to the strategy of Savanna khet University In terms of information technology infrastructure, the university has set up a network of hardware and software for teaching and learning. Providing modern tools and equipment to access teaching and learning materials electronically teaching and learning management Information and communication technology is used in teaching and learning to create an atmosphere in the university that is conducive to the use of information technology and communication in teaching. Providing teaching and learning in information and communication technology subjects according to the curriculum in all disciplines and teaching online to promote job delivery and learning through the network to develop courses to facilitate application. Use information technology to manage classes. In terms of personnel development, there is a personnel structure for the assignment of tasks to information technology personnel who are suitable according to the rate and position. University personnel have knowledge and experience in information technology. The problem of information technology management for teaching in Savanna khet University found that information technology administration in educational institutions in information technology The problem of information technology management for teaching in Savanna khet University found that and the departments affiliated with the university are not in the same direction. There is still a lack of a central information unit of the university and an ICT center to support teaching and learning. Lack of management of building design and improvement to take advantage of information technology in classrooms and learning spaces Budget allocation for ICT development for teaching and learning is not enough. Information technology infrastructure, equipment, software and network systems have been in use for a long time. and some are obsolete and not suitable for existing systems slow system development and lack of participation It also does not give importance to adjusting the university structure to suit the situation and the need for ICT for teaching and learning as it should be. Teaching and learning management ICT management planning to develop teaching and learning that is unclear and still lacks the use of information technology in the





practice of curriculum preparation and curriculum development in each field of study. Personnel Development Staff of Savanna khet University Lack of knowledge and understanding of information technology systems, especially in technical matters of programming and new innovations in teaching resulting in ineffective performance and responsibility for work as they should The need for information technology management for teaching in Savanna khet University found that information technology administration in educational institutions The university should set up ICT policies for the development of clear teaching and learning in the same direction at the university level, faculty level, and other departments. Within the university, the university's central information department should be established as well as an ICT center.to support teaching and learning information technology infrastructure Equipment, software and networking should be provided. effective for use in universities to improve the quality of Internet network service Computers and teaching aids Teaching and learning management Technology should be used in teaching and learning and the use of information technology in the practice of curriculum preparation and curriculum development in each field of study. to enhance the skills necessary to prepare graduates to the labor market There is a support system that facilitates learning (Smart Library) for personnel development. Modern ICT skills should be developed and promoted for teachers and students. Training on how to use ICT is organized to provide teaching and learning for teachers and students on a regular basis and with continuity. Consistent with the research results of Pirada Malam (2017, abstract) conducted a research study on Development of management style of information and communication technology Schools under the Office of Secondary Education Service Areas, District 24, found that Current state of information and communication technology management Schools under the Office of Secondary Education Service Areas, District 24, found that information technology management problems In terms of infrastructure in ICT management, there should be an appropriate budget allocated and funding from other sources should be allocated for ICT management of the school personnel development, namely, there should be training of personnel in the school about basic computer usage to be able to be applied in teaching and learning all subjects Regarding the learning process, there should be an application of ICT in learning management. Teaching all groups of learning subjects In terms of management and ICT services, i.e., there should be an ICT center within the school; Conducting research and developing ICT learning management in teaching and learning Consistent with the research results of Thongjeen (2015, Abstract) Information Technology Management of Nakhon Si Thammasat Primary Educational Service Area, Region 4 The results showed that Information technology needs in Nakhon Si Thammasat Primary Educational Service Area, Region 4, are required for information





technology for management. information technology infrastructure Information technology personnel development administrative and educational services and support for learning management and the most in demand in each area are: WiFi connection Personnel use computers in their work. The establishment of an Internet system for management and development of personnel learning management, students through the computer system Consistent with the research results of Kanchit Chamornman (2010, Abstract) An Analysis of Information and Communication Technology Policy and Policy Implementation of Secondary Schools in Thailand the results showed that Recommendations for the appropriate guidelines for implementing the policy in secondary schools are that the administrators should provide continuous support in the implementation of the policies and master plans. should develop a plan to promote the use of information technology within educational institutions Information technology knowledge training should be provided to all teachers. A monitoring and evaluation system should be established should provide enough computers should organize activities with the community and local Activities that promote the use of information technology should be organized and should consider the use of information technology skills.

9. Feedback

9.1 Suggestions from research results to use

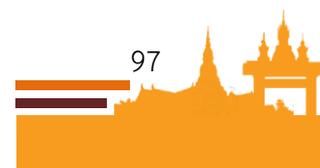
should bring information about the current condition Problems and needs of information technology management for teaching and learning in Savanna khet University to be applied as information in policy formulation of all departments to strengthen the university in terms of teaching and learning.

9.2 Suggestions for next research

Problems and needs of information technology management for teaching and learning in Savanna khet University should be brought forward by conducting policy research. This will be used as a guideline for the management of information technology for teaching and learning in Savanna khet University.

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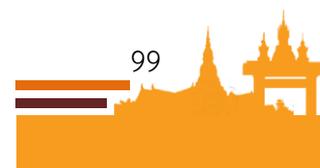


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A MODEL FOR DEVELOPING DIGITAL-ERA LEADERSHIP OF PRIMARY SCHOOL TEACHERS IN THE NORTHEAST

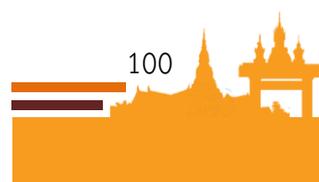
Nattayaporn Leksingto¹

Abstract

The purposes of this research were to 1) examine the components of digital-era leadership of primary school teachers in the Northeast, 2) construct and develop a model of developing digital-era leadership of primary school teachers in the Northeast, and 3) validate the effectiveness of the developed model. This research employed a Research and Development approach which was performed in three phases with seven stages. The samples, obtained through multi-stage random sampling, consisted of 375 teachers from 375 primary schools in the Northeast in the academic year 2021. Additionally, the sampling schools were selected as the unit of analysis, and one teacher as a key informant was drawn from each school. The samples for the development process consisted of 20 primary school teachers from the 5th Basic Education Network Center under Sakon Nakhon Primary Educational Service Area Office 2. The research instruments included 1) structured interview forms for experts examining the components of digital-era leadership of primary school teachers, and 2) a set of questionnaires examining the levels of digital-era leadership of primary school teachers, and 3) teacher behavior assessment forms. Statistics for data collection were percentage, means, and standard deviation. The findings were as follows: The digital-era leadership of primary school teachers consisted of four major components with 16 sub-components and 60 indicators: 1) Instructional knowledge and abilities with seven sub-components and 15 indicators; 2) Digital skills and knowledge with four sub-components and 15 indicators; 3) Digital technology abilities of instruction with two sub-components and 15 indicators; and 4) Literacy in digital technologies with three sub-components and 15 indicators. The model for developing digital-era leadership of primary school teachers in the Northeast included five components: 1) principles, 2) objectives, 3) contents, 4) development processes, 5) instructional media and learning resources, and 6) measurement and evaluation. The assessment results of the effective index of the developed model revealed that the model, as a whole, was suitable at the highest level ($\bar{X} = 4.67$). The effectiveness index of the development of digital-era leadership of primary school teachers in the Northeast achieved 70 percent, which was higher than that of before the model implementation.

Keywords: A Development Model, Digital-Era Leadership

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1. Introduction

The driving forces as globalization, borderless connectivity, and digital technologies are dramatically transforming the practice of individuals. Inevitably, the rapid technological transformation is altering the present and future nature of work and lives in Thailand. Issues in terms of human resources, education, public service, and healthcare provision in a technology-dominated society are widely debated and bring about altered responses to various resulting challenges. It is, therefore, necessary to prepare Thailand to accommodate a long-term and sustainable development. The passage of the 2017 Constitution of the Kingdom of Thailand in section 258B was more closely linked to keeping pace with the rapid changes of advanced technology addressing the administration of State affairs to ensure the application of appropriate technology for the administration of State affairs and provision of public services for the benefit of the administration of State affairs and the convenience of the people. Similarly, the twelfth National Economic and Social Development Plan (2017-2021) adhered to Thailand's 20-year National Strategy framework (2018-2037) was formulated to prepare human resources, society, and the economy by using digital technology as a key tool to develop the economic system through innovation and to create a digital development plan for improving economic and social development; thereafter being a catalyst for a driven framework of digital technology for national economic and social development. The guidelines for developing digital government skill set for civil servants and personnel in public sectors has also been established to transform to the digital government which influences all organizations both from public and private sectors to optimize complex tasks solution and decision-making improvements, including collaborative experiences, and services. This is a process of paradigm shifts-therby changing the ways of the thinking processes within the organization body.

The National Education Act (NEC) of B.E. 2542 (1999), and Amendments (No.2) B.E. 2545 (2002), and (No.3) B.E. 2553 (2010) Chapter 9 concerning guidelines for education provision stress the importance of technology to keep pace in the digital era, demanding innovation actions from all supporting personnel and teachers. In line with the NEC, education involving technology is transformative of the education system. The Thai Ministry of Education has taken the initiative to develop the skills of educators, and teachers in the use of technology to effective teacher management to the success of quality education. Teachers also need to improve digital teaching practices, which is considered as a new role of teachers in effectively managing the digital learning environment for students. According to several relevant research papers, a critical factor of organizational efficiency and success is the management and leadership of organizations and services in the public





and private sectors. Indeed, during the Covid-19 pandemic, the need for digital skills by leaders to transform the work environment, and processes at all levels has become more urgent. In the current era, the importance of digital leaders has emerged. The present study highlights the leadership characteristics required for the digital age in academic organizations.

In this light, it is necessary to present the digital skills that characterize a leader. Indeed, as already mentioned, the present research study aimed to explore and construct a model for developing digital-era leadership of primary school teachers in the Northeast. Not only has such a process been highlighted, but the benefits would also be an alternative model for the Primary Educational Service Area Office in the Northeast and other primary schools to further improve teacher leadership in a digital era.

2. Objectives of the Study

The objectives of the study were as follows:

2.1 to examine the components of digital-era leadership of primary school teachers in the Northeast.

2.2 to construct and develop a model of developing digital-era leadership of primary school teachers in the Northeast.

2.3 to validate the effectiveness of the developed model.

3. Significance of the Study

3.1 This research gives a solution to examine the components of appropriate digital-era leadership for teachers in primary schools in the Northeast.

3.2 The result of this research can be used as a reference to improve digital-era leadership for teachers at a primary school level. The developed model was developed and confirmed its appropriateness through a research process and R&D research plan.

3.3 The primary school teachers as the target group were trained and improved their digital-era leadership.

3.4 The developed model could be implemented in other educational institutions.

4. Research Methodology

The Research and Development (R&D) was employed consisting of three phases with seven stages as follows:

Phase 1 Model Component Examination: This phase was related to examining components of digital-era leadership of teachers and components of a model and methods for developing digital-era leadership of teachers. The component examination



was done through concept, theories, documents, and relevant studies on models for developing teachers' digital-era leadership at a primary school level in the Northeast. The results were drawn to formulate the research framework. The leadership components, methods for the development process, behaviors of teachers' digital-era leadership at a primary school level in the Northeast.

The research consisted of three steps, including document analysis, seven expert interviews about the development of digital-era leadership of teachers in primary schools with similar contexts or conditions, and a survey with 375 teachers examining a level of digital-era leadership of primary school teachers. The framework of this research was proposed as follows:

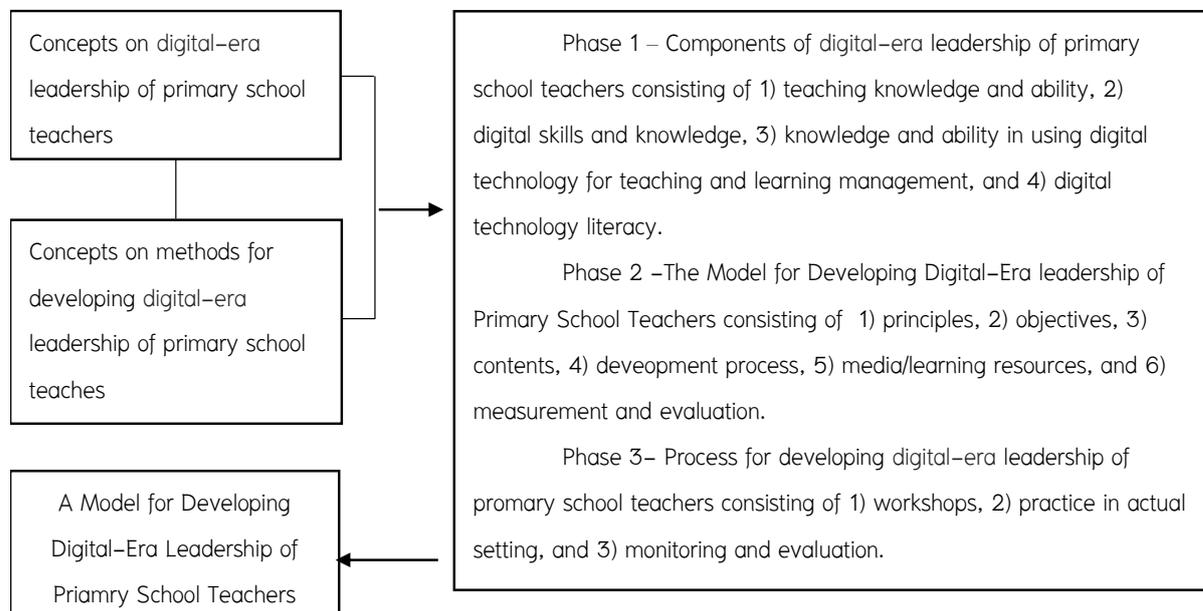


Figure 1: Research Framework

Population and Sample

The population of teachers consisted of 12,376 teachers teaching in primary schools in the Northeast in the 2021 academic year. The sample group included teachers from 375 primary schools in the Northeast in the 2021 academic year were key informants, selected through multi-stage random sampling. Additionally, the sampled schools were selected as the unit of analysis, and one teacher as a key informant was drawn from each school. The sample size was determined through a table of Krejcie and Morgan (1970, p. 608 cited in Waro Pengsawat, 2007, p. 152)





Research Instruments

A 5-rating scale survey questionnaire on a model for developing digital-era leadership of primary school teachers in the Northeast was administered. Thereafter, the structured interview was conducted to collect useful information and evaluate the same question responses.

Research construction and Quality Confirmation

In this phase, the research construction and quality confirmation are described as follows:

1. A document analysis on model development and processes of digital-era leadership was carried out.
2. The structured interviews were also conducted by examining the opinions of seven experts on components of digital-era leadership of teachers.
3. The data collected from literature reviews, and interviews were analyzed using content analysis. The data congruence was confirmed for components and development methods for developing digital-era leadership of teachers in the Northeast and formulated a set of survey questionnaires.
4. The survey questionnaire was proposed to thesis advisors for accuracy and appropriateness, including a revision of the completed version.
5. After the approval, the set of survey questionnaires was then proposed for five experts to evaluate validity using the Index of Item-Objective Congruence (IOC) technique. The items with IOC Index ranging from 0.60 to 1.00 were accepted (Boonchom Srisa-ard, 2002, p. 62). The result revealed that the survey questionnaire achieved an IOC Index ranging from 0.80 to 1.00, which was congruent with the objectives. Revisions were performed before proceeding with the pilot testing.
6. The survey questionnaire has undergone pilot testing for reliability using Cronbach's Alpha Coefficient with the non-sample group of 30 primary school teachers (Boonchom Srisa-ard, 2002, p. 100). The reliability of the questionnaire was 0.99, which demonstrated adequate reliability. The questionnaire was then revised and completed for further data collection.

Data Gathering Procedures

The researcher requested necessary permissions from the Graduate School of Sakon Nakhon Rajabhat University to school directors working in primary schools in the Northeast. The questionnaire forms were distributed to 375 school directors in selected schools for data collection and collected via mailing, email, LINE, and Google forms, and in person. Out of 375 distributed questionnaires, 375 were returned. Thus, the return rate was 100 percent. Thereafter, the completed questionnaires were collected,





and the responses were tabulated, analyzed, and interpreted. The responses have been treated with confidentiality.

Data Analysis and Procedures

The data gathered were subjected to descriptive and inferential analysis as follows:

1. Data collected from document analysis and expert interviews were done through content analysis to determine the congruence of the collected data concerning the components of digital-era leadership of primary school teachers in the Northeast and the development methods.
2. The data collected from a survey questionnaire was analyzed using frequency, percentage, mean, and standard deviation.

Phase 2 Model Constructure and Development

In this phase, the model was constructed and developed with two steps consisting of a model development construction, and a model confirmation through nine experts.

Research Instruments

The research instrument in this phase was an assessment of the appropriateness and possibilities of the developed model.

Research construction and quality of research instruments

1. The data collected from Phase 1 on digital-era leadership and methods for developing digital-era leadership were summarized as the important issues.
2. The research framework was formulated and connected as a model for developing digital-era leadership of primary school teachers in the Northeast.
3. The detailed documents used in the development process were created and designed for supporting the activities covering the development of digital-era leadership of primary school teachers in the Northeast.
4. The data gathered concerning the digital-era leadership of primary school teachers in the Northeast were arranged and summarized for further revision by the thesis advisors.
5. The developed model, handbooks, and documents for developing digital-era leadership for primary school teachers in the Northeast were proposed to assess the consensus level among nine experts on the model appropriateness.

Phase 3 Model Efficiency

The steps of the model efficiency phase were processed into two steps: an experimental stage and summary results after the model implementation.





Target Group

The target group involved 20 volunteer teachers from 15 primary schools under Sakon Nakhon Primary Educational Service Area Office 2.

The construction and quality of research instruments

The construction and quality of research instruments in this phase were as follows:

1. The appropriateness of the developed model assessed by nine experts as a whole was at the highest level ($\bar{X} = 4.67$).
2. Further adjustments to the developed model were made according to experts' recommendations before considering any further implementation.
3. The implementation results were then summarized on key areas of digital-era leadership of primary school teachers in the Northeast.

Research instrument

The research instrument in this phase was the model for developing digital-era leadership of primary school teachers in the Northeast.

Data Collection Procedures

1. The developed model was implemented with 20 primary school teachers from 15 schools under the 5th Basic Education Network Center in Phannanikhom District, Sakon Nakhon Province.
2. After the model implementation, the results were summarized and written for the completed research report for further publication.

Data Analysis

The effectiveness Index (E.I.) was analyzed.

5. Findings

5.1 The demographical characteristics of the respondents were analyzed. Supporting tables and figures were provided. Table 1 indicated that the gender composition of the 375 respondents, 301 (80.27 percent) reported their gender as female. Regarding the educational background or equivalent, 63.73 percent of respondents had completed bachelor's degrees. Considering the employment status of the respondents, Table 1 showed that 37.60 percent of respondents were employed for less than ten years. Table 1 also indicated that 49.87 percent of 187 participating teachers were from medium-sized schools as described in Table 1.





Table 1 Distribution of population groups included in the study

Demographical profile of respondents	Number (person)	Percentage
Gender		
1. Male	74	19.73
2. Female	301	80.27
Total	375	100
Educational Background		
1. Bachelor's degree or equivalent	239	63.73
2. Master's degree or higher	136	36.27
Total	375	100
Work experience		
1. Less than 10 years	141	37.60
2. 11-20 years	107	28.53
3. 21-30 years	60	16.00
4. 31-40 years	58	15.47
5. 41 years up	9	2.40
Total	375	100
School Sizes		
1. Small-sized school	116	30.93
2. Medium-sized school	187	49.87
3. Large-sized school	72	19.20
Total	375	100

5.2 The digital-era leadership of primary school teachers in the Northeast, as a whole, was at a high level ($\bar{X} = 4.19$, S.D. = 0.69). When considering each aspect, the highest-level aspect was Literacy in Digital Technologies ($\bar{X} = 4.24$, S.D. = 0.68), followed by Digital Skills and Knowledge ($\bar{X} = 4.20$, S.D. = 0.66), Instructional Knowledge and Abilities ($\bar{X} = 4.16$, S.D. = 0.69), and Digital Technology Abilities of Instruction ($\bar{X} = 4.15$, S.D. = 0.71), respectively as described in Table 2.

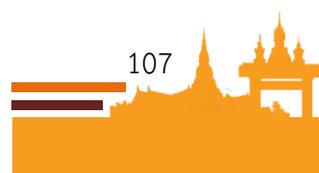




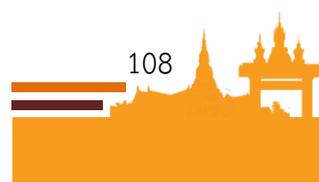
Table 2 demonstrated mean (\bar{X}), standard deviation (S.D.), and the dimension range of components of digital-era leadership of primary school teachers in the Northeast, as a whole and each aspect

No.	Components of digital-era leadership of primary school teachers	Statistical Value (N=375)		Dimension
		Performance Level		
		\bar{X}	S.D.	
1	Instructional knowledge and abilities	4.16	0.69	high
2	Digital skills and knowledge	4.20	0.66	high
3	Digital technology abilities of instruction	4.15	0.71	high
4	Literacy in digital technologies	4.24	0.68	high
Total		4.19	0.69	high

5.3 The model for developing digital-era leadership of primary school teachers in the Northeast as a whole was appropriate at the highest level ($\bar{X} = 4.67$, S.D. = 0.40). When considering each aspect from high to low mean, the components were ranged in order as follows: principles ($\bar{X} = 4.89$, S.D. = 0.33), measurement and evaluation ($\bar{X} = 4.89$, S.D. = 0.33), objectives ($\bar{X} = 4.78$, S.D. = 0.44), a development process ($\bar{X} = 4.78$, S.D. = 0.44), contents ($\bar{X} = 4.33$, S.D. = 0.50), media and learning resources ($\bar{X} = 4.33$, S.D. = 0.50), respectively as described in Table 3.

Table 3 demonstrates the assessment result of the model appropriateness by experts

Categories	\bar{X}	S.D.	Level of Appropriateness
1. Principles	4.89	0.33	highest
2. Objectives	4.78	0.44	highest
3. Contents	4.33	0.50	high
4. Development process	4.78	0.44	highest
5. Media/Learning resources	4.33	0.50	high
6. Measurement and evaluation	4.89	0.33	highest
Total	4.67	0.48	highest





5.4 The effectiveness Index (E.I.) of the development of digital-era leadership of primary school teachers in the Northeast was assessed by 20 teachers. The pre-test scores before the development process were 200 scores compared to 340 scores after the post-test scores, with a total score of 400 scores. The effectiveness Index (E.I.) was 0.70 or equaled 70 percent as described in Table 4.

Table 4 The effectiveness Index (E.I.) of the development of digital-era leadership of primary school teachers in the Northeast

scores	N	ΣX	E.I.
Pre-development test	20	200	0.7
Post-development test	20	340	

6. Summary of Research Findings

The research findings were presented as per the research objectives.

6.1 The components of digital-era leadership of primary school teachers in the Northeast comprised four main components with 16 sub-components and 60 indicators as follows:

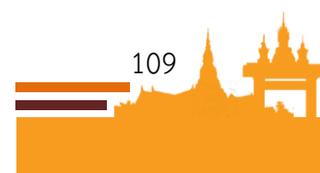
6.1.1 Instructional knowledge and abilities consisted of the following sub-components: 1) knowledge and experiences in teaching contents and methods, 2) mastery and understanding contexts of changes, 3) knowledge about educational psychology, 4) ability in curriculum administration and learning management, 5) ability for developing learners, 6) ability in learning management, and 7) ability in analyzing, synthesizing, and conducting research for learners' development.

6.1.2 Digital skills and knowledge comprised the following sub-components: 1) knowledge about information, 2) knowledge about media, 3) Knowledge about ICT, and 4) Knowledge and skills of being a digital citizen.

6.1.3 Digital technology abilities of instruction comprised the following sub-components: 1) digital technology literacy, and 2) digital technology understanding and utilization skills.

6.1.4 Literacy in digital technologies comprised the following sub-components: 1) being a citizen with responsibility, 2) being a citizen with participation behaviors, and 3) being a citizen focusing on a fair deal in society.

6.2 The model for developing digital-era leadership of primary school teachers in the Northeast consisted of 1) principles, 2) objectives, 3) contents, 4) a process development, 5) media/learning resources, and 6) measurement and evaluation.





6.3 The Effectiveness Index (E.I.) of the model for developing digital-era leadership of primary school teachers in the Northeast revealed that: 1) The appropriateness of the developed model as a whole was at the highest level, and 2) The digital-era leadership of primary school teachers improved at a higher level than the pre-implementation at 70 percent.

7. Research Discussion

7.1 The components of digital-era leadership of primary school teachers in the Northeast consisted of four components: 1) Instructional knowledge and abilities 2) Digital skills and knowledge 3) Digital technology abilities of instruction and 4) Literacy in digital technologies. Based on the findings above, the digital-era leadership of teachers is considered as behaviors or characteristics of teachers as leaders and followers in a modern society, known as the knowledge, information or networked society because of rapid changes of information technology and globalization and a highly digitalized society. This is in line with Wirote Sanrattana's statement on digital Leadership (2014, p. 54). Societies in the 21st century are considered knowledge-based, information or networked societies. Therefore, leaders in this era or future era must have special characteristics, such as new attitudes, new skills, and new knowledge within limitations and opportunities of ICT. The effective utilization of ICT includes 3Cs: computer use, communication, and multimedia content, which are additional characteristics from having original good characteristics. This is also in line with the statements of Nutavoot Pongsiri (2017, pp. 20-23) that digital leadership in a digital economic era would have roles and duties in driving organizations differently from previous organizations in various dimensions, which is to say, leaders must integrate mixed factors as 3C consisting of Climate-Working environment, Culture-organizational culture, and Creative-creative thinking. It is also supported by Chevin Oonla-or (2020, pp. 117-118) that the characteristics of digital leadership must include communication support, information technology use.

The components of digital-era leadership of primary school teachers in the Northeast could be described in detail as follows:

Component 1 Instructional knowledge and abilities are key important characteristics because teachers must be able to teach to improve the self-learning process for better behaviors changes. This is in line with the Office of Basic Education Commission, Ministry of Education (2010, pp. 1-15) formulating a framework to assess teachers' competency. In addition, Thanompon Laohajaratsang's statement that "in this technology and communication era contains a range of information. Therefore, teachers'





must-have skills would fit in the digital technology era as becoming C-Teacher (2013 cited in Passkorn Roungrong, 2021, pp. 3-4). Sukanya Chaemchoy (2017, p. 38) stated that teachers in a digital era should have seven characteristics as follows: 1) Coach, 2) Questioner, 3) Learning Designer, 4) Context Provider, 5) Educational Technology, 6) Quality Controller, and 7) Role Model.

Component 2 Digital skills and knowledge are also as important as Component 1 because digital skills and knowledge are must-have skills for teachers to apply into teaching practice to keep pace in a modern age. According to Ongjit Metthayapraphat (2014, online), teachers in the 21st century must be E-Teachers. In addition, Chantana Sansuck (2016) investigated components of digital leadership skills consisting of 1) Digital literacy-using digital technology to search, evaluate, use, share, and create content. 2) Digital vision-formulating strategies for using digital technology in work performance, 3) Public relation-supporting personnel to improve digital vision and grow in a digital environment, 4) being leaders with a clear vision for supporting personnel effectively, 5) transferring digital vision to personnel for improving performance, 6) adaption-use new technologies to practice, 7) self-awareness-being able to predict situations that may affect self and others, and 8) cultural perception-communication and participation in performing tasks using digital technology. This is also in line with the Office of the Education Council, Ministry of Education (2019, p. 4) who suggests the roles of teachers should be adjusted to be as a bridge to connect the body of knowledge to students and to ensure that teachers understand changing of students' learning behaviors.

Components 3 Digital technology abilities of instruction. Currently, using technologies in teaching and learning is not new or any unapproved evidence. However, using technology for effective teaching is still a process of continuously searching for better solutions which could be categorized into two aspects: 1) using technology to enhance new opportunities in education, 2) using technology to encourage learners' success. This is in line with the learning process based on the National Education Act B.E. 2542, where section 24 statement addresses the guidelines for the learning process in educational institutes and adheres to Chapter 9 Technology for education in section 65, encouraging the development of personnel to be as producers and education technology users and to obtain knowledge and ability and skills in producing and using technology appropriately, and effectively. It is also in line with the guidelines for Digital Literacy World-Class Standard School proposed by the Office of the Basic Education Commission (2010, p. 6), which stated that teachers should be able to use the Internet for communication, searching information, conducting research, and job opportunity. Similarly, Jinnawat Pakotung (2018, p. 237) stated that learning management in the digital era should embed information technology and communication into practice and facilitate teaching and learning.





Component 4 Literacy in digital technologies. In the past decade, there have been rapid changes to media integration. This is consistent with Nithida Wiwatpanitch (2015) stated that media literacy was an important concept in the 21st century as information and communication technology within the digital era may happen much faster affecting the way how at-risk children and youths cope with overwhelming information. At-risk children and youths were not able to identify reliable sources of information or false information. In addition, traditional command-and-control organizational structures were not effective in this rapidly changing society. Therefore, it is necessary to support media users to be protected and obtain media literacy. This is in line with Nattakarn Sukolratanametee and Nuchaprapa Moksart (2019, p. 32) who stated that media literacy could be defined as decoding media messages and utilization by using critical thinking and reasonings, identifying truth from opinions, and being able to assess the content quality and reliability. Similarly, Nuntiya Dounghummes and Nitida Saengsingkaew (2020, pp. 54-67) stated that the growth of advanced technology and various innovative inventions disrupted Thai society and eventually to everyday life in all dimensions.

7.2 The model for developing digital-era leadership of primary school teachers in the Northeast consisted of 1) principles, 2) objectives, 3) contents, 4) a development process, 5) media/learning resources, and 6) measurement and evaluation. This is in line with the study by Kompisit Sriboonruang (2015, pp. 103-104) which examined the model for developing administrators' leadership in information and communication technology in basic education schools in the Northeast. According to a study by Worakanyapilai Gaerahan (2007, p. 209), the findings revealed that the model for developing instructional leadership of school administrators under the Office of Basic Education Commission in Educational Inspection Region 11 consisted of principles, objectives, development process involving an intensive workshop, actual practice settings, a field trip, and follow-up session. Similarly, a study by Siriporn Kunlasant (2014, pp. 206-207) revealed the model for developing teacher leadership in learning management in Educational Opportunity Extension Schools in the Northeast consisted of principles, objectives, contents, development process, measurement, and evaluation. This is also in line with a study by Rattiya Promsin (20016, pp. 255-256) stated that the model for developing teachers' leadership in primary schools under Educational Inspection Region 11 consisted of principles, objectives, contents, a development process, and measurement and evaluation.

7.3 The appropriateness of the developed model, as a whole, was at the highest level. The Effectiveness Index (E.I.) was higher than the pre-implementation with a mean of 70 percent. When considering the mean differences, teachers' digital-era leadership behaviors in learning management after the model implementation were higher than





those of before at the 0.01 level of significance. This is in line with a study by Chaiya Pawabutra, Surat Duangchatom, and Sumattana Hansuri (2020, pp. 1-10). The findings revealed that the technology leadership of school administrators in a digital era after the model implementation as a whole was at a high level compared to the pre-implementation at a medium level. The percentage progress achieved at 25.80. The interview results showed a similar direction. In addition, after the knowledge testing on technology leadership, the scores of the participants attending the workshop for developing technology leadership for school administrators in a digital era were higher than those of before the implementation at the .01 level of significance. According to Komsit Sriboonrueng (2015, pp. 103-104), the study results indicated the information and communication technology leadership of school administrators as a whole was at a high level. The mean after the implementation was higher than that of before the implementation at the .05 level of significance. The mean after the follow-up session was higher than that of before at the .01 level of significance. Similarly, a study by Siriporn Kulasant (2014, pp. 206-207) found that teacher leadership improved after the model implementation. This is also consistent with a study by Rattiyas Promsin (2016, p. 273) revealed that leadership of primary school teachers after the model implementation was higher than that of before the implementation at the .01 level of significance.

8. Recommendations

The following recommendations were offered for practitioners.

8.1 Primary school administrators should be able to use fundamental data of digital-era leadership of teachers in primary schools in the Northeast for teaching and learning management and develop education to achieve the highest effectiveness in the future. The digital-era leadership consisted of 1) Instructional knowledge and abilities, 2) Digital skills and knowledge, 3) Digital technology abilities of instruction, and 4) Literacy in digital technologies.

8.2 School administrators should provide workshops, self-learning in actual settings concerning leadership components.

8.3 School administrators should promote the application of the model for developing digital-era leadership of teachers in other schools.





9. Recommendations for further research

Based on the results of this study, some recommendations for further research were offered below.

9.1 The model for developing digital-era leadership of teachers in primary schools should be implemented in other regions.

9.2 It is recommended to conduct a similar study at a secondary school level.

9.3 It is recommended to conduct a study on factors affecting the development of digital-era leadership of primary school teachers and a school's quality of education.

9.4 It would be worthwhile to examine leadership in other aspects following education management in school contexts.

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GUIDELINES FOR DEVELOPING EFFECTIVENESS OF PROJECT ADMINISTRATION FOR THE ENGLISH PROGRAM IN SECONDARY SCHOOLS UNDER THE BASIC EDUCATION COMMISSION, MINISTRY OF EDUCATION

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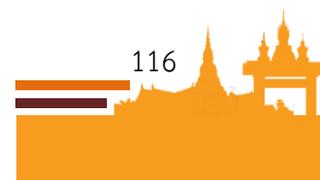
Watana Suwannatrai⁴

Abstract

In this paper, an attempt is made to propose guidelines for developing the effectiveness of project administration for the English Program (EP) in Thai secondary schools under the Basic Education Commission, Ministry of Education. Drawing from records of nine experts, the paper seeks to present four key areas to establish the guidelines for improving the EP projects' administration in terms of instructional leadership of administrators, school atmosphere, teacher competence, and stakeholders' participation.

Keywords: Effectiveness of Project Administration, English Program (EP)

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1. Introduction

Based on the National Educational Act of B.E. 2542 (1999) and the amendment (Second National Education Act) B.E.2545 (2002), section 22 requires all sectors to regard the importance of providing quality education and opportunities for all Thai learners to learn at their own pace and self-development of their potentiality. In addition, the importance of having language knowledge and skills is claimed under section 23(4). In Thailand, English is used as a foreign language but plays an important role as an international medium for communication, media, and the internet. Therefore, understanding English gives access to extensive information, learning resources, and employment opportunities (English Language Institute, 2016). In this respect, section 24 means teachers who provide instruction to students, and educational institutions who provide support for teachers, and promote atmosphere, environment, and media to facilitate learners can be considered as critical factors contributing to learners' academic success, and capabilities. Similarly, Brisk (1998) noted the quality of the English program project and/or bilingual projects as well as curriculum, learning management, various resources, evaluation guidelines, and personnel readiness.

The implementation of the 1999 National Education Act being made in Thai education is a language learning at primary and secondary levels. The English Program (EP) has been established aiming at providing Thai national curriculum subjects in English. The development of the EP in Thailand indicates the necessity of preparation for Thai learners' English proficiency. The EP has been operated in mainstream schools offering the teaching and learning of school subjects being taught at least 15 hours a week of each class for four core subjects in English including English language, Science, Mathematics, and Physical Education. However, upon examining the English-language classes, many studies pinpointed a few factors contributing to the failure of English-language instructional management: unqualified teachers-English knowledge and proficiency (Habibi & Sofwan, 2015; Tod & Darasawang, p. 195), non-English major teachers (Jindapitak, 2019, p. 36; Wisitudonkarn, 2021, p. 265; Rigter, 2020, p. 104), teachers' heavy teaching loads (Kongcharoen, Onmek & Wangyisen, 2019, Abstract), teachers' involvement (Kaur, Young & Kirkpatrick, 2016, p. 357), mixed abilities in large classes (Todd, 2019, p. 4), limited opportunities for using English outside class (Abdullah, Hussin & Ismali, 2019, p. 131). As Jacobs, Boardman, & Wang (2018) explained improving English language teacher quality is necessary for better language classroom practices. The Thai Ministry of Education has attempted to assist teachers by already establishing the English Resource and Instruction Centers (ERIC) project, known as the "Bootcamp" -a three-week intensive course in many educational regional areas, and providing training workshops throughout Thailand for





English-language teachers at primary and secondary school levels to improve communicative teaching skills, methodologies practices, and English proficiency. Several regional universities also have started offering similar programs and teacher certification programs to in-service teachers at all levels.

Despite the training, education programs, and workshops provided for the English-language teachers, a study by Stevenson, Bower, Falloon, Forbes, & Hatzigianni (2019, Abstract) found that the teachers had many concerns about the implementation of their knowledge into practice including infrastructure, and administrative support. Likewise, a study by Wuttichai Niemted (2016, p. 158) revealed the five keys factors improving the EP administration: 1) support-resource input, including integrating curriculum with ASEAN community content, using technology as teaching aids, learning resources; 2) personnel-resource input containing two sub-factors: having school administrators with a strong vision and understanding of bilingual education and investing in qualified and professional teachers; 3) school-management process with eight sub-key factors, including management structure, policy/vision, community involvement, school-networks, utilization of technology and classroom management for self-access learning, staff development, cultivation of the culture of research and student-centered activities; 4) learning-management process with three sub-factors: learning patterns in the use of English and Thai as an instructional medium, learning management-style, and measurement and evaluation; 5) output or educational quality involved five determinants: learning achievement, attainment of the desirable characteristics of the learners, educational roles in society and culture, achievement of English skills among target groups. Nomnian & Arphattananon (2018, abstract) revealed that school administrators and leadership skills should be enhanced for effective administration that leads to school success. The key competencies included strategic thinking and innovation, managerial leadership, instructional leadership, personal excellence, and stakeholder engagement.

In responding to the challenges and social and economic opportunities, the EP projects have gained popularity in Thai education at primary and secondary school levels since 2002 to promise improvements in education and English studies. However, despite the initiatives and efforts, the English skills of both teachers and students did not improve at a sufficient rate (Kaur, Young & Kirkpatrick. (2016, p. 345). Some schools still do not conform to the policies and regulations set by the Ministry of Education because of the insufficient and unprepared infrastructure and administrative support of the organizations (Ngamsom, 2018, abstract). This has resulted in the quality of the educational output; hence, the researcher is interested in examining the feasible guidelines for improving project administration of instructional management for the EP project in secondary schools under the Basic Education Commission, Ministry of Education. This paper also





reports the findings drawn from the big research project which were explored and then expanded to propose the guidelines for developing the effectiveness of the EP projects' administration. The researcher has aimed to support educators, school administrators, teachers, and stakeholders to incorporate educational findings into their practices at both primary and secondary levels.

2. Research methodology

2.1 A Purpose of the study

The purpose of this qualitative research was to examine guidelines for developing the effectiveness of the EP project in secondary schools under the Basic Education Commission, Ministry of Education.

2.1 Subjects of the study

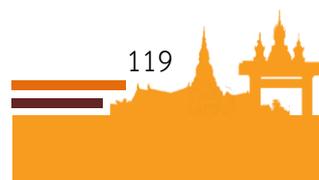
The key informants were nine experts with experience in the EP project administration consisting of two experts from the Basic Education Commission, four experts at a regional level, and three experts with English-language teaching experience.

2.3 Research tools

The research tool was an interview concerning opinions and recommendations on guidelines for developing the effectiveness of the EP project in secondary schools under the Basic Education Commission, Ministry of Education. Qualitative approaches are useful for measuring accurately and then generalizing results to a larger population within the known limits of error (Froehlich, Van Waes & Schafer, 2020, p. 114).

2.4 Data collection and analysis

Approval for conducting the study was obtained from the Human Research Ethics Committee of Sakon Nakhon Rajabhat University. The required completion of necessary documents before undertaking the interviews. The interviews were conducted in Sakon Nakhon, Thailand during the second semester of 2021. The selected experts were approached (after the Sakon Nakhon Rajabhat university Committee had approved the letter of consent). The statement in the letter outlines the purpose of the investigation and ensures the experts' confidentiality and anonymity, with the right to refuse to participate and be drawn from the study at any time. After the participating experts had read the information and were satisfied, they were asked to sign a form of consent, The experts signed the consent form indicating their willingness to participate. Their responses were confident. The research requested a letter for experts interviews from the graduate school, Sakon Nakhon Rajabhat University. The letter was asked to provide information regarding the guidelines for developing the EP project in secondary schools under the Basic Education Commission, Ministry of Education, and their feedback by way





of responses and comments assisted in improving the guidelines. Qualitative data collected was analyzed using descriptive statistics such as frequency distributions.

3. Research Findings

The guidelines for developing the effectiveness of the EP project were analyzed through the experts' opinions and calculated the frequencies that could be summarized into four key factors: 1) administrators' instructional leadership, 2) school atmosphere, 3) teacher competence, and 4) stakeholders' participation. The summary of the findings is as follows:

3.1 Administrators' instructional leadership development consisted of 1) curriculum and instruction management and 2) supervision of teaching and learning management. All experts agreed that the development of administrators' instructional leadership should focus on the utilization of digital models to support the curriculum and instruction of teachers to promote learners' learning in the 21st century. In addition, administrators should give opportunities for teachers to participate in every step of project operation. School administrators also should have knowledge and understanding of supervision and use it appropriately following individuals' context and current situation. The schools should also support teachers' professional development and academic advancement and be leaders. The findings are in line with a review of the work of Kaiser (2000, p.33) that the characteristics of effective instructional leadership of school administrators could be identified within the following areas: Knowledge and understanding of theories, philosophy of different curricula of an educational institution, knowledge and understanding various teaching approaches, support teachers using innovation teaching, being a role model in terms of academic, promote the learner-centered approach, supervision and monitoring teaching and learning as designed lesson plans. In addition, Nomnian & Arphattananon (2018, p. 52) proposed that administrators should have instructional leadership that leads to higher levels of student achievement. Administrators should also be instructional resources to identify good teaching and provide feedback that promotes teaching techniques, learning atmosphere, gives importance to students' learning progress, and teachers' professional growth.

3.2 School atmosphere development The school atmosphere consisted of school structure, moral support, and clearly defined goals and policy. The experts suggested that schools should have flexible and adjustable to follow the trends of the 21st century. School goals and policy should be established to suit personnel knowledge and understanding and clear time framework as well as recognition and rewards in public. The utilization of technology communication should be put in place for running effective





projects. As Pashiardis (2008) mentioned that the elements of organizational atmosphere covered 1) goals, if organizations share mutual goals, the organizational atmosphere must be in the same direction; 2) structure, the clear and well-defined structure is like to establish the well-defined atmosphere; and 3) rewards, personnel attitudes are important for the success of the organization

3.3 Teacher competence development Teacher competence elements consisted of teaching spiritual, content mastery, teaching, and learning management. The experts agreed that teachers' development should focus on teaching professional development. Teachers should have opportunities for continuous training, knowledge shared with others to improve their professions to keep pace with science, economic, social, and political changes and flow with the guidelines of instructional management in the 21st century. This is in line with the professional standards of knowledge and experience from the Teachers Council of Thailand (2021) containing two competence areas with eight sub-competencies: 1) professional knowledge and experience, including Thai and English language for communication, digital technology for education, teaching profession, and major subjects; and 2) work performance and personal conduct, including learning management, parents and community relations, and performance of teachers' duties and professional code of ethics. In more recent years, there has been a growing interest amongst educators in exploring teachers' competence through the use of observation instruments. In one of the analyses of this kind, Bernard (2015, pp. 32-33) that good teachers should have core competencies, including experience in different educational settings, strong communicator, effective classroom management strategies, knowledge and understanding of assessment, adaptive teaching practices. In terms of attributes, teachers should be optimistic, have a genuine care for students, contribute to the school, be a life-long learner, collegial personality, have a love for teaching, believe in equity, and respect for students. Pinsuda Siridhrungsri (2014, p. 21) concluded that "great teachers" should focus on teaching and students' care. The teaching goals and objectives should be set and performed as outcomes set. The skills of teachers should also involve good classroom management, communication with parents/ guardians. Teachers should also have high expectations of students, be friendly and highly gain trust from students.

3.4 Stakeholders' participation development The stakeholders' participation consisted of a participation level, a participation model, and participation factors. The experts agreed that the EP project should open opportunities for stakeholders to participate in project activities In addition, the EP project should investigate the current situation or factors affecting the stakeholders' participation, such as goals or expectations of stakeholders. This is in line with Yuwat Vuddhimeti (2003, p. 139) defining public





participation as an opportunity to participate in initiatives, planning processes, insightful judgment, decision making, jointly performing, and have responsibilities for matters the impact on the public. According to the study of Moswela (2006), the stakeholders' participation, including headteachers, teachers, students, and parents showed a positive and significant influence on academic achievement. The components of head teachers' managerial skills that influence academic performance include leadership styles, interpersonal skills, managerial skills, and time management skills. Teachers' involvement in school governance and in developing discipline policies increase students' morale and motivation leading to the improvement of students' academic performance. The involvement of students in management and decision-making makes them feel more confident in their learning. Parents' involvement in their siblings' learning process offers opportunities for success-improvement on morale, attitudes, academic achievement, behaviors, and social adjustment.

4. Conclusion and Recommendation

The study findings advised the school administrators should give full support to ensure that the implementations of the EP project match teachers' and learners' needs, school goals, and mission. For example, teachers, students, curricula, school culture, and systems need to be accountable. English-language and technology and skills training for school personnel should be adequate. The support changes should also include continuous assessment and evaluation. Investigating funding strategies to support ongoing professional development for in-service teachers' education and professional development is essential. School administrators should give importance to stakeholders as the network to upgrade project development, and teachers must change their instruction to suit current situations by utilizing technology. The findings also revealed an insight into the development of instructional leadership of school administrators that could make a difference to the education and self and personnel professional development. The study also recommends for future EP policy implementation that more thorough preparation in terms of human and finance resources available for the institution should be concerned. Suggestions for future research include a comparative study of the influence of stakeholders' participation on the success of the EP project and similar programs.





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AN EVALUATION OF ENGLISH TEACHING REFORM POLICY IMPLEMENTATION IN UPPER NORTHEAST SECONDARY SCHOOLS OF THAILAND

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Sawat Phothivat²
Chaiya Pawabutra³

Abstract

This mixed-method research aimed to evaluate English teaching reform policy implementation in upper Northeast Secondary Schools of Thailand based on the CIPP model. The quantitative samples, obtained through stratified random sampling, consisted of 168 schools under the Secondary Educational Service Areas Office, Areas 19 to 23. Data were collected from 974 respondents using an assessment form and the development guidelines were drawn from 10 expert interviews. Statistics used in the research were percentages, mean, multiple regression analysis, and content analysis. A multi-cases study of key informants from two medium-sized schools was selected as a quantitative sample. An in-depth interview, document analysis, observation, and group discussion with content analysis were also used. The research results were as follows: 1) The English teaching reform policy was clear, able to communicate to practitioners. Resources were allocated at a high level; 2) The school policy administration in terms of Context, Input, and Process was overall at a high level. All factors were at a high level of positive correlation at the .01 level of significance. The Input and Process were good predictors of the product. The Input should aim at developing administrators, teachers, and students according to their roles with adequate budget and suitable equipment. The PDCA cycle should also be taken in the process development to organize a quality management process in monitoring work performance, following up the outcomes of performance, and summarizing reports; and 3) The extracting lessons of the implemented policies in the outstanding and non-outstanding schools were found both similarities and differences in Context, Input, Process, and Output.

Keywords: Implementation Evaluation, English Teaching Reform Policy,
Policy Implementation

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1. Introduction

Thailand is in a rapidly changing century with a greater transfer of information, knowledge, culture, and economic cooperation. Each country is connected to other countries becoming a global association. Thus, language is seen as a medium for communication. The Office of the Basic Education Commission (2014) stated that English is a tool for several operations in terms of trade, investment, education, communication, travel, and daily use. In ASEAN associations, English was designated as “working language”, or language for work. As a result, the Thai Ministry of Education has elevated English language competency among students and teachers. Thus, the English language is taught as a compulsory subject from the primary level to higher education until Thai learners achieve fluent communication skills and abilities and are well-equipped to face the challenges of business, economics, education, as well as the quality of life in the global community. This is consistent with Prayong Klanrit (2013), who stated that English played an important role in a global society in the 21st century and the future because it was the central language for educational knowledge. Meanwhile, Maream Nilpan et al. (2013) said that most of the world's important knowledge was recorded and published in English.

Despite the great efforts spent in developing English proficiency among Thai students, the results have been mixed. For example, the scores on the Basic National Educational Test (O-NET) in the 2019 academic year for English subjects are still very low. English proficiency of Prathomsuksa 6 students at a national level from all schools were 34.42 average points, Mathayomsuksa 3 students with 33.25 average points, and Mathayomsuksa 6 with 29.20 average points (National Educational Testing Institute, 2020). In addition, ranking of the English communication ability of the population of countries where English is not an official language from the EF English Proficiency Index found that Thai people's ability to communicate in English has declined for three consecutive years. Since 2017, Thailand was ranked 53rd out of 80 countries. In 2018, it was ranked 64th out of 88 countries, and in 2019, it was ranked 74th out of 100 countries in a very low proficiency level. As a result of this ranking, Thailand is the third-lowest scoring country in Southeast Asia (Post Today, 2019). From the role of the English language and the problems mentioned earlier, it is necessary to accelerate the development of the readiness of Thai students to be modern global citizens with a variety of skills and abilities to compete with the world market. There is a wide range of research studies focusing on issues relating to problems faced by Thai students in terms of English proficiency, such as instructional management, or students' personality. As Belardo, & Thienpermpool (2018, p. 269) stated that teachers' instruction management must encourage students to be more involved in their learning, that is, students must be allowed to participate in their learning decisions.





The target areas of this study were secondary schools affiliated with the Office of the Basic Education Commission in the Upper Northeast of Thailand, which are directed to the Education Policy Steering Unit. The Regional Education Office No. 10 includes Loei, Udon Thani, Nong Bua Lamphu, Bueng Kan, and Nong Khai provinces, and The Regional Education Office No. 11 consists of Nakhon Phanom, Mukdahan, and Sakon Nakhon provinces (Ministry of Education, 2016). Almost all provincial areas are located at the border of the Lao People's Democratic Republic. The Mekong River is a boundary, and all provinces in this study area are similar in cultures, traditions, and values. Stufflebeam's CIPP (context-input-process-product) Model (1971) was applied in this study. This model of assessment is recognized as an appropriate method for evaluating a project, a policy, or an operation that has been carried out for a while. It is also an assessment that has clear, concise, and systematic assessment planning and procedures. In addition, it supports the use of standardized tools for data collection. The data was analyzed and summarized with logical results.

This paper presents a study of progression information leading to administrative decisions of an English teaching reform policy implementation. The evaluation results and recommendations from the assessor can be used as information for relevant organizations or project improvement and development for administrators. The results of this study will also contribute to the development of educational policies and the improvement of school policies.

2. Objectives

There are three objectives as follows:

2.1 to evaluate the policy body in terms of clarity, communication, and resource allocation.

2.2 to evaluate school policy administration of a comprehensive project in context, input, process, impact on past project output, and guidelines for the development.

2.3 to extract lessons from the implementation of the policy of schools with outstanding performance and non-outstanding at different levels in terms of similarities and differences.





3. Literature Review

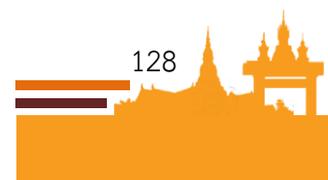
This study investigated in collecting and analyzing data on the main issues as follows:

3.1 English Teaching Reform Policy

The English teaching reform policy states the reason that English is a very widely used international language, as well as one that records and disseminates most of the world's most important knowledge. In addition, the English proficiency of Thai people of all ages is still at a low level, which requires to be developed seriously and must be considered an urgent policy of national authorities. Therefore, the Thai government has made it an urgent need to enhance the competency and skills of English communication skills of Thai people. For students to have such attributes, the Minister of Education established a 2014 policy to reform English language teaching at the basic level of education as follows: 1) Using the Framework for International English Proficiency, namely The Common European Framework of Reference for Languages (CEFR), as the main conceptual framework for teaching English in Thailand; 2) Adjusting the focus of teaching English according to the nature of language learning, focusing on communication with Communicative Language Teaching (CLT); 3) Encouraging standardized English language instruction following the core standard framework; 4) Promoting the enhancement of English proficiency as follows: 4.1) Expanding special English language teaching programs, 4.2) Developing special English classrooms, 4.3) Organizing activities and ambient images that promote English proficiency, and 4.4 Teaching English conversation courses in general and has intensive English language instruction; 5) Enhancing teachers' ability to organize instruction following communication-focused learning methods (CLT) and following CEFR core concepts; and 6) Encouraging the use of information technology media for education as an important tool to help improve the language proficiency of teachers and learners (Office of the Basic Education Commission, 2014, pp. 1-2)

3.2 CIPP Model Assessment Concept (Stufflebeam's CIPP Model)

Evaluation theory is varied depending on suitability and conformity to the work. Sanya Kenaphum (2016) stated that assessments and forms of evaluation by Stufflebeam et al. in 1971 are acceptable in education because it provides interesting and never outdated educational evaluation concepts and methods. This CIPP model by Stufflebeam evaluates the factors of Context, Input, Process, and Product based on how to create criteria and performance of policies or projects, either overall or individual factors as follows; 1) Context Evaluation (C) is a study of the fundamentals that contribute to the development of policy goals, namely the context of the environment, vision, problems, funding conditions of social, economic, political volatility, and the trend of the formation

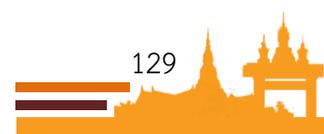




of the problems that may hinder the implementation of the project, etc. 2) Input Evaluation (I) to find the effectiveness of input components such as individualized tourism in terms of facilities, tools, equipment, and management potential. Each factor is further subdivided, such as a person, separated into gender, age, educational qualifications, etc. 3) Process Evaluation (P) is a study of how effective the process is to find the shortcomings, weaknesses or strengths of project management that will lead the project to achieve its intended objectives. 4) Product Evaluation (P) examines the effectiveness of the project, especially the consistency between the objectives and the results, and then the specified criteria are settled. The benchmark may be set by itself or relying on criteria already set by other persons or entities. The concept of evaluating according to Stufflebeam's model based on the CIPP Model in 1971 summarizes the assessment in three stages: 1) define or identify the required information, 2) collect information, and 3) analyze and organize information for presentation to the management board with characteristics that distinguish the role of work between the assessment and management. In other words, the assessment department must identify, provide and present information to management. The administration is responsible for applying the results of the assessment to make decisions before carrying out any related activities appropriately.

4. Conceptual Framework

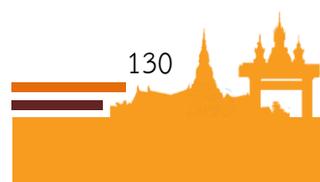
This research has divided into two areas: policy body and policy management, using Stufflebeam's CIPP model assessment concept (1971, 2001) for assessment in four areas: context, input, process, and product. The evaluation of English teaching reform policy implementation aims to study overall performance following a quantitative research methodology. The assessment tool design and analysis were applied science (Struening & Guttentag, 1975; Riecken & Boruch, 2003; Weiss, 1972). This is also in line with Rossi, Lipsey & Freeman (2003), which stated that evaluating research is the application of systematic social science research methods to evaluate the value of the conceptual framework of other projects/plans/services and benefits of social projects implemented to improve human well-being. Stufflebeam's CIPP Model Systematic Assessment Model (1971, 2001) is considered as an assessment research approach that is appropriate for project/policies evaluation, reflected monitoring, and evaluating performance that leads to improvements based on progress assessment concepts. The formative evaluation and follow-up of operations are used to make decisions based on summative evaluation concepts, with assessment models such as context evaluation, input evaluation, process evaluation, and product evaluation.





Therefore, contextual assessments are intended to have information to determine whether the goals or directions of the policies that were originally defined are appropriate. Are there some complications that will result in changes to the goal, or has the context changed? Input assessment aims to obtain information to verify the resources that were originally defined as appropriate. What complications have occurred that require the use of the defined resource to be modified? Increase or decrease? What complications have occurred? The issue of process and product is an assessment of what happened, an inquiry, or retrospective data collection because it has been through a period of practice in that regard (Mariam Nilpun, 2013; Ratiporn Bhattapur, 2009; Piangkhae Phuphayang, 2011; Wilaiporn Seriwat, 2012). CIPPI Model or Integrated Systematic Assessment Model of Wiroj Sararatna (2011), which applied Stufflebeam's CIPP Model format, was found to be an appropriate and generally accepted assessment model with applied in the assessment of educational policies. A key benefit of this assessment was to provide useful information for administrative decision-making. This leads to a reasonable decision which is considered to be a significant benefit of the assessment.

The main purpose of this study was to study the implementation of the English teaching reform policy. The two variables consist of school policy and school policy/project management. This assessment research also identified good predictors as variables influencing project productivity. For extracting lessons of multi-cases study of the policy implementation of the outstanding and non-outstanding schools, an in-depth interview, document analysis, observation, and group discussion with content analysis were used. The diagram of the research conceptual framework was shown as follows:



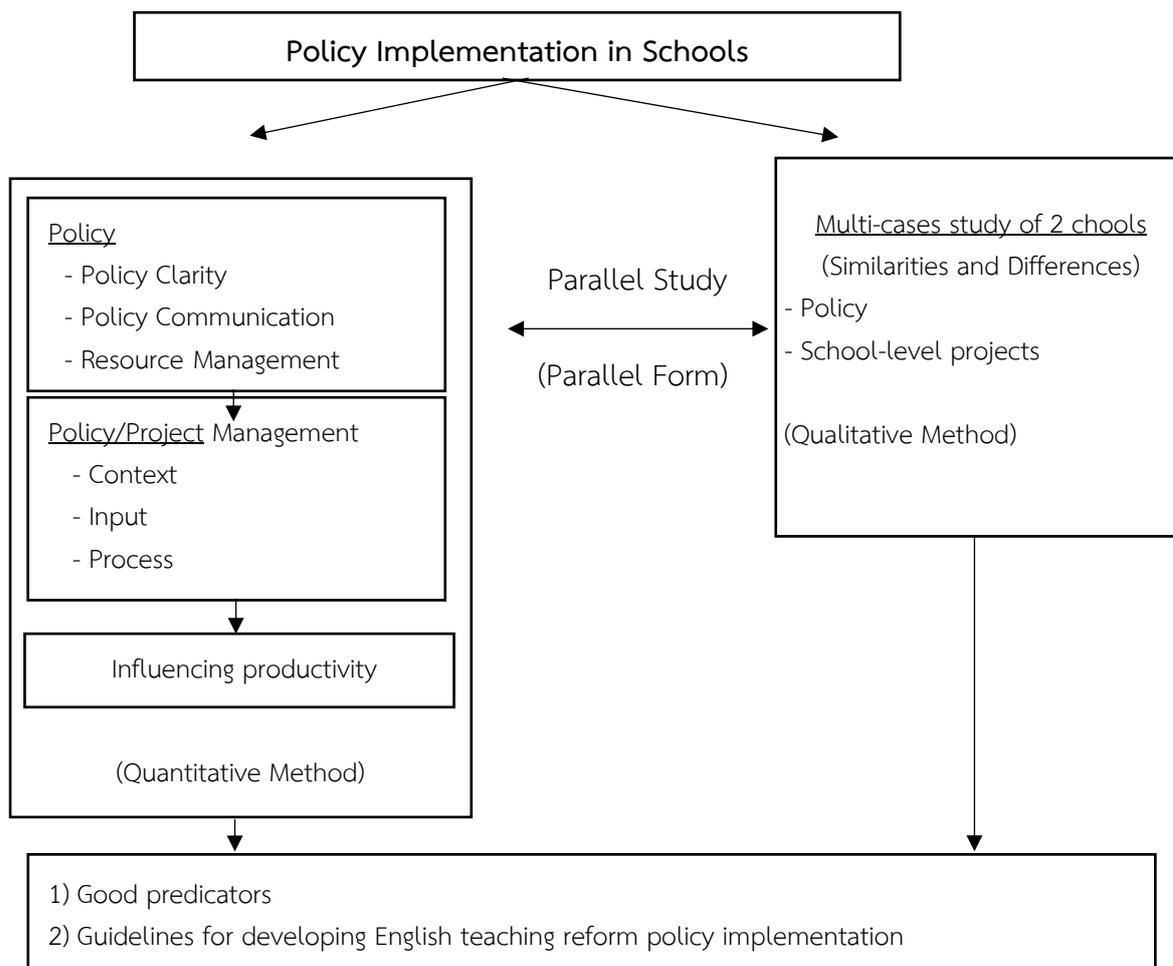
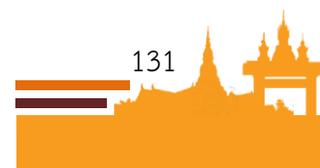


Figure1: the research conceptual framework

5. Research Methodology

This mixed methods research was in a dominant-less dominant design where quantitative and qualitative aspects are combined in parallel form. The research was conducted in eight provinces in the upper northeast of Thailand. The samples consisted of 297 schools under the Secondary Education Office Service Area 19 to 23 in five areas (Office of the Basic Education Commission, 2011). The research was conducted in the academic year 2020 by dividing the research method into two parts as follows:

Part 1: Quantitative study, 168 schools were obtained as a sample of the study using the Krejcie & Morgan table (1970, pp. 607-610) and the proportional stratified random sampling method. The research tool for data collection was a 5-rating scales evaluation form consisting of three parts: Part 1- general data of respondents, Part 2-policy information and policy implementation in schools comprising seven factors: policy clarity, policy communication, resource allocation, context, input, process, and product, and Part 3-Additional opinions and recommendations. The evaluation form had an Index of Item-





Objective Congruence (IOC) between 0.80-1.00 with a reliability of 0.98. The individual items were in the range of 0.90–0.93. The discrimination was between 0.48-0.90. Each school has a different number of respondents based on the school size. The samples consisted of 974 respondents, including administrators, English teachers, and the committee of the Basic Education Board. The data were analyzed using percentage, mean, and multiple regression analysis. For the study of development guidelines, ten expert interviews were conducted. Data were analyzed for content analysis and descriptive analysis.

Part 2: Qualitative Study, a multi-cases study was conducted through fieldwork along with a quantitative study, which was parallel with the objectives. The researcher selected two medium-sized schools with outstanding and non-outstanding performances from a quantitative sample. Information collecting tools were 1) structured in-depth interview forms for school administrators and school board members or parents, 2) school documentation analysis, 3) observational records, and 4) group conversation logs of English teachers and Mathayomsuksa 6 students. The data were presented using content analysis and descriptive statistics.

6. Results of the research paper

The research results can be summarized following the objectives as follows:

6.1 The policy body in terms of policy clarity, policy communication, and resources allocation was overall at a high level ($\bar{X} = 3.99$). The averages were arranged in descending order as follows: policy clarity ($\bar{X} = 4.07$), followed by resource allocation ($\bar{X} = 3.95$), and policy communication ($\bar{X} = 3.94$), respectively.

6.2 The school-level policy management in the form of projects covering Context, Input, Process, Product. The overall factors were at a high level, only a product factor was at a medium level. However, all factors showed a high level of positive correlation with a correlation coefficient between 0.549-0.839. When analyzing all factors, two factors, namely the Input and the Process factors could predict the productivity of the policy implementation in schools, with predictive coefficients of 0.505 and 0.376, respectively, and a good multiple correlation coefficient of a good predictor affecting the variables of 0.874. The factors can jointly predict the success of the English teaching reform policy implementation in 76.30% of overall school performance, and the standard error of estimate of ± 0.27445 .





Table 1 Analysis results of forecasting power influencing a project output

Prediction variables	B	S.E.b	β	t	Sig
Input factor (X_5)	.641	.085	.505	7.559**	.000
Process factor (X_6)	.436	.079	.376	5.488**	.000
$R^2 = .763$ Adjusted $R^2 = .754$ S.E.est = $\pm .2744$					

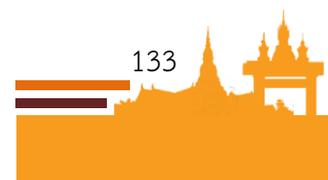
** Statistically significant at .01

6.3 The development guidelines can be summarized as follows: 1) Input factors should develop administrators, teachers, and students to be aware of their roles and duties and to focus on work development, that is, administrators must be in good management principles, namely planning, people management, budgeting, and systematic coordination with clear and practical rules. Teachers must be ready for change and develop their knowledge and competencies in the field of both quality teaching methods and skills to select and use instructional technology. Students must focus and set goals in their studies, cooperate in all study activities, use technology for learning, researching, and seeking knowledge. The budget allocation must take into account the necessary emphasis on value and maximize benefits with transparent management. The media, equipment, and technology must be sufficient, up-to-date, and always in good working conditions. Training should cover quality-control systems; 2) Process development guidelines must follow the sequence of steps such as starting from the investigation of relevant problems, needs, and issues, a regular meeting for fostering a better understanding of the personnel, choosing appropriate activities for schools' context, identifying relevant project problems and seeking for solutions, and sorting critical tasks. The implementation of the mission must be planned that guarantees a smooth transition. During operation, the PDCA quality process should be implemented to monitor the work, and job progress. The progress of policies or programs associated with the implementation process should be reported regularly. The evaluation at the end of the projects on both positive results and hindrance needs to be addressed on the next project.

6.4 The study results of the policy implementation in schools at different levels of outstanding performance in terms of similarities and differences were as follows:

6.4.1 Similarities based on document analysis, observations, in-depth interviews, and small group discussions were analyzed as follows:

1) Context: both schools were medium-sized secondary schools teaching Mathayomsuksa 1 to Mathayomsuksa 6 students under the Secondary Educational Service Areas Office. The schools are in small agriculture communities where the students'





parents are engaged in agriculture. The average annual income is relatively low. They are located next to the main road connecting the districts with convenient transportation. Both schools are located in different provinces with no adjacent territories, the community residents of both speak the same dialect as the primary language of communication, namely, Yoh, Phu Thai, and Laos.

2) Input: administrators from both schools have implemented policies to support communicative English teaching. Four Thai teachers have participated in the Regional English Core Teacher Development Program (Boot Camp). Students of both schools are 100 percent admitted with a placement test for classroom settings. The overall student learning potential is diverse. The main budget for management is from the Ministry of Education. Contributions are raised on school activities from time to time on a case-by-case basis. Both schools are equipped with high-speed wireless internet networks and only certain areas in the schools. Classrooms are organized by regular teaching curriculum with equipment and technology media such as smart TV. Teachers allow students to use their smartphones for education purposes. However, many students who participated in this study have smartphones with limited functionality and capability to access the internet. Some students have no smartphones and some use smartphones for other purposes.

3) Process: the English teaching reform policy of both schools was recognized by the administrators through school meetings. English teachers are aware of the policies through specific meetings or training, such as the Boot Camp training program. English teachers are also aware of the CEFR framework. Teachers obtain the written policy of the CEFR framework from searching and sharing through the internet. Both schools host a Christmas program as the main extracurricular activity annually. The English language proficiency test following the CEFR has not been conducted for teachers and students. The schools have never held an English camp. The representative students are brought to the English camp at other schools in the same network.

4) Product: The students' English proficiency of both schools did not meet the community or national level, but some students are confident to participate in school activities such as English singing contests and being an English MC to welcome guests on various occasions. Impressively, some students who are aware of English importance have been learned and practiced English by listening to music, watching Hollywood movies on Youtube, and speaking with foreign friends via social media.

6.4.2 Differences can be analyzed and compared as follows: 1) Context: The outstanding school is a district school with a mission to provide education services to 25 villages within the district and neighboring districts. There is an area adjacent to the border of a neighboring country, the Lao People's Democratic Republic, along the Mekong





River about 2 kilometers away from the district and about 40 kilometers away from the downtown area of the province. The school has been providing services for 37 years. The non-outstanding school is a sub-district school located in the middle of two extra-large district secondary schools providing services for 3 sub-districts. The school location is 24 kilometers from the district and 106 kilometers from the downtown area of the province. The school has been providing services for 45 years. 2) Input: The outstanding school has beautiful natural conditions which are suitable for tourism. The village community has opened homestays for foreign tourists and gradually become a learning center for practicing the English language experience and skills of students outside the classroom. In addition, foreign English teachers are hired in both full-time and volunteer form every academic year. The policy of the school plays in supporting the community efforts, such as procurement from the school board and the salary budget from the parents. All students must study with foreign teachers at least once a week. On the other hand, the non-outstanding school community has no or few opportunities to speak with foreigners. There are only occasional invitations to meet with students. The students of the outstanding school with high achievement show a more favorable preference and enthusiasm for learning English. There is up to 80% of English usage in teaching activities and 20% in other classrooms. The non-outstanding school students lack motivation in learning English. Few students are interested in learning English and try to find ways to practice English. Teachers cannot use English in teaching activities. The outstanding school has a guidance room where students can always use the internet to search for information. The school has an award-winning Living Library, demonstrating its readiness to be a great source of information and learning. 3) Process: Outstanding school has 21 classrooms, which can be divided into the ratio of lower/upper level in 4:4:4/3:3:3. The management is divided into 4 major administrative divisions, namely academic administration, budget management, personnel management, and general administration. Classes are organized into 2 groups at the lower secondary level, which were the General group and the Special group. The upper level was divided into 2 groups: Mathematics-Science and Language-Social Studies, Religion and Culture. The non-outstanding school has 18 classrooms with a ratio of lower/upper level in 4:4:4/2:2:2. The management is divided into 5 major divisions, namely academic administration, personnel management, budget management, general administration, and student affairs administration. There is one study program at the lower level. Mathayomsuksa 4-6 is divided into 2 study programs, namely the Science-Mathematics program and the program for Thai/ English/Social studies. As for extracurricular activities, all English teachers at outstanding schools have organized a project to promote language learning individually at least one project of each per semester.





There are a variety of formats, including ongoing projects such as the English Breakfast project, the daily audio project. and seasonal projects such as Christmas, Halloween. As non-outstanding schools provide a core English proficiency development program once a year on Christmas Day which is held on New Year's Day. Moreover, there is a program to train language skills of English for communication for administrators and all teachers by foreigner teachers, and an ongoing campaign to communicate in English by the administrators and teachers throughout the school. The outstanding school has a plan for implementing other English activities or projects in the future. 4) Product: The outstanding school's students had self-confidence in their abilities to communicate with foreigners, especially students in Mathayomsuksa 6 because they are familiar with foreign teachers of various nationalities every year and have practiced speaking at the school assembly according to a project organized by the teachers, including visiting communities and practicing communicating in real situations with foreign tourists at homestay villages. In addition, the English language achievement data of Mathayomsuksa 6 students from the results of the National Basic Educational Test (O-NET) during the 4 academic years 2017-2020 had improved continuously every year. As non-outstanding school students have limited learning experience with foreign teachers. Regarding the English language achievement data of Mathayomsuksa 6 students from the results of the Basic National Educational Test (O-NET) during the 3 academic years 2018-2020, the average scores tend to decline slightly continuously.

7. Conclusion and Discussion

The evaluation of the policy implementation that the researcher has analyzed in this thesis can be concluded and discussed as follows:

7.1 The English teaching reform policy in terms of policy body which consisted of policy clarity, policy communication to operators, and resources allocation in both overall and individual factors was at a high level in every factor. This might be the policy of English teaching reform policy is written following government regulations. It must go through careful consideration in the planning and policy-making process. According to William F. Glueck (1983), the policy is a unified plan that is complete and easy to understand and combine. It is the integration of ideas together to ensure the success of the activity objectives. In terms of resources allocation, it does not always mean just the budget. Policy resources also include human resources, which are relevant to management methods at all levels. As Laswell and Kaplan (1970) argued, policies are part of management methods. This is one of the important administrative factors as follows: 1) Policy is essential for management. The goal is to save money, people, and time, as well as the power,





talent, and potential of personnel. It also makes the work of personnel more efficiently and effectively achieve the goals of the organization; 2) Policy helps executives to operate with confidence. It is both a plan direction indicator and it is a guarantee that executives at all levels must follow; and 3) The policy helps personnel at all levels in the organization understand their mission, including how to carry out the mission to achieve the objectives succeed without overlapping with other departments in the organization and making coordination between each other easier in policy communication. The implementation of the English teaching reform policy is the top-down theory of implementation as the policy has been set by the Ministry of Education and then transferred policy through the Office of Secondary Education Service Area to the schools. According to Pisan Banchusuwan (2015), the implementation of basic education curriculum policies in the Educational Service Areas Office of Surat Thani Province also applied a theoretical framework of dynamics and environment context combined with the CIPP model.

7.2 The school-level policy management in the form of a comprehensive context project, the input factor, and the process factor revealed that the overall product factor was at a high level. When considering each factor, the product factor was at a medium level as follows: 1) The context factor was consistent with Pisan Banchusuwan (2015) who found that the policy implementation at the Educational Service Areas Office level was influenced by the context in four important dimensions at both regional and global environment contexts, namely economic, social and cultural, and political environment contexts. The four dimensions influenced the implementation of the curriculum at both the district office level and the level of the seven targeted educational institutions; 2) The input factor was consistent with Wilaiporn Sereewat (2012), which found that the quality of teachers, administrators, and fundamental factors in World-class Standard Schools was at a high level. However, teachers and administrators lacked confidence in using English to communicate and should be improved an electronic classroom, multimedia, and high-speed internet; 3) The process factor was consistent with Wilaiporn Sereewat (2012) found that the implementation of the school development policy toward World-class Standard Schools was at a high level. The teaching and learning management that is comparable to World-class Standard Schools is practiced at the highest level and there should be an exchange of knowledge on management both domestically and internationally, and 4) the Product factor was at a medium level. This might be concerned with the students' normal lifestyles with limited opportunities and familiarization with using English daily. Therefore, the students appear unconvinced that English language skills are essential. In addition, the rapid and widespread technology changes such as smartphones, which most students take and can use the internet conveniently, as well as the freedom to access information and various usage patterns





emphasizing in entertainment. The use of technology is inconsistent with the environment in which the policy will be implemented. This is in line with the conclusion of Chaleo Yachan (2013, p. 37) that the factors that determine the success or failure of a policy implemented were the policies that are consistent with existing values and the needs of stakeholders.

7.3 The development guidelines can be summarized as follows: 1) Input factors should be developed by administrators, teachers, and students to be aware of their roles and duties with focusing on the development of work which is consistent with Piangkhae Phuphayang (2011) that the organizational structure and the administrative system are consistent and support the education management. Human resources related to educational management should be provided in enough quantity and quality affecting the operation of educational institutions and school administrators should manage adequate budgets, educational media, and equipment to create the school environment are appropriate and comfortable learning; 2) Guidelines for process development must work in a step-by-step manner. The PDCA quality process was used to supervise work which is consistent with Piangkhae Phuphayang (2011), who found that although teaching and learning management and student development were at a very good level, schools should encourage teachers to organize teaching activities seriously based on student center. The multi-resources and various activities should use more technological media providing, especially computers and the internet. There should be standard criteria for recruiting foreign teachers in the English project. As for the implementation of the mission of the educational institutions in the 4 workgroups, including academic management group, personnel management group, planning, and budgeting management group, and general management group, the results revealed that educational institutions must increase strategic management by providing a strategic plan with indicators of success in all workgroups.

7.4 Policy implementation in different levels of successful schools revealed that the two schools are in the similarities and differences in four factors of CIPP model evaluation.

8. Suggestions

The recommendations for applying the findings are as follows: 1) School administrators or decision-makers should consider implementing into school settings based on the results of the assessment of the English language learning reform policy; 2) School administrators should focus on inputs because the inputs have the greatest influence on productivity. In addition, school administrators should adjust the development





guidelines through expert opinions to suit the individual context; and 3) English teachers should apply the findings from transcripts from schools with highly prominent policies.

The recommendations for the next research are as follows: 1) Research should be expanded to a much larger, and more diverse population; 2) Case studies should be conducted for schools that have performed excellently in implementing English language teaching reform policies in large and small-sized secondary schools. Administrators and teachers should pay attention to inputs and processes in English teaching management as they influence productivity at a high level and adapt the proposed development guidelines to concrete action.

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THE MODEL FOR DEVELOPING INSTRUCTIONAL LEADERSHIP OF TEACHERS IN SAVANNAKHET UNIVERSITY, THE LAO PEOPLE'S DEMOCRATIC REPUBLIC

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Tawatchai Pailai³

Abstract

The purposes of this research were 1) to study the components and indicators of instructional leadership of teachers at Savannakhet University, the Lao People's Democratic Republic (Lao PDR); 2) to construct and develop a model for developing instructional leadership of teachers in Savannakhet University, Lao PDR; and 3) to assess the correctness, suitability, feasibility, and usefulness of the developed model. The sample group used in the study consisted of 152 teachers working at Savannakhet University, Lao PDR in the academic year 2021. The sample size calculation was determined based on Krejcie and Morgan table. Qualitative data was obtained through expert interviews. The quantitative data, derived from questionnaires, was analyzed through statistical software packages.

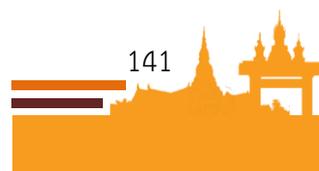
The findings revealed that

1. The components of instructional leadership of teachers in Savannakhet University, Lao PDR consisted of four components: 1) Self-Development with three sub-components: seeking knowledge for self-improvement, always improving professional development, and personality development; 2) Student Development with three sub-components: monitoring student progress, maintaining student standards, and improving student achievement, 3) Being a Teaching Model with three sub-components: student-centered focus, media creation and teaching innovation, implementing a variety of teaching methods, and 4) Transformational Leadership with two sub-components: human relationship with colleagues, and having visions.

2. The model for developing instructional leadership of teachers in Savannakhet University, Lao PDR consisted of principles, objectives, contents, a development process, and measurement and evaluation.

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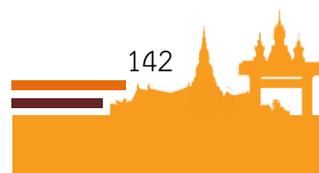




3. The instructional leadership of teachers was at a high level. When considering each aspect, the highest average was self-development, followed by transformational leadership.

4. The model for developing instructional leadership of teachers in Savannakhet University, Lao PDR was accurate, suitable, feasible, and useful at a high level.

Keywords: Instructional Leadership Development Model, Teachers' Instructional Leadership





1. Introduction

Teachers play a significant role in school development and bear responsibilities for student development, creating a conducive learning environment to nurture the potential of their fellow teachers, and students. Higher education teachers' role is also important to produce qualified human resources to enter a competitive labor workforce effectively. Thus, teachers should have a quality performance to produce quality graduates. Teachers with high standards of teaching professions are considered the main representative of the changes in the knowledge-based society (Stogall, 2004, pp. 7-15). In addition, teachers demonstrate high-quality performance if they are under good leadership (Gunawan, & Adha, 2021, p. 2).

Instructional leadership of teachers influences the teaching and learning development process, and self-performance during instruction. Teachers should implement instructional leadership to encourage self-development and performance during transformation to improve students' learning achievement. Teachers are not only instructional leaders but also a teaching model for fellow teachers in implementing a variety of teaching methods and creating media materials and teaching innovation. Teachers' transformational leadership also influences the development process of creating a positive relationship among stakeholders, including parents, teachers, and students. This is in line with a study conducted by Supermane, Tahir, & Aris (2018, p. 269) implies that teachers need to equip themselves with adequate knowledge and skills of leadership to implement transformation to enhance teaching quality and student learning success. Likewise, Roueche, Baker, & Rose (2014, p. 8) pointed out that one of the attributes of transformational leaders is a shared vision providing an opportunity for self-evaluation to better meet the demanding challenges of the future of educational institutions. In addition, leaders who can explain the vision and mission can also inspire colleagues and students to achieve the organization's goals (Reza, p. 121).

According to Article 4 on the education policy of the National Education Act of the Lao PDR, the focus of education is on human resource development in terms of qualifications, morals, worldview, science, and advances as well as building people with knowledge, abilities, inventions, professions, and creating a learning society (Ministry of Education and Sports, 2015, p. 10). In addition, Article 42 pointed out the standards of teachers consisting of five aspects: "1) have confidence, correct political view, loving and protecting system of people democracy; 2) have revolutionary attitude, teachers' ethics, loving teacher profession, having a good human relationship, and acting as an outstanding sample for the learners; 3) have the knowledge, capacity, technical professions in teaching in various levels in accordance to standards that the Ministry of Education defines;





- 4) have diligence in searching for lessons and continuously self-development, and
- 5) have good health”.

Due to the emerging modern technologies and market demand, the duties and responsibilities of teachers and faculty members at a higher education level may either adopt a leadership role in the transformation of education or be left behind. At Savannakhet University, Lao PDR, the teaching profession has emphasized teacher-centered, lecture-based instruction to the student-centered, interactive learning environment to keep up with the changes. For example, a study by Chin, Hwang, & Kim (2019, p. 1167) revealed that 394 students of higher education in Luang Prabang in the Lao PDR perceived usefulness, ease of use, enjoyment in using mobile learning. The findings also yield insights into policy recommendations for mobile learning implementation and contribute to the understanding of mobile learning acceptance.

Several studies have focused on the effects of school administrators’ leadership, especially instructional leadership on school culture and success, teachers’ practices and work engagement, and student learning achievement, and often dismissed to improve teachers’ instructional leadership, which are also at the center of many school reforms (Bellibas, Kilinc, & Polatcan, 2021, p. 776).

For these reasons, stakeholders in higher education institutions in Lao PDR must consider upgrading training programs to meet the global standards and the employment of qualified and competent teachers, and teacher production in the future, to ensure that teachers have sufficient potential in terms of leadership to drive educational reform policies following the goals of the government.

From the reasons mentioned above, the study of elements and indicators of academic leadership of teachers in Savannakhet University Lao People’s Democratic Republic is necessary for further developing the instructional leadership of teachers. In addition, the researcher is a teacher who performs teaching duties in Savannakhet University, Lao PDR, and is interested in establishing guidelines for creating and developing a model for developing instructional leadership of teachers in universities in Savannakhet, Lao PDR.

2. Research objectives

2.1 To study the components and indicators of instructional leadership of teachers in Savannakhet University, Lao PDR.

2.2 To create and develop a model for developing instructional leadership of teachers in Savannakhet University, Lao PDR.

2.3 To examine the effectiveness of the instructional leadership development model of teachers in Savannakhet University, Lao PDR.



3. Scope of research

In this research, the researcher studied the instructional leadership of teachers by synthesizing the documents and relevant academic publications from related research as follows: Office of the Basic Education Commission (2010); Aparat Ratchapat (2011); Jaruphat Boonsong (2013); Sivanat Chaima (2013); Sukanthon Singh Phuangpet (2015); Waraporn Saroj (2016); Mai Thumsee (2017); Chaiya Bhavabut (2017); Kanyarat Raekrungs (2019); Crowther et al. (2002); Richardson and Sarah (2006); Concordia University (2013) and University of Washington (2014). The four components of instructional leadership of teachers were as follows: 1) self-development, 2) student development, 3) being teaching role models, and 4) transformational leadership.

4. Research conceptual framework

The research conceptual framework was developed based on relevant research in the education field regarding instructional leadership, education policies, and the integration of instructional leadership in educational settings. The overall findings from the document inquiry, interviews, a survey of instructional leadership, and the model implementation would provide useful and practical guidelines for current and future implementations of teachers' professional development in terms of instructional leadership. The conceptual framework in this study was presented in a diagrammatic form.

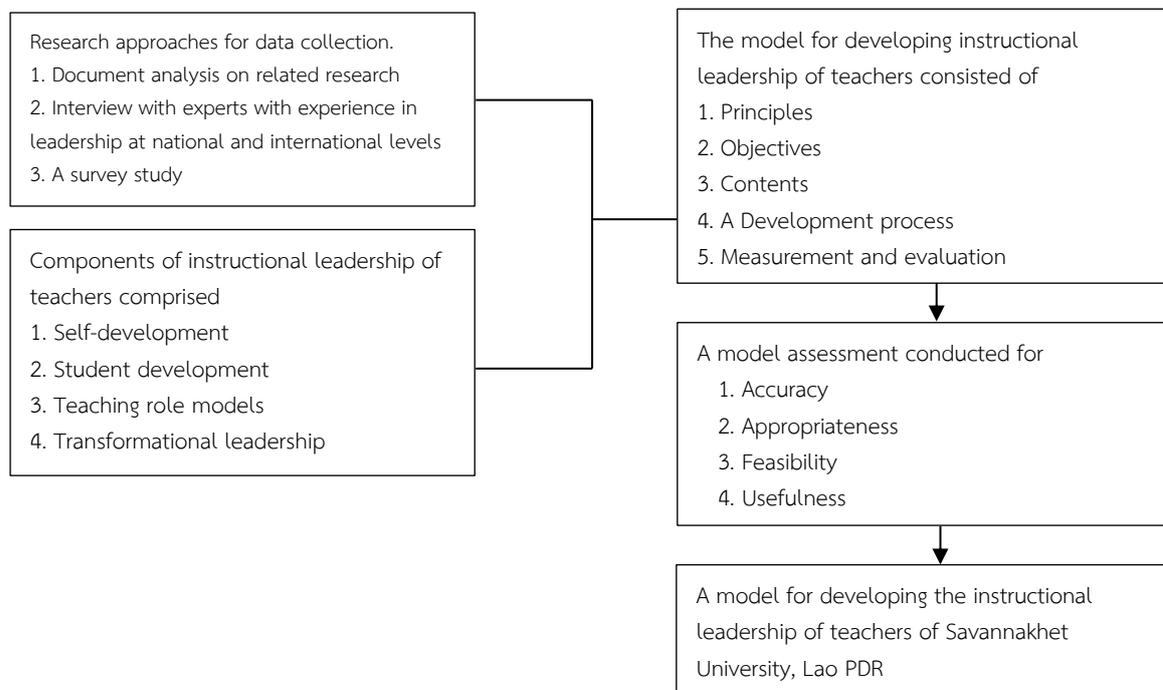
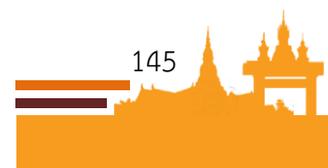


Figure 1: Conceptual Framework





5. Research Methodology

The research methodology is divided into phases as follows:

Phase 1, Investigation of components of instructional leadership of teachers

The participants used in this phase were ten qualified teachers with knowledge and experience in instructional leadership or those who have been successful in academic administration, selected through purposive random sampling, consisting of three administrators of Savannakhet University, including the Acting President, Vice President for Research and Education Graduate Studies, and Vice-President for Academic Affairs, and seven members of the Dean of Savannakhet University, consisting of the Dean of the Faculty of Agriculture and Environment, Faculty of Business Administration, and Faculty of Linguistics and Humanities, Faculty of Food Science, Faculty of Education, and Faculty of Education.

Data Collection Tools

The researcher prepared an unstructured interview form with issues concerning the components of instructional leadership of teachers in Savannakhet University. Then the researcher requested a letter requesting cooperation in data collection from the Director of Graduate School of Sakon Nakhon Rajabhat University to request assistance through interviews and observations from qualified experts. The digital photographic equipment, posture, recording, and collecting data from the results of the interviews on key issues consistent with the components and indicators of instructional leadership of teachers in Savannakhet University were analyzed and presented in a format of content analysis. The researcher analyzed the data during the research process using the following approaches

A Survey Study

The population in this study consisted of 253 teachers who perform teaching duties in Savannakhet University, Lao PDR in the academic year 2021. The sample group consisted of 152 teachers who performed teaching duties in Savannakhet University, Lao PDR in the academic year 2021. To determine the size of the group, the Krejcie and Morgan table was employed (Krejcie and Morgan, 1970, pp. 607-610, cited in Boonchom Srisaats, 2013, p. 43)

The data collection tool was a set of questionnaires on components and indicators of instructional leadership. The statistics used to analyze the results were frequency, percentage, mean and standard deviation.





Phase 2 Constructing a model for developing instructional leadership of teachers

1. A model for developing instructional leadership for teachers was drafted using the results of the data analysis from Phase 1. After that, the drafted model was refined and further processed for confirming the components from eight experts, selected through a purposive sampling, who were educational administrators in universities in Laos and two administrative experts in education fields from Thailand, yielding a total of ten qualified experts. The results revealed that the components of the developed model for developing instructional leadership among teachers included principles, objectives, development processes, and monitoring and evaluation.

2. Model assessment for accuracy, suitability, feasibility, and appropriateness. The researcher has prepared a form to assess the accuracy, suitability, feasibility, and appropriateness of the developed model.

6. Summary of research results

The model of instructional leadership of teachers in Savannakhet University, the Lao People's Democratic Republic revealed that:

6.1 The components of instructional leadership of teachers consisted of four main components, 11 sub-components, and 49 indicators as follows: 1) Self-development consisting of three sub-components: (1) seeking knowledge for self-development; (2) professional development of teachers, (3) Personality development with 13 indicators; 2) Student development consists of three sub-components: (1) Supervising and monitoring student progress (2) Maintaining student standards (3) Developing student achievement; 3) Teaching exemplary consisted of three sub-components: (1) student-centered focus (2) media and teaching innovation (3) using a variety of teaching methods; 4) Transformational leadership consisted of two sub-components: (1) human relations with colleagues (2) leaders with visions.

6.2 The overall instructional leadership of teachers was at a high level ($\bar{X} = 4.24$). When considering each aspect, the highest mean was self-development ($\bar{X} = 4.31$), followed by teaching exemplary ($\bar{X} = 4.17$), respectively.

6.3 The components of the developed model consisted of 1) principles, 2) objectives, 3) a development process, with three phases: Phase 1, Self-Study, Phase 2 Workshop, Phase 3 hands-on training during the workshop, and Phase 4, Follow-up and evaluation.

6.4 The effectiveness of the developed model for its accuracy, suitability, feasibility, and usefulness was overall at a high level.





7. Conclusion and Discussion

The results of the research examining on the model of instructional leadership of teachers in Savannakhet University, the Lao People's Democratic Republic found that

7.1 The components of instructional leadership of teachers consisted of four main components, 11 sub-components, and 49 indicators as follows: 1) Self-development consisting of three sub-components: (1) seeking knowledge for self-development, (2) professional development of teachers, and (3) Personality development with 13 indicators; 2) Student development consisting of three sub-components: (1) Supervising and monitoring student progress, (2) Maintaining student standards, and (3) Development student achievement; 3) Teaching exemplary consisting of 3 sub-components with 12 indicators: (1) student-centered focus, (2) media and teaching innovation, and (3) using a variety of teaching methods; 4) Transformational leadership consisting of two sub-components with 15 indicators: (1) human relations with colleagues, and (2) leaders with visions. This is in line with a study of Mai Tum See (2017, Abstract) pointed out the indicators of instructional leadership of teachers consisting of four main components, 12 sub-components, 52 indicators covering teacher development, educational institution curriculum development, student development, and having visions and missions. This is also consistent with the results from a study by Sukanthon Singphuangphet (2015, Abstract) on an instructional leadership development model for colleges teachers in health science fields in the Lao People's Democratic Republic. The results showed that the components of the developed model consisted of five key components: 1) self-development and peer teachers with the following sub-components: (1) having a vision for self-improvement, (2) believing in one's self that can be developed, and (3) being a teacher who leads the development of fellow teachers; 2) Being a teaching role model with the following sub-components: (1) using a variety of teaching methods, (2) promoting self-learning, (3) promoting a learning environment, and 3) participating in the development process with the sub-components of (1) having a vision for joint development, (2) having teamwork, and (3) having a working network; 4) student development with the following sub-components: (1) maintaining a high standard of students, (2) monitoring student progress, (3) analyzing data to improve student achievement, and 5) problem-solving leadership. This is in line with a study by Waraporn Saroj (2016, Abstract) researched the development of instructional leadership indicators of teachers. The results showed that the components of the developed model consisted of a total of 75 indicators covering five key components: transformational leadership





with 23 indicators, self-development with 20 indicators, professional teaching skills with 13 indicators, creativity with 9 indicators, and atmosphere of buildings and learning environment with 10 indicators.

7.2 The overall instructional leadership of teachers was at a high level. When considering each aspect, the highest mean was the aspect of self-development, followed by transformational leadership, student development, and being a teaching role model, respectively. This would be because the administrators of Savannakhet University have always formulated a policy to develop educational personnel in academics and placed an emphasis on self-development. When personnel has improved their professional development, the efficiency in teaching management or having all-around potential will result in personnel being able to be leaders. Changes in academic work and the ability to develop students, including being a teaching role model are consistent with a study by Kanyarat Raek Model (2020, Abstract) revealed that the present conditions of instructional leadership of teachers were at the highest level. And in line with Davis and Tomas (1989, p. 40), the element of instructional leadership is a duty-based to improve academic work for higher academic achievement, creating motivation for teachers and students working in academics, monitoring academic progress, recruiting human resources and materials necessary for effective teaching, organizing academic atmosphere for a school environment, monitoring teachers' teaching practices, and observing teachers' teaching methods and providing feedback.

7.3 The model of instructional leadership of teachers in Savannakhet University, the Lao People's Democratic Republic consisted of principles, objectives, contents, a development process, and the measurement and evaluation. This is supported by a study of Kanyarat Raek (2020, Abstract) that the model for developing instructional leadership of teachers consists of six parts: Title of a model, Principles and Rationale, Objectives, Concepts, and Principles. The elements of instructional leadership of teachers comprised five Areas: (1) Personal Development (2) Vision Development (3) Curriculum Development and Learning Management (4) Development of Learning Resources and Class management and (5) the development of learner quality towards learning standards. This is also in line with a study by Sukanthon Sapuangphet's (2015, abstract) on the instructional leadership development model of teachers in a College of Health Sciences in Lao PDR. The results showed that the developed model covered principles, objectives, contents, a development process, and measurement and evaluation.

7.4 The assessment results of accuracy, suitability, feasibility, and usefulness of the developed model were at a high level. This is consistent with Kanyarat Raek (2020, abstract) researched instructional leadership development model of teachers. The results showed that the model was found to be accurate, feasible, and applicable in all parts of





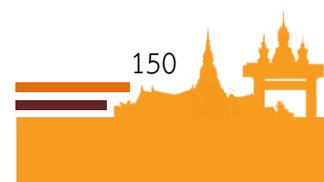
the development of instructional leadership of teachers. This is also consistent with the concept of Macaus, Seriven & Stufflebeam (1983, pp. 399-402) stated that the most common method of checking for patterns with assessment methods is “validation”. A basis for the audit activity comprises four aspects: 1) Feasibility Standards assessing the feasibility of implementation, 2) Utility Standards assessing the needs of users, 3) Propriety Standards, and 4) Accuracy Standards assessing credibility.

8. Suggestions

Instructional leadership of teachers in Savannakhet University in the Lao PDR can bring the basic information obtained using as a guideline for the development of the teachers’ leadership to be effective in continuing teaching. In addition, The developed model that was created and developed in this research can be used as a guideline for developing instructional leadership of educational personnel of other institutions. The recommendations for the next research would be to apply the model of teacher leadership development in action research to continue to develop the leadership of teachers in other universities.

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DEVELOPMENT OF COMPONENTS AND INDICATORS OF EFFECTIVE ACADEMIC AFFAIRS ADMINISTRATION OF SECONDARY SCHOOLS IN NORTHEAST OF THAILAND

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Abstract

The purposes of this research were 1) to develop components and indicators of effective academic affairs administration of secondary schools and 2) to examine the congruence of the models of the developed components and indicators of effective academic affairs administration of secondary schools. The scope of the research was 1,205 secondary schools located in the Northeast of Thailand under the jurisdiction of Office of the Basic Education Commission (OBEC), Ministry of Education (MOE). The population included the 1,205 directors/deputy directors of academic affairs. Stratified random sampling was administered to draw 400 sample informants. A questionnaire was developed to collect data from the sample informants. Descriptive statistics (frequency, percentage, mean, S.D.) and inferential statistic were used to analyze the data. The result showed that the academic affairs administration was consisted of 4 components and 16 indicators; *academic affairs effectiveness* with 5 indicators, *academic leadership* with 5 indicators, *teacher competence* with 3 indicators, and *public participation* with 3 indicators. The models of the 4 components of the effective academic affairs administration were congruent with the empirical data.

Keywords: Components, Indicators, Academic, Administration, Directors

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1. Introduction

Education is a process to develop humans in all aspects. Education management in the present time gains more participation from different sectors. With wider participation, more effective school administration is necessary, particularly academic affairs administration. The certain mission of academic affairs administration is to elevate learning achievements of all levels. This requires great attention from school directors or deputy directors (Boonpirom, 2009). Wonganudroj (2001) proposed that academic affairs administration is aimed at developing and revising teaching and learning management to benefit learners the most. The National Education Act B.E. 2542 (1999) and the Amendments (Third National Education Act) B.E. 2553 (2010) has specified a framework of academic affairs administration for schools.

As academic affairs administration is important, evaluation of academic affairs administration is even essential to keep it effective. School directors have to cooperate with stakeholders in evaluating the effectiveness of academic affairs administration. This evaluation looks at all the aspects academic affairs administration is connected with, especially factors affecting its effectiveness. Saensuk (2013) proposed that factors concerning academic affairs administration include 1) directors, 2) teachers, 3) parents and community, 4) school buildings, 5) budgets, and 6) technology for education. Moreover, Ankinandana (2015) found in her study that there were 3 factors directly affecting academic affairs administration; good teacher attributes, participation from people, and academic leadership of directors. These factors can shape the effectiveness of academic affairs administration. Thus, schools must consider incorporating these factors into their academic affairs administration. However, Thai learners' achievements in average have still been unsatisfying. These achievements are presented through the national tests such as the Ordinary National Educational Test (O-NET). This phenomenon is caused by various factors one of which is academic affairs administration of schools in the country. The O-NET results can directly reflect the country's educational system as a whole and academic affairs administration of each school.

As mentioned above, a study on academic affairs administration is necessary as it would provide an insight for further development of school administration. A study of academic affairs administration can benefit both implication and research. For implication, schools can use findings from research to consider factors that affect academic administration. They can gain knowledge on how to handle each factor to push schools to achieve ultimate goals. For research, researchers can gain an insight of a direction to put their research into. Researchers are dynamic builders of a new knowledge body.





In this field of study, they serve as feeders of knowledge for schools to adapt their academic affairs administration into the updated or changing trend.

According to the rationale above, the researcher as a school director of a secondary school considered that it was necessary to do research in this field of academic affairs administration. In order to benefit this research to actual implication to academic affairs administration of schools, components and indicators had to be studied. Such components and indicators would be confirmed through their congruence with empirical data. The important of this study was that it would give an insight into effective academic affairs administration of schools in the Northeast of Thailand. The results of this research would be applied to school development planning and learning achievement development.

2. Objectives

The objectives of this research were as follows:

2.1 To develop components and indicators of effective academic affairs administration of secondary schools

2.2 To examine the congruence of the models of the developed components and indicators of effective academic affairs administration of secondary schools

3. Research questions

3.1 What were components and indicators of effective academic affairs administration of secondary schools in the Northeast of Thailand in this research?

3.2 How were the developed components congruent with the empirical data?

4. Conceptual Framework

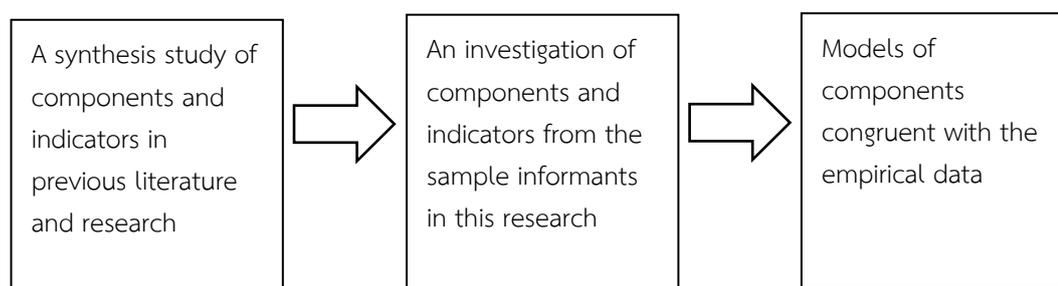
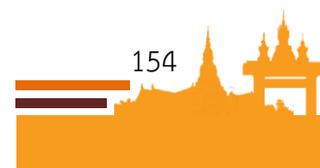


Figure 1: Conceptual Framework





5. Research Methodology

Design

The design of this research was quantitative.

Population and sample

The target scope of the research was the total of 1,205 secondary schools in the Northeast of Thailand under the jurisdiction of Office of the Basic Education Commission (OBEC), Ministry of Education (MOE). The unit of analysis included school administrators. Thus, the population was the 1,205 directors or deputy directors of academic affairs of the schools.

Stratified random sampling was administered to draw sample informants from the population. In do this sampling technique, the schools were divided into 4 clusters by sizes of student populations specified by Bureau of Policy and Planning, Office of the Basic Education Commission (OBEC) in the academic year 2012. The 4 clusters divided by sizes of student populations are as follows:

Small-sized secondary schools (1-499 students)

Medium-sized secondary schools (500-1,499 students)

Large-sized secondary schools (1,500-2,499 students)

Extra-large-sized secondary schools (more than 2,500 students)

The sample size was determined by 16 observable variables. A ratio of 20:1 (samples: an observable variable) was selected. This ratio obtained 320 samples, but the proper minimum number of samples was 400 (Wiratchai, 1999). Finally, 400 sample informants were drawn to participate in this research as shown in Table 1.





Table 1: 400 sample informants drawn from schools divided by secondary educational service areas and sizes

Secondary Educational Service Area Office	Population by school sizes					Population by school sizes				
	XL	L	M	S	Total	XL	L	M	S	Total
Area 20	11	10	36	6	63	7	7	23	4	41
Area 22	7	18	54	2	81	5	12	35	1	53
Area 23	8	14	23	0	45	5	9	15	0	29
Area 25	13	6	51	14	84	8	4	33	10	56
Area 27	9	14	34	3	60	6	9	22	2	39
Area 28	13	9	53	8	83	8	6	34	6	55
Area 29	11	27	40	3	81	7	18	26	2	53
Area 31	17	12	18	3	50	11	8	12	2	33
Area 32	13	17	35	1	66	8	11	23	1	43
Total	102	127	344	40	613	66	83	224	28	400

Research instrument

A questionnaire was developed to collect data from the sample informants. This questionnaire consisted of 3 sections as follows:

Section 1 Personal information: The design of this section was checklist and gap filling. The target data in this section included genders, age, professional experience, educational levels, administrative positions, and school sizes.

Section 2 Perceptions of factors affecting academic affairs administration of secondary schools. The design of this section was 5-point rating scale. The target data in this section was levels of perceptions of factors affecting academic affairs administration of secondary schools. The mean scores indicating the levels of perceptions and interpretations are as follows; 4.51-5.00 (highest), 3.51-4.50 (high), 2.51-3.50 (moderate), 1.51-2.50 (low), and 1.00-1.50 (lowest).

After the questionnaire was developed, the structure validity was examined through the confirmatory factor analysis. It was found that the questionnaire elements were theoretically correct and appropriate for data collection. The content validity of the questionnaire was examined by 7 experts through the Item-Objective Congruence Index. It showed the IOC of 0.57–1.00. The questionnaire was revised according





to the experts' suggestions. Also, the reliability of the questionnaire was determined through the Cronbach's Alpha Coefficient. It revealed a reliability of 0.98.

Data collection

Official letters of request for cooperation in collecting data were posted to the sampled schools. Copies of the questionnaire were attached to the letters. The informants were requested to complete and return the questionnaire within 6 weeks. The informants returned the questionnaire by post to the address provided.

Data analysis and statistics

Descriptive statistics were used to analyze the data from Section 1 Personal information of the questionnaire. Personal information was analyzed with frequency and percentage whereas perceptions of factors affecting academic affairs administration of secondary schools were analyzed with mean and S.D.

Inferential statistic was used to analyze the congruence of the models of the developed components and indicators of effective academic affairs administration of secondary schools with empirical data.

6. Results of the research

Personal information of the sample informants

The result of the descriptive statistics of the personal information of the sample informants is presented in Table 2.

Table 2: Personal information of the sample informants

Personal information	Frequency	%
1. Genders		
1.1 Male	290	72.50
1.2 Female	110	27.50
2. Age		
2.1 Younger than 40 years	46	11.5
2.2 40–45 years	81	20.25
2.3 46–55 years	155	38.75
2.4 Older than 56 years	118	29.5
3. Professional experience		
3.1 1-15 years	59	14.75
3.2 15–25 years	173	43.25
3.3 26–35 years	123	30.75
3.4 Over 35 years	45	11.25

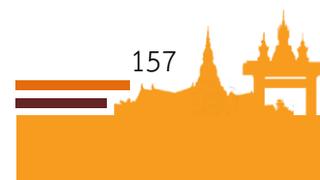




Table 2: (Cont.)

Personal information	Frequency	%
4. Educational levels		
4.1 Bachelor's degree	30	7.5
4.2 Master's degree	319	79.8
4.3 Doctor's degree	51	12.8
4.4 Other	None	None
5. Administrative positions		
5.1 Director	205	51.25
5.2 Deputy director	195	48.75
7. Numbers of informants by school sizes		
7.1 Small-sized	29	7.3
7.2 Medium-sized	223	55.8
7.3 Large-sized	82	20.5
7.4 Extra-large-sized	66	16.5

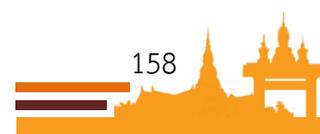
Table 2 shows that the majority of the sample informants were male (72.50 %), 46–55 years of age (38.75 %), had the professional experience of 15-25 years (43.25 %), held a master's degree (79.80%), served as directors (51.25 %). Most of them belonged to medium-sized schools (55.80 %).

Components and indicators of effective academic affairs administration of secondary schools

According to the first research objective, it aimed to develop components and indicators of effective academic affairs administration of secondary schools in the Northeast of Thailand. These components and indicators were collected through the sample informants' perceptions. They perceived components and indicators as factors that affected the academic affairs administration of their secondary schools.

The result of a synthesis study of components and indicators found in theoretical and literature reviews showed that effective academic affairs administration was consisted of 4 components and 16 indicators (observable variables) as follows:

1) Academic affairs effectiveness with 5 indicators; 1.1) higher achievement of learners, 1.2) positive attitudes of learners, 1.3) teacher's work satisfaction, 1.4) academic project achievement, and 1.5) school adaptation to environment.



2) Academic leadership with 5 indicators; 2.1) education quality development planning, 2.2) curriculum administration and learning management, 2.3) professional development of teachers and staff, 2.4) learner quality promotion, and 2.5) learning atmosphere and environment management.

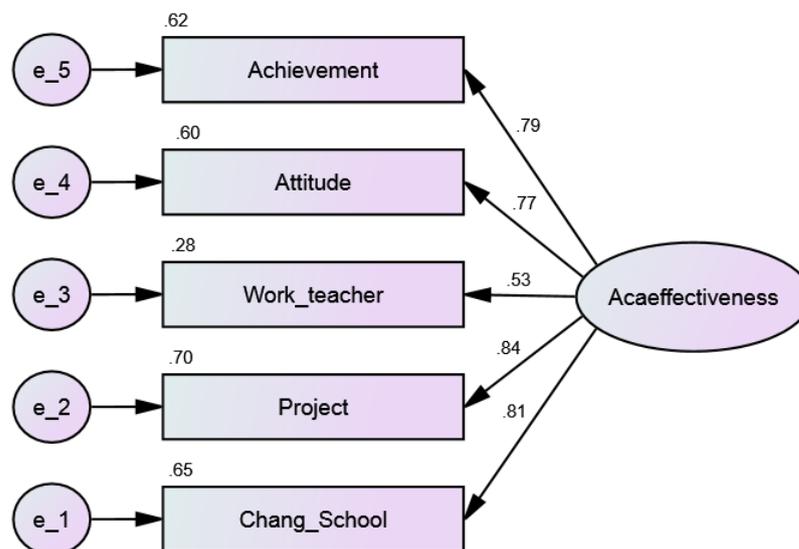
3) Teacher competence with 3 indicators; 3.1) education levels and teaching experience, 3.2) professional attributes of teachers, and 3.3) teaching behavior of teachers.

4) Public participation with 3 indicators; 3.1) participation in school curriculum development, 3.2) participation in learning development, and 3.3) participation in evaluation.

Congruence of the models of the developed components and indicators of effective academic affairs administration of secondary schools

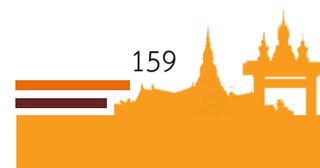
According to the second research objective, it aimed to examine the congruence of the models of the 4 components and 16 indicators of effective academic affairs administration of secondary schools in the Northeast of Thailand.

The inferential statistics were employed to analyze the congruence of the models of the 4 components and 16 indicators. The results of the data analysis are as follows:



Chi-Square = 5.388, Chi-Square/df = 1.796, df=3, P-value = .146,
 GFI = .995, AGFI = .974, CFI = .998, RMR = .002, RMSEA = .045, NFI = .995

Figure 2: Confirmatory factor analysis of the *academic affairs effectiveness* model



The academic affairs effectiveness model was consisted of the 5 indicators; 1) higher achievement of learners, 2) positive attitudes of learners, 3) teacher’s work satisfaction, 4) academic project achievement, and 5) school adaptation to environment.

The indicator school adaptation to environment showed the greatest factor loading and R².

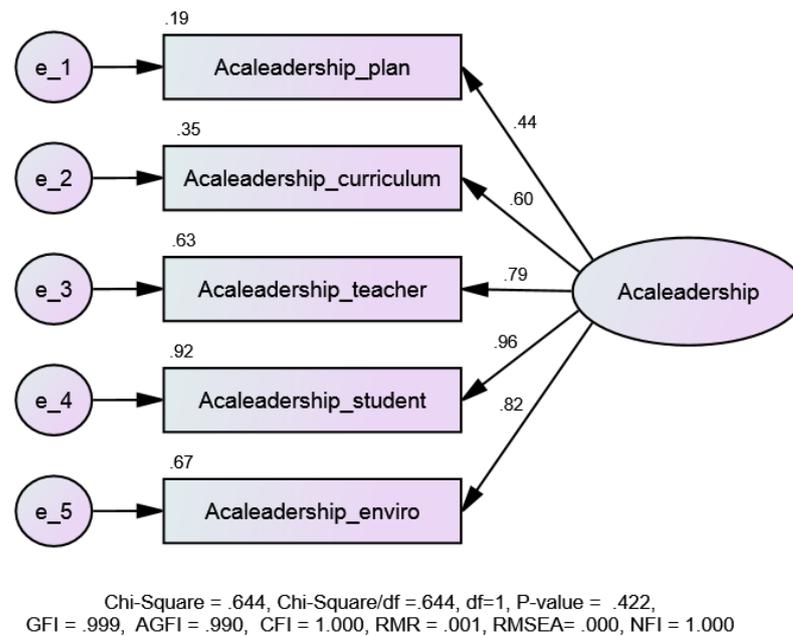
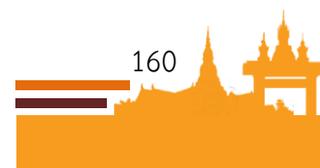
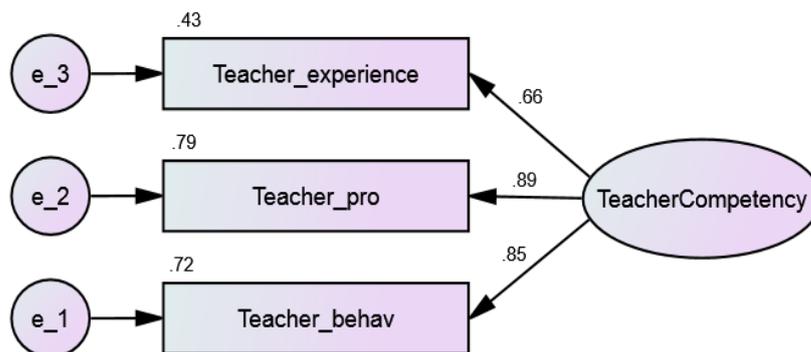


Figure 3: Confirmatory factor analysis of the *academic leadership* model

The academic leadership model was consisted of the 5 indicators; 1) education quality development planning, 2) curriculum administration and learning management, 3) professional development of teachers and staff, 4) learner quality promotion, and 5) learning atmosphere and environment management. The result of the analysis showed that the model was congruence with the empirical data. The indicator learner quality promotion contained the greatest factor loading and R².

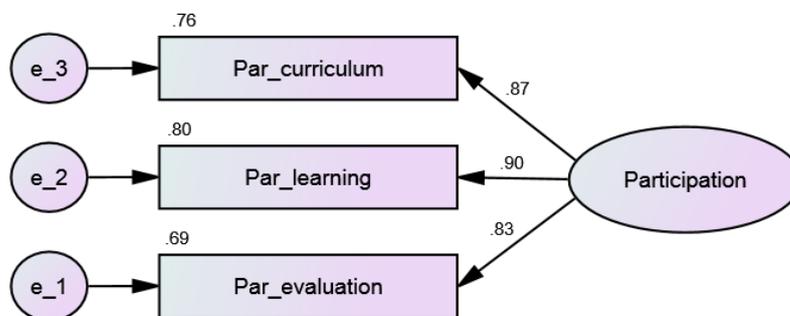




Chi-Square = 4.947, Chi-Square/df = 4.947, df=1, P-value = .026,
GFI = .992, AGFI = .951, CFI = .992, RMR = .008, RMSEA = .099, NFI = .990

Figure 4: Confirmatory factor analysis of the *teacher competence* model

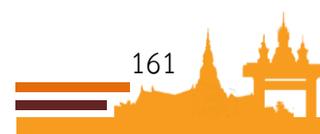
The teacher competence model was consisted of 3 indicators; 1) education levels and teaching experience, 2) professional attributes of teachers, and 3) teaching behavior of teachers. The result of the analysis revealed that the model was congruence with the empirical data. The indicator professional attributes of teachers possessed the greatest factor loading and R^2 .



Chi-Square = 3.572, Chi-Square/df = 3.572, df=1, P-value = .059,
GFI = .994, AGFI = .965, CFI = .997, RMR = .010, RMSEA = .080, NFI = .995

Figure 5: Confirmatory factor analysis of the *public participation* model

The public participation model was composed of 3 indicators; 1) participation in school curriculum development, 2) participation in learning development, and 3) participation in evaluation. The indicator participation in learning development had the greatest factor loading and R^2 .





7. Conclusion and Discussion

Components and indicators of effective academic affairs administration of secondary schools

The first research objective aimed to develop components and indicators of effective academic affairs administration of secondary schools in the Northeast of Thailand. The result in this research revealed 4 components and 16 indicators (observable variables) of the effective academic affairs administration.

1) The component academic affairs effectiveness had 5 indicators; 1) higher achievement of learners, 2) positive attitudes of learners, 3) teacher's work satisfaction, 4) academic project achievement, and 5) school adaptation to environment. This finding was due to some reasons. This finding was consisted with Lunenburg and Ornstein (2004) and Sribantao (2017). Academic affairs administration can be effective when there is collaboration between administrators and stakeholders. They share the same goals in producing students as key outcomes to achieve the goals. Teachers' satisfaction is also a factor to accomplish target needs. The school's abilities to operate to meet pre-set objectives and to adapt to the environment in changing contexts were additional factors to create academic affairs effectiveness.

2) The component academic leadership had 5 indicators; 1) education quality development planning, 2) curriculum administration and learning management, 3) professional development of teachers and staff, 4) learner quality promotion, and 5) learning atmosphere and environment management. This finding was in accordance with Leithwood and Ducke (1999) and Chuanwan (2018). Directors and heads of divisions schools have to push their missions into success. Student quality improvement has to meet set objectives and goals. In so doing, they have to specify visions, goals, projects, and methodologies. They should also plan a budget for student development. The school curriculum development must gain participation from all groups of stakeholders. This provides the school with feedback which reflects its administration.

3) The component teacher competence had 3 indicators; 1) education levels and teaching experience, 2) professional attributes of teachers, and 3) teaching behavior of teachers. This finding in the research supported Arends (1998) and Tungduangdee (2016). This was due to some reasons. A school that runs teaching staff management can benefit teaching management. Students can learn from experienced teachers. As a result, overall learning achievement is higher. Furthermore, a school that promotes professional development on a regular basis can gain qualified and desirable teachers. These teachers express their competence through their teaching process. A good teaching process can lead students to meet the goals of a curricula.





4) The component public participation had 3 indicators; 1) participation in school curriculum development, 2) participation in learning development, and 3) participation in evaluation. This research confirmed Phaosri, Puthaprasert, and Yaboonthong (2017) and Gantamas, Jaroensook, and Narkkhwan (2017). This was due to some reasons. Schools in Thailand now provided opportunities for the public to take part in curriculum development and revision. Teachers are allowed to make lesson plans based on learners' interests and aptitudes. Those lesson plans support learners to learn by doing and experiencing. They are required to meet desirable attributes. The public is also invited to participate in evaluation. Results of evaluation are valuable to further revise curriculum in the next academic year.

Congruence of the models of the developed components and indicators of effective academic affairs administration of secondary schools

The 4 models of the 4 components and 16 indicators of effective academic affairs administration of secondary schools in the Northeast of Thailand were all congruent with the empirical data. The reasons of this findings are as follows. For the academic affairs effectiveness model, the finding accorded with Lapcharoen, Wichitputcharaporn, and Niyamapa (2018). It was the administrator's responsibility to provide fundamental facilities to support the academic affairs. Good learning atmosphere is needed to motivate students to learn. Both teachers and students have to build good relationship. They should always exchange opinions on learning management. These factors lead the school to achieve its goals of academic affairs administration. For the academic leadership model, the finding was in accordance with Newble and Cannon (1995). Academic administration is the heart of a school. It helps the school to manage resources in a proper way. The result of such management is students' learning achievement. For the teacher competence model, this finding was in consistence with Newble and Cannon (1995). This was due to the following reasons. Education quality is affected by teachers' abilities in teaching and learning management is all aspects. Teachers should be equipped with certain professional attributes. These attributes affect learning achievements and academic affairs. Attributes are expressed or showed through behaviors. Teaching behaviors reflect actual attributes and indicate actual competence. For the public participation model, the finding was related to Wisat (2017) due to some reasons. Academic affairs are related with various aspects of school administration and public participation. Academic affairs administration can cover all dimensions when it is joined by related parties. Stakeholders who are in the context of the school are good sources of knowledge for curriculum development. After they participate in curriculum development, they should be allowed to be part of learning processes and curriculum evaluation.





8. Suggestions

For implication

To pursue academic affairs administration found in this research, directors should be equipped with academic leadership. Academic affairs administration can achieve its potential under academic leadership of directors.

Participation from all sectors of stakeholders should be increased. This participation can determine the direction of academic affairs administration. It can gear academic affairs administration to effectiveness.

For further research

Next research should be done in various school sizes to study whether school sizes cause different results.

More in-depth qualitative research should be done to investigate more actual phenomenon in academic affairs administration.

This kind of research should be done in other different education levels.

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PROGRAM FOR DEVELOPING THE COMPLETENCIES OF INFORMATION TECHNOLOGY MANAGEMENT IN BASIC EDUCATION INSTUTIONS OF SECONDARY SCHOOL ADMINISTRATORS IN THE NORTH-EAST

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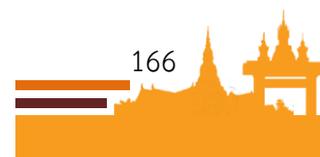
Abstract

This aims of this research were the following 1) To study elements of information technology management competency development for the management of secondary school administrators in the Northeast 2) To create and improve information technology management competency development programs for the management of secondary school administrators. In the Northeast and 3) To evaluate information technology management competency development program for the management of secondary school administrators. In the Northeast, that developed this research. This research and development was performed 3 phases: Phase 1: Studied of development program elements, including: Analysis of related documents and research Expert interviews and exploratory research the population included 933 school administrators, among whom included school administrators in secondary schools in the Northeast, 335 people were acquired at multiple stages random, used a 5-level estimation scale query to analyze data using frequency, percentage, average, and standard deviations. Phase 2: Created and developed program Education of Information Technology Management Competency Development Program for Secondary School Administration in the Northeast According to interviews with seven experts to draft the program, Review the draft program using experts, created and confirmed program by experts. Phase 3, evaluated the program, experiment with 30 school administrators, analyzed data using averages and standard deviations.

The research results were as below:

1. There were 5 elements of Information Technology Management Competency for Management of Secondary School Administrators: information technology strategy plan, organizational structure, information technology infrastructure, Leadership and Personnel.

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2. Information Technology Management Competency Development Program for School Management of Secondary School Administrators in the Northeast consisted of principles, objectives, contents, development processes and measurements and evaluations Completed the 2-day period using the Information Technology Management Competency Development Manual for the school management of secondary school administrators. in the Northeast 5 units included: Practicality and sharing of learning.

3. Results of the use of information technology management competency development program for the management of secondary school administrators in the Northeast found that secondary school administrators participating in the research had the capacity to manage information technology for the administration of the school after participating in an increased trial of the program. The effectiveness index of information technology management development for the management of secondary school administrators in the Northeast was 0.7204 or 72.04% and the knowledge and experience gained in general was the most inclusive development.

Keywords: Development Program, Competency, Information Technology Management





1. Introduction

Education is an important factor for preparing people and society to face change to be able to accept and adapt to change in order to live happily in society. Education can also help and solve problems that arise in society, economy and politics, where the state has always recognized the importance of education as affecting the development of civic capacity. As seen in the Constitution of the Kingdom of Thailand. B.E. 2007 Section 49 stipulates that individuals have equal rights to receive basic education for at least twelve years that the state must provide thoroughly and quality B.E. 1999 Article 10 is defined in accordance with the In regards to basic educational rights and opportunities, by requiring the development of education for Thai people to receive a widely higher quality education and standards, thoroughly and fairly (Ministry of Education, 2007, p. 2). In accordance with the Ministry of Education's Information and Communication Technology Master Plan People are given the opportunity to learn throughout their lives with the use of information and communication technology systems, and educational communications aim to enhance the quality of education, where learners can access learning resources anytime, anywhere by leveraging the modern integration of electronic tools used in everyday life. It is convenient to communicate with each other, also known as “Ubiquitous Learning”, as well as to create classrooms of the future to create an environment that allows students to be at the center of education in 3D: 1) Access to learning resources is to increase the potential of research and access to online learning resources is to increase the potential of research and access to online learning resources.2) Learning anytime, anywhere is to enhance the learning experience without continuity by using modern personal devices (BYOD : Bring Your Own Device) 3) The variety of learning is to increase the ability and freedom to choose a variety of methods and learning materials in the classroom of the future (Ministry of Information and Communication Technology, 2011, p. 7) The quality of schools should have student-centered teaching and learning characteristics. Have a good academic plan teaching and learning that promotes student learning is available. There is a positive atmosphere for the school. Promoting group interaction with each other, widespread human resource development. Using participatory leadership to promote creative solutions. Parents and communities are engaged, where the effectiveness of the school is the ability to operate, with leaders using the ability to manage the school to achieve good education to achieve quality goals (Sergiovanni, 2009, pp. 198-199). The main in managing changes in schools is to have a good system of educational management and management. The key goal is quality education. Effective and effective in developing Thai children to be of higher quality and higher standards equally or similar to the country. The quality of education also reflects the characteristics





of standardized educational management, resulting in sustainable outcomes for students in accordance with the course intent and can meet the needs of students. Parents and communities, or, it can be said that the quality of education is the quality of students who have high academic achievement and desirable characteristics as specified by the curriculum. The quality of such students is due to the cooperation of all parties, including parents, parents and communities who care about education management, policy and practical organizations have a standardized management system and especially the practical level, which means that schools have a quality down-to-classroom system. As a result of having professional administrators and teachers, as well as having an effective advisory school board (Rattana Duangkaew, 2013, p. 11), the school needs to change and develop the management of learning throughout the system. The quality of the school is the primary goal of developing the school to its potential to be ready to develop in various areas to cope with various situations, have quality learners, have a good teaching system. Fully equipped and equipped with a library. Media, information and communication technology are used, as well as the proper environment arrangement. There are teachers with a spirit of teacher hood. Open your mind, listen to problems so that students can think for themselves, dare to express themselves, have good manners, have morality, be virtuous, to be used for living or career. Especially these days, political change. Socioeconomic is fast and continuous. Technology is being introduced. New learning and living and cultural patterns come to Thai society. Education is an important factor in helping people think, to think, to contemplate, to choose, to develop and adapt to the events that come to life all the time. In the midst of the changing of society that is a current trend of globalization, it is a knowledge based society and a knowledge based economy, which results in the management of Thai education subject to the conditions of competition and commitment in accordance with society's expectations. The management process must be adapted and developed in accordance with the conditions, so it is imperative that the management is constantly interested in knowing and developing in order to ensure the management of the organization survives and achieved the objectives (Theera Rooncharoen, 2010, p. 98). Therefore, it is necessary to organize an effective education. To develop students to be complete human beings. It has a good desirable feature: physical development. In order to produce students of quality to society, coexist happily, and quality education management can be considered an important part of developing human resources to have desirable attributes and will directly affect the development of the country. It also promotes the Knowledge-based Society to students or service recipients, and the trend of global social development into a modern economic society that relies mainly on innovation and technology. The country's knowledge of manpower and wisdom are key factors in the country's potential to compete





with other countries. As a result, every Countries around the world have turned their attention to education. As an important mechanism or tool for developing manpower, Society & Country The key point in the development of education is towards improving quality, because if the people of the country have the quality of development, the country will be of high quality and also indicate international competitiveness. When the school is of quality, it will also result in the confidence in the school's educational management. As a result, parents send their children to that school. As a result, every Countries around the world have turned their attention to education. As an important mechanism or tool for developing manpower, Society & Country The key point in the development of education is towards improving quality, because if the people of the country have the quality of development, the country will be of high quality and also indicate international competitiveness. When the school is of quality, it will also result in the confidence in the school's educational management. As a result, parents send their children to that school. Based on the study of documents and research related to information technology management competency development programs for the management of secondary school administrators in the Northeast, found that result in the management of the school very well up-to-date and quality information, information can be used to make effective management decisions that will affect the quality of schools, teachers, students. As a result, those involved will be satisfied with the school's operations and the Information Technology Management Development Program for The Management of Secondary Schools in the Northeast will guide to develop information technology management and the management of schools to be successful.

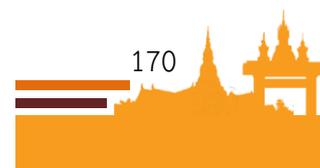
2. Objectives

The research aims were as follows:

2.1 To study elements of information technology management competency development for the management of secondary school administrators in the Northeast.

2.2 To create and improve information technology management competency development program for the management of secondary school administrators in the Northeast.

2.3 To monitor and evaluate the effectiveness of information technology management competency development program for the management of secondary school administrators in the Northeast.



3. Literature Review

In this research, the researchers analyzed synthesis from the concept papers. Theory and research related to the development of information technology management competency for the management of secondary school administrators. The content scope is as follows:

3.1 Information Technology Management for School Management consists of 1) Information Technology Strategy Planning 2) Organizational Structuring 3) Information Technology Infrastructure Management 4) Leadership of Information Technology Executives and 5) Personnel

3.2 Information Technology Management Competency Development Program for School Management of Secondary School Administrators in Northeastern Region. There are 4-stage program development processes: 1) Analyze, synthesize, concept and study current conditions, 2) Create program details, 3) program trials, and 4) evaluate programs.

4. Conceptual Framework

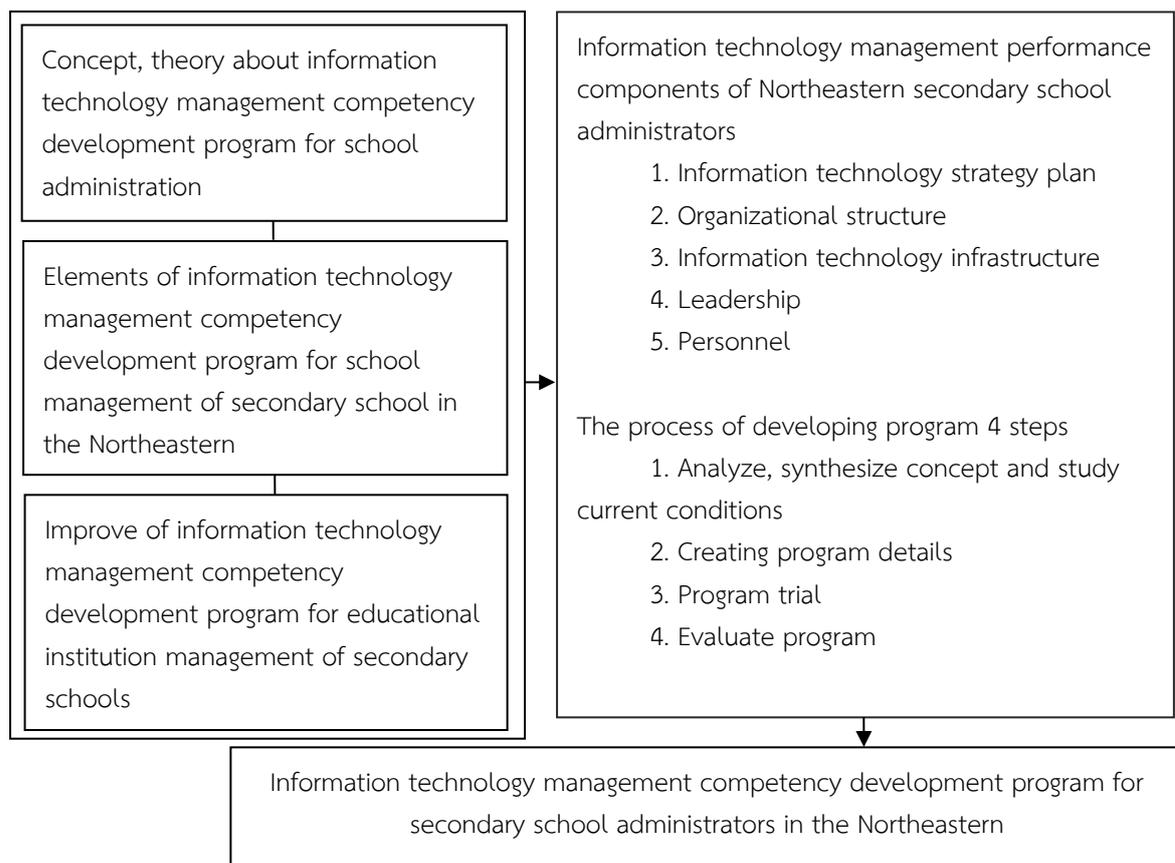


Figure 1: Conceptual Framework





5. Research Methodology

This research was classified as research and development, conducted in three phases, including Phase 1, The Study of The Development Program Elements, Phase 2, The Creation and Development of Programs, and Phase 3 Program Evaluation.

To create and develop information technology management competency development programs for the management of secondary school administrators in the Northeast, obtained by analyzing data based on concepts. Theory and research papers relegating information technology management competency development program for the management of secondary school administrators in the Northeast.

6. Results of research paper

Findings program for developing information technology management for the management of secondary school administrators In the Northeast, the conclusions as follows:

6.1 Information Technology Management Competency Elements for The Management of Secondary School Administrators In development, there are 5 elements:

- Element 1 Information Technology Strategy Plan
- Element 2 Organizational Structure
- Element 3 Information Technology Infrastructure
- Element 4 Leadership
- Element 5 Personnel

6.2 Information Technology Management Development Program for The Management of Secondary School Administrators There are 5 elements in the Northeast: infrastructure, information technology, information technology strategy, leadership, organizational structure and personnel. In the Northeast, it can be sequenced to determine the framework for development, as follows

- 3 hours of training on Information Technology Strategy
- 3 hours of training on Leadership
- 2 hours of training on information technology infrastructure,
- 2 hours of training on organizational structure,
- 2 hours of training on personnel





Development of information technology management competency development program for the management of secondary school administrators in the Northeast as follows:

2.1 Suitability of information technology management competency development program for the management of secondary school administrators in the Northeast It is optimal as a whole to the level, and when considering the development documentation in each element. In descending order of averages: information technology strategy (= 4.80), organizational structure (= 4.80), leadership (= 4.76), personnel (= 4.74) and leadership (= 4.74).

2.2 Appropriateness of documentation for the development of information technology management competency for the management of secondary school administrators in the Northeast Considering each element In descending order, the information technology strategy (= 4.80), the organizational structure (= 4.80), leadership (= 4.76), personnel (= 4.74) and leadership (= 4.74), respectively.

2.3 Information Technology Management Competency for The Management of Secondary School Administrators in the Northeast During the trial of information technology management competency development models for the management of secondary school administrators in the Northeast It was found that the participants were trained in the development of information technology management for the management of secondary school administrators. In the Northeast, pre-training and post-training tests are conducted. The total score before training was 689 points and the total score after training was 841 points when comparing pre-training scores with post-training scores increased after training, which was 152 points, representing an increase of 72.04 percentages.

2.4 Satisfaction of the participants to the Information Technology Management Competency Development Program for the Management of Secondary School Administrators In the Northeast, the overall picture is very high (= 4.18), considering the field is found to be very high on all sides, sorting the average in descending order, cognitive (= 4.25), second only to speaker (= 4.21), knowledge implementation (= 4.18) and place/duration/food (= 4.12), respectively.

2.5 Monitoring and evaluating the effectiveness of information technology management competency development programs for the management of secondary school administrators in the Northeast It found that the use of knowledge and experience gained to improve themselves and develop the work of secondary English teachers under the school district was the most overall (= 4.51), considering that it was the highest level of 4 areas, on two very levels, with the highest average being personnel (= 4.71), second only to leadership (= 4.59) and information technology strategy (= 4.59), respectively.





6.3 Effectiveness of information technology management competency development program for the management of secondary school administrators in the built-up northeast. The effectiveness index increased.

7. Conclusion and Discussion

Based on the results of the data analysis, the researcher presented a discussion of the results on key issues as follows:

7.1 Information Technology Management Competency Elements for The Management of Secondary School Administrators in the Northeast It found that there are 5 elements as follows: 1) Information Technology Strategy, 2) Organizational Structure, 3) Information Technology Infrastructure, 4) Leadership, and 5) Personnel. This is because information technology management for school management is the implementation of the implementation of information technology in the work of personnel, which must be carried out from policymaking. Organizational goals related to the adoption of information technology The designation and appointment of persons or groups to be responsible for information technology in a concrete way, as well as the continuous development of relevant personnel and quality in accordance with Songchai Orarikpong and team (2017, p. 73). Discussed the Information Technology Management Reform Strategy to create value for money, consisting of 6 indicators: 1) Developing an information technology development plan in line with the policies of the Ministry of Education, 2) Raising funds to modernize information technology work and efficiency, 3) The appointment of people responsible for information technology in a concrete way, 4) developing information technology agencies into highly effective entities, 5) supporting the use of information technology in the design and organizing learning activities for learners, 6) coordinating information communication through computer systems, and Apiwat Kansriviang and faculty (2013, abstract). He studied the information management system development strategy of the Secondary School District. The results showed that the development strategy for information management systems of secondary school districts consists of 5 strategies: Strategy 1: Develop data standards and central database systems to become the country's educational information center. Strategy 2: Develop information and communication technology infrastructure to be efficient Strategy 3: Develop information and communication technology systems for public relations of educational news and services with good governance, Strategy 4: Develop personnel to compete in information and communication technology, and Strategy 5: To develop information and communication technology systems to support the creation of good governance in management and operation.





Element 1 Information Technology Strategy plan is the competency or competence that school administrators must have and must be continuously developed in time for changing circumstances. When school administrators can plan their operations on information technology well, they will be able to plan for information technology. It will be implemented in management. In line with The Graduate, Blow Yen (2015, p. 36), he said that a good strategy must have a reasonable focus. There's a mechanism for coordinating everything. Adapting to change is a possibility. Suitable, consistent, competitive advantage, recognized and made the agency more efficient than ever before. Nilsuk and Jira Chitsupa (2014, pp. 72-74) He said school administrators must therefore be prudent. Have a thorough understanding of strategy and require brainstorming from all stakeholders involved. In order to acknowledge and understand the common goals, the implementation of the implementation of the goals, which is to formulate information and communication technology management strategies for good and clear education, will effectively affect the actions of all parties involved in the school and bring success to the school.

Element 2 Organizational Structure Quality Management of Organizational Structure Accurately, suitable for the context of the organization, it will affect the smooth and efficient operation of activities or tasks. The positioning of staff in the school or the self-sufficiency of the staff in the sub-units of the school will have a positive effect on the management of the school. In mind, knowledge and understanding of the organizational structure must be capable of determining personnel to perform tasks that meet the capabilities, knowledge can be divided by groups corresponding to information technology work, in accordance with Leavitt (1964, pp. 55-71), proposed control of information and communication technology that organizations that have adopted technology must have. The adaptation of the work of people in the organization and its structure will ensure efficient operation and patronage (2015, pp. 8-9). studied the management of information technology for education that affected the organization of learning of educational institutions affiliated with vocational education in Chachoengsao Province. The results showed that the management of educational information technology to make the most of the management of educational institutions in infrastructure. Management must have the management of the school, which operates with the installation of intranet networking and networking within the school area. There is an Internet system used for management and teaching and learning. Contains the necessary software for use in non-pirated schools. Providing a variety of classrooms, such as computer laboratories or computer classrooms. There is a maintenance and stability system of information and communication technology systems.





Element 3 Information Technology Infrastructure Information Technology Infrastructure, as well as ICT infrastructure related to educational infrastructure, including computers Network and Internet Display and peripheral screens and information systems will affect information systems. The use of information for communication, as well as the consequences of the school's holistic management. so If the structure of the technology of Tesson is good, it will make the management good in accordance with the sacratic. Pphan Peng (2016, p. 32) discusses the main elements in 1: Information and Communication Technology Infrastructure. 1) Setting out plans for building management, learning resources and utilities 2) Classroom management laboratory Set the ratio of the number of computers to the number of students 3) install computer networking and Internet networking 4) Defining the features of the computer operating system. 5) Building infrastructure maintenance systems 6) Providing computer teachers and computer and internet network administrator teachers and Nikorn Poolput (2009, abstract) We have researched and developed information and communication technology management models of school districts to improve the education of small schools. It found that the management of information and communication technology will result in success. Effectively, consisting of determining the structure and mission of ICT management by establishing and determining the mission of the ICT Management Center and establishing the ICT Management Network Center.

Element 4 Leadership Technology leaders demonstrated the creation of a clear vision and aimed at developing information technology by encouraging those involved to use information technology in the school's operations. Capable of leading the way in changing, developing technology Knowledge and ability to integrate information technology with school management, as well as teaching teachers specific skills to learn about new technologies. Technical solutions to teachers Access to technological resources and coordination with teachers in curriculum development in line with Gurr (2006) A research on the impact of information and communication technology on the work and living of both consumers and knowledge builders in the 21 century found that school administrators and teachers were to develop strategies that focused on the periods of acceptance of information technology of teachers and those involved. The quality of leadership and vision of education system organizers and school leaders, who are both technology users, resource allocators, people leaders, and change leaders. And Thitree Wilayert (2011, p. 11) discusses managing ICT technology to achieve leadership efficiency, namely by executives using leadership to persuade and encourage others to follow their needs in order to achieve the organization's goal effectively and effectively.





Element 5: Personnel developing personnel to have knowledge and skills in information technology to have the right attitude to work will allow people to develop their own potential in information technology and be able to apply them to successful operations. Able to achieve the goals of the organization effectively in line with Orusa. Punyaburana (2015, p. 238) discusses the determination of the roles of information and communication technology executives and personnel, consisting of three characteristics: 1) the readiness of personnel to develop and use information and communication technology, 2) school administrators have an understanding of information and communication technology, and 3) manage personnel development and curriculum development to promote training and training for personnel in information and communication technology.

7.2 Information Technology Management Competency Development Program for Secondary School Administrators' School Management Program in the Northeast
It was found that after the trial of information technology management competency development program for the management of secondary school administrators, in the Northeast It was found that the participants were trained in the development of information technology management for the management of secondary school administrators. In the Northeast, pre-training and post-training tests are conducted. Total pre-training score is 689 points and total score after training, 841 points. When comparing pre-training scores with post-training scores increased after training by 152 points, representing a 72.04 percent increase, the effectiveness index increased. The result of this may be because during the experiment, the participants received knowledge and practices regarding the development of information technology management for the management of secondary school administrators until the trainees were able to apply ideas and theories in the school and develop themselves in accordance with Thanita Nopparit. Base (2013, p. Ng). He studied the innovation of information and communication technology management of the dream school. It found that the overall and individual contextual evaluations were very high. By setting out the vision, mission and strategy of the school. Use the principle of personnel engagement at all levels as variables. Has the highest average The overall and individual factor assessments are very high, with the teacher's readiness to receive computer training the highest average. The results of the process assessment, both overall and individually, are very high, with the clauses that encourage students to search using the highest average ICT. The overall and individual output assessments are very high. Teachers provide the highest average student-oriented teaching and learning.





It can be seen that the development of information technology management competency for the management of secondary school administrators. It is important for self-improvement, which affects the competency of the duties of the school administrator and, moreover, resulting in the management of the school. Promoting teacher teaching and learning It will have a greater impact on students. The use of information technology will help school administrators to manage effectively. Have information to manage correctly, completely and adequately.

7.3 Effectiveness of information technology management competency development program for the management of secondary school administrators In the built-up northeast. The effectiveness index increased. The findings may be due to the development of information technology management capacity for the administration of secondary school administrators. The development participants received knowledge from speakers on the management of information technology for the management of educational institutions in various areas according to the information technology management competency elements for the management of secondary school administrators, including information technology strategy planning. Information Organizational, Information Technology Infrastructure Management The leadership of information technology executives and personnel resulted in the development of the participants by using the Information Technology Management Competency Development Program for the management of secondary school administrators. Higher cognition than before the development, in line with the findings of Kompisit Sriboonruang (2015), the trial of information and communication technology leadership models for the purpose of After operations, there was a statistically significantly higher than the pre-operational phase at .05, and the follow-up phase was statistically significantly higher than the post-operation phase at .01.

8. Suggestions

Suggestion from the findings

1. The findings of the underlying information discovered can be used as a way to develop information technology management competency development programs for the management of secondary school administrators.

2. Research has shown that information technology management competency development programs for the management of secondary school administrators in the Northeast It is the most suitable and effective, giving the development participants the knowledge and ability to manage the school by bringing information technology to the aid. Therefore, it should encourage the use of more broad development programs.





Feedback for the next research Based on the findings, the researcher has recommendations for the next research

1. Research on the development of information technology management competency should be conducted for the management of secondary school administrators using the model. Others

2. There should be education, competency development, information technology management for the school administration of primary school administrators. College or university level

3. The factors that affect the development of information technology management competency should be studied for the management of school administrators.

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THE DEVELOPMENT OF LEARNING ACTIVITY TOWARDS VERIFICATION LEARNING PRINCIPLE ON THE COMPETENCIES OF CURRICULUM AND LEARNING MANAGEMENT COURSE INTEGRATED WITH SAKON NAKHON LOCAL WISDOM

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Abstract

The purposes of this research were to develop learning activities based on verification learning principle on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom, and to study the results of providing learning activities towards verification learning principle on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom: the results of curriculum development integrated with Sakon Nakhon local wisdom, the results of reflection learning log about work performance on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom, and the satisfaction of learning towards verification learning principle on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom. The research and development (R&D) design was employed in this study. The samples were thirty-one of second-year students that the simple random sampling as a lottery technique was assigned. By using the study group as a random unit, 1 group studied in the curriculum and learning management science in the 2020 academic year. The statistics used in the research were mean and standard deviation.

The findings were as follows:

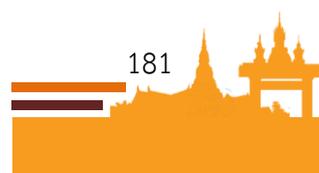
1. The results of the development of learning activities towards verification learning principle on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom found five main steps of verification learning processes (step 1: define teaching objectives, step 2: pretest, step 3: verification

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teaching, step 4: test to confirm the results of learning, and step 5: remedial teaching for learning retention). These steps were used to be the main indicators for learning management after the researchers had studied the focuses of verification learning principle: students know the learning objectives together, students reach learning objectives for each time, and students enable to prove together with their generated learning.

2. The results of providing learning activities towards verification learning principle on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom were as follows:

2.1 The results of curriculum development integrated with Sakon Nakhon local wisdom led to 10 works with different learning activities. Brain-Based Learning (BBL) was generated for primary 4 in the topic of Cultural Heritage of Buddhism. Creative-Based Learning (CBL) was activated for primary 5 in the topic of Study of Local History. Creative-Based Learning (CBL) was activated for primary 3 in the topic of Community Settlement Factors. Storyline Model was assigned for primary 3 in the topic of Know Me, Know You, Know Thai Society. Experiential Learning was employed for primary 4 in the topic of The History Evidence of Local. MACRO Model was administrated for primary 2 in the topic of Thai Local Wisdoms. The 5Es of Inquiry –Based (5Es) was assigned for primary 6 in the topic of Roles and Responsibilities of Local Organization. 4 MAT was used for Mathayomsuksa 1 in the topic of Using Local Geographic Tools. MACRO model was employed for Mathayomsuksa 3 in the topic of Resources and Environments Management in the Continent of America, and Problem-Based Learning (PBL) was activated for Mathayomsuksa 3 in the topic of Causes and Effects of Natural Disaster on the Continents.

2.2 The results of reflection learning log about work performance on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom were found that the students impressed with the intensive content knowledge of instructors. The learning contents were consistent with several learning activities. The several of learning activities, details, and a warm learning atmosphere promoted better learning that also helped students to understand clearly with the learning content of each topic. Students' recommendation of teaching process were reducing high speed lecture of instructors, adjusting learning content with the squeezed time, and insufficient time for individual student's assignment moderating

2.3 The results of students' satisfactions of learning towards verification learning principle on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom were as follows:





The overall satisfaction of learning towards the verification learning principle was at the most level ($\bar{X} = 4.75$, S.D. = 0.43). The consideration of each domain found that the three highest mean averages were that students satisfied with verification learning ($\bar{X} = 4.88$, S.D. = 0.34), students reflected that verification learning brought about advantages of working and learning ($\bar{X} = 4.88$, S.D. = 0.34), and students enabled to practice learning activities either by themselves, peer learning, or facilitated teacher ($\bar{X} = 4.84$, S.D. = 0.37).

Keywords: Verification Learning Principle, the Competencies of Curriculum Course, Integrated Sakon Nakhon Local Wisdom





1. Introduction

From trend of educational reform, several countries have focused on learners' "skill" or work experience rather than their content knowledge from textbooks. UNESCO (n.d.) recommended that learners would have three domains of skills: fundamental skills which are important for their living such as literacy and calculating skills, working skills which is a basic skill for all occupations (e.g., information technology, analytic and creative thinking, team work, and communication), and specific skills for careers which aim at different individual interests (Upper Secondary Education Bureau, Office of the Basic Education Commission, n.d.) The important skills may not effectively be activated by learners if teachers remain to use traditions teaching approaches in globalization era. Similarly, Chumjit (2007, as cited in Panichpalinchai & Tanabhatchotiwat, 2016) stated that teachers have to have knowledge, capabilities and competencies for learning management and they need to have modern and expansive knowledge in worldwide. Teachers can also catch up with the modern of science and technology with the transformation of things surrounding them because teachers are the key man to provide learning experience for learners.

Moreover, teachers are not only the facilitator to support students' learning but also they have to be a good explorer as their roles such as providing modern learning contents for students. If teachers cannot manage class teaching and explore to modern information in the era of knowledge transformation their teaching management would be outdated. Therefore, teachers have to learn several things in real world. They not only learn for survivals living but also learn to be a professional teacher. Moreover, teachers always have to develop their sciences and arts of teaching (e.g., learning about curriculum, exploring educational administration policy, observing environment of learning both inside and outside school, and so on). Specifically, teachers would assign students to learn from resources in their communities such as learning about skills of local wisdom, way of local living and so on. An important factor for teachers' learning to understand intensively is that teachers have to learn to know their students such as background knowledge, learning capabilities, strengths and weaknesses, aptitudes, needs, interests and individual learning behaviors (Buasuwan & Tongthai, 2019).

As such, the researchers who have played the roles of lecturers in faculty of education always have to improve learning with modern education transformation. Faculty of education is one of the main sectors for providing and supporting the development of competency-based curriculum to be used effectively by practitioners in practice. The researchers are aware of the important and imperative improvement of teaching approaches through a modern teaching approach which is "Verification Teaching".





This teaching approach focuses on classroom learning management basing on the teachers' defining the learning objectives. Students also have to know that they will be tested depending on learning objectives. If students who cannot improve their learning, teachers have to re-teach and re-test students until every students can achieve all learning objectives (Kaemmanee, 2011).

Accordingly, the researchers aim at conducting a research study about learning activities development towards verification teaching principle basing on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom to motivate the educational reform relating to living transformation, working, learning, problem-solving, self-adaptation for transformation and modern needs of societies and world. Competency-based curriculum development is a trend to be an alternative choice to assist teaching and learning problems of teachers and students. The verification learning would be the effective teaching approach for modern needs in 21st century.

2. Objectives

The purposed of this study were;

1. to develop the learning activities towards verification teaching principle basing on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom,
2. to study the results of providing learning activities towards verification leaching principle basing on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom:
 - 2.1 the results of curriculum development integrated with Sakon Nakhon local wisdom
 - 2.2 the results of reflection learning log about work performance on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom
 - 2.3 satisfactions of learning towards verification learning principle on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom.

3. Literature Review

The areas of literature were reviewed as follows.

1. Verification learning principle means; a form of learning management that emphasizes knowledge. The ability of the students is important. The important conditions



are: 1) The teacher clearly defines the objectives before learning, where learners are aware that there will be tests for that purpose 2) The learners recognize the test results and accept the test results. 3) If the learners have not achieved the learning objectives The teacher must repeat the teaching to the learner. 4) Retake the test until all learners learning according to the specified objectives and the objectives set out must be appropriate and feasible for the learners.

2. Sakon Nakhon Local Wisdom means; the content that can be used to support learning management that can be inserted into the learning management plan, such as the important ancient sites of Sakon Nakhon. Landmarks of Sakon Nakhon Province local, historical evidence local culture, etc.

3. The Development of Learning Activity towards Verification Learning Principle on the Competencies of Curriculum and Learning Management Course Integrated with Sakon Nakhon Local Wisdom means; Documents supporting learning activities based on the concept of verification learning principle based on the competency of the 3 curriculum courses. The Learning Management Plan consists of 5 steps as follows:

- Step 1: identify the teaching objectives
- Step 2: pretest
- Step 3: verification teaching
- Step 4: testing for confirmation of learning achievement
- Step 5: remedial teaching for the learning retention

4. Conceptual Framework

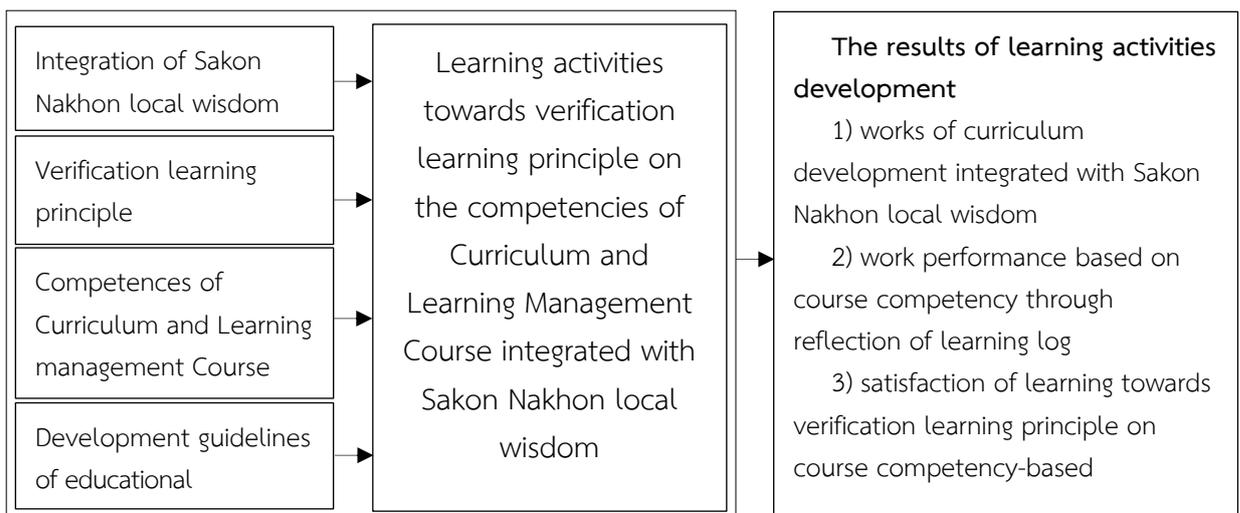
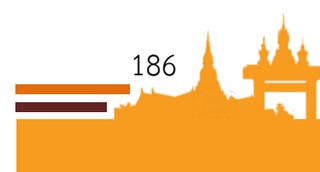


Figure 1: Conceptual framework





5. Research Methodology

This research study was research and development design (R&D). There were two steps of the study.

Step 1 was conducting and testing the efficiency of the learning activities towards verification learning principle on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom.

The researchers studied the background information about educational innovation development guidelines, verification learning principle, competencies of curriculum course, and integration of Sakon Nakhon local wisdom to bring about the important issues for curriculum development. Then the learning activities on course competence were designed to conduct works and explicit knowledge from real experience. The efficiency of curriculum was assessed by 3 experts in the fields of curriculum and teaching, measurement and evaluation, and educational innovation development.

Step 2 was the trial of learning activities towards verification learning principle on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom

This process focused on the trial of using learning activities that had already been designed and created in the first step. There were three issues to focus on this process: the result of curriculum development integrated with Sakon Nakhon local wisdom, the result of work performance based on course competence by the reflection learning log, and satisfactions of learning towards verification learning on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom

Research Instruments

The research instruments were assigned basing on the research procedures in the following steps.

Step 1 was conducting and testing the efficiency of learning activities through verification learning principle basing on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom:

1) lesson plans towards verification learning principle basing on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom,

2) the evaluation form of learning activities appropriateness which was five Likert-scale: most, more, moderate, little, and least.





Step 2 was the trial of learning activities towards verification learning principle basing on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom. There were four research instruments in this step as follows:

The first instrument was lesson plans towards verification learning principle on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom through five steps learning.

The second instrument was the evaluation form of curriculum development integrated with Sakon Nakhon local wisdom. The form was an analytic rubric that the IOC and Inter-Rater Reliability were assigned for checking reliability by the same group of experts in step1.

The third instrument was the evaluation form of satisfactions of learning towards verification learning principle basing on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom. The evaluation form was five Likert-scale that it was checked for the reliability by the same group of experts in step1.

The fourth instrument was learning log which focused on questions about the results of work performance through competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom. It was designed by the researchers that the reliability of the instruments were evaluated by the same group of experts in step1.

Data Analysis

Data analysis techniques were 1) study the number of works from curriculum development integrated with Sakon Nakhon wisdom and quality of those works, 2) evaluate the reflection learning log by contents analysis, and 3) evaluate the satisfactions of learning by using basis statistics.

6. Results of This Research

The results of this study were as follows:

1. the results of learning activities development towards verification learning principle on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom

It found that the focuses of verification learning principle were learners' engaging to understand the learning objectives together, reaching the learning objectives for each time, enabling to prove learners' generated their learning. Therefore, these focuses led to five main indicators of verification learning principle.





Step 1: identify the teaching objectives

Step 2: pretest

Step 3: verification teaching

Step 4: testing for confirmation of learning achievement

Step 5: remedial teaching for the learning retention

2. The results of learning activities towards verification learning principle on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom

2.1 The result of curriculum development integrated with Sakon Nakhon local wisdom found works as follows:

- The first lesson plan: Cultural Heritage of Buddhism of primary 5 students. The teaching approach focused on brain-based learning (BBL).

- The second lesson plan: Study of Local History of primary 5 students. The teaching approach focused on creativity-based learning (CBL).

- The tenth lesson plan: Community Settlement Factors of primary 3 students. The teaching approach focused on creative-based learning (CBL)

- The eleventh lesson plan: Know Me, Know You, Know Thai Society of primary 3 students. The teaching approach focused on storyline model.

- The twelfth lesson plan: The History Evidence of Local of primary 4. The teaching approach focused on experiential learning.

- The fifteenth lesson plan: Thai Local Wisdoms of primary 2 students. The teaching approach focused on MACRO model.

- The sixteenth lesson plan: Roles and Responsibilities of Local Organization of Primary 6. The teaching approach focused on The 5Es of inquiry-based (5Es).

- The seventeenth lesson plan: Using Local Geographic Tools of Mathayomsuksa 1. The teaching approach focused on 4 MAT.

- The twenty-seventh lesson plan: Resources and Environments Management in America Continentv of Mathayomsuksa 3. The teaching approach focused on MACRO model.

- The forty first lesson plan: Causes and Effects of Nature Disaster for Continent of Mathayomsuksa 3. The teaching approach focused on problem-based learning (PBL)





2.2 The results of work performance based on competencies of Curriculum Course from the reflection learning log

The reflection learning log found that students impressed with teachers who have explicit content knowledge of teaching, learning contents related to several learning activities, learning atmosphere to support learning effectively. Verification learning supported students to understand each learning topic clearly. However, the recommendation for improvement was the high speed of teachers' speaking, time limit for some lessons, and insufficient of individual assignment checking.

2.3 The results of satisfactions of learning towards the verification learning principle basing on competencies of Curriculum Course

The overall evaluation of satisfactions of learning towards verification learning principle basing on competencies of Curriculum Course was at the most level ($\bar{X} = 4.75$, S.D. = 0.43). The consideration of each domain found that the highest of three mean averages were that students satisfied with verification learning ($\bar{X} = 4.88$, S.D. = 0.34), students reflected that verification learning brought about advantages of working and learning ($\bar{X} = 4.88$, S.D. = 0.34), and students practiced not only learning by themselves but also peer learning and facilitated teacher ($\bar{X} = 4.84$, S.D. = 0.37).

7. Conclusion and Discussion

The research results were concluded and discussed as follows:

1. The results of this study based on the development of learning activities towards verification learning principle on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom.

There were five steps of learning management from the study of principles of educational innovation development, verification learning, competency-based learning management, and course competence.

Step 1: identify the teaching objectives

Step 2: pretest

Step 3: verification teaching

Step 4: testing for confirmation of learning achievement

Step 5: remedial teaching for the learning retention

The researchers took these steps from innovative learning management. Ritjaroon (2016) noted that the important processes of innovative development consist of learning problem analysis, study and selection of innovation for solving learning problems, innovation design, innovation conducting, testing of innovation's efficiency by experts, the evaluation of innovation's efficiency and trial, and reporting of the result of innovation





development. These processes were chronologically arranged relating to innovation development steps. Moreover, these seven steps related to verification learning principle as Laska (1990, as cited in Kaemmanee, 2011) stated that verification learning is the teachers' defining teaching objectives in their teaching management which would be either a part or all parts of learning objectives. The objectives can also be in general or specific purposes that can prove learners' learning through the defining objectives. Teachers conduct individual tests on learners for that objective. Learners have to know that they will be tested with the objectives before learning. From the test result, if learners have not generated their learning with the learning objectives teachers have to re-teach and re-test until all learners can generate their learning with all learning objectives; or teachers could decide not to use verification learning onwards. Therefore, defining learning objectives should be defined appropriately and impossibly for learners to learn.

2. The results of learning activities towards verification learning principle on the competencies of Curriculum and Learning Management Science Course integrated with Sakon Nakhon local wisdom

Learners enabled to create works form curriculum development integrated with Sakon Nakhon local wisdom. It would be that the researchers arranged the steps of learning activities consistently with the indicators of verification learning principle. Similarly, Laska (1990, as cited in Kaemmanee, 2011) mentioned that teachers have to define teaching objectives clearly and the objectives can be testable. Learners also know the learning objectives before learning and testing. Moreover, teachers have to conduct individual test for learners to evaluate that they can generated their learning or not. Teachers would re-teach for students who were not pass those learning objectives and teachers also re-test until all learners can pass all learning objectives.

8. Suggestions

8.1 Applying the results of this study, the practitioners who would use teaching activities of verification learning principle may intensively study the activities of verification learning principle to make a very good understanding before applying it for teaching. Moreover, the practitioners may have to consider about time of activities arrangement that it has to be appropriated with the content of curriculum and students' capabilities.

8.2 The further research may consider to conduct the study about the retention of students' learning.





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A STUDY OF ENGLISH ORAL PRESENTATION PROBLEMS OF SECOND-YEAR ENGLISH MAJOR STUDENTS, NAKHON PHANOM UNIVERSITY

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Abstract

This study aimed to 1) examine the problems of the second-year English major students toward the English Presentation Course, and 2) propose the techniques supporting English oral presentation of the second-year English major students. The instruments were a set of five-Likert scale questionnaires via a google form and a focus group with a semi-structured interview. The participants, obtained through convenient sampling, consisted of 30 second-year English major students who enrolled in the English Presentation Course at the Faculty of Liberal Arts and Social Sciences, Nakhon Phanom University. The mixed method of qualitative and quantitative was used for the data collection on the problems the students faced in four categories: 1) feeling, 2) presentation, 3) gestures, and 4) language and communicative skills. The results revealed that the most problems students faced were 'feeling nervous' in delivering the contents of a presentation, and having no confidence when presenting in front of the class, poor communication and presentation skills. The students also faced problems in linguistics related to lacking vocabulary, limited grammatical knowledge, and errors in using conjunction and pronunciation. The students need extra hours for practicing oral presentations. The suggestions are that oral presentation skills and techniques should be more addressed and needed to transfer by instructors having experiences and being able to clearly explain students' errors. Interesting activities and materials are needed to reduce students' tension. English oral presentation should be taught to not only English major students but other non-English major students to prepare them for academic presentation as well as a future profession.

Keywords: English Presentation Problems, Nakhon Phanom University Students

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1. Introduction

In today's world, multilingualism has become increasingly important. For example, opening up employment opportunities, making a real connection with people from other countries, and learning more about diverse cultures, places, and lifestyles. The more capable you are, the better you can describe yourself (Global a Subsidiary of Educational Testing Service, 2021). English plays a vital role in wider communication and contributes to multilingualism in many countries in which English is learned as an additional language. Thus, knowing how to communicate in English is essential for the ones seeking to succeed in various fields such as business and education. According to the British Council (2020), English is the official language used among 53 countries and is spoken as a first language by approximately 400 million people. Another 1 billion people also use English regularly and 2 billion ones study the English language to eliminate the communicative barriers between global citizens and easy-flowing information. Moreover, English is used to communicate in various field works, for instance, diplomacy, science, aviation, computers, and tourism. Being able to communicate by using English can increase the employment opportunities of people in multinational companies both at the domestic and international levels.

In Business, English plays as the main business language in the global workforce in multi-national companies: Samsung, Airbus, Nokia, and Microsoft in Beijing which employers use English in their official cooperating language (Arinya, 2021). Furthermore, giving English presentations aids people from many sectors like Steve Job, a founder of Apple who presented the ideas of his products to attract the audiences' attention successfully (Garmston & Wellman, 1992). In the Thai context, the English language is widely used in business organizations and all four language skills are used as a medium for communication during meetings and required in conducting various assigned tasks at the workplace. For example, writing an e-mail and memos (Kulaporn, 2015).

In education, English is also vital for communication in various skills. In speaking skills, English oral presentation is one of the necessary courses. In teaching and learning, the course has been taught to students by both native and non-native teachers to evaluate learners of presenting their ideas and contents by showing the linguistic skills and abilities, as well as background knowledge of learners on the topics assigned. Garmston and Wellman (1992) identified that an English presentation is a formal talk to the audiences by presenting the ideas or information clearly and systematically. Presentation assists individuals and groups of people to meet the aims of training, hence, it is widely used in daily life in a speech at conferences, media, and sales presentations (Gamston & Wellman (1992).





Judd (2019) indicated that Thai students have the lowest standard of English skills in Southeast Asia, compared to counterparts in Vietnam and Laos. The research studies related to the causes of low English proficiency of Thai students have indicated three major causes in terms of psychological, cognitive, linguistics problems, for example, self-confidence, feeling fear of public speaking, critical thinking, vocabulary knowledge, grammar, and discussion skills.

In Nakhon Phanom University, students have faced difficulties and also experienced while learning the English oral presentation course with a native speaker teacher for years. However, the students felt fear of conducting oral presentations in English. They identified their opinions that they encountered the problems of self-confidence, background knowledge of the topics assigned in the course, a lack of vocabulary, structure knowledge, and pronunciation. According to an observation of the researchers on the English Oral Presentation course taken by the second-year English Major students at the Faculty of Liberal Arts and Science in the first semester of the academic year 2021, Nakhon Phanom University, it is found that the students experienced the difficulty in asking and answering questions, and explaining the materials, as well as getting stressed and nervous during an oral presentation. Thus, many English-major students still used their first language together with English while making an oral presentation. In addition, the English-major students were anticipated by teachers to use English in their conversation or presentation while studying in courses. As a result, the researchers are interested in examining the real problems from both linguistics and non-linguistic perspectives of students and proposing the techniques to improve the English oral presentation of the second-year English major students, Faculty of Liberal Arts and Science, Nakhon Phanom University. This research will be useful for those who want to practice being good presenters and extend their knowledge to other courses relevant to speaking skills including their job employment in the future.

2. Objectives

2.1 To investigate the problems of English oral presentation of the second-year English major students at Nakhon Phanom University.

2.2 To propose the techniques to improve the oral presentation of the second-year English major students at Nakhon Phanom University.





3. Literature Review

In this article, the literature review consists of three topics: the importance of English oral presentation, problems of English oral presentation, and related studies on English oral presentation.

3.1 Importance of English Oral Presentation

English oral presentation is one of the effective communicative courses that has been widely adopted by EFL teachers to promote oral proficiency. However, when oral presentations are assigned in class, teachers will get either complete silence or grumbles from students who find the ideas of oral presentations frustrating and intimidating. Students are overwhelmed with the research and communication skills that are necessary for a successful presentation.

In university life, the undergraduate students must be equipped for employability, especially oral presentation skills, which are highly valued in both academic and professional life. An oral presentation is a verbal form of communication in which students communicate their thoughts, present ideas, and share information with friends, family, or colleagues, presentations, and speeches not only in but outside the classroom. In addition, oral communication can help to build trust and reliability for presenters to become the most reliable communication. Nihayatul (2018) indicated that “oral presentation becomes a more important part of language teaching, especially in the university environment. One of the purposes of this presentation is to prepare the students for business presentations that they will likely be expected to carry out after graduating from their university and getting a job.” In addition, the main advantages of using oral presentation in the classroom are to focus on student-centered learning. Thus, oral presentation requires students to use all four language skills in a naturally integrated way and the presentation encourages students to become active and autonomous learners (Sri, 2019).

It can be stated that oral presentation is beneficial for undergraduate learners because it can assist them to prepare their skills of further occupational presentation before finding jobs and motivate them to use and apply all skills of English using their ideas.

3.2 Problems of English Oral Presentation

English oral presentation skills in a second or foreign language is a challenge for students because speaking a foreign language such as English requires not only more than knowing grammar but also the use of English in a correct context. Though English plays a language taught in diverse schools, many students still hesitate to speak clearly and accurately (Nurul et al., 2019). Moreover, lack of presentation skills was believed to





be the second most important factor that causes difficulty in an oral presentation. In a related study exploring the factors influencing students' oral presentations, Leichsenring (2010) stated that EFL Japanese undergraduate students wanted to speak better English and to reduce their language anxiety. They were worried about making mistakes, which resulted in their memorization of contents. They also believed that presenting in English was difficult and reported problems with planning and preparing a presentation.”

There are many problems that students faced with English problems presentation. First, it is related to students' condition who lack vocabulary that make them difficult to say words during class and also lost confidence to speak English. Second, some students are not confident to speak English because of feeling fear of making mistakes. Some of them are afraid because their pronunciation is not as good as native speakers. Last, the students speak more with their first language or their mother tongue (Meliarya, 2017). As the difficulties of English oral presentation such as pronunciation, vocabulary, and grammar found by ESL and EFL learners mentioned above, furthermore, Chomsky (2018) indicated that talking skill is a “capacity to state or convey viewpoints, musings, and thoughts by talking and this capacity can be acquired by training”.

As the problems stated above, it can be concluded that problems of English oral presentation are caused by many reasons: 1) students feel hesitant to speak English clearly and plainly, 2) lack of presentation skills, 3) they are worried about making mistakes, 4) they lack vocabulary that makes them difficult to say words during class, and 5) some of them are afraid because their pronunciation is not as good as a native speaker.

3.3 Related Studies on English Oral Presentation

The related studies on oral presentation in English have been conducted by different methods. It can be identified as follows:

In a quantitative method, Neil and Gi-Zen (2019) used a set of questionnaires, a focus group interview, students' observations, and instructors' perspectives to explore how students develop academic oral presentation skills. The results revealed that group oral presentations improved with a stronger introduction, linking devices, and visual elements. However, students had problems constructing conclusions and linking the main ideas to the content. Sladana (2014) used a questionnaire method on students' attitudes, opinions, preferences, and reactions toward the oral presentation in the engineering classroom. The results obtained in the study show that students perceived the significance of preparing and delivering an oral presentation for successful communication in the professional future. Putri (2019) used classroom action research to correct the problems. The research was conducted in two cycles. The observation checklists and field notes were applied to observe student behavior during the teaching and learning process. The results found the techniques that helped





students to improve their speaking ability and their confidence to present ideas in front of people through group sharing and discussions. The students then showed their good attention during the teaching and learning process. Alwi and Sidhu (2010) used a questionnaire and oral presentation test, semi-structured interviews to collect the data. The results indicated that there is a difference between the actual performance scores and the student's self-evaluation marks for the four skills. Thus, when designing the curriculum outline, educators need to focus more on those fields to improve students' oral presentation skills. Moreover, Salmawati (2020) used a speaking test for making a presentation, giving interviews and questionnaires as the instruments of data collection to find out the students' problems in oral presentation toward their performance and to examine the causal factors of students' problems in speaking. The results revealed that the causative factors of students' problems in the presentation consisted of three factors: a lack of vocabulary knowledge, poor grammar, and lack of confidence.

For the qualitative method, Radzuan and Kaur (2011) used qualitatively to investigate by using the focus group interviews to conduct the 6 groups of students. The results revealed several major sources of anxiety existing among the students during the English oral presentation, for example, limited technical knowledge, and obstacles to students' English language proficiency. In addition, Susilawati (2016) used the questionnaire and observation checklist to survey the students' experience. The results showed that the problems students faced most in their presentation are vocabulary, feeling fear of making mistakes, lacking confidence, grammar, and pronunciation. While Rajinda (2018) used qualitative and quantitative approaches with the research tools for data collection consisting of questionnaires, in-depth interviews, and participant observation. The results showed that the level of oral presentation techniques of the students was at a high level, whereas Saragih (2019) brought an interview with a set of questionnaires to gather the data finding the fourth-year students' perceptions after making the oral presentation as an assignment. The results found that oral presentation as an evaluation can be beneficial to students if teachers or lecturers use it as a tool to help them learn. Chowdhury (2018) used a focus group discussion as the instrument for collecting data of the qualitative study to explore students' perceptions of the effectiveness of oral presentation activities to develop confidence in an oral presentation. Students significantly increased their speaking confidence as they made more class presentations and group discussions, and their abilities also increased compared to high school and graduate levels.

In sum, each research instrument used to investigate the problems of English oral presentation for ESL and EFL learners is effective depending on the background knowledge of learners and the real contexts. In this study, the researchers applied the tools by using the questionnaire and the semi-structured interview to gain the in-depth





data of the undergraduate students at the Faculty of Liberal Arts and Science, Nakhon Phanom University.

4. Methodology

The study used a mixed-method of both quantitative and qualitative to collect the data.

4.1 Research participants

This study was conducted by using an online focus group interview and a set of questionnaires during the period of the Covid-19 outbreak in the class of English Oral Presentation while studying in an online class with a native speaker in the first semester of the academic year 2021. The participants were 30 second-year English major students studying at the Faculty of Liberal Arts, Nakhon Phanom University. They were selected by purposive sampling. GPA is used to classify students into three groups before interviews.

4.2 Data collection and research instruments

A set of questionnaires and semi-structured interviews are reviewed as follows.

The researchers informed 30 participants studying in the English major at the Faculty of Liberal Arts and Sciences, Nakhon Phanom University a week in advance. Then the questionnaires with 20 items were adopted from Tian (2019) and distributed to three experts for validation. The 20 questions were divided into 4 parts: 1) feeling, 2) presentation, 3) gestures, and 4) language use and communicative skills. Each part consists of 5 items equaling 20 items. Then all questions were created in the google form and distributed to the participating students.

After interpreting the results from online questions, the researchers analyzed the data. After that, the participants were informed before being interviewed one week in advance. It was conducted for about two hours on a weekend via the Zoom meeting program. To make participants feel comfortable to respond to the questions, they were asked in the Thai language. In this process, the 30 participants were classified into three groups based on GPA. Group A (high-performance students), GPA was between 2.00 to 2.60, Group B (medium-performance students) was between 2.61 to 3.19, and Group C (low-performance students) was between 3.20 to 4.00. The spending time was about 30-40 minutes long for a group. Voice recording was also asked participants' permission.





4.3 Data analysis

According to the two objectives, the investigation of the problems in English oral presentation of the second-year English major students at Nakhon Phanom University was done through a set of questionnaires using the 5 Likert scales, which were generated by the software program and then interpreted to find Mean and S.D. Thus, this data was analyzed according to scale ranges of Srisa-at (2002) as follows: 1.00-1.50 = Lowest, 1.51-2.50 = Low, 2.51-3.50 = Average, 3.51-4.50 = High, 4.51-5.00 = Highest. The second objective was to propose the techniques to improve students' English oral presentations. The data obtained from the students' semi-structured interview via the Zoom meeting program using 5 questions with the IOC value of 1.00, evaluated by the three experts. The results were grouped and analyzed by content analysis.

5. Results of research

The results of this study revealed that: Students shared their ideas according to the four aspects as follows: 1) Feeling, students felt excited about presenting in front of the audience at the most problem, whereas they felt bad when they compare themselves with their friends at the least problem; 2) Presentation, they did not have interaction with the audience most, but they had no preparation for their presentation least. 3) Gesture, students had no eye contact with the audience least but they could not control their gestures most; and 4) Language use and communicative skills, the students used least the wrong grammatical structure but they focused on pronouncing the word incorrectly and not using appropriate conjunction most.

In terms of opinions given by students towards the problems, they faced with learning English oral presentation, the basic skills and knowledge they want most, and the necessary skills they needed to develop their speaking skills in this course. The results showed that all groups of students had never presented their works in front of the class before learning this course. Most students in all groups were excited and felt fear of making mistakes. They needed to learn more both in vocabulary and grammatical knowledge. Most of those having an average level of GPA level was not good at pronunciation. For the group having the lowest level of GPA, they wanted to reduce anxiety before making a presentation. Most of the students from group A and group B needed to improve presentation skills and pronunciation skills, for reading and writing skills were the least skills they needed. Whereas the group had the highest level of GPA, they felt shy and spoke fast. More importantly, the knowledge of the instructor was really important for teaching this course.





The techniques proposed for learning in English oral presentation can be concluded as follows: 1) Ice-breaking and interesting activities must be first done to make students not being shy and feel relaxed before starting the course; 2) Learners should be first taught linguistics by teaching clear and correct pronunciation and using proper conjunction; 3) Vocabulary and structure are needed to focus by instructors apart from the contents; 4) The rehearsal must be assigned for all levels of students to reduce their tensions before making a real test; 5) Students should be allowed to speak English out of the schedules more than three hours a week indicated; 6) The topics should be started from easy to difficult; 7) The contents assigned should be closely related to students' interests, background knowledge, or contemporary issues in the current time; and 8) Group work or pair work presentation should be done apart from the individual.

6. Findings and discussion

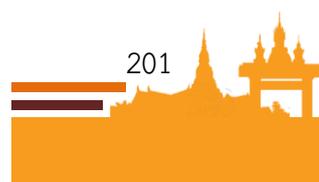
Learning English oral presentation by Thai EFL learners is the problem caused by not only the competencies of learners themselves but instructors and materials provided.

For RQ1: What are the problems of English Oral Presentation that the second-year English major students faced with? It can be discussed as the five following aspects mentioned in the tables below.

Table 1: Feeling

Questions	N	\bar{X}	Std. Deviation
1) I feel anxious before an oral presentation.	30	3.800	0.96132
2) I am not confidence when I have to present.	30	3.700	0.95231
3) I feel bad when I compare myself with my friends.	30	3.433	1.33089
4) I feel excited about presenting in front of an audience.	30	4.100	0.88474
5) feel stress about being criticized.	30	3.567	1.13512

Table 1 shows that overall participants did agree that feeling was one of the problems of oral presentation. Considering each item, the highest agreement was no. 4, I feel excited about presenting in front of an audience ($\bar{X} = 4.100$, S.D. = 0.8874). The neutral one was no.1 = I feel anxious before an oral presentation ($\bar{X} = 3.800$, S.D. = 0.96132) and the lowest one was no.3 = I feel bad when I compare myself with my friends ($\bar{X} = 3.433$, S.D. = 1.33089). According to the results of the focus group interview, the worst feeling when they had to present their presentation was that they





felt excited about presenting in front of the audience, even if their audience were their friends because they were shy and afraid of being seen as clowns. For no. 1, the reason that they felt anxious before an oral presentation was because they have never given an oral presentation before.

Table 2: Presentation

Question	N	\bar{X}	Std. Deviation
6) Lack of technical skill.	30	3.267	0.82768
7) No presentation has been prepared.	30	2.367	0.92786
8) Do not have techniques to start or end presentation.	30	3.200	0.99655
9) Do not have interaction with the audience.	30	3.300	0.98786
10) Forget points and contents while giving presentation.	30	3.133	0.89955

Table 2 shows that the overall mean was neutral. When considering each item, the item with the highest agreement was no.9 = Do not have interaction with the audience ($\bar{X} = 3.300$, S.D. = 0.98786), the neutral one was no.6 = Lack of technology skill ($\bar{X} = 3.267$, S.D. = 0.82768) and the lowest one was no.7 = No presentation has been prepared ($\bar{X} = 2.367$, S.D. = 0.92786). All the participants did not have interaction with the audience because they were worried about their presentation and forgot to have interaction with the audience. No.6 showed that the lack of technology skills was moderate agreement because they did not use that technology as much as they thought they could. And for the last one, no.7: no presentation has been prepared. They said that it was difficult to prepare presentations by themselves because their grammar was not good enough and they thought that they could remember their contents.

Table 3: Gestures

Questions	N	\bar{X}	Std. Deviation
11) Use too many gestures during the presentation.	30	3.133	0.93710
12) Use a tone of voice unappropriated to the content.	30	3.400	0.89443
13) No eye contact with the audience.	30	2.933	1.08066
14) Can't control your gesture.	30	3.667	0.99424
15) Speak too fast.	30	3.233	0.77385

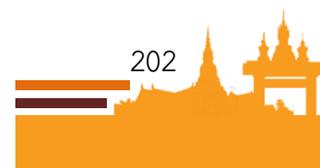


Table 3 shows that the item with the highest agreement was no.14 = Can't control your gesture ($\bar{X} = 3.667$, S.D. = 0.99424), the neutral one was no.12 = Use a tone of voice unappropriated to the content ($\bar{X} = 3.400$, S.D. = 0.89443) and the lowest one was no.13 = No eye contact with the audience ($\bar{X} = 2.933$, S.D. = 1.08066). All the participants expressed their gesture problems as follows: Firstly, they were unable to control their gestures because they brought notes with them and tried to see their notes. Secondly, they were unable to use their tone appropriately for the context, and lastly, they did not make eye contact with the audience because they would forget what they wanted to present.

Table 4: Language use and communication skills

Question	N	\bar{X}	Std. Deviation
16) Use wrong grammar.	30	3.100	0.88474
17) Pronounce the word incorrectly.	30	3.200	0.84690
18) Unclear pronunciation.	30	3.167	0.87428
19) Use vocabulary incorrectly and inappropriately according to the content.	30	3.133	0.81931
20) Not using appropriate conjunction.	30	3.200	0.84690

Table 4 shows that overall language use and communicative skills were neutral. Focusing on each item, the items with the highest agreement were no.17 = Pronounce the word incorrectly ($\bar{X} = 3.200$, S.D. = 0.84690) and no.20 = Not using appropriate conjunction ($\bar{X} = 3.200$, S.D. = 0.84690). The lowest one was no.16 = Use wrong grammar ($\bar{X} = 3.100$, S.D. = 0.88474). The result from a group discussion revealed that the highest agreement concerning students' pronunciation, misused words, and using incorrect conjunction. According to the interviews, they said the biggest problem that they have faced was vocabulary. The lowest one was that they used incorrect grammar because the instructors did not explain more about their grammatical errors; therefore, they did not have new knowledge to improve their grammar.

For RQ2: What techniques can help the second-year-English major students develop English Oral presentations? It can be discussed as the five following aspects mentioned in the tables below.



Table 5: Opinions on the problems that they faced in learning English oral presentation subject

The result	Group	Student No.	Student's opinions/words
Difference	Group A	1	I forget what I want to present in front of the audience.
		Group B	1
	7		I am afraid that the audience will laugh at my presentation.
	9		My pronunciation is not good
	Group C	1	I feel shy.
		5	I speak too fast.
Similarity	Group A	All of the participants	We only know basic vocabulary and grammar; it is not enough for this subject.
	Group B		I feel excited when I have to present in front of an audience, even if they are my friends.
	Group C		

Table 5 shows the students' opinions on the problems that they faced in learning the English oral presentation subject. According to the table, the students had different opinions with English oral presentation subject before the class started, they have never presented in front of the audiences; one said that "s/he felt anxious, fear of making mistakes". A similar point from the students is a lack of vocabulary and grammar.

Table 6: Opinions on the basic skills/knowledge that you want to study the most in the English for Presentation subject

The result	Group	Student No.	Student's opinions/words
Difference	Group A	4	I want to check the grammar of my script before I present my presentation.
		7	I want to reduce anxiety before I present my presentation.
	Group B	2	I feel anxious because of my grammar structure.
		5	I am afraid that the audience will laugh at my presentation.
		8	My pronunciation is not good
	Group C	1	I feel shy.
		6	I speak too fast.
Similarity	Group A	All of the participants	I want to know about vocabulary.
	Group B		I want to know about grammar.
	Group C		





Table 6 shows that the students thought they liked other Thai students that grammar is really important if they want to be good at English, and vocabulary is also important. All student groups needed to know more about vocabulary and grammar.

Table 7: Opinions on the skills do you think are necessary to develop your English-speaking skills in the English presentation subject

The result	Group	Student No.	Student's opinions/words
Difference	Group A	1	Writing skills
	Group B	2	Reading skills
		4	Presentation skills
	Group C	3	Vocabulary skills
7		Pronunciation skills	
Similarity	Group A Group B Group C	All of the participants	The knowledge of the instructor is really important for this subject.

Table 7 can be concluded that the students need to improve their pronunciation skills, vocabulary, and presentation skills, respectively, whereas reading and writing skills are the least needed. The knowledge of the instructors is really important for this subject.

7. Suggestion

To be more effective in learning in English oral presentation, it should not be taught online, rather onsite is the best way to allow learners to use body gestures together with linguistics. The appropriate teaching method can reduce the problems of an oral presentation. The limitation of the study is that the native teachers should be given opinions on their teaching. For further study is to explore students' oral presentation problems, especially in an individual to be more details, and focused on the larger scope of participants not only English major but also other majors that will be useful to enhance a professional skill for learners to prepare themselves in an internship and future profession.





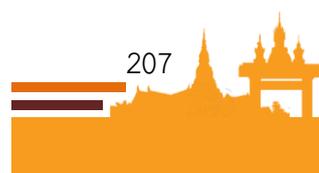
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COMPETENCY IN RESEARCH AND DEVELOPMENT OF TEACHING AND LEARNING INNOVATION OF HIGHER EDUCATION TEACHERS IN LAO PEOPLE'S DEMOCRATIC REPUBLIC

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Abstract

The paper was a preliminary study drawn from a major research project to explore the components of teachers' competencies in Research and Development of Teaching and Learning Innovation (RDTLI) in a university in Lao People's Democratic Republic. The collection of data was a two-step process, including 1) synthesizing 14 academic document papers and research related to RDTLI of higher education teachers; 2) determining the indicators of RDTLI of higher education teachers. The finding revealed that the three components of higher education teachers' competencies in RDTLI consisted of Knowledge competency with 7 sub-components with 31 indicators, Skills competency with 4 sub-components with 14 indicators, and Attributes competency with 3 sub-components with 12 indicators

Keywords: Teachers' Competency, Research, and Development of Teaching and Learning Innovation

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1. Introduction

In rapid and unexpected changes in the 21st century, it is necessary to develop teaching and learning innovation for preparing human resources in line with national socio-economic development. As higher education institutions are one of the most significant contributors to providing a range of services and facilities to attune to young people's outcomes and to create a labor force to compete in the global marketplace. The Government of the Lao Peoples' Democratic Republic (Lao PDR) has faced increasing demands to reform national education, thus the changes have been introduced to higher education institutions to meet the needs of a social new paradigm. Since 1996, the ten tertiary institutions have been harmonized to be the national university which was called the milestone of higher education reform (Bounheang Siharath, 2010). According to National Education Act, higher education defined in Article 17 refers to education following secondary, middle school levels, or equivalent offering the award of Associate, Bachelor, Masters, and Ph.D. degrees, to promote long-life learning, profession, science, and research (National Assembly, 2015, p. 6). For expanding the access to higher education institutions, the regional universities under the Ministry of Education and Sports (MOES) were established in the 2000s namely Champasack University (CU) in the South, Souphanouvong University (SU) in the north, and Savannakhet University in the center (MOES, 2015). Those regional universities perform an important role in contributing offering several majors, academic services for the communities, as well as research.

Research and Development (R&D) in education is a popular and vital strategy for educational development and reform that is a process aiming to find a new science through basic research and applied research to improve the quality of educational practices (Brog & Gall, 1979). In other words, R&D-scientific work being taken on a systematic basis-has been proved to play a significant role in improving economic growth as well as applications of increasing new knowledge in various fields, especially science, technology, and advanced education. Besides, the higher education institutions as teaching universities have been transformed into a combination of teaching with research improving conditions for innovation and operating as a source of new knowledge and technological discoveries for societies (Government, 2015, p. 6). The universities are also responsible for both supporting teachers' skills and competencies for R&D-related skills and soft skills through education and training programs to improve innovation performance and transform their practices to prepare graduates to meet the needs of societies and businesses.

The importance of conducting educational research is recognized by the Government of Lao PDR as mentioned in Strategy 3: Support science research, technology development, and technical services to meet socio-economic development needs in





higher education institutions (HEIs) of the Education Sub-Sector Development 2016-2020. The objective of this strategy aims to increase the capacity for quality research, technology, innovation, and technical services under key activities, namely providing training in research methods and publishing research for higher education researchers, proposing to the government to consider the policy and strategy for science research and research management, encouraging HEIs to set up science research centers, increasing funding for science research funding for publication in national and international journals, supporting social-technical services based on research finding to inform socio-economic development planning, and conducting a review of regulations to identify and make recommendations on reducing for overcoming barriers within a research-implementation process (MOES, 2015, p. 68).

According to the Lao higher education institutions, the barriers to the development of R&D practices relate to individual initiatives workload, inexperienced peer researchers, insufficient training, and inconsistent institutional coordination and approach (MOES, 2015; DHEIs, 2011). Even though conducting research is a crucial task for teachers at a higher education level, the primary obstacles for research development are the teaching workload and insufficient research team members (DHEIs, 2011). These barriers can arise in connection with resources, teachers' professional development levels, organizational environmental features. One interesting finding was that novice researchers have not participated in the training due to a lack of competencies (Boutphomvihanh, 2011). This finding is consistent with that a study of Sengkhambhouklavong (2006) on the development model of researchers in Lao Universities revealed that there was a high level of need and satisfaction of competencies, especially knowledge and skills, but the attributes were at a medium level. Based on the previous studies, there was a gap in investigating teachers' competency regarding R&D to foster innovation that can be utilized in practices. Therefore, the teachers' competencies in R&D of teaching and learning innovation need to be detailed and developed in their indicators of them.

This paper is looking at bridging the gaps between teaching and R&D and is part of a big research project attempting to overview and synthesize higher education teachers' competencies in R&D of teaching and learning innovation in a university in the Lao People's Democratic Republic.





2. Objectives

2.1 To determine competencies in R&D of teaching and learning innovation for higher education teachers in a university in Lao People's Democratic Republic

2.2 To synthesize the indicators of higher education teachers' competencies in R&D of teaching and learning innovation

3. Literature Review

The study reviewed and synthesized relevant documentation and research studies concerning competency in R&D, instructions, teaching and learning management, and innovation in the education field of higher education teachers at the national and international levels. R&D competency can be defined as an ability acquired by a knowledge searching process to discover answers to inquiries or solutions to issues consisting of three main components: research knowledge, research skills, and attributes (Best, 1981; Bounphen, 2018; Bundit 2020; Freeman, 1998; Jamjeang, 2013; Paulson, 2001; Phayvanh, 2019; Phounsili, 2011; Saythong&Saythong, 2017; Sriphayroch, 2015; Somxay Kitirat and Jinnawatra, 2020; Souvanno, 2017; Supriyanto, Harti, Syamsudin, and Sutoya, 2019; UNESCO, 2015).

The concept of teaching and learning innovation of teachers can be defined as a component that improves educational institutions' conditions fostering new ideas of teaching and learning, and teaching professional development in organizations. The competencies of teachers in transforming new ideas and knowledge into new teaching processes and systems illustrate the competencies to innovate. Developing innovative ideas or knowledge through conducting research, especially R&D in educational institutions has become a priority and an essential source of effective services and products for competitive labor forces.

Several educators proposed different processes for determining the core competencies of certain tasks for each organization (Swanburg, 1995; Paiwitayasiritham and Phonpanthin, 2016). In addition, Paiwitayasiritham and Phonpanthin (2016) indicated that there are several methods for developing research competency, including mentoring and coaching (providing research experts and model teachers), arrangement of research workshops, research practices, research environmental arrangements, such as information technology for research, lessons learned, and a network system to collaboratively do study and learn from good researchers. Moreover, Swanburg (1995) also claimed that several methods of competency study in a specific task should appropriately consider on need assessment of competency from a targeted group, determining competency in task analysis by identifying content and task goal of existing jobs, and classifying each of



description task for helping in need determining, and determining competency or targeted development systematically (systematic competency analysis), expert judgment, and theories grounded.

4. Conceptual Framework

To study the competency in R&D of teaching and learning innovation of higher education teachers in Lao PDR, the concept framework

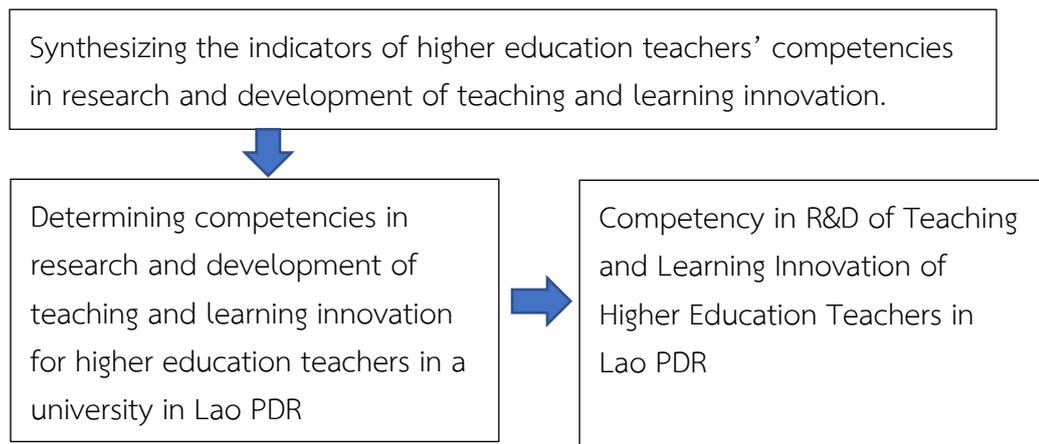


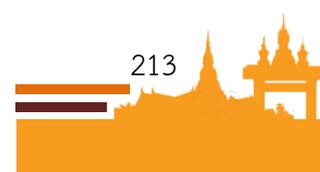
Figure 1: Conceptual Framework

5. Research Method

The 14 relevant educational and academic documents for developing indicators of teachers' competency in R&D of teaching and learning innovation at a higher education level were examined (Best, 1981; Bounphen, 2018; Bundit 2020; Freeman, 1998; Jamjeang, 2013; Paulson, 2001; Phayvanh, 2019; Phounsili, 2011; Saythong&Saythong, 2017; Sriphayroch, 2015; Somxay Kitirat and Jinnawatra, 2020; Souvanno, 2017; Supriyanto, Harti, Syamsudin, and Sutoya, 2019; UNESCO, 2015). These primary sources are drawn from Lao PDR and international contexts. The research method was divided into two steps as follows:

Step1: Synthesize the R&D-related academic document papers and research and competencies of teachers at a higher education level. In this step, the researcher analyzed 14 academic document sources, and synthesized the indicators of higher education teachers' competency in R&D of teaching and learning innovation in higher education.

Step 2: Determine the indicators of R&D of teaching and learning innovation of teachers at a higher education level in Lao PDR. The indicators were analyzed using the content analysis approach from the sources and assessed the frequency of more





than 50 % of them for drafting the indicators of R&D of teaching and learning innovation in a higher education institution in Lao PDR.

6. Results of the research paper

The result of the study revealed that the competence of the teachers in R&D of teaching and learning innovation in a higher education institution has three-core competencies: knowledge, knowledge, and attribute competency with 14 sub-components and 58 indicators. Knowledge competency has 7 sub-components with 31 indicators; Skills competency has 4 sub-components with 14 indicators; Attribution competency has 3 sub-components with 12 indicators as follows:

Table 1: Indicators of Higher Education Competence in R&D in Teacher and Learning Innovation

Component	Sub-components	Indicators
Knowledge	K1 Understanding Introduction	K1-1 know background of research
		K1-2 know problem identification
		K1-3 know the key objectives of interest
		K1-4 know how to make research questions and/or hypothesis
		K1-5 know the scope of research
		K1-6 know the benefit of research
	K2 Understanding Literature review	K2-1 know aim to define in the literature review
		K2-2 Know discipline and scope of research
		K2-3 know how to search sources
		K2-4 know related and relevant sources critically
		K2-5 know a conceptual and theoretical framework
	K3 Understanding research methodology	K3-1 Know methodology approach
		K3-2 Know instrument design
		K3-3 know about the sample section
		K3-4 know data collecting
		K3-5 know the ethical issue

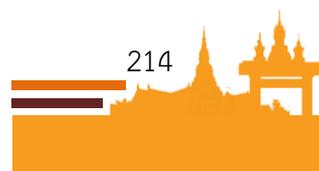




Table 1: (Cont.)

Component	Sub-components	Indicators
	K3 Understanding research methodology	K3-6 instrument validity and reliability
		K3-7 know statistics for analyzing data
	K4 Understanding result and discussion	K4-1 know technical terms in statistical analysis
		K4-2 know indicating a significant result
		K4-3 know how to interpret and explain the result
		K4-4 know justify research approach
		K4-5 know critically evaluate a research study
	K5 Understanding conclusion	K5-1 know summarizing introduction, key finding, the outcome in a conclusion section
		K5-2 know acknowledge limitations and make recommendations for future work
	K6 Understanding research writing	K6-1 know how to write a research proposal
		K6-2 know how to write references
		K6-3 know plagiarism
		K6-4 know how to write a full paper
	K7 Understanding dissemination	K7-1 know how to disseminate the result of teaching and learning innovation
K7-2 know where to disseminate R&D in teaching and learning innovation		
Skills	S1 Language skills	S1-1 ability to comprehend the main idea of documents and literature review
		S1-2 ability to translate international research and journals
		S1-3 ability to write concise and appropriate contexts





Table 1: (Cont.)

Component	Sub-components	Indicators	
		S1-4 ability to cover each part of a research	
		S1-5 ability to write research and for publication	
	S2 Communication skills	S2-1 ability to discuss with advisors on research	
		S2-2 ability to build a friendly relationship with the target people to collect research data	
		S2-3 ability to present research	
	S3 Technology skills	S3-1 ability to search and save sources	
		S3-2 ability to analyze data	
		S3-3 ability to present the result of research	
		S3-4 ability to design in the dissemination	
	S4 Planning and management skills	S4-1 ability to make a plan for achieving research accomplishment	
		S4-2 ability to manage validity and reliability instrument	
		S4-3 ability to manage time and place for collecting data with the sample group	
		S4-3 ability to organize time for meeting deadline	
	Attributes	A1 Inquisitiveness	A1-1 enjoy striving knowledge about research
			A1-2 like searching knowledge and information continuously
			A1-3 love seeking to explore other fields to find the appropriate solutions for scientific problems

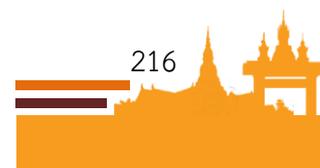




Table 1: (Cont.)

Component	Sub-components	Indicators
	A2 Adaptability	A2-1 take responsibility for all research processes
		A2-2 accept others' recommendations in the changing process
		A2-3 modify a research focus moving to a new opportunity
		A2-4 have good attitudes in actively participating with a research team
		A2-5 recognize self-capacity in successful R&D
		A2-6 recognize the opportunity to seek the truth and reflect the benefit for the community
	A3 Innovativeness	A3-1 looks at something with a new perspective
		A3-2 Extend or improve to an existing pedagogy in a different view
		A3-3 Find something new solution for developing research

The Table shows the three core components, including Knowledge, Skills, and Attributes with 14 sub-components and 57 indicators of higher education teachers' competency in R&D of teaching and learning innovation in a university in Lao PDR.

The details were as follows:

1. Knowledge

The knowledge competency of higher education teachers in R&D of teaching and learning innovation in a higher education institute in Lao PDR covered: K1-Understanding Introduction consisting of: K1-1 know background of research, K1-2 know problem identification, K1-3 know the key objectives of interest, K1-4 know how to make research questions and/or hypothesis, K1-5 know scope of research, K1-6 know benefit of research ; K2 Understanding Literature review: K2-1 know aim to define in literature review, K2-2 Know discipline and scope of research, K 2-3 know how to search sources, K 2-4 know related and relevant source critically, K 2-5 know a conceptual and





theoretical framework , K3 Understanding research K3-1 Know methodology approach, K3-2 Know instrument design, K3-3 know about sample section, K3-4 know data collecting, K3-5 know ethnical issue, K3-6 instrument validity and reliability, K3-7 know statistics for analyzing data methodology; K4 Understanding result and discussion, K4-1 know technical terms in statistical analysis, K 4-2 know indicating significant result, K 4-3 know how to interpret and explain the result, K4-4 know justify research approach, K 4-5 know critically evaluate research study; K5 Understanding conclusion: K 5-1 know summarizing introduction, key finding, outcome in a conclusion section, K 5-2 know acknowledge limitations and make recommendations for future work; K6 Understanding research writing: K6-1 know about how to write a research proposal, K6-2 know about how to write references, K6-3 know plagiarism, K6-4 know about how to write full paper; K7 Understanding dissemination: K7-1 know how to disseminate the result of teaching and learning innovation, and K7-2 know where to disseminate R&D in teaching and learning innovation.

2. Skills

The skills competency of higher education teachers covered: S1-Language Skills, consisting of S1-1 ability to comprehend the mean idea of documents and literature review, S1-2 ability to translate international research and journals, S1-3 ability to write concise and appropriate contexts, S1-4 ability to covering each part of research, S1-5 ability to write research and for publication; S2 Communication skills, S2-1 ability to discuss with advisors on research, S2-2 ability to build a friendly relationship with the target people to collect research data, S2-3 ability to present research; S3 Technology skills, S3-1 ability to search and save sources, S3-2 ability to analyze data, S3-3 ability to present result of research, S3-4 ability to design in dissemination; S4 Planning and management skills, S4-1 ability to make a plan for achieve research accomplishment, S4-2 ability to manage validity and reliability instrument, S4-3 ability to manage time and place for collecting data with sample group, S4-3 ability to organize time for meeting deadline

3. Attributes

The attributes competency of teachers refers to the quality of teachers as researchers comprising three sub-components, namely inquisitiveness, adaptability, and innovativeness. A1-Inquisitiveness, consisting of A1-1 enjoy striving knowledge about research, A1-2 like searching knowledge and information continuously, A1-3 love seeking to explore other fields to find the appropriate solutions for scientific problems; A2 Adaptability: A2-1 take responsibility all research processes, A2-2 accept others' recommendations in the changing process, A2-3 modify research focus moving to a new opportunity, A2-4 have good attitudes in actively participating with a research team,





A2-5 recognize self-capacity in successful R&D, A2-6 recognize the opportunity to seek the truth and reflect the benefit for the community; A3-Innovativeness, consisting of A3-1 looks at something with a new perspective, A3-2 Extend or improve to an existing pedagogy in different views, A3-3 Find something new solution for developing research.

7. Conclusion and Discussion

Components of teachers' competency in R&D of teaching and learning innovation in higher education level were analyzed using document analysis through various academic sources in Lao, and international contexts from 14 sources for determining components, sub-components with indicators of competency. The research findings revealed that there are three core competencies, namely knowledge, skills, and attributes competency in R&D of teaching and learning innovation in a higher education level in the context of Lao PDR. This pattern of research is consistent with the previous concept of Swanburg (1995) that there are several methods to study competency in a specific career or task, the consideration of appropriate methods, such as determining competency in task analysis, identifying contents and task goals of existing jobs, and classifying each description task for helping in need determination; and determining competency or targeted development systematically. The three competencies of R&D of teaching and learning of teachers in the present study consist of Knowledge competency with seven sub-components and 31 indicators; Skills competency with four sub-components and 14 indicators; Attributes competency with three sub-components and 12 indicators. The finding is similar to those of a study carried out in Best (1981) which revealed that teachers' skills competence in research is determined in three core competencies include knowledge, skills, and attributes becoming a crucial element because these competencies are in the individuals or have been developed for achieving the objective of implementing specific work. Furthermore, Phayvanh (2019) proposed classroom research competency for high school teachers in Lao PDR that the teachers' competency comprises research knowledge and skills competency in research, and research attributes with knowledge of the research regulation, scopes of problems and introduction, literature review, knowledge of methodology, data analysis, report writing, and recommendations and suggestions for further studying and implementation; and attribute competency containing inquisitiveness, academic critique, responsibility, and research ethics. The findings from this project suggest that R&D of teaching and learning innovation in a particular university remains underdeveloped compared to other studies. The university might therefore provide infrastructure and funding to encourage larger-scale work. An investment and efforts





would facilitate a process for developing teachers' competence in R&D of teaching and learning innovation to achieve benefits for the individual university.

8. Suggestions

Application of Research Findings

1. Researchers at Lao higher education institutions should use these components and indicators for testing Item Objective Congruence (IOC) and develop a model or curriculum for enhancing competency in R&D of teaching and learning innovation of higher education teachers.

2. Administrator or related stakeholders should consider the need for competency in R&D of teaching and learning innovation for higher education teachers to meet the teaching and learning in the 21st century.

Recommendations for Future Research

1. Those who are interested in the competency in R&D of teaching and learning innovation of higher education teachers in Lao PDR should analyze the gap between needs and expectations for determining significant competency for developing models or curricula in quantitative research.

2. This research study was a qualitative design, therefore, an experimental design in applying the competency in R&D of teaching and learning innovation to see its need assessment and effects is recommended. The analysis enables stakeholders to see whether R&D of teaching and learning innovation of higher education teachers may enhance their competency when conducting through experimental study.

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AN EXPLORATION OF UNDERGRADUATES' PERCEPTION AND ENGAGEMENT TOWARD USING ELECTRONIC PORTFOLIOS AT A UNIVERSITY IN SAVANNAKHET, LAO PDR

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Abstract

The study aims to explore the perception of 28 undergraduate students of a university in Savannakhet, Lao PDR toward the implementation of an electronic portfolio. The opinions toward the use of electronic portfolios in an online classroom, the patterns of student engagement, and the factors that influenced student engagement with the electronic portfolios were collected using qualitative data. The results revealed that students perceived an electronic portfolio as a self-improvement gauge, a learner-centered depository, and a showcase of reflections. The study offers some suggestions for improving students' experience with the electronic portfolio as a method of assessment at a higher education level.

Keywords: Electronic Portfolio, Assessment, Students' Perception

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1. Introduction

The disruption caused by the current Covid-19 pandemic is unprecedented, and the resulting economic and social measures have brought a massive change throughout the world (Krishnamurthy, 2020, pp. 1-5). To mitigate the spread of the virus, governments around the world have imposed social distancing measures, lockdowns, and cessation of personal contact outside immediate households. The pandemic is thus having a huge impact on educational activities. In a matter of weeks, entire education systems from elementary to higher education had to completely transform activity to evolve to an online teaching-learning scenario (Mishra, Gupta, & Shree, 2020, pp. 1-8). According to UNESCO, higher education institutions (HEIs) were closed completely in 185 countries in April 2020, affecting more than 1,000 million learners around the globe (Marinoni, Van't Land, & Jensen, 2020).

The reality of the new normal, disrupted by COVID effects, has involved a radical transformation of education and training, and one of the sectors undergoing dramatic digital transformation is global higher education (Dwivedi, Hughes, & Constantiou, 2020, p. 55). The sudden forced closure of face-to-face teaching has led academics and students into “unfamiliar terrain” due to the need to adapt swiftly to total e-learning settings (Carolan, Davies, & Crookes, 2020, p. 46). This sudden change has required universities to evolve toward online teaching, implement, adapt the technological resources available, and involve professors and researchers who have very little experience, in many cases no technology experience. The university system must provide quality education in a scenario of digital transformation, disruptive technological innovation, and accelerate change in the educational framework. The emergence of disruptive innovation is a time of risk and uncertainty, but it is also a time of opportunities to bring talent and innovation to the education system.

In response to significant demand, various higher education programs have adopted technology resources such as emails, the internet, course web pages, computer simulations, as well as free online learning platforms, including electronic portfolio platforms. Electronic portfolios are gradually becoming an increasingly common component of higher education programs and becoming a part of a blended learning environment. At the same time, many professionals are currently being required to build electronic portfolios to demonstrate continuing learning for maintaining employment, seeking promotion, and applying for new positions. Teacher education courses are among the higher education programs where students were able to incorporate electronics and databases for storing, sorting, viewing artifacts experiences, reflecting on activities and products that the student experiences and generates in a social context. In addition,





electronic portfolios provide constructive feedback to foster guidance and monitor students' learning progress and achievement. In terms of assessment, electronic portfolios provide the students with authentic, reflective, interactive, and individual features, and all of these attributes have advantages over examinations and computer-assisted, multiple-choice forms of assessment (Chang, 2001, pp. 435-458). Much of the evidence and research studies available on the use of electronic portfolios agreed that electronic portfolios have the potential to engage students and promote deep learning in higher education levels in many countries

University administrators can also benefit from the use of electronic portfolios. According to Reese and Levy (2009), schools can use students' electronic portfolios to demonstrate that they are meeting certain accredited requirements or internal academic standards. In addition, department heads can use electronic portfolios to evaluate their students' strengths and weaknesses so they can make curriculum changes if necessary to help them better achieve desired outcomes. In this way, electronic portfolios provide a strong centralized source for administrators to refer to when assessing students' performance and the effectiveness of their programs. Electronic portfolios give students another avenue to show potential employers their abilities. An academic transcript does not always tell the full story of a person's skill set, but electronic portfolios allow people to fill in gaps and demonstrate soft skills that are not overtly apparent on a résumé (Ferns & Comfort, 2014, pp. 269-280).

Electronic portfolios are also an effective way to enhance the utility of digital devices. Having these resources in one place allows peers and employers to match a name and face with the achievements, evidence, and artifacts that indicate a promising candidate for hire or promotion. In addition, electronic portfolios are a great way for students to demonstrate learning pathways or series of skills that students achieve by following a "path" of linked objectives or competencies. Similarly, electronic portfolios are a great method to help students demonstrate increased competency in different subject areas. Organizations can also use electronic portfolios to aid in employee performance and collaboration, inspire organizational growth through professional development, and establish goals for leadership (Andriotis, 2017). According to a survey of 318 employers, 83% said that electronic portfolios are useful in ensuring job applicants have the knowledge and skills needed to succeed in their company (Hart Research Associates [HRA], 2013).

The integration of electronic portfolios into the classroom in a university in Savannakhet, Lao PDR has not been introduced yet and the research conducted to date focuses very little on student engagement of the value of the electronic portfolio to their learning in the context of Lao PDR. Therefore, the electronic portfolio must be



required to explore how Lao undergraduates actively engage in their learning during the pandemic crisis, and the perceptions of undergraduate students of a university in Savannakhet, Lao PDR toward the use of electronic portfolios.

Definitions of Electronic Portfolios

An electronic portfolio is simply a file management system, a place to store electronic artifacts. Others see it as a web display tool for student artifacts, as an official document of student achievement, or as an assessment tool (Lewis & Fournier, 2009). In technical terms, an electronic portfolio is, “a digitized collection of artifacts including demonstrations, resources, and accomplishments that represent an individual, group, or institution” (Lorenzo & Ittelson, 2005). Johnson and DiBiase (2004, pp. 18-26) added that an electronic portfolio consists of “evidence of, and reflections upon, their curricular and co-curricular achievements” (Barrett, 2000, pp. 14-21)

An electronic portfolio is more than a simple collection; however, it can also serve as an administrative tool to manage and organize work created with different applications and control who can see or discuss the work. The benefits of an electronic portfolio typically derive from the exchange of ideas and feedback between the author and those who view and interact with the electronic portfolio. In addition, the author’s reflection on the work inside an electronic portfolio helps create a meaningful learning experience (Greenberg, 2004, pp. 28-36). There are features that electronic portfolios share an organized collection, comprising digitized artifacts, seeking to provide an authentic record related to an individual’s status, particularly associated with learning. Another definition by the (US) National Learning Infrastructure Initiative 2003 identified that a portfolio is “a collection of authentic and diverse evidence, drawn from a larger archive representing what a person or an organization has learned overtime on which person or organization has reflected, and designed for presentation to one or more audiences for a particular rhetorical purpose” (Barret, H., Carney, J., 2005).

Importance of Electronic Portfolios to Education

Electronic portfolios can help learners develop deeper learning resulting in higher achievement, a better sense of themselves as students and as individuals, sharing with friends and family members, and showcase learners’ achievements for employment. At present, electronic portfolios are widely used in teachers’ work both for students’ assessment and for personal development. Portfolios in education are natural to be a means for student assessment and a learning process (Barret, H., 2005). In addition, Herman and Winters (1994, pp. 48-55) noted that a portfolio is a well-designed portfolio that represents important, contextualized learning that requires complex thinking and expressive skills. Traditional tests have been criticized as being insensitive to local curriculum and instruction and assessing not only student achievement but aptitude.





Portfolios are being heralded as vehicles that provide a more equitable and sensitive portrait of what students know and can do. Portfolios also encourage teachers and universities to focus on important student outcomes, provide parents and the community with evidence of student achievement.

Using electronic portfolios or digital portfolios have become a very useful tool these days at different kind of works and everyday life. Electronic portfolios have developed from paper-based portfolios and are being increasingly used internationally throughout the education system for students at primary, secondary, and tertiary levels, as well as for teachers. Within education, they are used as tools for learning, assessment, and professional development. They can also be used for interviews, employment, and career development beyond the education settings (Beka, & Gallareva, 2016, pp. 32-42).

Mcalpine (2005, pp. 378-385) also lists several benefits that are provided by using portfolios, such as improving the assessment validity, accessibility, reliability, process, and speeding up the appeals process. The use of portfolios for assessment is gaining popularity in higher education, providing a rich resource for both students and faculty to learn about the achievement of important outcomes over time, make connections among disparate parts of the curriculum, gain insights leading to improvement, and develop identities as learners or as facilitators of learning. Some specific pedagogic benefits of electronic portfolios have been identified as 1) authentic learning, where learning is more meaningful when it is linked to real-world experiences (Buzzetto-More, N., 2010, pp. 61-85); 2) experiential learning, where 'learning is by doing rather than through telling; 3) competency-based education, where instruction is outcomes-based using electronic portfolios as part of student learning outcomes-based performance assessment where assessment may include higher-order skills (Cooper and Love, 2007, pp. 267-292); and 4) lifelong learning, where learning is directed by the individual and guided by the individual's interests (Stephenie, Hewett, 2004, pp. 24-28).

A key advantage of using an electronic portfolio as an ongoing, accessible record of students' achievement, is the potential for demonstrating provided examples of graduate attributes, skills, and knowledge learned as part of their university experiences (Barret, 2000). Besides the advantages for supporting the process of professional learning and growth, using an electronic portfolio system for learning, self-assessment, and reflection, and for interaction with peers and teachers can be expected to enhance the quality of learning, and consequently, to impact the learning and learning achievements of students. Therefore, introducing an electronic portfolio component into an existing curriculum can significantly strengthen its potential for a positive impact on students' competencies. It was anticipated that the electronic portfolio would be a tool for students to document and accumulate evidence of attributes and skills required by employers.





Finally, because an electronic portfolio is a student-centered activity in which the student is free to choose what artifacts are included and reflected on the process of their learning—they foster engagement and motivation (Tosh, Penny Light, Fleming, & Haywood, 2005). Research on student engagement with learning suggests that when students perceive that they have choices in how to learn they are more engaged and motivated to move beyond simple information acquisition to try to gain an understanding of the subject (Entwistle, & Karagiannopoulou, 2014, pp. 75-98). Electronic portfolios offer this opportunity for learner control and can support or promote deep learning as students can make connections between the learning that occurs in different contexts. Indeed, it is this recognition that learning occurs beyond the classroom that makes electronic portfolios attractive to many educators.

Although electronic portfolios have not been yet fully introduced at a higher education level in many countries, especially in Lao PDR, research studies related to an electronic portfolio in North America and Europe, with institutions incorporating portfolios as a key element of the student experience have focused on their uses to support students' experience, learning support, and assessment, or the documentation of capabilities. Professionals in many fields, such as design, writing, and photography, also kept portfolios to document personal development and to showcase their work. Once digital capabilities became more commonplace, the electronic portfolio has eclipsed its physical counterpart, while increasing the capabilities, functions, and portability of these collections. The electronic portfolio is now the platform that students can use to compile, organize, and formulate a digital presence across various types of media and can be updated and adapted over time for different purposes and audiences. According to Bolliger and Shepherd (2010, pp. 295-314), Electronic portfolios are widely used in higher education to help students develop critical thinking and problem-solving skills, as well as to prepare them to be lifelong learners. The value and potential of the electronic portfolios are garnering attention within higher education, and the Association of American Colleges & Universities has designated the electronic portfolio as a high-impact practice (Watson, Kuh, Rhodes, Light & Chen, 2016, pp. 65-69).

In addition, electronic portfolios are like regular portfolios which are tools to record student work. In addition, students can reflect on their work, which makes the experience of creating electronic portfolios meaningful.

Stakeholders' Perception on the role of electronic portfolios

The study aims to explore the perception and engagement of undergraduate students of a university in Savannakhet, Lao PDR after the implementation of an electronic portfolio in a course during the pandemic. The critical features of perception, engagement,





and student and institutional responsibility to improve students' engagement are discussed in the following section.

Teachers' perception

Teachers in a university in Savannakhet, Lao PDR seek to assist students to connect their learning experiences in different contexts, especially electronic portfolios during the pandemic. The electronic portfolio provides an opportunity to articulate their educational experience, including academic, workplace, and innovative competence. There has been large-scale evidence to support the use of electronic portfolios as tools for enhancing the professional development of teachers and students' learning engagement. For example, the college faculty members have positive perceptions toward the use of course portfolios. They also, positively perceive the usefulness of audit results of the course portfolio and show good intention towards using electronic course portfolios; however, they need more training and support to use portfolios effectively (Akleh, Aamall & Wahab (2020, p. 39). Although the implementation of electronic portfolios in universities in Savannakhet, Lao PDR has been not fully introduced yet, this preliminary study would be an example to prepare students to experience different ways of learning in universities and brings together stakeholders for proving program implementation, access to and reliability of the technology, and supporting of professional development.

Students' Perception

No study has been conducted to specifically determine the perceptions and engagement of the higher education students in Lao PDR. Based on various studies, results of analysis of undergraduate students at a university level revealed that students saw the benefits of using electronic portfolios. They keep current with innovations, serve as a tool for job search, a collection of materials for their best work, work collaboratively with peers and teachers (Kocogulu, 2008, p. 71). In addition, Payne, Paredes, & Cross (2020, p. 67) found that five themes were identified related to discovery (technology, e-portfolio as a process, e-portfolio as a product, age, and e-portfolios, and the multifaceted nature of e-portfolios) and four themes were identified characterizing the tips students had for developing electronic portfolios (showcase tips, technological advice, process guidance, and just say no to electronic portfolios). In addition, older students appeared to have less favorable attitudes about electronic portfolios. The study by Song (2021, p. 68) through an online survey of 226 students in a university in Singapore revealed a 5-factor structure: (1) perceived usefulness (PU), (2) organization (ORG), (3) collaboration (COL), (4) evaluation (EVA), and (5) perceived value of learning (PVL) were a good model fit. All the independent variables, except for evaluation, were positive and significant predictors of learners' PVL. Specifically, the ORG variable was the most influential predictor of PVL. In comparison, the PU variable was a relatively weaker predictor of PVL.



Factors influencing students' engagement

Understanding why students make active decisions to engage and disengage or adopt a state of inertia requires an investigation of who the students are and what issues they face in making these decisions. As the 2008 Bradley Report into Higher Education in Australia (Bradley, Noonan, Nugent & Scales, 2008) stated that course completion and student engagement are significant factors affecting an individual's completion. The level of support from teachers and institutions, course content, course satisfaction, and students' expectations and personal circumstances are also important factors. Institutions can influence some, but not all, of these factors to produce a more favorable outcome. Student engagement is complex and individual; there is not a simple on/off switch, or magical formula to engaging students. Ultimately it is the students' responsibility to engage within an environment provided by the institution that provides the most favorable conditions for engagement. Student engagement also varies over time, within individual tasks and during a course or program of study.

The five factors that support and impede student uptake and engagement are as follows: 1) A high level of academic challenge: challenging intellectual and creative work is central to student learning. The promotion of high levels of student achievement is achieved by emphasizing the importance of academic effort and setting high expectations for student performance; 2) Student-faculty interaction: students learn how experts think about and solve practical problems by interacting with faculty members inside and outside the classroom; 3) Active and collaborative learning: students learn more when they are intensely involved in their education and asked to think about what they are learning in different settings; 4) A supportive campus environment: students perform better and are more satisfied at institutions that are committed to their success and cultivate positive working and social relations on campus; and 5) Enriching educational experiences: complementary learning opportunities in and out of class augment academic programs. Opportunities include diverse experiences, the use of technology, and work experience.

Student engagement in these five types of activities is considered educationally purposeful, as it is expected to lead to deep levels of learning and the production of lasting and measurable gains and outcomes (Kuh, Kinzie, Schuh, Whitt & Associates, 2005). Because the electronic portfolio documents student's accomplishments and successes during the learning process, students can readily review and reflect on their accomplishments (Pegrum & Oakley, 2017, pp. 21-34). This, in turn, can provide learners with the motivation needed to keep studying and investing effort (Bolliger & Shepherd, 2010, pp. 295-314; Welsh, 2012, pp. 57-83). Likewise, it helps them to maintain interest in the use of Electronic portfolios for professional purposes (Wakimoto & Lewis, 2014, pp. 53-58). The electronic portfolio also helps learners to set personal goals related to their learning and to establish





realistic objectives, as well as to identify short and long-term goals which are necessary to achieve their individual goals (Chang, Tseng, Liang & Liao, 2013, pp. 237-249; Ciesielkiewicz & Coca, 2013, p. 464). These are key strategies for effective lifelong learning (Laal, 2011, pp. 470-474).

Strategies for measuring student engagement

Measuring student engagement is an increasing requirement for administrators and academics (Coates, 2006). Measures include quantitative and qualitative indicators, such as how much students engage and the actual processes and practices of student engagement. A measurement of 'student engagement is suggested as a prominent indicator of the effectiveness of higher education. (Coates, 2006 July 26th, p. 28; Kuh, 2003, pp. 24-32) states that to assess the quality of the undergraduate education at an institution, good information about student engagement, such as time and energy students devote to educational activities inside and outside of the classroom and the policies and practices that institutions use to induce students to take part in these activities. However, as Harper and Quayle (2009) stated, "educators must have the requisite skills and expertise to analyze the campus environment and determine where gaps in engagement and achievement exist" Several strategies currently exist. For example, educators engage in self-reflection singularly or as a team before developing strategies to resolve student engagement issues (Baxter-Magolda & King, 2004). The process of self-reflection focuses attention on the limitations and strengths of the educator or team that either facilitate or impede student engagement. Self-reflection should be a core process for teachers and teaching teams undertaken during and at the end of teaching sessions.

Another strategy for educators and researchers is to listen to students to understand how to enhance their educational experiences and improve engagement. Harper and Quayle (2009) contended that "barriers to achievement and engagement can result from making decisions without qualitative input from students". In summary, Harper and Quayle (2009) stated that "in an era in which student engagement is receiving increasing attention, providing undergraduates with numerous, sustained opportunities to participate actively in determining the appropriate methods for enriching their academic and social experiences in higher education cannot be overstated". The listening process, however, requires more than quantitative surveys; it requires a conscious decision to listen to all those students have to say and to provide tools that empower students to communicate their opinions and needs.

Universities wishing to use data on student engagement to validate the provision of a quality learning experience and investment often find that "the lack of a context-sensitive instrument to measure student engagement is an important gap in the information" (Coates, 2006, p. 28). This paper seeks to better understand student





engagement by providing a sense of the context (an electronic portfolio), which enables a clearer appreciation of student decisions to engage and disengage.

There are various types of assessment for which the electronic portfolio can be used successfully. First, it can be used as a formative and/or summative evaluation tool in the classroom (Strivens, Baume, Grant, Owen, Ward, Nicol, 2009). Cummins and Davesne (2009, pp. 848-867) asserted that the electronic portfolio is better suited than standardized tests for student assessment, given the multitudinous and complex aspects of student learning. Program-wide assessment is also facilitated by the use of an electronic portfolio. Zhou and Helms (2015, p. 119) stated that “the documents, materials, and artifacts in the electronic portfolio are often used for accreditation and other course and program-embedded documentation for validation of learning by faculty and peer-review committees”

This study examined the engagement with an electronic portfolio of 28 undergraduate students enrolled in a Computer Multimedia Course within a four-year Bachelor of Education degree at a university in Savannakhet. This study reveals students’ perceptions of using the electronic portfolio and whether they engaged with the assessment tasks.

2. The Purpose of Study

This study examined undergraduate students’ perceptions and engagement as students participated in the electronic portfolio project in a classroom at a university in Savannakhet, Lao PDR.

3. Research Questions

The students’ perceptions and engagement with the integrating electronic portfolio were sought by asking the following questions:

3.1 What are the opinions toward the use of electronic portfolios in a classroom?

3.2 What were the patterns of student engagement with the electronic portfolios?

3.3 What factors influenced student engagement with the electronic portfolios?





4. Population and Sample

The participants consisted of volunteer third-year students (n=28) of their four-year degree program, majoring in computer multimedia enrolling in a Computer Multimedia Course in a university, Savannakhet Lao PDR. An introduction to the electronic portfolio was provided during a lecture by the researcher as an instructor of the course in the first semester of 2021.

5. Data Collection

The data collection methods selected for the study include document analysis, observation, interviews with students. The attitude survey consisted of a series of statements to which students are asked to express agreement or disagreement and was administered to gather student opinions of their experience with the electronic portfolio. The survey was delivered via an electronic survey accessed through Google form, a familiar technology platform for students. The focus group of five participating students was organized online to gain further insights into the topics discussed.

6. Findings and discussion

Category 1: Students' perceptions toward the electronic Portfolio

The findings of this study indicated that student opinions proved to be a critical factor in the engagement intentions of the students. It was expected that a positive opinion of the usefulness of the electronic portfolio, and its ease of use, would shape the students' opinions toward using the electronic portfolio. Conversely, negative opinions would increase student disengagement. Student opinions were formulated before the implementation sessions as preconceptions, were changed or reinforced during the workshop based on their initial supported engagement, and then again when students first used the electronic portfolio independently, and finally as part of their ongoing engagement. In response to the first research question, student opinions were polarized around five themes:

- 1) The usefulness of the electronic portfolio in helping them to get a job;
- 2) The usefulness of the electronic portfolio for their learning;
- 3) The motivational impact of the assessment task;
- 4) The time and effort required to make use of the Electronic Portfolio;
- 5) The ease of use of the Electronic Portfolio.

The findings are in line with the study by Muin & Hafidah (2021, p. 497) that confirmed the positive perceptions of using electronic portfolios in the teaching and learning process at a higher education level. The results, obtained through interviews and





a questionnaire, of the study of 16 undergraduate students in a university revealed that most participants demonstrated positive views toward the use of electronic portfolios, and acknowledged the benefits of utilizing electronic portfolios. They were extended to increase the motivational beliefs and self-efficacy, learn new things, accomplish the tasks effectively, give beneficial effects for the learning, and improve students' learning ability.

Category 2: Patterns of student engagement with the electronic portfolio

In response to the second research question, many students disengaged early in the implementation. The pattern of student engagement with the electronic portfolio has been one of initial engagement based on an assessment task, and then subsequent disengagement. Of the 28 respondents to the survey, only 13 percent used the electronic portfolio beyond the initial compulsory assessment requirements. The level of disengagement is highlighted as a disappointing outcome of the implementation process. The key decision points for student engagement included prior knowledge and experience, supported engagement, independent engagement, and ongoing independent engagement. Research suggests that students interact with educational software in different ways (Bangert-Drowns & Pyke, 2002, pp. 23-38) and that the time and energy students devote to educational purposes (Kuh, 2003) are the best indicators of their learning.

Category 3: Factors influencing student engagement with the electronic portfolio

In response to the third question, the factors that impacted student engagement with the electronic portfolio were their negative experiences in using the electronic portfolio. As discussed previously, the negative student opinions about the electronic portfolio were generally concerned with the usefulness of the electronic portfolio for their learning and employability, the motivational impact of assessment, the time and effort they believed the electronic portfolio would require and how easy the electronic portfolio appeared to be to use. Many students were not willing to invest time and effort into the electronic portfolio because they could not see any return on this investment. Instead, they made reasonable and logical personal decisions to put their efforts elsewhere. Students also feel they may be disadvantaged due to their technical ability. Some believe their technological ability would affect their grades as being assessed through electronic portfolios. The software and training provided by the university are needed to support and accommodate the needs and preferences of learners. A study by Coates (2005, pp. 25-36) suggested that the students ultimately hold the responsibility for their learning. Students who disengage from the learning experiences presented to them may not fully gain the skills and knowledge required to compete in the employment marketplace.





7. Conclusion

Technology is certainly a necessary part of any classroom, especially in this digital age and pandemic crisis. The use of an electronic portfolio for knowledge and skills development and management becomes part of the teaching and learning process at a higher education level. The sample size in the study was small and voluntary, and data was collected at a university in Savannakhet, Lao PDR, which may not sufficiently represent the perspectives of the student population in the university. According to the description of the study findings, participants described their experience influenced by using electronic portfolios and how it benefits their learning experiences and the problems they faced while using electronic portfolios. Electronic portfolios have many advantages over printed portfolios as they are easily accessible, with the ability to store multiple media, update, and reference the work of learners. There are also positive reflections on improving the quality of students' work. Through this type of work, with electronic portfolios, students would achieve to develop a professional working plan, reflect on their work, develop more skills in the use of technology for future professional development and have a clear review of their work. Implications for relevant stakeholders are the need to incorporate into existing curricula, electronic portfolios, to prepare future teachers with professional competence so they can be more creative and productive at work.

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IMPACT OF COMBINED FEEDBACK ON FEMALE UNIVERSITY STUDENTS' WRITING ACHIEVEMENT

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Abstract

This study examines the impact of combined feedback on female university students' essay writing achievement and investigates the attitudes of the students toward the use of combined feedback in writing. Twenty-one female students from one class were used as the sample group. Convenience sampling was used to select the participants. The research instruments included the combined feedback instructions, writing achievement test and semi-structured interview. The participants wrote four essays of five paragraphs. At the end of the intervention, they attended the interview. The findings revealed that the participants developed their writing significantly after both types of feedback were combined in the intervention. Based on the interview, they had positive perceptions toward the use of both types of feedback to develop their writing skill.

Keywords: Indirect corrective feedback, Writing, Female university students

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1. Introduction

Writing is recognized as one of the most difficult skills for the learner as it needs appropriate practice and training to be able to produce effective written work. Errors is considered as one of factors for writing development. This is because it is an essential component for learners' language learning process development (Li & He, 2017).

Many studies revealed that providing feedback is very crucial to help learners develop their writing ability and many studies have been conducted on corrective feedback in the recent years (Brown, 2007; Zanjan & Eslami, 2013). Feedback is recognized as one of the main components of the foreign language writing instruction because when learners receive constructive error correction, they understand their strong and weak points of their written work, nurturing their learning process (Zaman and Azad, 2012).

Content-based feedback means any comment emphasizing on whole-text issues of language learning: concepts or content, vocabulary, genre and register, argument, clarity of purpose and coherence in productive skills (Olson & Ratteld, 1987 as cited in Shobeiry, 2021). Studies showed the positive impact of content-based feedbacks over form-based feedbacks on motivation and essay writing skill of students (Rojab, 2017; Farrah, Zahida, & Zaru, 2014).

Corrective feedback is referred to as methods of teachers' responses to students by describing the writing issues that do not appropriate or accurate in the target language (Li & Vuono, 2019). Based on the literature review, there are two kinds of written corrective feedback that are direct and indirect written corrective feedback. Direct written corrective feedback refers to when the teachers see the errors produced by learners, they directly explains the learners with correct form of these errors (Bostanci & Sengul, 2018). Direct corrective feedback is useful for developing writing and learning competence (Sheen, 2007; Alroe, 2011; Guo & Barrot, 2019). According to Al-Jarrah (2016), some drawbacks of direct corrective feedback is that it may not good for long-term learning for students. When students know where the errors are and how to correct them, their cognitive effort may not be encouraged to process the correct answer. That is to say, it doesn't motivate students to learn some grammatical aspects in the target language.

For indirect corrective feedback, no explicit corrections are provided to the students, they give only clues or codes such as underlining, circling the errors (Eslami, 2014). According to Elashri (2013), there are two kinds of indirect corrective feedback. First, coded indirect feedback is provided to learners by underlining the error and marks the symbol on that error. The second one is uncoded indirect feedback. It is provided to learners only with underlining or circling the error (no symbols identifying the kinds of error). This will help stimulate the learners to fix errors on their own.





Studies revealed positive impact and student's perceptions of indirect corrective feedback to help improve students' language and writing abilities. Based on these studies, students who received indirect corrective feedback performed significantly better in essay writing than students who received direct corrective feedback (Lizotte, 2001; Moser & Jasmine, 2010; Alhumidi & Uba 2016). However, some researchers revealed that poor writers may not possibly point out and fix errors even though they were provided with error location (Srichanyachon, 2012).

The problem of the present study was the low level of English writing proficiency of students at Thaksin University. Based on the data of non-English majored students, the data revealed that most of them are struggling writers with poor grades in English writing, tend to exhibit negative views toward writing tests and writing instruction and low effort and English writing motivation in classroom. Thus, this research aim to combine feedback instructions to improve university students' English writing ability. With this regard, this study was designed to address the research objectives as detailed below.

2. Objectives of the Study

The two purposes of this study are:

2.1 To study the impact of combined feedback on female students' academic writing achievement

2.2 To explore female students' attitudes toward the use of combined feedback on writing

3. Research Methodology

Research design

A one-group design was conducted in this study to investigate the impact of the use of combined feedback on students' English writing ability. This study proposes an independent variable that is the combined feedback. The dependent variables were students' essay writing achievement and their attitudes toward the use of combined feedback on writing.

Population and Sample

The population in this study was 60 first-year students from the Faculty of Humanities and Social Sciences, Faculty of Law and Faculty of Education at Thaksin University in Thailand during the second semester of academic year 2020, as the course of "Read and Write in Basic English" (EN 0000122) is offered only during the second semester of every academic year. The Convenience sampling was employed in this study. Twenty-one female students from the same class were used as a sample group.



Research Instrument

The three instruments of this study were combined feedback instructions, essay writing achievement tests and semi-structure interview.

1. Combined feedback instructions

The combined feedback instructions were adapted El-Sakka (2017). The constructed model was checked by three experts and revised based on their suggestions. The pilot study was administered with first-year students majoring in English at Thaksin University.

The four participants were later interviewed for their feedback for improving the instructions prior to the intervention of the study.

In this study, the participants were required to write three drafts in order to receive feedback from the lecturer, and the fourth draft was to submit to the lecturer. In the first draft, the content feedback for content, organization, and development of essay writing was provided to them through writing comments. The use of lecturer written feedback helped the participants to recheck on global writing issues in the first draft. For the second draft, the students received encoded feedback for local changes. The lecturer only circled the mistakes without explanation for grammatical errors. In the third draft, the participants received the coded feedback: circled words with error correction using symbols. Then, the final draft was submitted for overall writing evaluation.

2. The pre-test and post-test of essay writing achievement and scoring rubric

An essay writing test was designed and were checked by three experts in the fields. The IOC result was higher than 0.6. The participants were given two hours to finish the pre-test and post-test. For inter-rater reliability, the Spearman's rank correlation coefficient was conducted after two raters rated students' writing tests. The inter-rater reliability for the pre-test was .933. For the post-test, the value of reliability was .912. The analytic scoring rubric for writing evaluation was adapted from the Michigan Writing Assessment Scoring Guide (2020).

3. Semi-Structured Interview Questions

The interview questions were conducted with four female participants after the use of combined feedback regarding participants' perceptions toward the feedback intervention and preferences for feedback types. The interview was conducted in Thai and took half an hour for each participant. The responses were audio-recorded and analyzed using content analysis. The questions were checked by three experts and some revisions were suggested by them. For example, "What do you think about the combined feedback?" or "Which types of feedback do you prefer to receive in the future?"



4. Data Collection

The female students were required to take a pre-test by writing an essay of 200 words. Four types of essay writing were classification, problem and solution, descriptive, cause and effect essays. Each participant was assigned four writing tasks for the whole semester. Then they received the combined feedback. For each writing task, the participants were required to write four drafts. In the first draft, the content feedback for content, organization and development of the essay writing was provided to them through writing comments. For the second draft, the students received encoded feedback focusing on local changes. The lecturer only circled the mistakes without explanation for grammatical errors. In the third draft, the participants received the coded feedback for form-based changes: circled words with error correction using symbols. The code sheet was explained and distributed to the participants prior to returning the third draft to them. Then, participants can ask questions while checking codes and looking at the feedback. The final draft was submitted to the lecturer for overall writing evaluation. At the end of the semester, the students took the post-test on essay writing. Finally, four female students voluntarily took part in the individual interviews to check their views toward the use of the combined feedback to develop their writing skill.

5. Data Analysis

The writing rubric was used to score the students' writing. The students' English writing ability was examined using four essay writing tasks. Each writing task was scored by two raters. The average score from both raters was analyzed in each writing task. Students' score from four writing tasks were analyzed by using Wilcoxon signed-rank test. The content analysis were used to transcribe and analyze the quantitative data from the semi-structured interviews of four students.

4. Research Results

Background information of the participants

Most of the students were 18 years of age and were first-year undergraduate students, comprising 17 participants (80.95%). However, four of them (19.04%) were aged 19-21 years. Eighteen participants studied English for 12-13 years. Three students had studied English for 14-15 years. In terms of English writing competency, fifteenth students viewed themselves as low level, six of them reported that they had the moderate level, and only one of them had high level of English writing competency.



Findings and discussion of research questions

Writing Achievement Results

The participants were required to write an essay of around 200 words based on the topic “Causes and effects of climate change.” Each students must write an essay before and after the implementation of the intervention. They were allowed for one and a half hours to complete the essay. All essays were evaluated using the evaluation form adapted from the Michigan Writing Assessment Scoring Guide (2020). There were five parts: cohesion and organization, task completion, mechanics, grammatical accuracy, and vocabulary to evaluate the written essay. 10 marks were full scores for each section, and the total score was 50 marks.

Based on the result, the mean score of the pretest was 24.70 and the standard deviation (S.D.) was at 1.98; the mean score increased to 33.96 and standard deviation (S.D.) reached 3.21 for the post-test.

Table 1: The comparison result of pre-test and post-test

		N	Mean	Sums
Post-test and pre-test	Negative	0a	.00	.00
	Positive	24b	10.00	240.00
	Ties	1c		
	Total	25		

a. post-test < pre-test, b. post-test > pre-test, c. post-test = pre-test

Table 2: Result of Statistics

	Post-Test and Pre-Test
Z	-3.941
Asymp. Sig. (2-tailed)	.000

** p < .01

Table 1 and 2 present the writing achievement between the pretest and posttest through the intervention. The result was lower than .01. It can be inferred that after the intervention, the writing achievement was different with a statistical significance at the .01 level. The result revealed that after the intervention of combined corective feedback, participants’ writing ability improved when compared between the pre-test and post-test.



Table 3: Result between the pretest and posttest based on each component of evaluation

Components of Evaluation	Tests	n	X	S.D.	Z	P-Value Sig. (2-tailed)
Cohesion and Organization	Pretest	25	5.70	0.50		.000
	Posttest	25	7.18	0.84		
Task completion	Pretest	25	4.60	0.41		.000
	Posttest	25	6.72	0.57		
Mechanics	Pretest	25	4.95	0.39		.000
	Posttest	25	7.07	0.68		
Grammatical accuracy	Pretest	25	4.65	0.36		.000
	Posttest	25	6.78	0.52		
Vocabulary	Pretest	25	4.85	0.54		.040
	Posttest	25	6.21	0.60		
Total	Pretest	25	24.70	1.98	-3.841	.000
	Posttest	25	33.96	3.21		

Based on Table 3, it shows that there are the significance difference levels between the pre-test and post-test are significantly different. This can be inferred that the students' overall writing score including each aspect of the writing evaluation improved. After the intervention, the highest mean score was in cohesion and organization part with mean score of 7.18, and a standard deviation (S.D.) was 0.84 for this part of the evaluation. The lowest means score was 6.21 in the vocabulary component.

The results of the students' attitudes toward the use of the combined feedback to develop their writing skill

Regarding the interview data, the combined feedback was useful. They gained more understanding on the writing process: this experience differs from what they had been taught about writing before.

They were all agreed that they liked this method, especially for the combined feedback was the lecturer and participants meeting as this encouraged them to gain more understanding of the their writing content. For some of low competent participants, they viewed themselves as weak in grammar, so they felt pressured and worried to receive the low marks from each writing assignment.





5. Discussions and Conclusion of the Findings

Research Question 1

For the first question, the results revealed that the writing achievement was at a statistical significance of .01 level. The results of this study are consistent with the studies conducted by Yamalee (2019) and Van Beunigen, De Jong & Kuiken (2012). It can be explained that the participants must plan and revise their written work for their errors according to the lecturer's written feedback, so that they have to carefully reread their own writing, leading to improving their written work.

Another explanation might be that there were two types of feedback that the participants received. Then, they had to detect and analyze errors, revise and edit their drafts and re-submit their revised essays, helping to improve their writing quality. For the students, they are more active in revising and improving their writing tasks after they received both feedback in the three drafts.

Research Question 2

Based on the result of the semi-structured interviews on the their attitudes toward the intervention, the students had the positive view of their lecturer's feedback, as they consider her as a person who can explain and provide feedback on their writing. The result also revealed that the students just perceived that grammar is not the whole thing that they must pay attention to, but the process of writing is very helpful when the feedbacks were received.

Students were willing to receive the lecturer's comments, even though some of them said that they were worried after seeing the lecturer's written feedback on the first draft. In terms of correcting grammatical errors, all of them viewed that it was useful when they received written corrective feedback with codes, as they had opportunities to revise their errors.

In addition, the student interviewees recognized the way that the lecturer implemented indirect corrective feedback with codes as a challenge due to the problem of solving nature eventhough at the beginning they seemed to be frustrated as they were not sure whether the correction of an error was really the right one. For example, S1 mentioned that:

“In the first time, I don't really like this type of feedback. It is difficult for me to know whether this tense is correct or not”.

Eventhough the indirect corrective feedback is not preferred by most students at the beginning, later their attitudes have changed as they see the positive sides of the indirect corrective feedback. They are encouraged to be more active and put more effort to find out the correct answers. For instance, S4 explained that:





“I know what is incorrect because I have to put more effort to find out what is incorrect.”

Regarding the types of feedback they would like to receive in the future, two of the students (50%) agreed on the direct feedback. This might be because of their learning preferences. But another two students (50%) preferred to receive coded indirect feedback, as they would like to understand more of which types of grammatical aspects they need to improve. As S3 stated that:

“ When I understand which grammatical errors I have, I can improve them.”

To conclude, it can be inferred from the findings that the participants improved their essay writing with the help of the lecturer’s written feedbacks and indirect corrective feedback. Both types of feedback perceived by students finally show positive views and feedback, as the feedback could strengthen students’ motivation.

6. Limitations and Recommendations for further studies

No control group was included in this study for result comparison and the sample size of the study was only twenty-one which is small. Thus, the use of control group and large numbers of students are more reliable for the quantitative data collection. In addition, future research can use data triangulation through including a questionnaire to gain information of learners’ perspectives regarding each types of corrective feedback. The limitations should be taken into consideration if the findings from this study are to be used in other contexts.

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DEVELOPING SUCCESSFUL TRAINING MODELS FOR SMALL BUSINESS SCHOOL IN THE NEW AGE: CASE OF QUANG BINH UNIVERSITY

Nguyen Van Chung¹

Abstract

Today, in the context of fierce competition in education at home and abroad as well as global education integration, along with extremely strict domestic and international standards, training disciplines need to always innovate according to keep up with the trend. However, achieving global competence in education is not a small challenge for small-scale educational institutions. Therefore, it is necessary now to have a clear roadmap as well as a clear model to help these educational institutions gradually keep up with the world trend to avoid being eliminated on the track. Within the framework of this research, we conduct a study for a fairly typical case that Quang Binh University is in the process of renovation to keep up with world trends in management training and education. This research try to developing trainings models for business school in the new age the case of Quang Binh University.

Keywords: Trainings models, Business school, Quang Binh University,
Competition in education

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1. Introduction

Today, along with the rapid development of the global economy, many challenges have been created for schools to train entrepreneurs of all classes. Many standards are set by prestigious organizations around the world for top schools. However, to meet the human resources for the development of the whole economy, it is necessary to have the presence of smaller business schools. Although the quality of these schools is still low, they have the potential to grow if they have access to modern educational standards earlier in this research we try to make a breakthrough for some schools small business. Set educational standards based on global standards, thereby helping them gradually improve their training capacity and help develop a more equal source of entrepreneurs.

2. Literature Review

Currently, in the world, there are many researchers interested in teaching innovation models according to different standards, including how Boyer's model has been applied in business faculties of member Vietnam institutes as well as how institutes are changing to meet standards. The findings of the study are the trends of the faculties and the lessons learned from their changing experiences (VO, 2021). A new model of management education is needed to better address the current and future management and organizational challenges of the corporate world. An alternative action learning-based model can solve real and complex business problems and conduct a powerful questioning process in small groups or groups of diverse people (Daniel Belet, 2019). Competition in education is fiercer than ever, requiring a young and responsive leadership team to cope with rapid changes, introduce cost-effective new Products and protect data. Pradnya Chitrao (2013) studies how Business-school programs can meet this challenge and strengthen emerging economies. Especially Jacqueline Brassey etc. (2017) proposed the ACADEMIES Framework including nine components in business strategy and successful human resource training in the organization. It emphasizes the learning function of an organization with a strategic role in five areas: Attract and retain talent, Develop people capabilities, Create a values-based culture, Build an employer brand, and Motivate and engage employees. Companies spend a lot on executive education but often get a meager return on investment. The main reason is that because business schools and other traditional educators are not adept at teaching the soft skills needed for success today, people don't always stay with organizations. They have paid for their training and learners are often unable to apply classroom lessons to their work (Mihnea Moldoveanu and Das Narayandas, 2019).



3. Conceptual Framework

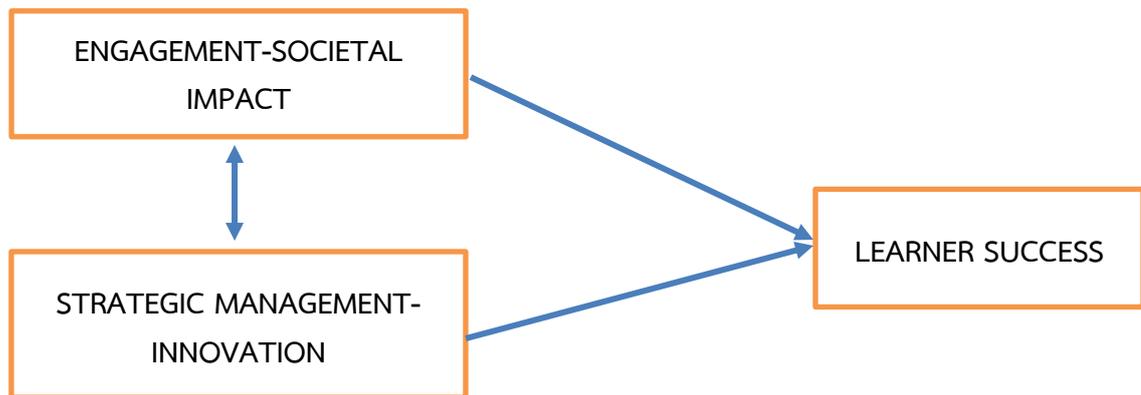


Figure 1: General model for business school in the new age (Adapt from AACSB, 2021)

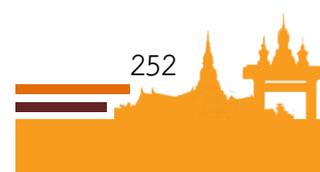
4. Research Methodology

Research is based on the criteria of AACSB from which to develop appropriate criteria for small business schools in the case of public universities. Data is taken from departments from 2017 to 2021. We survey data from alumni and employers within the last 5 years.

5. Results of the research paper

Strategic management and innovation

According to the AACSB Strategic Planning criteria, the school maintains a well-documented strategic plan, developed through a collaborative and robust planning process involving key input from the relevant parties; inform the school of resource allocation priorities. The strategic plan should also state a clear and focused mission for the school. Accordingly, QB University always has a development strategy as a public university, tasked with training high-quality human resources; carry out scientific research and technology transfer, serving the cause of socio-economic development of Quang Binh province and the whole country. For the business administration industry, it is to provide high-quality human resources in the economic field; develop students' learning and research capacity; practice working skills and lifestyle in a modern environment; transferring scientific research results into practice, meeting the requirements of the cause of industrialization and modernization of the country. The school regularly monitors its progress against planned strategies and expected outcomes and communicates its progress to key stakeholders. As part of monitoring, the school conducts a formal risk analysis and has a plan to mitigate the key risks identified. Although aware of the challenges in the



development process, there are still no concrete steps. In carrying out its mission, the university regards innovation as a key element of continuous improvement. Specifically, the business administration industry continuously improves the training program for 2 consecutive years based on the learners' evaluation of the training program and based on the employer's evaluation of the learners and the training program. The school demonstrates a commitment to positive social impact as demonstrated and supported by its focused mission and articulates how it intends to achieve this impact. Physical, Virtual and Financial Resources The school manages physical and technological resources to maintain school continuity and foster a high-quality environment that fosters the success of all involved in supporting the school's missions and expected results.

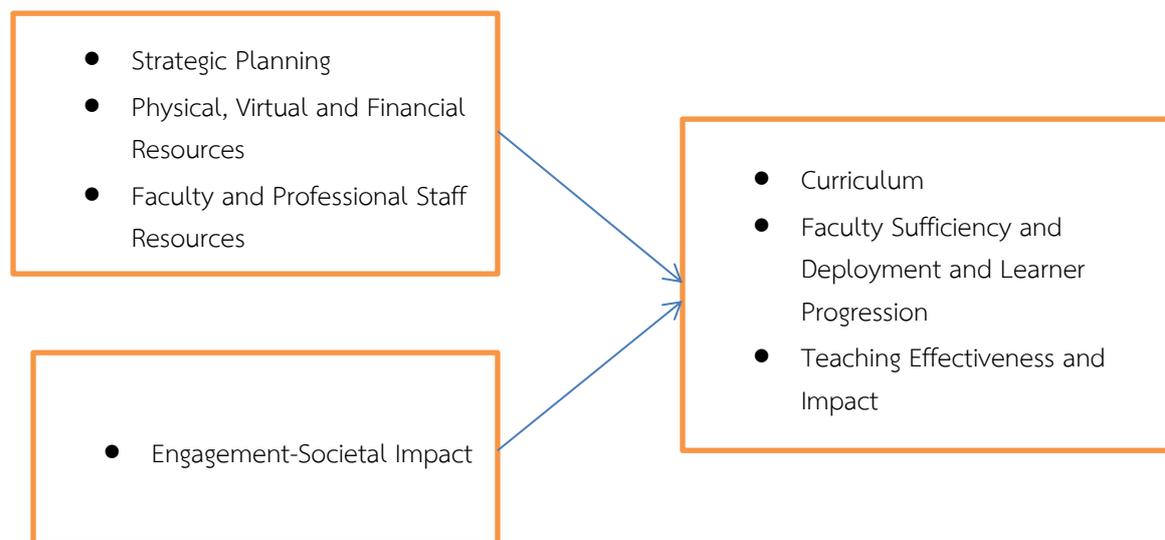


Figure 2: Diagram model for business school in the new age

Faculty and Professional Staff Resources

The College strategically maintains and deploys fully engaged and supportive faculty members who together demonstrate significant academic and professional engagement, thereby supporting consistent high-quality outcomes consistent with the school's mission. Accordingly, the Business Administration major always improves the qualifications of lecturers; nearly 37% of the number of lecturers has doctorate degrees.

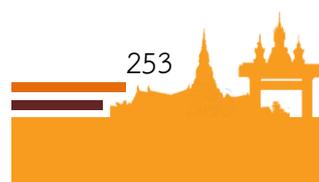




Table 1: Qualification of staff in Business Department

TT	Qualification	Quantity	Ratio (%)	Sort by sex		Sort by age (person)				
				Male	Female	< 30	30-40	41-50	51-60	> 60
1	Professor	0	0	0	0	0	0	0	0	0
2	Associate Professor	0	0	0	0	0	0	0	0	0
3	Doctor of Science	0	0	0	0	0	0	0	0	0
4	Doctor	7	37%	4	3	0	5	2	0	0
5	Master	11	58%	2	09	0	11	0	0	0
6	Bachelor	1	5%	0	1	0	1	0	0	0
	Total	19	100%	6	13	0	17	2	0	0

Learner success

The school has a systematic, multi-measure assessment process for ensuring quality of teaching and impact on learner success. The school has development activities in place to enhance faculty teaching and ensure that teachers can deliver curriculum that is current, relevant, forward looking, globally oriented, innovative, and aligned with program competency goals. Faculty is current in their discipline and pedagogical methods, including teaching diverse perspectives in an inclusive environment. Faculty demonstrates a lifelong learning mindset, as supported and promoted by the school. The school demonstrates teaching impact through learner success, learner satisfaction, and other affirmations of teaching expertise.

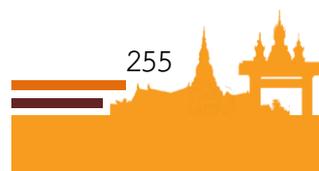




Table 2: Analyze and comment on survey results on employment and income

STT	CONTENT	RATIO (%)	RATE (%) (calculated on the total number of graduates)	
1	Current employment situation	Got a job	100%	100%
		No job yet	0	0
2	What area is your current office located in?	Government	0	0
		Private	47%	42%
		Foreign	18%	16%
		Self-employment	35%	32%
3	Is your current job suitable for the industry you are trained in?	Right field of training	18%	16%
		Related to the training industry	65%	58%
		Not related to the training industry	18%	16%
4	Level of satisfaction with current job	Very pleased	24%	21%
		Satisfied	53%	47%
		Relatively satisfied	24%	21%
		Unsatisfied	0%	0%
5	Satisfaction level of knowledge and skills trained at Quang Binh University (QBU) compared to current job requirements	Fully responsive	29%	26%
		Partially met	65%	58%
		Non	6%	5%

Most of today's students are able to find a job right after graduation. Specifically, 18% of students do right with their major and 65% of students work at institutes related to their major. However, still 18% of students find jobs unrelated to their training. 65% of graduates get a job with an income of over 6 million and 35% of students have an income of 4-6 million dong a month. The number of students who get a job right after graduation from 1 to 6 months 65%. 7 to 12 months is 6% and over 12 months is 25%. Only 29% of students after graduation fully meet the knowledge and skills trained at QBU compared to current job requirements. Meanwhile, 65% satisfy part of the knowledge and skills trained at QBU compared to current job requirements and 6% do not fully meet the knowledge and skills trained at QBU compared to current job requirements. Most students after graduation are quite satisfied with their jobs.





* Proposing solutions to improve job search opportunities for students: In order to improve the rate of finding job opportunities with the right majors, it is necessary to orient students to jobs right from the moment of admission and to adjust the training program more methodically to suit today's high-quality labor market.

6. Conclusion

To meet the standards of large educational institutions is a huge challenge for small business universities. However, that does not mean that small business universities cannot meet those criteria. Currently, schools are trying to stick to the criteria. This study has a special meaning as it establishes an educational development model for small-scale educational business schools such as Quang Binh University. From there, it helps these units have the direction to achieve their bigger goals in the future. The study came to some specific conclusions as follows:

Firstly, the small-scale educational business schools need to continue to raise the qualifications of their lecturers and strengthen the training of international certificates for their staff.

Second, it is necessary to continuously innovate the training program in accordance with the actual local needs to attract local enrollments.

Third, it is necessary to gradually meet international standards for training programs so that students from neighboring countries can be attracted.

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USING ENGLISH GAMES TO TEACH PRIMARY SCHOOL STUDENTS VIETNAMESE VOCABULARY DEVELOPMENT IN TUYEN QUANG PROVINCE TO ADAPT TO THE NEW NORMAL

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Doan Thi Thu Huyen²

Nguyen Thi Hong Chuyen³

Abstract

The article is based on the theory and results of the application of games in teaching in general and teaching English, in particular, to apply the design of some games to teach the development of Vietnamese vocabulary in English for primary school students in Tuyen Quang province to adapt to the new normal. We have developed design principles and proposed using three games in teaching Vietnamese in English for primary school students. From there, make the judgment: the games are suitable, effective and ensure the teaching and development of Vietnamese vocabulary in English for primary school students in Tuyen Quang province to adapt to the new normal.

Keywords: Using, English games, Vocabulary development, Tuyen Quang province, The new normal

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1. Introduction

The Resolution of the 8th Party Central Committee, term XI, identified the need to continue to strongly innovate teaching methods and aim at: “Focusing on teaching how to learn, how to think, encouraging self-study, creating a basis for learners to update and renew knowledge, skills, and capacity development” [1]. Innovating teaching methods in renovating general education towards modernity to meet the requirements of the times, the needs of national development, human resource development, and adaptation to society (the new normal). Since then, promoting positivity, initiative, creativity, and applying learners' knowledge and skills into practice is a very important task for teachers. To perform this task well, teaching methods innovation at each level, class, and subject is a prerequisite. [2]

In the general education program of Vietnam, English is one of the subjects that plays an important role in helping learners have a foreign language background to meet the requirements of international integration. [3,4]

Along with the development of science and technology and innovation in teaching methods, the English subject has also had a strong change in awareness-taking learners as the center and innovating teaching methods according to the direction increase practice time by creating communication space, learners work in groups, in pairs, ... under the direction of the teacher. [5,6]

At primary school, students' learning activities change from playing activities to learning activities. The way that students love to learn is the way “Learn to play, play to learn”. Extracurricular classes of Vietnamese in English, as well as English and many other subjects, have certain requirements, and the biggest difficulty for students when studying this subject is acquiring a new language while even the mother tongue (Vietnamese) does not have a specific understanding.

Therefore, in order to achieve the objectives of the subject, teachers need to have the flexibility to innovate teaching methods to attract students' interest and excitement in the Vietnamese extracurricular lessons in English, in general, and the focus is on learning vocabulary in particular. Realizing that one of the methods of teaching vocabulary that is highly effective in teaching English vocabulary for primary school students [7,8] can be applied in teaching Vietnamese in English. English, we choose to apply some games in teaching Vietnamese vocabulary development in English for primary school students.



One of the solutions to improve teaching effectiveness is to apply information technology to teaching and learning activities. This is consistent with the orientation of the Government [9], the Education and Training Sector, and practice in teaching activities [10,11]. IT is an important means to contribute to the innovation of school management and teaching methods; from these means, teachers can exploit, use, update and exchange information.

2. Objectives

2.1 Introduce Vietnamese language and culture training program to countries around the world.

2.2 Promote the strengths, overcome the limitations of Vietnamese language and culture for foreigner program, help the module to develop more and more.

3. Conceptual Framework

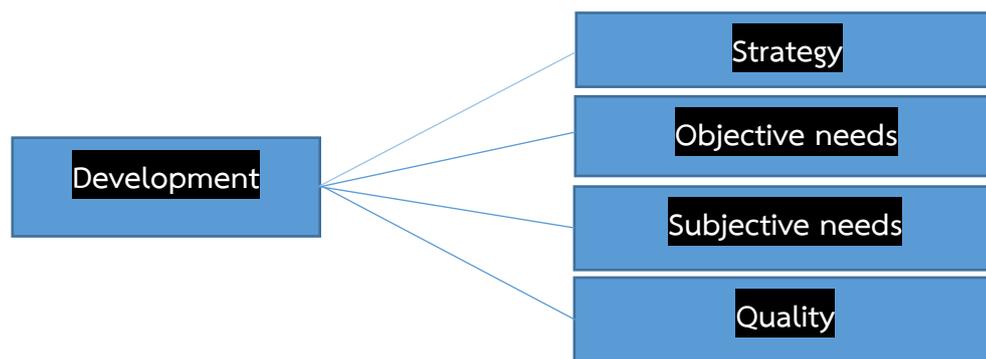


Figure 1: Conceptual framework

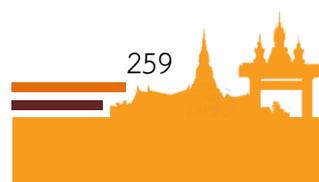
4. Research Methodology

We use the main research method which is the method of analysis and summarization of experience. Specifically, we research and review the achievements that have been achieved in Vietnamese language and culture training activities since it was established until now. We find the strengths of the module to promote, and find the limitations, weaknesses to come up with solutions to overcome them.

5. Results of the research paper

5.1 Creation history

According to Decision No. 796/QD-TCCB dated April 13, 2006, the Faculty of International Studies was established by the President of the University of Danang. As soon as its first establishment, the faculty was in charge of two majors: International Studies;





Vietnamese Language and Culture for foreigners. The establishment of the Faculty of International Studies aims to meet the needs of training human resources for foreign affairs, international exchanges, and international cooperation of the whole country in general and the Central-Highlands region in particular, simultaneously promoting mutual understanding between Vietnam and other countries worldwide in the current trend of integration and globalization. With the goal of training, providing students with basic, systematic, modern, and practical knowledge about the Vietnamese language and Vietnamese culture, the Vietnamese language and culture major helps learners after graduation to be capable of researching and teaching about Vietnamese language and Vietnamese culture, able to communicate directly in Vietnamese. Born in the context that Da Nang city in particular and Vietnam, in general, are reaching out in the period of integration, strong economic development, especially in tourism and international trade, has helped the Vietnamese language industry & Vietnamese culture can approach learners more efficiently, attracting many learners (students, students, workers, researchers, ...) from many different countries worldwide with diverse learning purposes. After 15 years of construction and development, the Vietnamese language and culture industry is confident with a team of experienced and enthusiastic lecturers in teaching and research.

5.2 Achievements

When it was first established, the program of Vietnamese Language and Culture mainly trained foreign students in the field of exchange. From 2006 to 2013, there were regular courses for 3rd year students of Guangxi University for Nationalities, China come to study for 1 year at the Faculty (3+1 program). For the full-time undergraduate training, the program of Vietnamese Language and Culture has been recruiting and training students since 2009 until now. With great enthusiasm and determination to develop a diverse audience of learners, the Faculty of International Studies overcame many difficulties, built and took advantage of relationships and cooperation channels to promote the teaching and learning process, teaching Vietnamese language and Vietnamese culture to universities and academies of other countries. The Vietnamese language and culture program has also gradually maintained and affirmed its name through cooperation programs on Vietnamese language training and Vietnamese culture research and discovery with long-time partners such as Guangxi University for Nationalities (China) which signed the MOU, Sakon Nakhon Rajabhat University (Thailand) which signed the MOU, Jica Foundation (Japan),...



In recent years, the Faculty has welcomed and organized exchange programs to learn Vietnamese language and Vietnamese culture with students from high schools and universities from the US, France, Australia, Hungary, Taiwan, China, Japan, Korea, Thailand, Laos, Indonesia,... and received positive feedback from students of these schools. (attached photo)



Figure 2: Students from Korea ChungAng University participate in a Vietnamese language and Vietnamese culture lesson at the Faculty of International Studies



Figure 3: The annual “Tet in me” program for foreign students is organized by the Faculty of International Studies

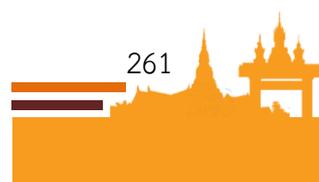




Figure 4: Pictures of exchanges between international students and Hasanuddin University, Indonesia

With the attention and investment of the leaders of the university and the Faculty of International Studies, students and students majoring in Vietnamese and Vietnamese Culture at the Faculty always have useful programs and activities that include both study and learning, practical experience, enhance language practice and cultural exchanges between international students, to help foreign students and students to facilitate participation in activities in many fields. (art contests, photography, sports, elegant students, volunteers and support liaisons for the APEC Summit Week in Danang in 2017). These achievements show the encouragement and facilitation of the university and the faculty to give students the best learning environment. That has contributed to attracting learners, creating a brand for the major and the Faculty. As a result, over the past time, the number of foreigners registering to study at the Faculty of International Studies has increased in both quantity and quality.

Along with the comprehensive attention and facilitation of the leaders of the university, the leaders of the Faculty of International Studies have gradually built up a strategy for the development of the Vietnamese language and culture major, improving the competitiveness in the field of international studies, recruitment and training. From a small group of members in terms of initial number (1 PhD, 2 MA, 2 Bachelor–statistics in 2014), up to now, the permanent lecturers of Vietnamese Language and Culture major include 3 PhDs and 5 MA.. Besides, the major also enjoys the long-term teaching attachment of the lecturers in the Faculty, in the university, creating a reputation for the major and attracting a large number of learners over the years.

Every year, in addition to the regular training system, the Vietnamese Language and Culture program also accepts exchange students, exchange students to study Vietnamese, short-term courses of the 6-level Vietnamese program, according to the National Vietnamese Language Competency Framework, the Vietnamese language





program for working people. For each class, the faculty conducts surveys to survey student satisfaction, students' comments on the program, lecturers, facilities, etc., thereby organizing classes and programs. Training, curriculum and content, teaching methods have been gradually improved and more complete. From 2015 up to now, the regular training program of Vietnamese language and Vietnamese culture has had 4 rounds of review and adjustment, helping the quality of teaching become more and more specialized and having its own brand.

Besides investing in the quality of teaching in the classroom, the Vietnamese Language and Culture program also continues to deploy extra-curricular activities, gala, book fairs, student clubs for academic exchange, to improve communication ability as well as create opportunities for learners to practice Vietnamese, allowing access to abundant learning resources at the University library, create learning motivation and increase excitement and positivity in learning among foreign students towards Vietnamese language and Vietnamese culture.

5.3 Opportunity and challenge

It can be said that the Vietnamese language and culture discipline is having a promising future with the initial achievements obtained during the constructing and following the correct strategy of the University of Foreign Language Studies and the International Studies Faculty's period and following the world's current trend. Thus, with a lot of potential and opportunities, at the same time this discipline's also facing with many internal challenges as well as external influences, forcing the department to act right.

5.3.1 Opportunity

The development potential of the Vietnamese language and culture discipline is remarkable when Vietnamese itself is an interesting and attractive language because of its characteristics. In the book *Babel: Around the World in 20 Languages*, published by Nha Nam by author Gaston Dorren, the Dutch linguist chose to write about 20 "giants" out of 6,000 world languages and languages. Vietnamese is mentioned in the very first chapter of the book while the author of this book who more than 15 languages is fluent, also tried to learn Vietnamese. It can be said that this is a living proof of the interestingness of Vietnamese language-one of the "charms" that help bring learners to Vietnamese language and Vietnamese culture.

In fact, in August, *Insider Monkey Magazine* has just announced 25 most used languages in the world which including Vietnamese , and, according to a data in 2019, Vietnam also in the top 25 most visited countries in the world. This is a reliable evidence for future development after the Covid epidemic is under control. Vietnam will continue to be an interesting destination for international tourists, which is an opportunity



for foreigners to interact with the culture and language. In particular, Da Nang is also a dynamic tourist city, a livable city of Central Vietnam, which is certainly a huge strength in attracting foreigners to come here and experience the living environment, learn about the local culture, looking for job and investment opportunities, etc. and learning Vietnamese is an indispensable condition along with those desires.

With the strength of UFLS in linking with both domestic and international educational institutions, localities, universities and research institutes are increasingly focused on expanding and strengthening exchange students, trainees program. The university is also one of the few institutions that are licensed to hold the Vietnamese language proficiency test and issue certificates according to the regulations on the 6-level Vietnamese competency framework for foreigners issued by the Vietnam Ministry of Education and Training. The Vietnam language and culture courses in UFLS is assessed every year, divided into different levels, levels, and training durations. With the strength of the location of the training institution, the modernity of facilities and learning materials, it increasingly meets the diverse needs of learners. Besides, with a team of qualified lecturers and rich practical content such as charity activities for the community, out-class activities learn about specific historical-cultural-religious sites, teambuilding, ...) to promote learners' interest.



Figure 5: Students from China Guangxi University for Nationalities participate in a Vietnamese language and Vietnamese culture lesson at the Faculty of International Studies





Figure 6: Students from Thailan Khamsean Wittayasan School participate in a Vietnamese language and Vietnamese culture lesson at the Faculty of International Studies



Figure 7: Students from Thailan Sakon Nakhon Rajabhat University participate in a Vietnamese language and Vietnamese culture lesson at the Faculty of International Studies-Outclass

In recent years, with the city's policy of attracting foreign investment, the number of foreigners living and working in Da Nang is increasing day by day. Foreigners increase their length of stay and the need to study Vietnamese. This is a great opportunity for the UFLS and the Faculty to further expand the number of foreign students of Vietnamese language and culture training programs.





In the last two years, although the Covid-19 epidemic has caused many difficulties for face-to-face teaching and learning, the language studies become easier thanks to online platforms with investment and maximum exploitation of advances in cutting-edge technologies. With a stable online learning platform, an ever-expanding learning material system combined with teachers who young and proactively exploiting all the preeminent features of online learning platforms to support learners, the number of foreign students is still considerable, while the quality of training, progress and learning efficiency are always guaranteed. It can be said that it is not only a guarantee of training quality but also opens a new direction in Vietnamese language training of the Faculty and the university in the context that the epidemic is still a great obstacle for direct contact between people.

As part of the University's development strategy and orientation, the International Studies Faculty and the Vietnamese Language and Culture for foreigner Department increasingly believe in the developing strategy from the very beginning. Following this strategy, the Faculty position is asserted. While Vietnamese more accessible and close to friends around the world, learners are attracting not only for the professional purpose but also for the love and interest in the country and people of Vietnam.

5.3.2 Challenge

Facing these opportunities, the Department of Vietnamese Language and Vietnamese Culture under the Faculty of International Studies-University of Foreign Language Studies–The University of Danang has been very sensitive in the process of approaching and grasping. However, it is a fact that the field of study currently has problems of weaknesses that need to be overcome as well as a number of requirements and challenges that are not small.

Regarding the current training status of the major, although many achievements have been achieved, there are goals set by the faculty that have yet to be achieved. The first is to diversify the countries where students come to study. In recent years, a large number of learners are mainly concentrated in Asian countries such as China, Korea, Laos, Thailand, etc., but have not been expanded to other distant continents. In addition, the number of full-time students in each course is not many, not to mention some students leave school midway without completing the course. This has many causes, both subjective and objective. These causes are, after all, the challenges of the major, first of which must be mentioned the difficulties in competing for enrollment of the major with other training institutions in the country.

Secondly, the Vietnamese language, Vietnamese studies, and Vietnamese culture majors for foreigners are now available in many domestic training institutions, especially in big cities such as Ho Chi Minh, Hanoi, and Hai Phong. Phong,





Thai Nguyen, are at long-standing training institutions and have advantages in experience, geographical location, etc. Meanwhile, the Vietnamese language and Vietnamese culture major for foreigners is at the Faculty of International Studies, the University of Foreign Language Studies - The University of Danang was born later, with limited resources in all aspects, so it is a big problem to compete with other institutions. Because many learners are people who have stable jobs in Vietnam, they choose a place to study that is convenient for them to work and live. With this competitive angle, Da Nang cannot compare with Hanoi and Ho Chi Minh City.

Besides, the peculiarity of choosing to learn Vietnamese language and Vietnamese culture is that students want to approach Vietnamese with standard pronunciation. Da Nang is in the Central region-an area with a relatively difficult voice compared to other areas in the country, making it difficult for learners to communicate. This is also one of the factors affecting the choice of training institution of learners. Instead of choosing Da Nang, many foreigners will choose another locality to be more convenient in communicating in their Vietnamese language.

In addition, the current general trend, many foreign students want to study in Vietnam in a specific major such as tourism, international trade, economics, business administration, ... This is also one of challenges for the Vietnamese language and Vietnamese culture industry in terms of enrollment.

And the common difficulty of the whole world, in all fields, in which education is one of the areas most seriously affected, that is the current outbreak of the Covid-19 epidemic. For the Vietnamese language and culture majors, who are foreign students, the problem of the global epidemic is the most difficult. Restrictions on travel, the time difference between countries has become a big challenge that the industry can hardly find a solution to. The recruitment of the industry, or the study of students, is no longer as simple as when the world is normal anymore. Students and trainees cannot come to Vietnam to study. Many students and students experience interruptions when participating in online learning because the time zone difference is too big compared to Vietnam. Hopefully in the not too distant future, objective causes like these will soon be overcome by the world.

6. Conclusion

With remarkable achievements in the training period which is not long enough as described above, the Faculty of International Studies-University of Foreign Language Studies-The University of Danang needs to make more efforts to be able to do so, maintaining the quality, raising the position of the industry to the region and the world,





attracting more and more attention from students and students in countries across five continents. With what the Department of Vietnamese and Vietnamese Culture belongs to International Studies-University of Foreign Language Studies–The University of Danang has been doing, hopefully in the future, the training program for Vietnamese language and culture Vietnam will always seize and receive opportunities, quickly overcome weaknesses, integrate and adapt to common challenges of the world, will always be the ideal destination for students, foreign students in many countries in choosing where to study Vietnamese language and Vietnamese culture.

7. Discussion

7.1 In the current context (epidemic, economic inflation, personal needs, ...) how to stimulate learners' interest and registration to learn Vietnamese language and culture?

7.2 In order to compete with other training institutions, what content does UFLS need to improve?

8. Suggestions

8.1 There are many forums related to national and international expertise for teachers of Vietnamese language and culture to participate, learn from experiences, and share learning materials.

8.2 Set up a question bank for Vietnamese language and Vietnamese culture for foreigners.

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SOLUTIONS TO FINISHING IMPLEMENTATION OF LEGAL PROVISIONS ON UNIVERSAL EDUCATION OFFICERS IN VIETNAM

Doan Thi To Uyen¹

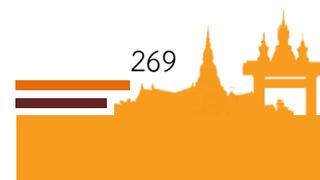
Chu Manh Hung¹

Abstract

Officials working at higher education institutions in Vietnam are now quite specific in many legal documents. However, the law on higher education officials is still scattered, regulated in too many different legal documents, so it is difficult for the implementation process, some provisions are not really appropriate; The process of organizing the implementation of legal regulations still reveals limitations, affecting the quality of higher education officials in practice. The article assesses the current status of legal regulations, the actual implementation of regulations, points out limitations and proposes solutions to improve the law on higher education officials in Vietnam.

Keywords: Higher education officials, Legal regulations, Law on public employees

¹Clause 3, Article 54 of the Law on Higher Education





1. Laws on higher education public employees and public employees

Currently, public officials in general including higher education officials
It is stipulated in many legal documents such as:

Law on Public Employees 2010, Decree 29/2012/ND-CP of the Government dated April 12, 2012 regulating recruitment, employment and management of public employees, Decree 161/2018/ND-CP of the Government on November 29, 2018 amending and supplementing a number of regulations on recruitment of civil servants, public employees, promotion of civil servant ranks, promotion of public employees and implementation of contract regimes for a number of jobs in administrative agencies the state, public non-business units; Decree No. 41/2012/ND-CP dated May 8, 2012 stipulating employment positions in public non-business units and promulgating Circular No. 14/2012/TT-BNV dated December 18, 2012 guiding the implementation of Decree No. 41/2012/ND-CP...

The Law on Higher Education in 2012 was amended and supplemented in 2018, Decree 99/2019/ND-CP of the Government, dated December 30, 2019, detailing and guiding the implementation of a number of articles of the Law amending and supplementing a number of articles of the Law on Higher Education; Circular 08/2018/TT-BGDDT dated March 12, 2018 stipulating the conditions, content and form of consideration for promotion to professional titles of teaching staff in public higher education institutions; Circular 13/2017/TT-BGDDT dated May 23, 2017 stipulating the conditions for educational institutions to organize training courses and issue certificates of standard training for professional titles of teaching staff in institutions public education...

Thus, higher education officials are governed by legal documents on public employees in general, including regulations on recruitment, use and management of public employees, in addition to the provisions of the Law on Education and Training higher education and detailed regulations on implementation.

An overview of the law on higher education officials focuses on the following basic issues:

Firstly, recruiting higher education officials

The Law on Public Employees stipulates quite fully on recruitment of public employees as a basis for recruitment “the recruitment of public employees according to job needs, job positions, standards of professional titles and salary fund of the public service unit” “public industry”; recruitment principles; conditions for enrollment; Recruitment method.... Based on the Law on Public Employees, Decree 29/2012/ND-CP of the Government dated April 12, 2012 regulating recruitment, employment and management of public employees, Decree 161/2018/ND-CP of the Government dated





November 29, 2018 amending and supplementing Decree 29 has more specific regulations on the recruitment council, content, form, time of public employee recruitment exam, content and form of public employee recruitment examination, announcement of recruitment results, working contracts, probationary regimes for public employees... These contents have been specified quite clearly in the above documents.

In addition, higher education officials as faculty are also subject to specific provisions in higher education documents. In which, in addition to the general standards of public employees, the standard qualification of a university-level lecturer is a master's degree or higher. Special cases in a number of specific professional disciplines shall be prescribed by the Minister of Education and Training ; duties and powers of the lecturer.

Second, training and fostering higher education officials

The contents of training and fostering higher education officials shall comply with the provisions of the Law on Public Employees, specifically:

- The training and retraining shall be conducted for public employees before appointing to managerial positions, changing professional titles or in order to supplement and update knowledge and skills in service of professional activities.

- The content, program, form and duration of public employee training and retraining must be based on the standards of managerial positions, professional titles, and requirements for supplementing and updating knowledge and skills in service of operations. occupational movement.

- Forms of training and fostering public employees include: Training and fostering according to the standards of managerial positions; training according to professional title standards; training to supplement and update knowledge and skills to serve professional activities.

- Ministries and ministerial-level agencies assigned to perform state management of public employees' activities shall detail the contents, programs, forms and duration of training and retraining of public employees working in the sector, the field is assigned to manage (the Ministry of Education and Training has issued Circular 13/2017/TT-BGDDT dated May 23, 2017 stipulating the conditions for educational institutions to organize training and grant certificate of standardization of professional titles of teaching staff in public educational institutions).

- Public non-business units are responsible for formulating and organizing the implementation of training and retraining plans for public employees.

- Public non-business units are responsible for creating conditions for public employees to participate in training and retraining.





- Public employees participating in training and retraining must strictly abide by the training and retraining regulations and be under the management of the training and retraining institution.

- Public employees assigned to participate in training and retraining are entitled to salaries and allowances in accordance with law and regulations of public non-business units; the training and retraining time is counted as the continuous working time and is considered for salary increase.

Third, the use and management of higher education officials

Promote higher education officer:

The content of promotion to higher education officials is currently regulated in many documents, mainly circulars of the Ministry of Home Affairs and the Ministry of Education and Training, which are directly regulated in Circular 08/2018/TT-BGDDT dated March 12, 2018 stipulates the conditions, contents and form of consideration for promotion to professional titles of teaching staff in public higher education institutions, including the following:

+ Conditions for registering for consideration for promotion of professional titles

Teaching officers in public higher education institutions may register for consideration for promotion to professional titles when fully meeting the following conditions:

The public higher education institution has the need and is sent by the competent authority for consideration.

Successfully completing the task within 03 (three) consecutive years up to the deadline for submitting the application for consideration; be assessed by the head of the higher education institution as having sufficient professional qualities and ethics; not during the time of being disciplined or having received notice of the consideration of disciplinary action as prescribed by law.

Having met the criteria of the professional title class registered for consideration as prescribed in Joint Circular No. 36/2014/TTLT-BGDĐT-BNV dated November 28, 2014 of the Minister of Education and Training and the Minister The Ministry of Home Affairs prescribes codes and standards for professional titles of teaching staff in public higher education institutions.

Holding the professional title of lecturer (class III), code V.07.01.03 for public employees applying for promotion to the title of main lecturer (class II), code V.07.01.02; currently holding the professional title of main lecturer (class II), code V.07.01.02 for public employees applying for consideration for promotion to the professional title of senior lecturer (class I), code V.07.01. 01.





+ Dossier for consideration for professional title promotion

Dossier for consideration for promotion to professional titles as prescribed in Article 10 of Circular No. 12/2012/TT-BNV dated December 18, 2012 of the Minister of Home Affairs promulgating regulations on professional titles and changing positions professional title for public employees.

Copies of diplomas and certificates as prescribed in Articles 4 and 5 of Joint Circular No. 36/2014/TTLT-BGDĐT-BNV dated November 28, 2014 of the Minister of Education and Training and the Minister of Interior The service stipulates codes and standards for professional titles of teaching staff in public higher education institutions.

+ Content and form of promotion review

This is the revised content compared to the previous regulation. Before Circular 08/2018/TT-BGDĐT took effect, the promotion of higher education officers was conducted in the form of an exam without having to consider admission. Thus, according to current regulations, the consideration for promotion to the professional title of public employees is through the consideration of dossiers according to the regulations on professional title standards of the higher rank adjacent to the current rank and appraisal and conversion scientific work points.

Seconding, appointing, and dismissing higher education officials

According to the provisions of the Law on Public Employees 2010, secondment of public employees means that an officer of this public non-business unit is sent to work at another agency, organization or unit according to the requirements of his/her duties for a period of time certain. The head of the public non-business unit or the agency competent to manage the public non-business unit shall decide on the secondment of public employees.

The appointment of a managerial officer must be based on the needs of the public non-business unit, the standards and conditions of the managerial position, and in accordance with the authority, order and procedures. Based on specific conditions of public non-business units, public employees holding managerial positions may be appointed for a term of not more than 5 years. During the time of holding a management position, the public employee is entitled to a management position allowance; may participate in professional activities according to their appointed professional titles. When a managerial officer expires in a managerial position, he must consider re-appointment or not re-appointment. In case of not being re-appointed, the level competent to appoint is responsible for assigning the public employee to a job position according to his/her work needs and in accordance with the officer's professional skills. If you are assigned to another job position or are appointed to a new management





position, you will automatically stop holding the current management position, unless you are assigned a part-time job.

The competence to appoint public employees to hold managerial positions shall be decided by the heads of public non-business units or proposed to competent authorities to decide according to the management decentralization.

However, the authority to appoint officials to hold managerial positions in higher education institutions is now clearly specified in the Law amending and supplementing a number of articles of the Law on Higher Education. Article 16 stipulates: The School Council of a public university has the right to:

Fourthly, decide and submit to the competent management agency to issue a decision on recognition, dismissal or dismissal of the university principal; to appoint, remove or dismiss vice-chancellors of the university on the basis of the proposal of the university's principal; the decision of other management titles as prescribed by the university's regulations on organization and operation”

Officer Evaluation

The purpose of public employee evaluation is to serve as a basis for further arrangement, employment, appointment, dismissal, training, retraining, reward, discipline and implementation of regimes and policies towards public employees. This content is also fully regulated by the 2010 Law on Public Employees:

+ Bases for evaluation of public employees: The evaluation of public employees is carried out on the following bases: Commitments in the signed working contract; Regulations on professional ethics, code of conduct of officials.

+ Contents of staff evaluation

Amended and supplemented by the Law amending and supplementing a number of articles of the Law on Cadres and Civil servants dated November 25, 2019 as follows:

- To abide by the guidelines, guidelines and policies of the Party and the laws of the State, regulations of agencies, organizations and units;
- Results of performance of work or tasks according to the signed work contract, according to the set plan or according to the specific work assigned; progress and quality of task performance. The assessment of performance results must be associated with the job position, expressed through specific work and products;
- The implementation of regulations on professional ethics;
- Sense of responsibility, attitude of serving the people, spirit of cooperation with colleagues and the implementation of the code of conduct of public employees;
- The performance of other obligations of the officer.





In addition to the contents specified in Clause 1 of this Article, managerial officers are also evaluated according to the following contents: Management capacity, administration and organization of tasks; Working plan by year, quarter, month and operation results of agencies, organizations and units assigned to manage; the assessment of the individual's performance of tasks must be associated with the results of the task performance of the agency, organization or unit directly in charge. The individual's quality rating is not higher than the quality rating of the agency, organization or unit directly in charge.

In addition to the above contents, the law on higher education officials also stipulates other contents such as labor contract, retirement regime, commendation, discipline. However, because the scope is too wide, the author only focuses on over-viewing the regulations on recruitment, use and some contents of managing public employees above.

The legal documents regulating public officials in general and higher education officials in particular are quite complete and detailed in terms of recruitment, use, and management of public employees, making an important contribution to the recruitment process institutionalize the Party's guidelines and guidelines and the State's policies and laws to meet the requirements of the recruitment, use and management of public employees, contributing to improving the quality of the contingent of higher education officials study today.

Documents detailing and guiding the implementation of the Law on Public Officials and the Law on Higher Education concretize the contents of the Law on reform of the mechanism for recruiting, employing and managing special higher education officials especially the strengthening of state management in the fields of recruitment, training, fostering, appointment, rotation and mobilization of civil servants and public employees, ensuring the correct process, procedures and quality of the official documents. It is a legal basis for higher education institutions to implement.

It is clearly stated in the Law on amendments and supplements to a number of articles of the Law on Higher Education about the autonomy of public higher education institutions in personnel work, including autonomy in determining job positions. Decentralize the authority to decide on job positions, structure of public employees according to professional titles and the number of people working in higher education institutions, autonomy in recruiting, training and fostering... is a new policy with many breakthroughs in state management thinking for higher education institutions and is directly related to the change in university governance today, in which the core issue is the human element.





However, the law on higher education officials is still scattered, regulated in many different legal documents, so it is difficult for the implementation process. In order to recruit and employ higher education officials, the applicant must search for provisions in the Law on Public Employees, detailed decrees and circulars, and at the same time find specific provisions on higher education in the Law on Higher Education, detailed decrees and circulars. This greatly affects the implementation in practice, and even risks omitting regulations when applied.

2. Actual situation of implementing regulations of law on higher education officials

2.1 Result

After the 2010 Law on Public Employees was approved by the National Assembly, the Government promptly directed the functional agencies to review the contents under the Government's authority to detail and guide the implementation. The Prime Minister has issued a Decision approving the implementation plan and assigned the agency to take charge of the construction. Ministries, branches and localities have also issued many guiding documents, contributing to perfecting the institutional system for managing public employees according to the spirit and provisions of the Law. Thereby, has initially implemented an appropriate management mechanism for the staff.

The development of detailed documents and guidelines for the implementation of the Law have concretized the contents of reforming the mechanism of recruitment, employment and management of public employees, especially the strengthening of state management in the fields of recruitment, training, fostering, secondment, appointment and dismissal of public employees, ensuring the correct process, procedures and quality of documents.

Firstly, the recruitment and appointment of higher education administrators

The recruitment of higher education officials has basically ensured the order and procedures according to the provisions of the Law and guiding documents; The competence to perform recruitment has been decentralized to the ministries, branches and localities directly managing public higher education institutions. The recruitment has been step by step based on job demand, job position, professional title standards and salary fund of the unit, ensuring competitiveness, publicity, transparency, fairness and objectivity; In addition to a number of exceptional admissions cases, the remaining examinations have been ensured to be competitive, comply with the correct procedures and be publicly announced on the mass media, on the website of the educational institution. University.





The appointment of management officers is carried out according to strict, public, transparent processes and procedures, ensuring the principle of democratic centralism. Appointed officials are all subject to planning, are highly trusted, comply with the Party and State's regulations on conditions and standards such as ensuring the requirements for seniority, work experience, job knowledge and professional qualifications ability to carry out the assigned work.

Second, training and fostering higher education officials

The training and retraining of public employees is carried out in accordance with the provisions of law. On the basis of needs and tasks, ministries, branches and localities shall promulgate their own training plans, specialized cadre training programs, and training materials for public employees according to professional title standards, innovation. about the program and content to match the requirements of the new situation. The work of training and retraining has made an important contribution to improving the qualifications and capacity of the staff, contributing to well performing the requirements of the assigned tasks.

Third, the use and management of higher education officials

- The promotion of professional titles of higher education officials has also been decentralized to localities and units to take the initiative in the implementation process. The State management agency on public employees only performs the function of inspection and supervision.

Examinations or consideration for promotion of professional titles are carried out strictly, in accordance with regulations, openly and transparently, meeting the requirements set forth, and at the same time, it also solves the regimes and policies for the educational staff. University.

- Evaluation and classification of higher education officials

The evaluation and classification of public employees is basically carried out every year at higher education institutions, ensuring the principle of democratic centralism and publicity, partly overcoming the phenomenon of respect and formality in assessment price. The evaluation is based on the performance of work or tasks according to the signed work contract, the implementation of regulations on professional ethics as well as the sense of responsibility and the implementation of the code of conduct of the employee. At the same time, many units have expanded the democratic form of assessment, attaching importance to the handling of information in public opinion and the public's complaints about officials to make the assessment more realistic.





2.2 Limitations, problems

Firstly, about recruitment of officials

- The implementation of recruitment of public employees according to the provisions of Article 20 of the Law faces difficulties because the Government and ministries are slow to promulgate documents specifying job positions and standards for professional titles. Clause 2, Article 7 of the Law on Public Employees stipulates that the Government has the authority to decide on the number of employment positions in public non-business units. The fact that the calculation of the number of “staff and staff” is decentralized to the Ministry is no longer suitable for the present. Therefore, when determining employment position, it is still mainly based on the circular of the governing ministry.

The reality is that higher education institutions are now under the direct management of various state agencies. There are higher education institutions affiliated to the National University, the Regional University; have higher education institutions under the management of the Ministry of Education and Training; there are higher education institutions under the management of the governing ministries and there are higher education institutions under the management of the provincial-level People's Committees. Therefore, the recruitment of public employees, in addition to complying with the general provisions of the Law on Public Employees, must also comply with the regulations of each governing agency. This causes difficulties and does not create uniformity in practice in terms of recruitment, use and management of higher education officials. Especially, there is still the situation that some ministries have not yet issued lists, standards and professional titles for public employees, the appointment of professional titles and salary classification of some ministries also have different regulations. In some higher education institutions, the recruitment process is quite slow, it can only be held once in many years, so it affects the quantity, quality, and inheritance of public employees, while the number of public employees taking leave according to the regime. Retirement is regular.

- The construction of the job position competency framework is still qualitative and is influenced by the quantity, quality, and working skills of the staff. University education. Therefore, at present, most of the units rely on the regulation of professional title standards as a basis for determining the job position competency framework.

- The determination of the name of output products and results performed in the year as a basis for determining the number of people working corresponding to the working position specified in Appendix 6 issued with Circular No. 14/2012 /TT-BNV still





faces many difficulties, because there is practically no basis to determine the number of workers needed to complete the annual assigned workload.

- It is very difficult to take the practice exam of specialized professional subjects in the public employee recruitment exam, because there are higher education institutions with a large number of candidates who register for the exam, so they do not have enough facilities to perform; It is very difficult to determine the content of the practical exam for some positions (for regular lecturers, the practical exam by lecture is quite easy, but there are administrative specialist positions that are quite difficult).

- The selection of public employees according to regulations that examiners must have the professional title of main specialist or higher causes difficulties for some higher education institutions, especially in the locality.

Second, training and fostering higher education officials

In addition to the positive results, the training and fostering of higher education officials also have some problems in the process of implementing the law, which are:

The training and retraining program on political theory, expertise, professionalism, and professional title standards is still not suitable for the target audience. Many topics become obsolete, purely theoretical;

- The method of implementation and the recognition of certificates (for certificate debt or compulsory certification when appointing administrative officers) is different between some higher education institutions regulated by the governing ministry the Department's own regulations.

- Many training and retraining programs are really unnecessary leading to waste of time, money and inefficiencies. For example, a lecturer who is a doctorate in the past has been granted the equivalent of an intermediate level of theory, but is not currently eligible for the equivalent session and wants to be appointed as Associate/Dean in a higher education institution. hold an intermediate degree in political theory, or for some professional titles, civil servants currently require a certificate in computer science and foreign languages according to new regulations of the Ministry of Information and Communications, the Ministry of Education and Training while many cadres and civil servants have been trained and granted certificates according to previous regulations.

Third, the use and management of higher education officials

- Regarding the transfer, transfer and secondment of officials

The Law does not provide for the transfer or transfer of public employees from one public non-business unit to another, which terminates the contract and settles the severance regime. This provision is unreasonable and inconsistent with the provisions of the Law on Organization of Local Government, which assigns chairmen





of provincial and district People's Committees to mobilize cadres, civil servants and public employees under their management.

Regarding the secondment of public employees: because the Law and its guiding documents do not clearly specify "agencies, organizations and units", there is still the phenomenon of public employees being seconded to administrative agencies. Regulations on the conversion between public employees and civil servants have not created a connection in the management of civil servants and public employees, and difficulties in rotation, mobilization and change of working positions.

- The promotion of professional titles of higher education officials

The appointment of professional title classes for public employees still faces many difficulties because of the lack of training and retraining certificates required because the training and retraining by professional title classes is very little.

Currently, the organization of examinations or consideration for promotion of professional titles of higher education officials is related to the responsibilities of many agencies.

The governing ministry only manages public employees who are not lecturers and will be promoted to specialists, main experts, and senior specialists, while lecturers are organized by the Ministry of Education and Training, all professional titles are available coordination and agreement with the Ministry of Home Affairs. This provision leads to the fact that the time and procedures for considering applications for public employee promotion are very long, directly affecting the rights of higher education officials. Even, there was a time for many years the Ministry of Education and Training did not organize the promotion contest for main and senior lecturers.

For example, from 2011 to 2017, after 6 years, there was no contest for promotion of main lecturers and senior lecturers. Many lecturers have benefited from this delay by the Ministry of Education and Training (myself a real example).

- Regarding the assessment and classification of public employees

Regulations on assessment and classification of public employees are not consistent with the Party's disciplinary regulations on classification and evaluation of party members. The evaluation of public employees has had many new points, expanded democracy and made a closer assessment. However, there is still a state of subjectivity, emotion, and respect in the assessment. The assessment has not yet accurately reflected the quality and capacity of public employees because the criteria are still general, applicable to many objects and groups of people, and have not been specified for each type of professional activity.





The assessment is still internal, closed, and lacks independent evaluation. When the assessment is still “reciprocal and precious”. Most of the public officials who self-assess themselves give themselves a high score, emotional assessment leads to the uncertainty of fairness, the evaluation results are not guaranteed to be accurate, objective, fair, and have not created a reliable basis for staff development planning of each unit. Evaluation results are still heavily emotional, so it is necessary to rely on many other criteria and other processes in the organization to evaluate.

Decree No. 56/2015/ND-CP on assessment and classification of cadres, civil servants and public employees has many shortcomings such as: it is required to have at least 01 scientific work, project, topic or invention ideas are applied and brought effectively, leading to thousands of topics and projects being recognized every year but have no practical value or novelty, which is costly to the budget; when meeting to consider and classify public employees, they must obtain written opinions from the party committees of the same level, giving rise to unnecessary procedures.

There are specific job positions officials who are specialists in functional departments cannot have the same initiative as lecturers, which are articles, scientific topics, etc., so it is also difficult to evaluate public employees.

3. Solutions to perfect the law on higher education officials

In order to improve the efficiency of recruitment, use and management of higher education officials, in the coming time, competent state agencies should consider and change the following contents:

Firstly, reforming the recruitment method of public employees to really match the standards of titles and employment positions, and the unit employing public employees assigned the Ministry of Home Affairs to build a bank of exam questions for general knowledge and professional subjects majoring for each job position, applying information technology in recruitment and public employee promotion exam, taking the average score of the whole course according to the transcript of the training institution to serve as a basis for admission examination and elimination of regulations regulations on professional practice exams. There should be a prioritization mechanism for different types of training (formal, in-service, joint, professional, and distance learning).

Secondly, reviewing, amending and supplementing regulations on regimes and policies in recruitment, management, evaluation and appointment of public employees, abolishing unnecessary administrative procedures in recruitment and training creating, appointing, contesting for promotion of public employees.





Third, research and innovate the organization of competitive exams, exam methods, issue of test questions, answers to marks and organization of examination marking, ensure correct and objective assessment, improve the quality of entrance exams, civil servant promotion exam.

Fourthly, uniform regulations on the authority to determine employment positions and professional titles of public employees. Currently, the Ministry of Specialized Management stipulates the professional titles of public employees, but does not stipulate the job positions for public employees in the professional activities of the industry under their management so the appointment of professional titles is associated with the job position do not agree.

Fifth, supplementing regulations on transfer and mobilization of public employees, supplementing regulations allowing the secondment of public employees to work for a definite time at specialized agencies of the People's Committee when having unexpected tasks, urgent. It is proposed to clearly define the concepts of "appointment of professional titles", "change of professional titles", "promotion of professional titles".

Sixth, it is proposed to decentralize so that ministries and branches can actively implement and take responsibility for the transition between civil servants and public employees. Clearly decentralize authority to issue rules and regulations on promotion of public employee professional titles so that line ministries and branches can determine the tasks to be performed.

Seventh, clearer regulations on deadlines, standards and responsibilities of ministries and branches in organizing the consideration for promotion of professional titles, ensuring a reasonable structure of public employees, ensuring the interests of public employees and employees and take into account the characteristics of each higher education institution.

Eighth, the proposal for special recruitment of public employees with 36 months of work experience or more, excluding the probationary and probationary period, the working time does not need to be continuous, if there is a break, it will be accumulated. to ensure the interests of higher education officials.

For examiners participating in the selection of higher education officials, it is only necessary to specify the professional title of specialist or equivalent and have at least 05 years of working experience in the industry, field or more or be a member of the university management organizations at higher education institutions to remove difficulties for higher education institutions in the provinces.

Ninth, it is proposed to amend to synchronously and specifically regulate the contents related to certificates and degrees, for example, professional standards for some professional titles of public employees that currently require certification only





informatics and foreign languages according to the new regulations of the Ministry of Information and Communications and the Ministry of Education and Training while many officials and civil servants have been trained and granted certificates according to previous regulations, but there is no regulation yet. specify the transition between these two systems.

It is proposed to stipulate a uniform standard of professional titles in higher education institutions, except for specific higher education institutions that are entitled to a separate industry allowance before it is necessary to issue title standards own occupation (medical industry, armed forces...).

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2. Law on Higher Education 2012
3. Law amending and supplementing a number of articles of the Law on Higher Education
4. Law amending and supplementing a number of articles of the Law on Cadres and Public Officials and the Law on Public Employees (2019)
5. Decrees and circulars detailing the Law on Officials and the Law on Higher Education.
6. Report No. 4202/BC-BNV of the Ministry of Home Affairs dated August 26, 2018 summarizing the implementation of the Law on Public Employees (2012-2017).





USING EDMODO LEARNING SOCIAL NETWORK IN TEACHING SOME VIETNAMESE MODULES IN ENGLISH FOR STUDENTS OF PRIMARY EDUCATION MAJOR OF TAN TRAO UNIVERSITY

Nguyen Thi Hong Chuyen¹

Abstract

The article is based on the practice of using Edmodo learning social networks in the world and in Vietnam to apply social networks to teach some Vietnamese modules in English for students of Primary Education major of Tan Trao University to adapt to the new normal. The application has created online classes parallel to face-to-face classes; Study guide; Evaluate; Archiving learning materials. Initial results show that: The roles of lecturers and students have changed positively; Learning activities are organized and implemented in a variety of ways; Exploiting effective learning data sources; How to evaluate effectiveness. Therefore, the use of learning social networks in teaching is an effective way to help the teaching process adapt to the new normal.

Keywords: Edmodo, Teaching, Vietnamese module, English, Students,
Primary education major

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1. Introduction

Innovation is a need and also an inevitable law of development. In education and training, to meet the requirements of industrialization and modernization in the context of a socialist-oriented market economy and international integration as well as to adapt to the new normal due to the COVID-19 pandemic, education and training require a drastic innovation in the model and process of education. One of the tasks that education has paid special attention to in recent years is the use of technology and modern teaching equipment in the new normal with the goal of ensuring the safety of learners' health and completing the teaching program.

Integrated teaching of a number of specialized Vietnamese modules in English for students of Primary Education major is one of the goals and tasks in the training program of the Primary Education major. Through this integrated teaching, students can improve their English proficiency; an in-depth understanding of specialized linguistic terms; help students actively integrate, interact with foreigners, actively integrate deeply through cultural exchange. Accordingly, the application of information technology to innovate and diversify teaching methods to improve teaching quality is extremely necessary.

Edmodo is a social learning platform (Social Learning Platform) used by many advanced countries in the world such as the UK, USA, Singapore, China, France, etc. in education to innovate teaching methods and forms based on advanced technology. Thanks to Edmodo, teaching activities such as teaching forms become diverse (classroom teaching, group teaching, individual teaching), forms of information exchange, control, testing, assessment in the teaching process are conducted smoothly and with high efficiency. Learners actively and actively follow knowledge and turn the training process into a self-training process.

This article is based on the theories and achievements of applying the Edmodo learning social network in teaching to teach Vietnamese modules in English for students of Primary Education major of Tan Trao University in order to “Safely adapting, flexibly, effectively controlling the COVID-19 epidemic” [1] and ensuring the educational goals according to Resolution 29-NQ/TW on “fundamental and comprehensive innovation in education and training meeting the requirements of industrialization and modernization in the context of a socialist-oriented market economy and international integration” [2].





2. Contents

2.1 Edmodo learning social network

2.1.1 Source

Edmodo is a learning social network founded by authors Nick Borg, Ed O'Neil, Jeff O'Hara, and Crystal in 2008 [3]. Currently, there are more than 30,000 people, and many countries use Edmodo to serve and support learning like the US and English-speaking countries. Besides the interface using English, Edmodo creates and supports more than 10 different languages to serve the needs of users. [4, 6, 7]

The advantages of learning social networks are reflected in such aspects as 1/ Cohesion. This advantage helps teachers design diverse learning activities in terms of learning in and out of the classroom. From there, helping students get more excited about learning activities; 2/ Connect. The connection between teachers, students, schools, parents, etc. is easy and effective; 3/ Personalization. Edmodo's easy-to-use applications allow learners in learning to integrate content and learning according to their ability; 4/ Evaluation. Edmodo allows teachers to diversify types and types of assessment tests; At the same time, this process is closely monitored by learners throughout the testing and evaluation process. [3]

2.1.2 Features of Edmodo

Edmodo is built and developed in the direction of a learning social network—a learning management system. Author Phung Van Huy [4] has summarized and given the outstanding features of Edmodo such as:

- Share unlimited resources. Through features such as tags, libraries, folders,... teachers share and attach learning materials as well as free downloads, develop learning applications on top of other applications. As a result, teachers create a learning community, sharing information widely and conveniently.

- Collaborate effectively. Edmodo allows a variety of embedded codes from applications that help teachers create communities/classes/learning groups to share resources, ideas about teaching and learning activities, experiences, and applications in teaching. In particular, the Google Drive feature makes it easier than ever to manage, share documents and collaborate with each other.

- Promote teaching and learning activities. Through tools and applications such as Polls, Quizzes, Pots, teachers diversify forms of assessment and motivation in learning; At the same time, the app allows learners to make study plans. Teachers, administrators, parents monitor and control. In particular, for students majoring in pedagogy, this will be an experience that allows them to be applied in high schools.





- Methods of testing and evaluation. Through the features of assignment, Badges, and Assignment, teachers use a variety of forms of testing and assessment to evaluate learners promptly, accurately, and effectively.

Thus, the outstanding features of the Edmodo learning social network, allows teaching activities to diversify in many aspects from teaching planning, teaching implementation, assessment, and post-assessment. In particular, for teaching Vietnamese modules in foreign languages, Edmodo promotes features, creates learning excitement, stimulates learning needs, experiences and brings learning effects in the new normal.

2.2. Edmodo creates a foundation for teaching and learning some Vietnamese modules in English for students of Primary Education major in the new normal

2.2.1 Create online classes parallel to face-to-face classes

Under the new normal, electronic forms of learning and teaching (E-learning) are being used by all schools. This is also the form chosen and used by Tan Trao University for many years. Facing the new situation, besides E-learning, the school allows and encourages teachers to use information technology software and tools in teaching. Using Edmodo in teaching, instructors create online and face-to-face parallel classes/groups.

To create classes suitable for some Vietnamese courses in English, teachers perform the following steps: Step 1. Access with Teacher account and create a class with its own class codes. For example: Communicating activities with Vietnamese language teaching in primary schools, Teaching and developing Vietnamese language ability in primary schools, Fostering gifted students in Vietnamese in primary schools; Step 2. The teacher provides class code to students. Students use the Join a class function and the class code provided to join the class; Step 3. Teachers manage students using the Member function.



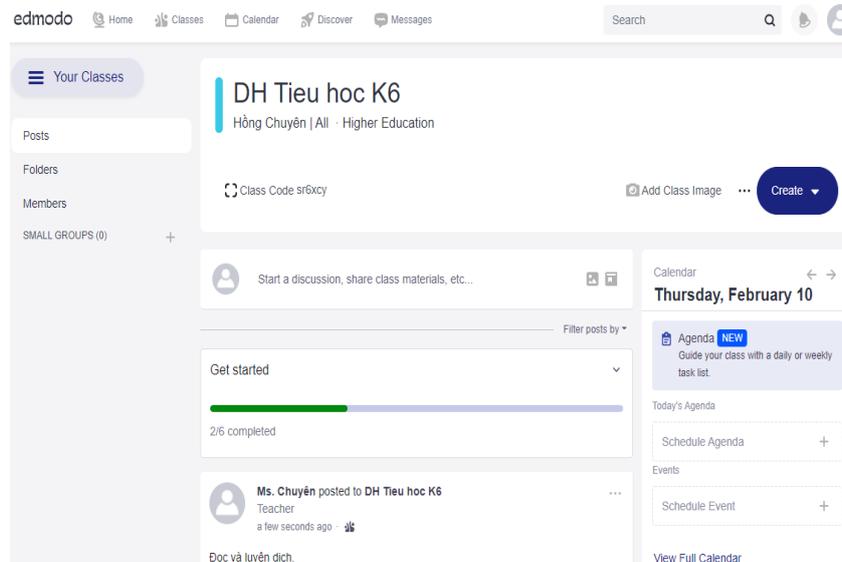


Figure 1: Online classroom created on the learning social network Edmodo

2.2.2 Study Guide

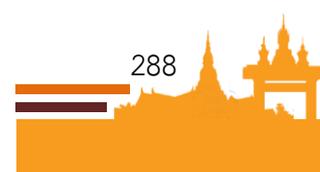
For effective learning, teachers provide lesson outlines, study plans, electronic lectures, and electronic references and guide students on how to learn through the Note function. Students receive the lesson the teacher sends through the Notification function to study the lesson and perform individual/group learning tasks for each learning activity.

Example: The lecturer gives the discussion: “Analysis of the functions of communication activities”. The menus will include the following items: number of functions, naming, giving examples and analysis to clarify each function; implementation and discussion groups; discussion time, etc. In the end, the teacher summarizes and gives instructions and orientation

2.2.3 Evaluate

Edmodo allows teachers to diversify assessment forms and provide timely assessment results such as:

- The Assignment feature is used in the essay test to help teachers easily assign assignments and attach documents and resources for students to refer to and complete tasks. In particular, the regulation of completion time will help students actively perform the task on time. Grading, grading, giving feedback, and updating teachers' scores are made easy. Students easily and quickly get grades. All of the above assessment activities take place independently and ensure privacy, making teacher-student interaction more convenient and natural.



- The Quizzes feature used in the test helps teachers create a diverse question bank with forms such as multiple-choice questions, true/false questions, short answers, fill-in-the-blank questions, etc. Except for short answers, all remaining questions are automatically graded and students' scores are updated on the system. This allows teachers to save time marking and students know the results as soon as they complete the lesson.

- Badges feature allows teachers to recognize the progress, efforts, and commitment of students with available titles.

Example: Question packages in Quiz built for the module Communication activities with teaching Vietnamese in primary schools for students to perform.

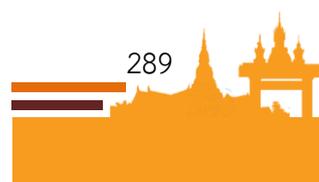
Number	Contents of multiple-choice questions	Number of sentences
1	Communication and forms of communication	10
2	Functions of communication activities	20
3	Elements of communication activities	30
4	Types of speech and communication activities	10
5	The process of producing and receiving speech in communication activities	10

2.2.4 Storage of learning materials

Through the Library feature, teachers and students will easily manage and use learning resources in any space as well as save printing or copying costs. In addition, this feature also connects to services such as Google Drive, Dropbox, etc. to help the data warehouse always be maintained and used quickly and efficiently.

2.3 Exchange and discuss

To evaluate the effectiveness of the application of Edmodo in teaching, I conducted a survey of 44 students in the K6 Primary university class, course 2019-2023. The applied research methods include theoretical research; methods of observation and evaluation; questionnaire survey method. The initial survey results noted: 1/ Regarding the level of satisfaction with learning through Edmodo: 90% of students are very satisfied with studying with Edmodo; 10% satisfied; 2/ Regarding the utility of Edmodo in learning: 85% are very satisfied; 15% satisfied; 3/ Regarding the quality of lectures and teaching activities implemented through Edmodo: 95% are very satisfied; 4% satisfied; 4/ Regarding group activities in teaching: 84% are very satisfied; 8% satisfied; 8% are not satisfied;





5/ Regarding inspection and evaluation activities: 89% are very satisfied; 11% satisfied; 6/ Regarding internet quality: 75% are very satisfied; 19% satisfied; 6% are not satisfied.

The initial results allow us to conclude that the use of Edmodo learning social network in teaching a number of English-language modules for primary education students has recorded positive changes such as:

2.3.1 The role of teachers and students has changed positively

According to the traditional teaching method, the teacher is completely active and decides the content as well as the form of knowledge transmission. Students mostly receive passive knowledge and complete the exercises. According to the “student-centered” teaching theory, the focus is on developing learners’ learning, thinking, and creative abilities. Accordingly, a teacher is a person who supports and guides learners in acquiring knowledge. Learners move from a passive position to an active and creative position in receiving knowledge.

Using the Edmodo learning social network, students are provided by teachers and guided to study Vietnamese modules in English on the system. From there, students understand the plan, actively connect through group discussions as well as practice through multiple-choice tests. All the above processes are carried out under the supervision of the teacher. Thus, using social networks in learning creates and empowers students with autonomy, helping students to be proactive in acquiring and applying knowledge, turning the training process into a self-training process.

2.3.2 Organize and implement diverse learning activities in the classroom

Using Edmodo in teaching does not reduce the number of direct lessons, but increases the space and scope of the class. Diverse classroom organization allows students to study anytime, anywhere with rich data sources and is highly effective. At the same time, with Edmodo students interact directly, instantly in groups or with instructors. In particular, for discussions and student exchanges, students are more active and excited because they can interact directly as well as record feedback on the system. As a strong learning society, beyond the classroom, students can make connections with teachers and international students. In particular, Vietnamese modules taught in English, in addition to providing theory, aim to deepen understanding of cultural and cultural content for learners and create a foundation for cross-cultural interactions with students. foreigner. In addition to the class group, students can join other open forums on Edmodo with the participation of many foreigners.



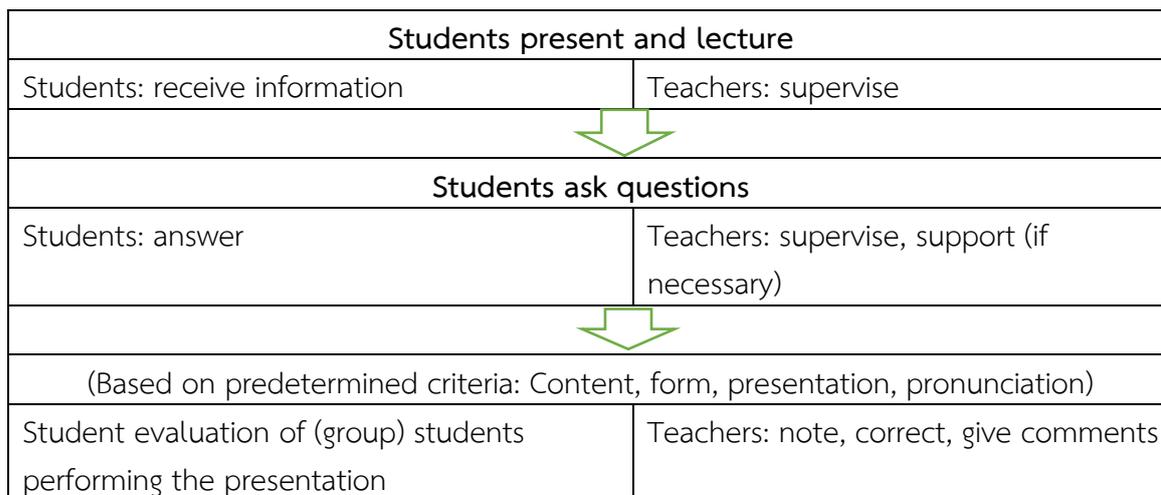


Figure 2: Model of group activities in the classroom

2.3.3 Exploiting effective learning data sources

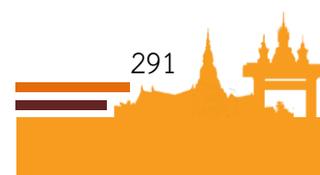
In learning activities, the source material is one of the factors that directly affect the process of receiving lectures. To adapt to the new conditions, Tan Trao University has digitized many documents into electronic documents as well as linked with learning resource centers/libraries of domestic and foreign universities. This is a rich source of data that allows teachers and students to easily access and use it in many different situations.

The learning data source is digitized, but the learning materials related to Vietnamese courses taught in English are limited. This is also a difficult thing in the teaching process for both teachers and students.

2.3.4 Versatile and effective assessment methods

With online lessons, Edmodo makes testing and assessment take place in a variety of ways. In particular, the Quizzis features allow teachers to perform multiple-choice tests for each part and the whole lesson quickly and effectively and create a learning environment that is fun, exciting, and attracts students to actively study. In addition, the examination and evaluation of the group's activities as well as the essays are recorded quickly, accurately, and efficiently.

There are also many innovations in the way of calculating the scores of students. Especially with the method of calculating the attendance score, the students' regular test scores have obvious advantages. Specifically: the activeness in learning of students, the time to perform the students' assignments are recorded specifically and clearly. This allows teachers to assign grades accurately and quickly.





3. Conclusion

Teaching is a special activity to impart knowledge to learners. In each stage, an individual learner has different points. Therefore, in order for teaching activities to meet the requirements of innovation and adapt to the new normal conditions, it is necessary for teachers and administrators to make changes in teaching methods and tools accordingly. Under the strong development of Industry 4.0, applications are constantly being discovered and applied in teaching. Innovation in teaching takes place in many ways. In addition to the main change in the roles of teachers and learners, the factors of teaching content, mean, and tools of teaching have also undergone major changes.

With many outstanding features, the learning social network has been successfully deployed in many countries and advanced education. At the same time, responding to the Covid-19 epidemic situation requires changes in adapting to the new normal, meeting and completing educational goals. The use of Edmodo in teaching with a number of Vietnamese modules in English at Tan Trao University initially recognized the innovations and changes of teachers and students in learning. Teachers and learners have access to wide data sources, multi-dimensional classrooms, flexible, fast, and effective testing, and assessment methods. However, for more effective use, it is necessary to involve foreign language lecturers inside and outside the participating units as well as the conditions of transmission lines and serving computers need to be improved to be able to use them properly. Improve efficiency with many other modules and add more students to experience with Edmodo learning social network.

4. Acknowledgement

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STUDY ON THE PROCESS TO PRODUCE BRANDY FROM QUEEN PINEAPPLE

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Pham Thi Lan²

Abstract

From pineapple juice and *Saccharomyces cerevisiae* D8 we studied the fermentation, distillation, and aging brandy in the commercial oak aging. From there, the process of making brandy from queen pineapple was given and identified 7 alcohol; 14 flavors which were 3 types of terpene, 1 derivative of terpene, 2 aromatic compounds; 5 types of aldehyde, 1 acid, 1 ester, and sensory scored of 18.5/20 points met standards of Vietnamese alcohol.

Keywords: Brandy, Diagram, Pineapple, *Saccharomyces cerevisiae*, Wine

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1. Introduction

Recently the demand for strong distilled liquors, such as vodka, whisky, brandy, etc., has increased in Vietnam. Among these, brandy is a premium one distilled from high-quality wines. The most brandies in the market in Vietnam are imported and sold at an extremely high price. Research on the Brandy production of inexpensive fruits available in Vietnam is necessary to produce a type brandy with reasonable price, suitable quality, and taste for Vietnamese consumers (Nguyen Van Thanh, 2013).

Production of high-quality brandy requires firstly is a good wine, and secondly the distillation technology that can retain the flavor of the original fruit. For the first request, suitable fruit sources and a well-selected yeast strain are the most important (Thepkaew N., 2013). In Vietnam, the condition of weather, climate, and soil is quite apposite to pineapple tree, which has been cultivated in huge areas (about 4,000 ha) in Tien Giang, Kien Giang, Hau Giang, and Ninh Binh provinces. Pineapple is a high nutritional fruit rich in sugar, protein, vitamins, and minerals (Vu Duc Hanh, 2013). This is a valuable source of raw material to produce high-quality pineapple wine which may subsequently be used to distill pineapple brandy. In Vietnam, studies on pineapple processing mainly focus on the preservation of fresh fruit, dried pineapple, jam, and wine (Kurtzman C. P., 2011). Although the pineapple brandy production process was patented by the Maui, a company in Hawaii in 1937 (Crutchfield L. C., 1936), scientific studies on the pineapple brandy production process have rarely been published either in the world or in Vietnam (Nguyen Van Thanh, 2013). Identification and isolation of good yeast strains which are well-characterized and well-adapted to the production of pineapple wine and brandy in Vietnam is an absolute necessity (Thuong, 2014). This demand leads us to the isolation of suitable yeast strains for the fermentation of pineapple wine and brandy. In this paper, we report the fermentation of pineapple wine from *Saccharomyces cerevisiae* D8, distillation, and aging in oak to give the pineapple brandy in Vietnam.

2. Materials and Methods

Research Materials

- Pineapple juice
- Fermentation: Pineapple juice is added with Saccharose sugar to total sugar to reach 220 g/l, using NaHCO₃ concentration of 1 g/l to adjust pH to 4.
- Yeast strain *Saccharomyces cerevisiae* D8 was isolated and selected from pineapple juice naturally fermented with selective factors (Thuong, 2014).





- Pineapple brandy has been removed from impurities, reaching an alcohol level of 62° (Nguyen Dinh Thuong, 2007); oak sticks (average size 0.3 × 2 × 10 cm) and oak pulp (Arobois VD110171) were imported from France.

- The chemicals used in the analysis include ethanol (E7023), n-hexane (73117), ethyl acetate (650528), ester (E7877), aldehyde (55977) imported from Sigma-Aldrich, all with purity at the analysis level.

Research Methods

- Collect pineapple juice with SUNHOUSE SHD5339. juicer
- Determination of total sugar and residual sugar by Bertrand method (Mai, 2006).
- Determine the total acid content of acetic acid by titration using 0.1 N KOH in the presence of a mixture of color indicators (mix in equal proportions of the following two indicators: methyl red solution) alcohol 0.2%, methylene blue alcohol solution 0.1%) (Nguyen Dinh Thuong, 2007).
- Determination of vitamin C using titration method with I2 0.01N (Mai, 2006).
- Determine the pH using a pH meter MP200R (Nguyen Dinh Thuong, 2007).
- Determination of the number of viable yeast cells by cell counting on a red blood cell counter (Mai, 2006).
- Determine the amount of CO₂ released by the weighing method to determine the change in mass of the fermenter (Mai, 2006).
- Determination of ethyl alcohol by distillation method, using a winemaker (Nguyen Dinh Thuong, 2007).
- Pickled oak: 0.3 × 2 × 10 cm oak slats are treated into 3 different types: (1) untreated dry oak slats, (2) kiln dried oak slats, and (3) dried to burn. Each oak was soaked in white brand name in different amounts of 0, 5, 10, and 15 g/l, respectively, to cool and cool indirect light for 24 months. Commercial oak pulp is soaked into white brandy at 1–5 g/l under the same conditions as store-bought with bar oak.
- Evaluation of wine quality according to standard TCVN 3217–79: Wine samples (750 ml) were collected after about 0, 6, 12, and 24 months in transparent glass bottles with tight-fitting lids. Assess the perception of color, smell, and location on a 20-point weighted scale (TCVN 3217, 1979).
- Color analysis by UV-VIS visible spectroscopy (Shimadzu, Japan) at A260 nm: alcohol samples (1.5 ml) were introduced into quartz cuvettes to determine the color adsorption of brandy (Contreras U. & J.L., 2010).
- Determination of volatile compounds in alcohol using Shimadzu's Gas Chromatography-Mass spectrophotometer (GCMS) (model QP2010): DB-XLB column 30 m × 0.25 mm at Institute of Natural Compounds Chemistry, Academy of Sciences Science





and Technology Vietnam. The working parameters are 250°C injection temperature, 230°C EI source, 150°C MS Quad and 250°C transmission line. The initial temperature was kept at 50°C for 3 min, gradually increasing to 80°C at a heating rate of 3°C/min. The temperature was further increased to 230°C at a heating rate of 5°C/min and maintained at 230°C for 6 min. Helium and a flow rate of 1.0 ml/min were used as the carrier gas (Yuping Z., 2018).

3. Results and Discussion

Basic chemical composition of pineapple juice

Based on the presented methods, it is showned that pineapple juice has the ingredients listed in Table 1:

Table 1: Basic chemical composition of pineapple juice

Ingredients	Quantitative
Total sugar	126 ± 3 g/l
Total acid	3,6 ± 0,1 g/l
Vitamin C	0,41± 0,08 g/l
pH	3,4 ± 0,01

The analysis results showed that pineapple juice had a total sugar content of 126 g/l, vitamin C content of 0.41 g/l, total acid of 3.6 g/l. This result is higher than published on the USDA nutrient database (<http://vi.wikipedia.org/wiki/D%E1%BB%A9a>), the pH is 3.4 which is understandable because the chemical composition of pineapple depends on the variety, soil, care regime, season, harvest time... Compared with the criteria of raw materials for the production of Brandy (Hung, 2010), the chemical composition of the pineapple juice analyzed is perfectly suitable for fermentation and distillation of brandy.

Pineapple wine fermentation from pineapple juice

Inoculum preparation: Inoculum of *S. cerevisiae* D8 was prepared from test tube to different volumes (1st, 2nd, and 3rd inoculum). Yeast inoculum should be quickly checked at each stage by observing morphology and determining the density of living yeast cells to ensure the 3rd inoculum must reach a minimum of 340 × 10⁶ living cells/ml and the percentage of budding cells reached approximately 88%. Alcoholic fermentation of pineapple juice



The number of yeast cells, sugar consumption, alcohol content, and acid content of the fermentation broth were monitored every 4 hours for the first 24 h of the fermentation. On the first day of the fermentation, the number of yeast cells increased rapidly, sugar consumption was slow (about 38.5 g/l after 24 hours of the fermentation). Theoretically, it would produce 5.9 g/100ml, which was equivalent to 7, 47% V/V; however, the actual alcohol production was only 2.24% V/V which was much lower than that of the theoretical account. This may be explained by the amount of sugar consumed mainly for the growth and development of yeast cells in the first 24 hours of the fermentation. After 24 h, the number of cells in the fermentation broth reached 342.8×10^6 cells/ml; the consumption sugar then is consumed mainly for making ethanol.

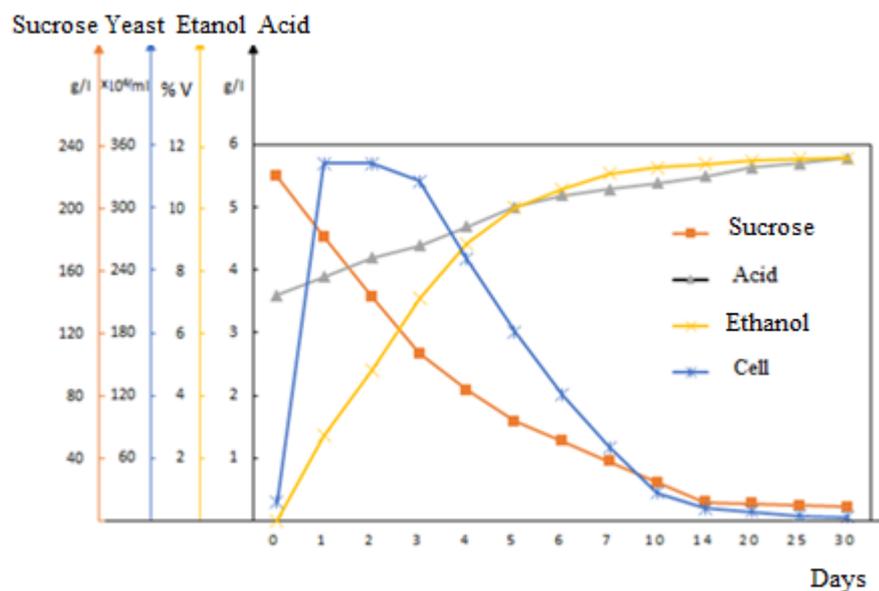


Figure 1: Dynamics of alcoholic fermentation of pineapple juice in 30 days

The composition of the fermentation broth changed very fast during the first 10 days of the fermentation. The number of cells, sugar content, and alcohol content were closely related.

On the first day, the number of viable cells reached a maximum of 342.8×10^6 cells/ml, the amount of sugar consumed mainly for growth and development of yeast cells; The amount of alcohol produced was not proportional to the amount of sugar consumed.

On the second day, the number of living cells did not increase yeast cells were in the stationary phase since the number of cells increased was equivalent to the number of dead cells. The amount of alcohol increases rapidly corresponding to the sugar consumed for the fermentation process to produce ethanol.



From day 3 onwards, the number of living cells decreases rapidly, which could be explained by the rapid decrease in dissolved oxygen which had been used for the growth and development of yeast cells on the first day and second day. The amount of alcohol produced was also a factor inhibiting the growth and development of yeast cells. The more alcohol formed, the more CO₂ released during the respiration and fermentation of yeast cells created an anaerobic environment in the fermentation vessel. At this time, the yeast changes from the growth stage to the fermentation stage, converting sugar into alcohol. Especially, the alcohol content increases the fastest on the 3rd, 4th, and 5th days. From the 6th day onwards, the fermentation took place slowly, fermentation parameters do not change significantly, the amount of sugar-the main substrate of alcohol fermentation decreased to 50 g/l.

By the 10th day of fermentation, the amount of alcohol generated 11.3% V/V and hardly in increase anymore. On the 25th day, the end of the fermentation process, the alcohol content reached 11.6% V/V.

Distillation, purification, and aging pineapple brandy

Distillation and purification

The actions of yeast cells in the alcoholic fermentation process are often accompanied by many unwanted by-products such as acid, methanol, aldehydes, furfurool...

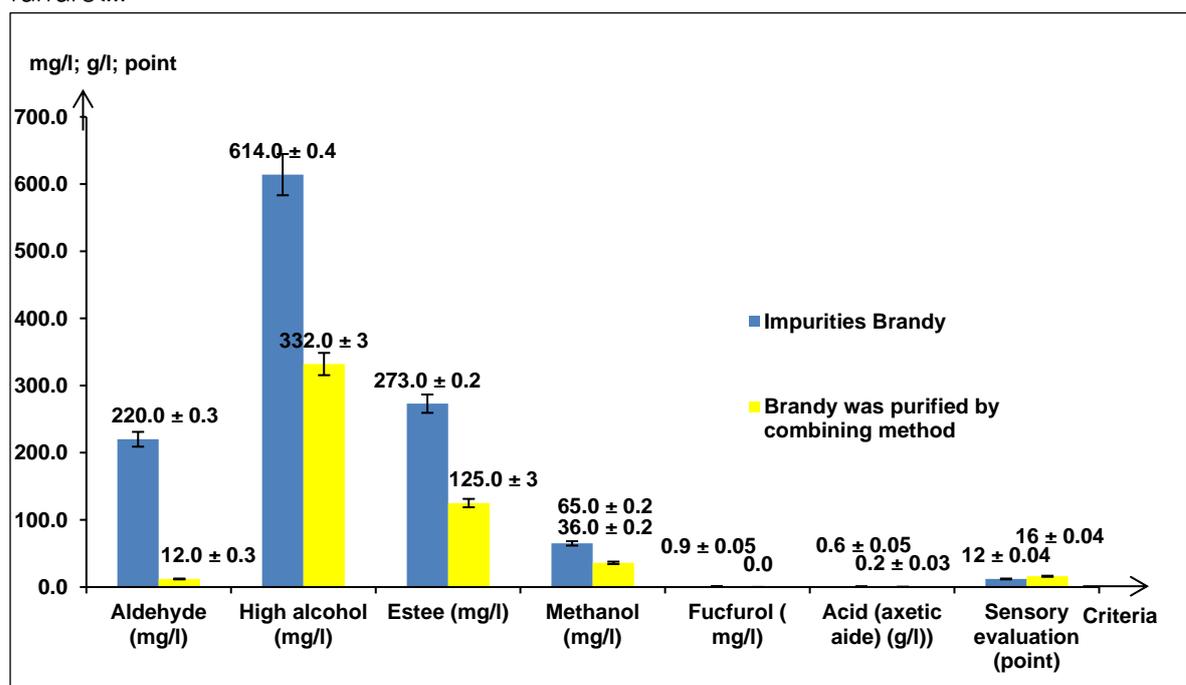


Figure 2: Impurities in pineapple brandy were distilled combining method





The distillation combining method had significantly reduced the content of impurity in pineapple brandy: the number of aldehydes decreases by 94.5% to 12 mg/l; high alcohol reduced by 45.9% to 332.0 mg/l; ester decreased by 54.2% to 125.0 mg/l; methanol decreased by 44.6% to 36 mg/l; acid reduced by 62.7% to 0.2 g/l; furfural was not detected in purified brandy; sensory score reached 16/20. Pineapple brandy cleaned by a combination method met the standards QCVN6-3: 2010 / BYT of Vietnamese alcohol.

Aging Pineapple brandy

Oak bar and commercial oak pulp imported from France were used to study the role of oak in pineapple brandy production. Using commercial oak pulp in aging pineapple brandy requires less weight (4 g/l) than when using the oak bar (10 g/l) but still achieves color, flavor, and taste better than that of using oak bars. Results were reported in Table 2.

Table 2: The aromatic component of pineapple brandy (aging for 24 months with commercial oak pulp (4g/l))

No.	Retention time (minutes)	Compound name	Content (%)	Formula of compound	General characteristics of flavor
1	5.54	Pinene	0.17	C 10 H 16	Scent of green pine
2	5.91	Camphene	0.13	C 10 H 16	Aromas of wood, cool, mint, like in green "Lim" leaves, lemon zest, citrus
3	6.22	Benzaldehyde	0.42	C 7 H 6 O	Fruit flavor: Sweet, greasy, almond, cherry, wood
4	8.52	Salicylaldehyde	0.12	C 7 H 6 O 2	Bitter almond flavor
5	12.30	Benzaldehyde	0.70	C 9 H 12 O	The woody notes of linden, acacia, pods and leaves of some other trees such as guava, strawberry, rum, wine, mushrooms and malt
6	12.43	Borneol (= Endo-Borneol)	0.17	C 10 H 18 O	The smell of camphor
7	14.19	Cinnamaldehyde <Z->	0.97	C 9 H 8 O	Cinnamon
8	16.15	Cinnamaldehyde <E->	74.22	C 9 H 8 O	Cinnamon aroma

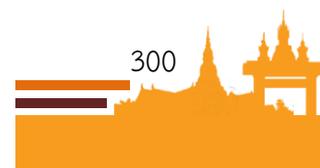




Table 2: (Cont.)

No.	Retention time (minutes)	Compound name	Content (%)	Formula of compound	General characteristics of flavor
9	20.12	Cinamaldehyde dimethyl acetal	18.97	C ₁₁ H ₁₄ O ₂	The smell of fresh cinnamon
10	21.25	Coumarin	1.54	C ₉ H ₆ O ₂	Sweet scent
11	21.33	Cinamic acid <E->	0.19	C ₁₁ H ₁₂ O ₂	Fruity and aromatic cinnamon with amber
12	21.47	Cinamyl acetate <E->	1.23	C ₁₁ H ₁₂ O ₂	Aroma of cinnamon flower and honey
13	23.38	Bisabolene (b-)	0.12	C ₁₅ H ₂₄	Fruit scent, citrus scent, aroma of opoponax resin
14	24.08	Methoxycinnamaldehyde <E> - O->	0.36	C ₁₀ H ₁₀ O ₂	Sweet fragrance of strawberries and cherries
		Total	99.31		

After storage with oak pulp, the composition of aromatic, volatile compounds in pineapple brandy was mainly obtained in about 15–20 min GC-MS chromatography; while the volatile, aromatic compounds in pineapple brandy not stored with oak were mainly obtained after 20 min of GC-MS chromatography. We identified 14 substances (accounting for 99.31% of total aromatics weight) in the aroma composition of pineapple brandy stored with oak pulp (4g/l) for 24 months including 3 terpenes (A-pinene, camphene, bisabolene); 1 derivative of terpene borneol; 2 aromatic compounds with benzene rings: (coumarin, cinamaldehyde dimethyl acetal); 6 aldehydes (benzaldehyde, salicylaldehyde, cinamaldehyde <E->, cinamaldehyde <Z->, benzenepropanal, methoxycinnamaldehyde) 1 acid. The flavor composition of this brandy is very different from that of white pineapple brandy in terms of both composition and quantity of analytes. Except for bisabolene(b-) isomer of copae-ne <a->, muurolene <a-> and muurolene <g-> in white brandy, the remaining components are very different. The main components are cinamaldehyde (<Z-> and <E->), accounting for 81.9%, and their derivatives: methoxycinnamaldehyde (0.36%), cinamaldehyde dimethyl acetal (18.97%). Cinamaldehyde has a cinnamon flavor and is found in apricot, peach, and pear brandy (Riu-Aumatell M., 2005), cinamaldehyde dimethyl acetal in fruit brandy (Peterson D. G., 2015); coumarin is an aromatic organic chemical in the chemical benzopyrone class, with





medicinal anti-inflammatory and anti-edematous effects, also found in apple and pear brandy (Schwarz M., 2014). Compounds with phenol rings account for a low percentage but are New substances appear in brandy stored with commercial oak pulp. Specifically: Benzene-zenpropanal (0.70%) and benzaldehyde (0.42%) have been found in cherry and plum brandy (Ninoslav N., 2011). Most of the newly analyzed incense components are derived from oak. It is the presence of these compounds that leads to the differences in color, flavor, and taste between preserved pineapple brandy and oak and white pineapple brandy. It is clear that during the storage of spirits, polyphenols (tannins, lignin) from the oak are extracted into the wine. Tannins and lignins in oak trees have been dried at high temperatures, so they have been partially chopped; we are further oxidized to phenol-based single molecules. Most of this phenol is oxidized to cinnamate-hyde (Saltveit M. E., 2017) (81.9%) (81.9%), while a very small amount of cinnamon-aldehyde is further oxidized to cinnamic acid (Saltveit M. E., 2017), the acid is oxidized to the cinnamyl acetate ester (1.23%). A small part of phenol is oxidized to coniferyl alcohol, sinapyl alcohol, p-coumarin alcohol; They are then oxidized with vanillin, syringaldehyde, p-hydroxy benzaldehyde, respectively; Leads to images of benzaldehyde, salicylaldehyde in the commercial wood pulp treatment label. Thus, these chemical changes occurring in the oak brand store are related to the oxidation of phenols to alcohols, where very small amounts of lignin produce phenolic antioxidant compounds (Harvey P., 1992).

Oak keeps an important role in the flavor taste and color characteristics of pineapple brandy. The composition and aroma content in brandy aging in oak wood is completely different from white pineapple brandy, which leads to different colors, flavors, and senses. Initially, brandy pineapple was colorless and transparent; brandy became amber color when stocked with oak powder. The composition of aromatic, volatile compounds (16 analyses) in white pineapple brandy were mainly obtained after 20 minutes of GC-MS chromatography, accounting for 34.88% of the aromatic components in white pineapple brandy. The composition, aromatic, volatile compounds in pineapple brandy stored with oak pulp mainly obtained in about 15-20 minutes of GC-MS chromatography, including 14 new substances which were including 3 types of terpene, 1 derivative of terpene, 2 aromatic compounds; 5 types of aldehyde, 1 acid, 1 ester; the highest sensory score of 18.5/20 points.

The technological process to produce brandy from pineapple

The technological process to brandy produce from pineapple

From a small-scale (20 liters) in the laboratory to a pilot production scale (100 liters), we proposed a technological process of brandy production from pineapple Queen.



The process consists of 8 main stages: (1) Preparing yeast inoculum; (2) Preparing raw material of pineapple; (3) Preparing fermentation medium; (4) Primary fermentation, (5) Secondary fermentation; (6) Purification; (7) Aging brandy; (8) Bottling, labeling, and packaging (Figure 3)

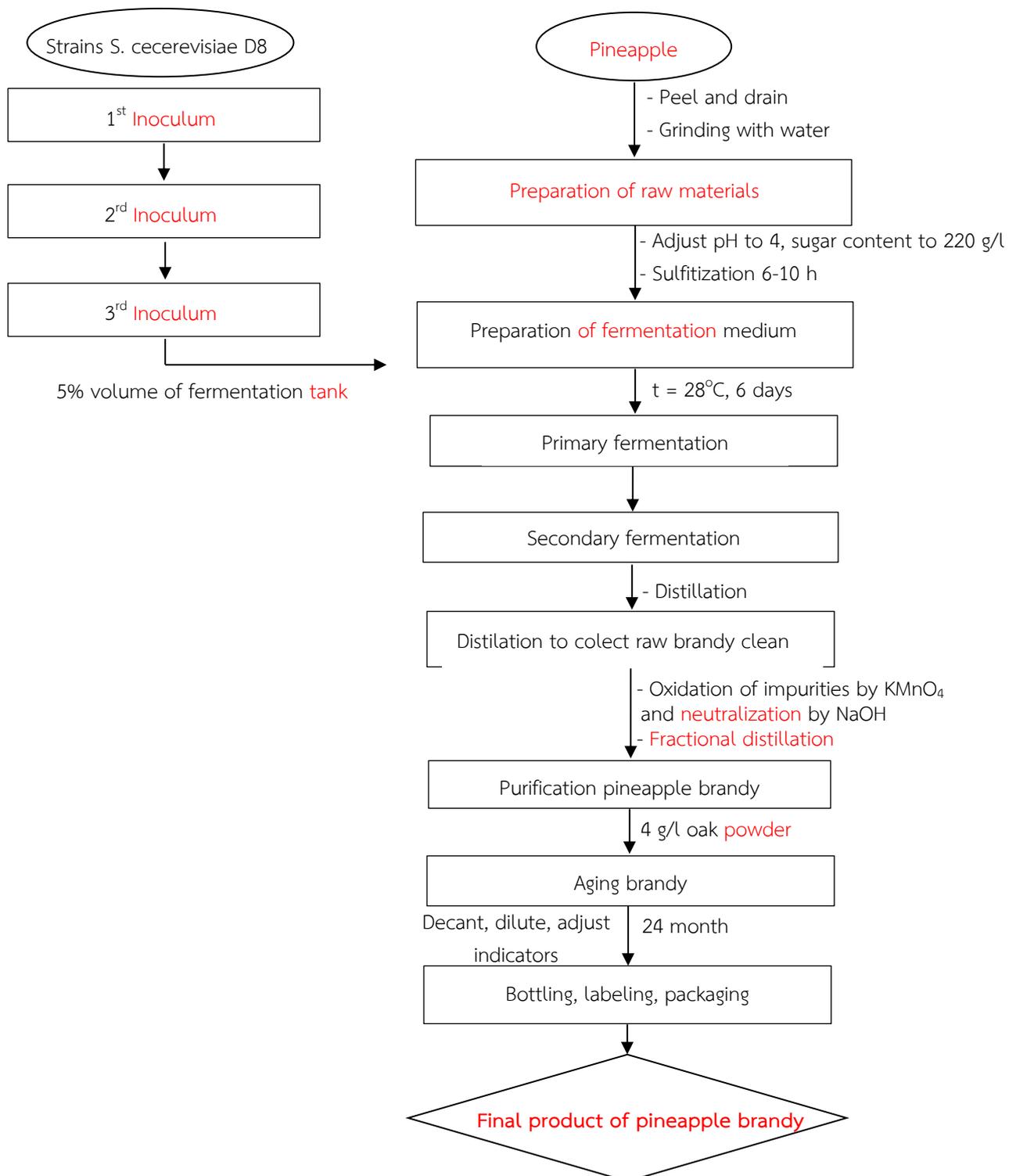
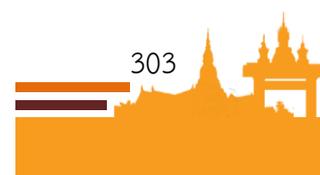


Figure 3: Diagram of pineapple brandy production process





4. Conclusion

From yeast strain *Saccharomyces cerevisiae* D8 and pineapple juice queen, we have researched and built the pineapple brandy production process. That consists of 8 main stages. The finished pineapple brandy has a standard rich aroma and alcohol composition that met the standards QCVN6-3: 2010/BYT of Vietnamese alcohol.

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ROLE OF SCIENTIFIC RESEARCH FOR UNIVERSITIES IN VIETNAM

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Nguyen Thi Hai Huong²

Abstract

Scientific research plays an important role not only for universities but also for teaching staff, helping to improve training quality and qualifications of teaching staff, and helping to enhance brand reputation. of the university. Therefore, the goal of the paper is to point out the important roles of scientific research for lecturers and universities, and to point out the current limitations and difficulties that reduce the role of scientific research current role of scientific research, thereby proposing solutions to further promote scientific research activities in universities in order to return scientific research to its inherent role.

Keywords: Scientific research, Lecturers, Universities, Vietnam

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1. Introduction

Scientific research is one of the three important tasks and functions of a university. Moreover, scientific research is also one of the criteria that accounts for a large proportion in evaluating and ranking a university compared to other criteria. However, in Vietnam, the role and position of scientific research has not been determined by many universities or lecturers as an important role. Therefore, pointing out difficulties and limitations reduces the role and position of scientific research in universities, thereby proposing solutions to promote scientific research, contributing to improving the quality of scientific research. training quality, brand reputation of universities in the coming time.

2. The role of scientific research for universities

2.1 Scientific research contributes to improving the qualifications of lecturers at universities

For lecturers at universities, teaching is always valued, a necessary and sufficient condition for a lecturer. However, this is only half of the requirements of a university lecturer's professional activities. Therefore, scientific research has long been highly valued, focused, and set forth as a mandatory and regular task and an important leading criterion for evaluating the comprehensive ability of lecturers. (Tran Mai Uoc, 2013). This is also the reason why the Ministry of Education and Training issued Circular No. 20/2020/TT-BGDĐT stipulating that each year, lecturers must spend 1/3 of their time on scientific research activities. For lecturers who do not complete their scientific research tasks as prescribed, the head of the higher education institution shall base on the level and specific circumstances to consider when evaluating the results of the performance of tasks in the academic year. emulation classification and settlement of relevant regimes and policies (Circular No. 20/2020/TT-BGDĐT).

Participating in scientific research activities contributes to the improvement of lecturers' qualifications because scientific research brings lecturers the following basic benefits:

- Scientific research helps lecturers have conditions to dig deeper, grasp more closely the professional knowledge they are directly teaching, timely adjust and supplement supplement the content of incorrect knowledge in his lecture. Lecturers participating in scientific research on the one hand have consolidated their professional knowledge, on the other hand, have the opportunity to expand and understand more knowledge from other specialties.





- Scientific research will contribute to the development of teachers' thinking, creativity, ability to work independently, cultivate knowledge and scientific cognitive methods. At the same time, forming in lecturers the qualities of researchers.

- Scientific research is also a process that helps teachers "update" information and knowledge in a really effective way. Moreover, scientific research helps teachers "enlighten" with new knowledge from different sources to evaluate and improve their own knowledge.

- Scientific research will increase the understanding of the profession, contributing to the formation and fostering of professional feelings for lecturers. I think this is necessary and important in the teaching process and professional activities of teachers. This will help teachers integrate better and be more active in their work.

- Scientific research is a good opportunity for lecturers to have an environment and opportunity to foster scientific research capacity. This is also the necessary basis for conducting innovation in teaching content and methods. This will contribute to improving the quality of training.

- Scientific research, if achieved with good results, will be an important factor contributing to improving the position and prestige of the lecturers themselves, and at the same time affirming the position and prestige of the university in the society. Because one of the criteria for evaluating and ranking those schools is the scientific research of the faculty and staff of the school.

- Scientific research is a very good field for teachers to assert themselves. It is difficult to say if a lecturer is assessed as having good professional capacity but every year there is no scientific work. Because the capacity of lecturers is mainly expressed through teaching and scientific research.

- Scientific research will make an important contribution to affirming the prestige of the school with other schools in the country. Each article participating in the conference is highly appreciated, each scientific research project at all levels, each article published in specialized journals with the names of officials and lecturers associated with the school's name is a trademark and The reputation of the school is demonstrated. The good reputation of the school is not something general, it must be shown through the achievements and contributions of each staff, lecturer, and student of the school. Individual achievements contribute to the achievements of the collective (Tran Mai Uoc, 2013).





2.2 Scientific research contributes to improving the quality of training, prestige and brand names of universities

Only with a close connection between training and scientific research in universities can the training products of universities fulfill the function of developing and training highly human resources for the development of the country. Through scientific research, lecturers have both cultivated old knowledge, opened up new knowledge, updated information of the times, thereby blowing into the lecture to refresh the lesson and create excitement for students in learning.

The quality of university education only improves when we pay attention to the role and position of scientific research in universities because lecturers “can teach anything new in universities today if they do not find do research to master scientific knowledge” (Le Ngoc Hung, 2003). If you want to create something new and up-to-date with the times, there is no other way for teachers than scientific research. On the contrary, if teachers teach class is just a bunch of old, outdated, theoretical knowledge, then this kind of knowledge is just like an “anesthesia” that makes students fall asleep in class and “paralyze”. With self-study, self-research, what else can be creative. Even, as Prof. Dr. Nguyen Quang Ngoc said, “old things only harm learners” (Chi Mai, 2014).

More importantly, when the teacher is a pioneer in scientific research, it is inevitable that according to inertia, students will also have the opportunity to be exposed to research work, even if it is just a habit of “carrying with the teacher”. In this way, students have gradually formed scientific thinking that is typical of problem discovery, problem solving or critical thinking, independent thinking and creative thinking. These types of thinking cannot form and develop without scientific research from the time they are still students. More importantly, this kind of thinking is very necessary, becoming an indispensable guide and luggage for students after graduation. That way, new students can take up jobs right after graduation without retraining. On the contrary, if the lecturer does not do scientific research, the students will forever only learn in the style of “the teacher reads and the students copy”. This teaching method is only suitable for lower secondary schools to impart knowledge. For the university level, helping students to form thinking is more important than imparting knowledge, so the late Prime Minister Pham Van Dong said: “Studying at university is learning about thinking”. Similarly, Almeida Junior said: “The highest goal that the university must aim at and have the duty of training for its students to achieve is scientific research”.

Finally, scientific research helps universities improve their position, reputation and brand in the rankings of prestigious rating agencies in the region and the world. When universities are ranked high, it means that the higher education system of that country also increases, has quality assessment, attracts foreign students to study. In fact, any





country with high productivity and quality of scientific research has a developed higher education system, prestigious and prestigious universities, and many successful students. Take the United States of America as an example of this point of view. In terms of the Nobel Prize, after more than 100 years of history since its first appearance in 1901, more than 800 individuals and organizations have been honored to receive this award. The first Nobel prize, topped by the US with 333 people, the UK with 116 people, Germany with 102 people, France with 58 people and Sweden with 29 people (www.vtc.vn). With such scientific achievements, it is not surprising that the US always has the most universities in the Top 10 universities in the UK Times Higher Education's university rankings. Specifically, in the 2015-2016 school year, the US has 6 out of 10; the 2014-2015 school year has 8 out of 10; In the academic year 2013-2014, there are 7 out of 10. Emerging are Harvard, Yale, Chiacago, Princeton... (<https://www.timeshighereducation.com>). Among these famous schools, as of 2015 Harvard University has 150 Nobel Prize winners and 5 Fields Prize winners who have been faculty, students or staff of Harvard University (www.en.wikipedia.org). Therefore, that prof. Nguyen Van Tuan believes that scientific research contributes 60% to a university's position in global university rankings (Nguyen Van Tuan, 2015).

2.3 Scientific research contributes to increasing income for lecturers and revenue for universities

Basically university lecturers have a legitimate income from salary, bonus and other social benefits. In addition to these incomes, university lecturers can also increase their income by conducting scientific research projects inside and outside the university. Especially for technical schools and lecturers with professional reputation, with high academic degrees, it is more convenient to host and deploy scientific projects as well as carry out scientific research cooperation. study with the outside. Younger, less experienced, and lower-level lecturers will be members who collaborate with “banyan trees” on scientific research or carry out smaller projects, depending on their “strength”. “resources” such as preparing training books, reference books, writing articles... These activities not only help improve teaching quality, update knowledge but also increase income for themselves.

Scientific research activities also bring in revenue for universities. For each scientific topic or project, the university and the lecturers will be entitled to a certain percentage in order to encourage the lecturers to do scientific research while compensating for the school budget. If the topic or project is large, it will bring significant revenue to both the school and the lecturers. The revenue of a university from scientific research is one of the criteria used to evaluate the quality of higher education issued by the Ministry of Education and Training in 2007. This content belongs to Criterion 5 in Standard 7 of





Decision 65/2007/QĐ-Ministry of Education and Training, Regulations on standards for assessing the quality of higher education, promulgated on November 1, 2007.

3. Some limitations and difficulties in scientific research at universities in Vietnam

- The reference system for scientific research is still a lack. According to the standards of facilities and equipment in Circular 24/2015 of the Ministry of Education and Training, which prescribes the national standards for higher education institutions. Currently many schools have not yet have access to at least 1 international scientific database and at least 1 international scientific journal (print or electronic) for each training discipline. This lack leads to the updating and integration of lecturers in scientific research which will be limited in the current international integration context.

- Remuneration and preferential policies for scientific researchers are not disproportionate, not created a motivation and push for scientific research and development, that is, a remuneration mechanism is needed. dedicated support for people doing scientific research. Support, treatment, reward, encouragement and encouragement of scientific researchers. Thanks to that, new scientific research developed.

- Some lecturers' scientific research skills, methods and experience are not good

Some lecturers still lack a lot of experience in conducting a scientific research project. They have only once or a few times carried out a scientific research project during their undergraduate and graduate studies, but often have the guidance of other teachers from suggesting the topic content, outline, content of each topic. unit. Young lecturers still have not taken the initiative in carrying out a scientific research project from start to finish. In particular, the scientific research topics of young lecturers are often subject to great competition from experienced lecturers, so their topics are rarely chosen by the Scientific Research Management Department (Tran Thanh Thao, 2008).

4. Some basic measures to promote scientific research at universities in Vietnam

Firstly, to treat and reward people who do scientific research

The policy of remuneration and reward for scientific researchers is the most effective investment method to attract, motivate and encourage people to do scientific research. Although this material and spiritual reward may not be much, it shows the recognition of the organization, collective and society for their merits and achievements. This measure helps people doing scientific research to have more funding and income





from scientific research. This motivates them to stick with and be more passionate about scientific research so that they can live on scientific research, rather than treat scientific research as a side job outside of salary.

Although this reward and treatment regime has been promulgated by many legal documents by the Government, it is not easy to put it into practice at universities. For example, the Government's Decree No. 40/2014/ND-CP stipulating the use and respect of individuals for scientific and technological activities, issued on May 12, 2014; Decree 99/2014/ND-CP of the Government stipulating the investment in developing potentials and encouraging scientific and technological activities in higher education institutions, promulgated on October 25, 2014.

Second, strengthen the facilities and documents for scientific research

For scientific research, the infrastructure and documents for scientific research are likened to the extension arm of the person doing scientific research. Doing scientific research without this condition, no matter how good a scientist is, it cannot be done. This is a mandatory standard in assessing the quality of higher education as well as a standard for university stratification such as Circular 24/2015/TT-BGDĐT on Regulations on national standards for higher education institutions. According to this Circular, universities need to purchase more books and international scientific journals, and purchase copyrights for international scientific databases such as www.gatesearch.com, www.proquest.com.... Having access to this data source helps lecturers to update new knowledge, grasp the development trends of the world, have abundant reference materials for research, especially in-depth research such as: write theses, dissertations, journal articles and conduct research projects at university level or higher, even student projects.

Third, strengthen the training and improve the qualifications of lecturers on scientific research

Continuing to innovate training and fostering to improve research capacity for teaching staff. The school continues to create opportunities for teachers to study and research at major universities and prestigious research institutions at home and abroad. Regularly open intensive training courses on research methods for teachers, organize seminars for leading scientists, experienced lecturers to share scientific research experiences for teachers. Encourage the formation of in-depth research groups, connecting scientific research between generations in the University.





5. Conclusion

Thus, the role of scientific research for universities is very large, but in fact, this role has not been clearly shown in practice due to difficulties and limitations that make this role new. theoretically determined. Therefore, if these difficulties and limitations are solved, it will make an important contribution to promoting scientific research in universities more strongly and then scientific research has a role to improve the quality of ethics. creating, the university's brand reputation not only in the country but also internationally and in the region.

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TAN TRAO UNIVERSITY-THE CRADLE OF HUMAN RESOURCES TRAINING FOR SOCIO-ECONOMIC DEVELOPMENT OF TUYEN QUANG PROVINCE AND NORTHWEST AREA, VIET NAM

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Abstract

This paper aims to evaluate training, scientific research and technology transfer activities of Tan Trao University. The research data used in the article are aggregated from 2016 to 2021. By descriptive, statistics, comparative methods, the paper points out its impacts on the socio-economic development of the locality. The region, in which there are the University's contributions in the fields of: training high-quality human resources, scientific research, technology transfer, economic development within Tuyen Quang province and Northwest region as well as a bridge with domestic and foreign partners to serve the needs of socio-economic development of Tuyen Quang province and the Northwest region.

Keywords: Tan Trao University, social-economic development, Tuyen Quang province

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1. Introduction

For the locality and the region, the university is not only a place to provide quality human resources but also actively contribute to the socio-economic development of the locality and the region (Valero & Van Reenen, 2016).

Tan Trao University is a public university with multidisciplinary training in Vietnam. The University was established in 2013 and was assigned by the Ministry of Education and Training, Tuyen Quang province to train and associate training human resources with college, university and graduate degrees; scientific research and technology transfer; international cooperation in order to serve the needs of economic, cultural and social development of the local as well as the region and the whole country. In 2019, Tan Trao University is one of 128 universities in the country that has met the quality accreditation standard of higher education institutions (Tan Trao University, 2020). Currently, the University has been training pupils and students from Tuyen Quang province and from over 30 other provinces in the country. Over the years, Tan Trao University has made great contributions to improving people's intellectual standards, training human resources and fostering talents for education and training, contributing to socio-economic development of Tuyen Quang province in particular and the Northwest region as well as the whole country in particular.

2. Research results

2.1 Contributions of Tan Trao University in the socio-economic development of the locality and the Northwest region in recent years

2.1.1 Knowledge training cradle

The establishment of the university was intended to help developing the local economy. Valero and Reenen (2016) have demonstrated that if a locality has only one university, the contribution of this university will be 10% to the total income of that locality. In addition, the benefits brought by the university also spread to the localities and neighboring areas; benefit more or less depends on geographical distance. From that, it can be seen that the economic benefits brought by the university are huge (Valero & Van Reenen, 2019).

Tan Trao University is currently training 24 undergraduate majors in most fields, basically matching the social needs as well as the strengths of Tuyen Quang province and the region such as: agriculture, forestry, economics & management business management, culture, tourism, pedagogy, especially in the field of medicine-pharmacy.





In the 2017-2021 period, Tan Trao University has trained, coordinated, and fostered over 34.075 people, of which 2.766 are full-time university students in various disciplines; training and granting certificates of all kinds to 18.936 people (Table 1).

Table 1: The reality of training and fostering vocational skills for employees at Tan Trao University in the period 2017-2021

Type of training and retraining	2017 (person)	2018 (person)	2019 (person)	2020 (person)	2021 (person)	Rate (%)
1. Certificate of IT	1.170	2.500	1.500	1.000	700	87,9
2. Certificate of Foreign Language	776	1.400	700	500	500	89,6
3. Certificate of Education Management	88	100	100	100	100	103,2
4. Certificate of Culinary Arts	190	100	110	121	133	91,5
5. Certificate of Education Skills	48	0	300	300	300	158,1
6. Certificate of Vocational Education	0	2.000	1.500	1.000	700	108,8
Total	2.272	6.100	4.510	3.321	2.733	104,7

The source: Tan Trao University (2021)

Through the survey, in the period 2017-2021, over 97% of the officials, civil servants, public employees, teachers and students of Tuyen Quang province were trained and retrained to improve their qualifications at Tan Trao University.

The quality of training is also confirmed by the fact that on average, 70% of graduates have jobs (in 2019) and over 90% in 2020, some majors reach 100% such as accounting, land management, and materials. environmental management, culture and tourism (Tan Trao University, 2021).

2.1.2 Scientific research and technology transfer

Scientific and technological activities created a foundation of knowledge, understanding and skills of employees, both promoting and serving as a basis for production and social development. (Charles, D, 2011). The application of scientific and technological advances to production contributes to accelerating the fundamental and comprehensive transformation of production, improving productivity, quality and efficiency of production and business. The economic structure is shifted towards rapidly



increasing production industries with high science and technology content and high added value, contributing to speeding up economic development.

Awareness of the important role of applying scientific and technological advances to production and life, over the years, Tan Trao University has paid great attention to developing scientific research activities. and technology transfer by both lecturers and students. That is:

- Scientific research activities: The results of scientific research activities of lecturers of Tan Trao University have increased significantly in quantity and quality in recent years (Table 2.2), especially the marked increase in the number of articles published in prestigious international scientific conferences and journals, specifically from 13 articles in 2017, the total number of these articles will increase to 107 articles by 2021. the growth rate reached 115,3%. Number of good quality articles published in international scientific journals with ISI index, Scopus achieved a growth rate of 151%. The Science Journal of CTU is ranked 71 out of 86 scientific journals with IF and H-index scores in more than 600 scientific journals of universities, research institutes and ministries and branches in the field of science and technology. the whole country (Tan Trao University, 2021).

Table 2: Scientific research products of Tan Trao University in the period of 2017-2021

Type of research	2017	2018	2019	2020	202 1	total	Ratio (%)	Growth rate (%)
Provincial projects and above	4	8	6	4	4	27	1,91	105,7
University level projects	23	53	38	2 7	43	184	13,00	116,9
international proceedings	13	4	37	30	23	107	7,56	115,3
Article of ISI/ Scopus	5	10	21	12	26	74	5,23	151,0
domestic proceedings	220	189	147	166	217	939	66,36	99,7
Textbooks, references	13	9	14	25	23	84	5,94	115,3

Source : Department of Scientific Management and International Cooperation, Tan Trao University (2020)

- Technology transfer activities : Every year, the University provides over 2,5 million agricultural and forestry seedlings such as bananas, sugarcane, acacia, eucalyptus... produced by tissue and cell culture methods, changing the structure of forestry tree varieties of Tuyen Quang province and some northern mountainous





provinces. Training and transferring science and technology to over 200 individuals and households on economic development, sustainable agricultural development, and homestay tourism in local districts such as Na Hang, Lam Binh, and Ham Yen.

2.1.3 Attracting talents and high-quality workforce

Attracting and retaining talent is one of the important strategies for the development of the university (Bradley, A. P, 2016). Improving working conditions and environment, developing appropriate policies and constantly improving rankings on university rankings are important factors to attract and retain qualified and skilled lecturers (Huong, 2013). This is necessary not only for the development of the university but for the development of the locality itself.

Table 3: Number of staff and lecturers at Tan Trao University in the period of 2017-2021

No	Level	Year 2017	Year 2018	Year 2019	Year 2020	Year 2021	Growth rate (%)	Ratio (%)
1	Professor, Assoc Prof	1	1	23	50	52	268,5	14,5
2	Doctor	21	25	36	65	98	147,0	27,3
3	Master	149	169	173	205	209	108,8	58,2
4	BA	47	34	38	20	0	0,0	0,0
	Total	217	229	270	340	359	113,4	100,0

The source: Tan Trao University (2021)

In 2017, Tan Trao University had 217 staff and lecturers, including 21 PhDs (accounting for 9,7% of direct teaching teachers), 01 Associate Professor (accounting for 0,5% of direct teaching lecturers). By the end of 2021, the University has a total of 359 lecturers and researchers, 100% of the teaching staff have a master's degree or higher (the growth rate is 108,8%); the number of lecturers is PhD accounts for is 27,3%; the number of lecturers is Assoc Prof, Prof reaches 14,5% of the total number of lecturers.

Thus, the number of staff and lecturers of Tan Trao University has increased in quantity and quality over the years. The university has been doing a good job of attracting and retaining talents. However, at present, Tan Trao University still has limitations that need to be overcome soon, that is, the number of doctorates is not many compared to the total number of lecturers and is uneven in professions; The training capacity of the University in some fields except for pedagogy is not high; Tan Trao University is not really confident to go beyond the area of Tuyen Quang province to participate in the market of training and scientific research in Northwest area as well as the whole country.





2.1.4 Connecting and building cooperative relationships with domestic and foreign partners

The university is the unit with the most favorable conditions in connecting and cooperating with domestic and foreign organizations and businesses, contributing to promoting investment attraction in the locality (Dung & Huong, 2017).

By 2022, Tan Trao University has established cooperative relationships with nearly 30 universities, research institutes and international organizations in ASEAN such as Thailand, Philippines, Singapore, Malaysia, Indonesia, Laos; countries in Asia such as: Korea, China; European countries such as: Russia, Belarus, Poland (Tan Trao University, 2020). The content of cooperation focuses on the fields of training, scientific research, publishing scientific products, exchanging students and lecturers. From these cooperative relationships, the university has created opportunities for students to experience, access to a professional and modern learning environment from advanced countries around the world.

Every year, the university receives hundreds of students from other countries to practice at Tan Trao University and sends hundreds of students from Tan Trao University to do internships at universities abroad, from which students Tan Trao University has improved foreign language skills and working skills, gradually approaching the labor market of Southeast Asia. Besides, through cooperation activities, the university has contributed to introduce and promote the image and people of Tuyen Quang province to domestic and international friends.

2.2 Some challenges for the development of Tan Trao University in the current context

- Currently in Vietnam, the problem of competition between universities is increasing, especially the competition between newly established universities and those with “thickness” and “brand name”. The trend of vocational training increased, higher education decreased. Many large enterprises attract workers without training.

- Conflict among the needs to improve the quality of training while the cost of training is low. There is a contradiction between the University's desire to expand, develop, grow and raise the level the university within it conditions, to meet the university's needs of society, and the human and material capabilities of Tan Trao University, of the locality.

- The level of education and income of the people in the regions and localities of Tuyen Quang province in particular and the northern mountainous region in general are still low.

- Tan Trao University is located far away from big cities, cultural and social centers of the country.





- The university's autonomy is still low, most of it still relies on investment resources from the provincial budget.

- Limited the University's human resources with highly qualified and fluent in foreign languages (accounting for 10% of the total number of lecturers in Tan Trao University). This affects and limits international integration and cooperation with foreign universities.

2.3 Proposing some solutions to promote the role of Tan Trao University in the socio-economic development of Tuyen Quang province and the Northern mountainous region in general

2.3.1 Strengthening the role of training high-quality human resources

Improve the quality of training the workforce to meet social needs.

In the long-term development strategy, Tan Trao University has determined that “training quality is the core factor for development”. Therefore, in order to train high-quality human resources for socio-economic development, first of all, it is necessary to identify leading fields and industries that society needs; then the university needs to continuously innovate training programs, learn with practice, make practical contacts, diversify forms of training in the new situation; focus on training necessary skills for students so that after graduation, they can meet the recruitment needs of large enterprises and corporations. Orientation to train learners capable of working at home and abroad, timely adapting to the development of the industrial revolution 4.0.

Focus on training high-quality human resources for the rapid development of priority areas of Tuyen Quang province and the northern mountainous regions. The university needs to coordinate with other universities, localities and businesses in continuing to train high-level human resources (from university and above). It is necessary to focus resources on areas in which the university has strengths and at the same time suitable for the needs of human resources of the society. Specifically, a number of key industries can focus on the following training:

- Firstly, to train human resources to meet the educational development needs, especially primary and preschool education for the locality and neighboring provinces.

- Secondly, training human resources to meet the requirements of agricultural development to produce high-value-added goods, green development on the basis of application of modern technology and organized with advanced production forms such as: agricultural product value chain, agro-industrial complex, forestry-industrial complex, specialized production areas; production associated with branding and geographical indications, traceability; development of e-commerce and digital economy.





- Thirdly, training human resources to meet the requirements of sustainable development of processing, manufacturing and mineral processing industries in the direction of green development.

- Fourthly, training human resources to meet the development requirements of the service sector, in which trade and tourism are strongly developed to effectively promote the local cultural capital, production and consumption habits of locals as well as of tourists from all over the world.

- Fifthly, training human resources to meet the health care requirements of people as well as foreigners coming to work, live and visit in the locality.

2.3.2 Promote its role as a center for scientific research and transfer of science and technology

For many years, Tan Trao University has implemented and conducted effective research on many scientific research topics with high application and practicality for Tuyen Quang province and some localities in the region. In the coming time, the university needs to continue to promote and improve the quality of scientific research and technology transfer activities for the development of the community and society.

First, the school needs to create motivation for lecturers to actively participate in scientific research, and at the same time improve the quality of facilities for scientific research activities such as: upgrading the school library, supplementing adding more database sources to be able to provide a full range of information sources and references to serve the scientific research process of the lecturers. There is a clear and specific policy mechanism in the “reward-punishment”, especially the reward system for lecturers who have a high number of scientific research hours.

Tan Trao University needs to focus on researching scientific topics towards transforming growth models, attaching importance to improving productivity, quality, efficiency and competitiveness associated with green and sustainable development for the future. localities; Besides, research on topics in the field of value chains, global distribution chains and digital economy development should also be considered.

2.3.3 Maintain and expand international cooperation relationships with domestic and foreign partners

Tan Trao University needs to continue to maintain and develop the ongoing cooperation with domestic and foreign universities in scientific research, training, student exchange, and cultural exchange. ... suitable for the new normal conditions during and after the current Covid-19 epidemic.

Actively organize and participate in online activities about training, cultural exchange, and exchange of study materials with other universities at home and abroad.



Strengthen the signing of training programs, cooperate with domestic and foreign enterprises, prestigious universities and enterprises abroad on the basis of investment in building facilities to meet international standards. national and international. Focus on high-tech field and seek output for scientific research products.

3. Conclusion

Tan Trao University has played an important role in the socio-economic development of Tuyen Quang province and the region. In which, the role of improving the quality of human resources, basically meeting the training needs of Tuyen Quang province and the region. The training professions are suitable with the province's socio-economic potential strengths and the needs of the society, the number of graduates who have jobs and the achievement of accreditation standards for higher education institutions have created a good change in the position of Tan Trao University in the region and the university system of the country.

In order to maximize the role of Tan Trao University in the socio-economic development of Tuyen Quang province and the northern mountainous region in general, some key solutions to focus on are: i) Strengthening the role of training high-quality human resources; (ii) Promote its role as a center for scientific research and transfer of science and technology; (iii) Maintain and expand international cooperation relationships with domestic and foreign partners.

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THE CURRENT SITUATION OF FACTORS AFFECTING THE DIFFERENTIATED TEACHING COMPETENCE OF PRIMARY SCHOOL TEACHERS IN TUYEN QUANG PROVINCE IN THE NEW NORMAL CONDITION

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Abstract

Differentiated teaching is a strategy, a teaching perspective towards the development of individual competence. This is a major concern of many teachers and researchers. So, how to optimize the competence of teachers in the process of differentiated teaching? The article analyzes and clarifies differentiated teaching capacity, methods, content, and forms of differentiated teaching, the factors affecting differentiated teaching capacity for primary school teachers with new normal conditions.

Keywords: Situation, Factors affecting, Competence, Differentiated teaching, Primary teachers

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1. Introduction

Differentiated teaching is the trend of the educational process in general and teaching in particular. Improving the differentiated teaching capacity of teachers is an urgent requirement in innovating teaching methods in general education institutions. The general education program in 2018 has emphasized the principle of differentiated teaching for primary education levels, general education in which teachers need to grasp and differentiate students to choose content and teaching according to the principle of fit for each student.

Especially with the current situation, the whole world is affected by the COVID-19 pandemic, which has caused disturbances, greatly affecting the education and training sector. Almost all schools have had to change the form of learning from face-to-face to online. The COVID-19 pandemic also poses many challenges to the education and training sector in general and primary teachers in particular. The problem is, teaching through the online form, how can teachers be interested in all students. How to make weak students not to be overloaded, good students be still interested in learning in the same class?? At the same time, how to help learners really participate deeply in the differentiated teaching process, to actively choose appropriate learning methods and ways.[1]

To solve this problem, our research focuses on pointing out the factors affecting the differentiated teaching capacity for primary school teachers in the new normal condition in order to well organize the differentiated teaching process.

2. Contents

2.1 Methods, contents, and forms of differentiated teaching in the new normal

In the new normal period, organizing teaching differentiated need collaboration comes from teachers, parents, students, and helpers. In a differentiated classroom, students are diverse in terms of cognitive levels, intellectual types, styles, and interests, so the choice of methods, content and organizational form is very important, determining the effectiveness of the teachin.

2.1.1 Methods

The main teaching methods used when organizing teaching are differentiated such as detecting and solving problems; teaching methods according to constructivist theory; project-based teaching; contract teaching; ... However, using any method, one must ensure the principle that students complete their tasks, awareness of





the organization, and guidance of teachers, in which teachers focus on training thinking logic, critical thinking, creative thinking of students [3].

In order for the teaching process to be most effective, teachers need to be well-prepared about the teaching environment, teaching content, conditions, and teaching aids. In order to improve the positive effects of teaching methods, it is necessary to effectively use teaching equipment and teaching aids in schools.

Differentiated teaching is a strategy, a teaching perspective towards the development of personal capacity. Basing on that orientation, teachers apply and choose active teaching methods, forms, and techniques to promote the initiative and creativity of students [4]. Thus, teaching differentiates throughout and dominates teaching methods. Group teaching combined with individual teaching is one of the main ways to implement differentiated teaching strategies and perspectives.

2.1.2 Content organizing teaching differentiated

On the basis of the standard knowledge and skills of the subject, the lesson is divided into three groups: Students with very good understanding, students with good understanding, and students with absolutely no understanding of the content. On the other hand, it is necessary to determine the level of reception and problem solving to select teaching content for each group according to learning capacity. Besides, basing on different learning styles, learning pace, learning needs, and learning interests of students, teachers must carefully develop strategies for exploiting content for each group in the direction through images, sound, language, movement, logic, and practice....for the best results

2.1.3 Teaching form

Based on the actual situation and complicated developments of the Covid-19 pandemic in Tuyen Quang province, in order to have students' learning results to be most effective, the Department of Education and Training has given instructions on forms of teaching and learning, specifically:

1) Teaching in groups

Grouping by level: In a lesson, with questions/exercises hierarchical from easy to difficult, it is possible to organize groups of students to perform different tasks to ensure fit. The teacher assigns students with average level to solve problem 1 (mainly demonstrating analytical ability); The group of fairly good students solved problem 2 (requiring the ability to apply and generalize on the basis of having solved problem number 1); The group of good students solved problem 3 (advanced application and generalization compared to problem 2) [5].





Grouping by opinion: People who have the same opinion on an issue will be organized into a group to continue to discuss and defend their common opinion.

Grouping according to learning needs: A form of grouping on the basis of a combination of students whose needs are similar/closer to each other before a lesson/learning problem. Procedure: The teacher gives each student a form asking students to fill in the information. Then, the teacher recalls and conducts classification. In fact, each student has different knowledge, and therefore needs are also very diverse. The number of groups is theoretically unlimited. But it is necessary to take into account the classroom space and the ability of teachers to organize. Teachers organize for students to work in groups: Indicate sources of documents related to issues of interest to the group, support if required.

The grouping according to the above needs allows teachers to know the level and desire of students to have an orientation to organize activities suitable for each group, helping students to fill the gap in their knowledge and skills. It is an effective, practical, time-saving way for learners, avoiding boredom and unnecessary redundancy.

Mixed grouping: In the process of teaching, in addition to grouping forms that different objects according to the above criteria, mixed grouping should be mixed. The purpose of this grouping is for children to share, learn, and help each other in solving a problem at a moderate level.

The form of group teaching is a form of organizing activities with a high degree of coordination and cooperation. This is a form with many advantages, promoting the activeness and creativity of students, which is very suitable for the requirements of the new normal. Primary teachers must understand the purpose of group teaching, forge students' coordination, cooperation, collectivism, and teamwork skills so that students can understand the required content and operate effectively.

2) Contract teaching:

Contract teaching is a way of organizing learning in which each student (or small group) works on a different set of tasks (mandatory and elective) for a certain period of time. Learners have the right to actively determine the time and order of performing exercises and learning tasks based on their ability and learning pace [2].

The form of teaching under contract in current conditions helps primary teachers differentiate the pace and level of students; Enhances student independence. For schools that cannot attend classes directly, using this method also enhances the sense of responsibility for performing learning tasks. Teachers have more





opportunities to give detailed instructions to students. Learning activities will be richer, students have more choices and more excitement

3) Project-based learning:

Is a form of teaching in which students perform a complex learning task, have clear goals, are associated with the practice, and combine theory with practice. Students are guided to perform tasks such as self-planning, self-implementation of the plan, self-assessment of results. The form of working is mainly in groups; Project outcomes are specific, clearly presented recommendable products.

Project-based learning helps to link theory with practice, thinking and acting, school and society; Stimulate motivation and interest in learning of learners; Promoting self-reliance and responsibility; Develop creativity; Develop the ability to solve complex problems; Exercise perseverance and patience; Train students' ability to collaborate; Develop assessment capacity. Project-based teaching is an important form of teaching to realize the point of view of differentiated teaching.

2.2 Factors affecting differentiated teaching capacity for primary school teachers in the new normal

In order to investigate the current situation of factors affecting differentiated teaching capacity in primary schools, we conducted an investigation through 189 teachers and 214 primary schools student in 7 primary schools in 7 districts and cities in Tuyen Quang province. The results obtained are as follows:

Table 1: Teachers' assessment of factors affecting differentiated teaching competence in primary school

Factors affecting	Teacher	
	\bar{X}	Average
1. Necessary competence of teachers in front of differentiated teaching requirements	4.26	3
2. Student's activeness and initiative	4.38	1
3. Psychological characteristics of primary school students	4.09	5
4. The school's educational environment	4.28	2
5. Current education policy and management factors	3.92	6
6. The quality of student input	3.54	7
7. Facility conditions of schools and families	4.25	4

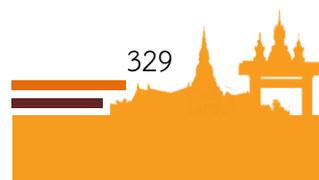




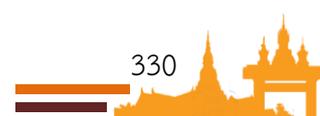
Table 1 shows that there are many factors affecting the differentiated teaching capacity of primary school teachers. In which the most basic influencing factors are: the activeness and initiative of students ($\bar{X} = 4.38$); ranked second is the school's educational environment factor, ($\bar{X} = 4.28$). The third is the necessary capacity factor of teachers before teaching requirements ($\bar{X} = 4.26$). Fourth is the factor of school and family economic conditions ($\bar{X} = 4.25$).

The results of in-depth interviews with teachers who directly teach in the class show that teachers give many influential factors in the process of differentiated teaching and learning. Most teachers said that most teachers and students are familiar with the traditional way of teaching and learning, students are very shy and not excited about applying new teaching methods, teaching techniques require establishing groups/groups, move tables and chairs, install equipment, help students get interested and actively discuss in groups... Especially in recent years, many primary schools in the area have been affected by the Covid-19 epidemic. Tuyen Quang province has changed the form of learning from face-to-face to online, so the organization of teaching and learning has encountered many difficulties.

In order for the article to have theoretical bases suitable for practice, along with investigating the factors affecting the teaching competence of teachers, we also investigate the influencing factors that students frequently encounter. must be in the process of teaching differentiation in primary schools. The results are shown in Table 2 below:

Table 2: Evaluation of primary school students on factors affecting the process of differentiated teaching in primary school

Factors affecting	\bar{X}	Average
1. Economic conditions and facilities are not adequate	4.05	4
2. Limitations in studying skills, communicative skills, teamwork skills	4.20	2
3. Shyness, timidity, not daring to express opinions, question teachers and debate with friends	4.35	1
4. Not aware of the right purpose, not ready to learn	3.56	5
5. No motivation, interest to learn	3.3	7
6. Necessary competence of teachers for differentiated teaching requirements	4.15	3
7. Other factors	3.13	7





Through the results obtained in Table 2, we find that there are many factors affecting the process of differentiated teaching in primary schools. Firstly, they have difficulties because: Psychological shyness, apprehension, passivity not daring to speak, questioning with teachers and arguing with friends ($\bar{X} = 4.35$). Their passivity and shyness are partly due to the educational environment. Therefore, in the teaching process, it is necessary to have measures to regularly encourage and motivate, creating many opportunities for students to express their views and thoughts. The second is limited in study skills, communication skills, teamwork skills ($\bar{X} = 4.20$);

Third, due to the necessary capacity of teachers before the requirements of differentiated instruction ($\bar{X} = 4.15$), teachers actively and actively accumulate knowledge and use modern teaching techniques to develop interrelationships. The interaction between teachers-students, students-students, and students-the classroom environment attracts attention and creates interest in learning for students. The fourth is because: Economic conditions and facilities are not sufficient ($\bar{X} = 4.05$). Most people living in Tuyen Quang province are ethnic minorities, so some schools in remote areas still do not have adequate teaching equipment. Especially in the situation of the Covid-19 epidemic, many families who do not have smartphon to let their children study online have to study together, study in pairs, affecting the quality of learning.

In addition, there are many other influencing factors depending on the cognitive level, thinking ability and development of each student, but the level of these factors is different. In general, it can be concluded that teachers and students face many obstacles in the process of differentiated teaching. These are problems that require managers and classroom teachers to pay attention to research to come up with remedial measures.

3. Conclusion

Differentiated teaching is currently a strategy, a teaching and educational perspective that is popular in many countries around the world. In the context of teaching and learning to adapt to the changes of the pandemic, to meet the requirements of the new normal, it is necessary to adjust the teaching process (objectives, content, methods, means, forms of organization, examination), assessment, building learning environment...) improve the teaching capacity of differentiated teaching for teachers, thereby positively impacting the teaching and educational process. Teachers need to be properly aware of the nature and purpose of differentiated teaching, this is the most important foundation that determines the success or failure of the differentiated teaching process in primary schools. In order to partially overcome the above influencing factors, all levels of





management need to have the right awareness of innovation, apply differentiated teaching methods, thereby motivating, encouraging and creating the most favorable conditions for teachers. ; It is necessary to organize periodic and regular refresher courses for teachers, equip teachers with sufficient theoretical basis to organize effective teaching and learning; Invest in and develop technical equipment and classrooms to achieve the best results in the differentiated teaching process.

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APPLYING INNOVATIVE THINGS OF EDUCATION AND TRAINING INNOVATION OF THE XIII CONGRESSIONAL RESOLUTION AIM TO IMPROVE THE QUALITY OF EDUCATION AND TRAINING HUMAN RESOURCES OF VIETNAM UNIVERSITIES TODAY

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Abstract

Education and training are the leading national policy and the key driving force for the development of the country. Education and training have received the attention of the entire Party, the people and the entire political system. The point of view on educational innovation in the Document of the 13th National Congress of the Communist Party of Vietnam has clearly demonstrated the comprehensive education direction, aiming to build and develop the Vietnamese people with a full range of skills intellectual qualities, skills, morals and health. Breakthroughs are needed to improve the education quality of current universities in Vietnam. Reality shows that after a period of rapid development in quantity, it can be said that quality is the most important issue of higher education in Vietnam. It is also the expectation of the whole nation about the quality of human development education to meet the process of integration and innovation in Vietnam. The article contributes to outline the key tasks and proposes some solutions to improve the quality of education and human resource training of universities in response to socio-economic development in the current context.

Keywords: Education and training, XIII Congress, Quality improvement, Human resources, University

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1. Make a problem

The country's transformation is very rapid, profound and comprehensive; in which the position of education has undergone fundamental changes, the model and scale of education has expanded and is influenced by trends such as internationalization, globalization, breakthrough development in the field of education and training. The application of digital science and technology... both creates motivation and creates favorable conditions for education and application of human achievements, creating a breakthrough in improving the quality of human resource training meet the needs of the country's economic development.

Facing different trends and meeting the market's requirements for quality human resources in each region are creating many opportunities, alternating challenges between the goal of expanding scale, diversifying forms of business training and improving quality, between the actual needs of the market and human resources for development, between old ways of doing things with innovative thinking and breakthrough, between development mechanisms and goals... Education and training issues Creation always receives the deep attention of the entire Party, the people and the whole political system. Since the 90s of the twentieth century until now, in Vietnam, education has always been affirmed as the leading national policy. In order to solve the difficulties and challenges posed, education of universities must quickly develop innovative thinking to create a breakthrough in human resource training to meet the needs of society in the spirit of Decision-making. 69/QD-TTG dated January 15, 2019 of the Prime Minister on "Improving the quality of higher education in the period of 2019-2025" (Project 69). Reforming educational thinking is a necessity, derived from the objective requirements of social life, but coincides with economic, cultural and social innovation. It is necessary to renew educational thinking in a comprehensive way, thinking about the system and scale; thinking about goals, content, programs, processes, thinking about quality and what makes the quality and effectiveness of the training process; examination quality, the staff and teachers meet the goal of training innovation in all elements related to the quality of human resources.

2. Contents

2.1 The concept of training quality

In the Document of the 13th National Congress of the Communist Party of Vietnam-The Congress of Solidarity-Democracy-Discipline-Creativity-Development has continued to affirm "the policy of education and training together with science and technology as the top national policy and a key driving force for the country's





development” [1]. The 13th National Congress of the Communist Party of Vietnam commented that the policy of fundamental and comprehensive reform of education and training in recent years has been actively implemented and initially effective, but there are still limitations and weaknesses. poor as: innovation of thinking, education and training activities have not met the requirements set out; a number of innovative tasks and solutions are still lacking in system and stability. The quality and effectiveness of education and training are not high. The education and training system has not yet ensured the synchronicity and connection between educational levels and modes of education and training. Education and training content and programs are still heavy on theory and light on practice. Training is still lacking in connection with scientific research, production, business and the needs of the labor market. Not paying enough attention to developing learners’ qualities and skills. Education “becoming a person”, ethics, lifestyle are still overlooked [2]. Therefore, radical and comprehensive innovation in education and training is an objective and urgent requirement today.

In the field of training, the quality of training is characterized by the product being “employees” as a result of the training process and is shown specifically in the qualities, personality values, and values of labor power. The graduate’s practice capacity corresponds to the training objectives of each profession in the training system. The most common concept is fitness for purpose when the goal is fitness of purpose. Requires universities to meet quality requirements and to have a holistic view of training quality.

In order to meet the needs of human resources for the labor market, the concept of training quality does not stop at the results of the training process in schools with certain guaranteed conditions in terms of facilities and staff staff, teachers, training programs, etc., but also take into account the relevance and adaptation of students after graduation to the labor market, especially at local universities to meet and promote local labor resources such as employment rate, practice capacity, suitability level, possibility of career development opportunities... It is difficult to give a complete definition of quality, because of relativity, many angles and multi-dimensionality, but from the perspective of learning, it is possible to provide an approach to consider quality as the appropriate approach to the goal. The goal in innovation of breakthrough thinking is not only to improve the quality of education and training, but the products of that training process well meet the needs of employers, create a qualitative change of the business national economy and international integration.





2.2 The main task of improving the quality of education and training of today's universities

Starting from the point of view of quality associated with the goal, the target must be really suitable with the actual requirements of society in general, of each specific level and profession in particular, and at the same time must be suitable with social reality festival. For training and development of human resources of universities, with the aim of developing human resources, ensuring quality training systems and products. In which, the system must meet the requirements on the number of human resources, have a structure of occupations, a structure of all levels of training, an appropriate age structure, and a training scale by industry and training level create to meet the specific needs of the region based on the analysis of social development needs, in line with the trend of international economic integration.

To do this, universities need to perform well the following tasks:

Firstly, taking the initiative of universities to proactively set their own standards and goals, to do this requires universities to study the criteria and standards of different levels, levels and levels system on the basis of research, analysis, evaluation, criteria and standards of universities in the region and abroad, applied in accordance with the characteristics, objectives and requirements of the university. Vietnam has set up a set of standards in 2014 with 10 standards and 61 criteria, then a set of 25 standards and 111 criteria based on the foundation of standards for evaluating university quality AUN-QA [3].

Since then, for any field, at the strategic, system, functional or result level, the school must also follow the method of planning (Plan), implementing (Do), evaluation (Check) and improve, innovate. Improvement must be made continuously to define each step of progress. Without innovation and improvement, in the competitive era, it will be difficult to avoid the possibility of falling behind in the rapidly changing trend of the times.

Compare ladder benchmarks for next steps. That's Best practices-best practices from inside and outside the country that need to be referenced to determine your own ladder (benchmarking), from which is the basis for evaluating fast or slow progress.

Identify resources for long-term progress Human resources, staff, teachers, staff, facilities, libraries, finance, internal and external resources and external relations. The AUN-QA standards set also clearly define the criteria 12.1 that are: Plan to continue to improve the quality of the University including policies, systems, processes, procedures and resources to obtain the best practices in education.





Second, conducting innovation must closely follow the awareness of comprehensive renovation of educational and training goals of local universities in the following areas: awareness (objectives), attitudes (interests, trends), attitudes and values) and conscientiousness (related to practical skills, adaptive skills). Sticking to educational goals and building output standards for each industry and training level. The important thing in building and organizing training to meet “output standards” is that the training product upon graduation must do well at the present job, be able to do well in the future, and meet the rigorous requirements of market. Concretize the output standards for subjects, disciplines, and courses with the aim of creating qualified and capable people to meet the economic development needs of the society. To strongly shift the educational process from mainly equipping knowledge to comprehensively developing learners’ capabilities and qualities; organize diverse learning forms, make use of science and technology, promote social activities, extracurricular activities, scientific research; Renovation must be comprehensive in order to develop people with full qualities and capabilities as the Document of the XIII National Congress pointed out “Training people in the direction of morality, discipline, discipline, and sense of civic responsibility, society; have life skills, work skills, foreign languages, information technology, digital technology, creative thinking and international integration” [4] to meet the development needs of society.

Third, the realization of training goals must be associated with innovation in content and programs. In order for learners to systematically, have solid knowledge, consider and choose careers, and at the same time have problem-solving skills, to meet the requirements of social reality, this requires a curriculum suitable training. The content must ensure all aspects of knowledge, skills and attitudes; qualifications and social understanding, quality and responsibility before society and profession, ability to think deeply and creatively, and proficiently use science and technology. The training content is modern and innovative in line with the changes of the times. Continue to research and apply training programs to improve self-study capacity, practical ability to create initiative and excitement and passion for learners.

Universities in the training strategy need to calculate fully and comprehensively in order to equip learners with the knowledge, capacity, bravery and psychological factors to participate in integration, and at the same time prepare the conditions necessary to take advantage of every opportunity to actively and confidently integrate. Because in the context of globalization, competitive pressure from the market economy has made some local universities tend to abandon traditional training disciplines that can strength from before to switch to training new industry codes suitable to learners’ tastes but not their strengths. Moreover, compared with national universities, local





universities have a low starting point in terms of facilities, qualifications of lecturers and financial resources, so the training meets the needs. The society in accordance with the declared mission also encounters many difficulties, affecting the quality of training. Facing that situation requires schools to make breakthroughs in innovative thinking, which is innovation in the direction of focus, defining core goals, innovating programs and processes, training thinking, improving high quality of exams, quality of lecturers, especially to produce generations of people with quality labor skills to meet the needs of the labor market. Quality is worth the money spent from learners and the requirements of the market and investors, that is a measure of quality assessment to improve the position and reputation of training of local universities, both meeting the needs of local economic development, and contributing significantly to meeting the human resources for the whole country in the process of comprehensively renovating education in the country.

Fourth, continuing to innovate teaching and learning methods is a central issue in training. Because big universities always grasp this problem, they regularly innovate teaching and learning methods, even thoroughly apply technology and science and technology in the teaching process, helping learners to Quick approach to problems, dialectical thinking, better knowledge acquisition. Therefore, there is no reason for local universities not to apply research, application and synchronous innovation of advanced teaching and learning methods and modern means to the teaching process and develop self-study capacity, research and creativity of learners. Focusing on training practical skills for learners to suit the training majors, improving professional capacity and skills, so that after graduation they are skilled and solid professionals. He is a passionate and enthusiastic person with a job with good quality and personality.

Fifth, to research and renovate management work in universities in the direction of improving the initiative and autonomy, and to have a synchronous and effective coordination mechanism in managing all aspects of the university's activities; There is a mechanism for screening, classifying, and combining general education and training with separate education and training for high-quality human resources, because high-quality human resources have an extremely important position and role in the current context the current situation when the country is deeply integrating into the world economy, especially before the digital revolution. High-quality human resources must meet the requirements of the market (requirements of domestic and foreign enterprises), that is: have knowledge: expertise, economics, informatics; have skills, techniques, find and create self-employment, work safely, work cooperatively; Have a good attitude, working style, responsibility for work. Investing in training high-quality human resources is a condition to shorten the lagging gap and create growth momentum that changes the structure of human resources in areas of the local economy. Because the rate of high-quality human





resources is still low compared to the actual demand, while unskilled labor is very common at present, there is a serious shortage of highly qualified workers, especially supply workers for industrial parks, export processing zones and for labor export... which increases the local GDP income steadily.

In addition, it is necessary to improve the quality of entrance admissions, to recruit students with high cultural qualifications, psychological qualities suitable for training professions, selective enrollment to create quality human resources, instead of because of massive enrollment to fulfill the quota, enrollment below the floor mark, mass enrollment...as has happened in the past few years.

In addition to the attention to the quality of the school and the students, there should be attention to the quality from the management agencies, leaders at all levels and units and localities using labor resources, creating create synergy to develop education and training to improve the quality of education and training. It is a combination of “internal” and “external” factors related to the training process. One of the factors that play a leading role in determining the quality of education and training is the teaching staff. In order to have quality education and training, it is impossible not to pay attention to building a sufficient number of teachers both in quantity and in quality. In the current race for brainpower, it is indispensable for highly qualified and dedicated teachers to obtain this resource, which requires schools to constantly train and select teachers. good, highly qualified and reputable and have appropriate policies and regimes for this team. Besides constantly innovating and improving the qualifications of the existing teachers. It must be seen that innovating to improve the quality of education and training, first of all, teachers themselves must innovate, learn and update information technology. The quality of education cannot be successful in a day, a day, in a short time... but without the creative labor of every day of researchers, teachers, and educational administrators, the quality of education cannot be achieved quality education is not possible.

2. Solutions to improve the quality of education and human resource training of universities in response to socio-economic development

Firstly, reform the training program, build a contingent of staff and teachers.

Develop educational and training programs in accordance with training objectives. The training program must help learners have solid knowledge, the learning content needs to gain knowledge, skills, attitudes, develop students’ thinking, capacity, ability to survive, establish a career and develop develop in different environments, have professional qualifications to meet output requirements, that is, after graduation, students have the opportunity to assert their worth. For learners to have that, the person imparting





knowledge is very important. The role of the teacher is to lead, inspire and motivate students to acquire scientific knowledge, so it is necessary to build a team of staff, especially qualified and enthusiastic teachers, to contribute to the development of science and technology human development in the socio-economic development strategy.

Second, ensure the appraisal and quality assurance of education and training at universities. Accreditation creates conditions for each school and the whole education system to review comprehensively on the basis of specific quality assurance for each university, especially universities that have the conditions to evaluate goals and their training. In fact, there are quite a few universities that have not been able to assess and accredit the quality of education and training beyond the learning experiences at large schools. The appraisal and accreditation of education and training quality requires the participation of the whole school system, different levels of work, management, and teaching to create a synchronous mechanism. In which, many schools have had quite basic and methodical changes in administration, management and leadership. It will create clear changes for local universities that are bold in the assessment and accreditation of education and training quality. Ensuring the appraisal and accreditation of education and training quality comes from the set of standards for evaluating the quality of universities, and the quality of training is methodical, a synchronous evaluation basis, creating a premise for universities to be evaluated. The school continues to innovate and improve quality in the ladder of development.

Third, gradually give autonomy to universities, which is considered the trend of world higher education. For this to be successful, future reforms will primarily focus on academic autonomy. Specifically, giving schools more freedom in setting standards, opening new industries at different levels after high school to respond to changes in the labor market and jobs following restructuring trends. of the current world higher education [5].

In the current context, giving autonomy to schools is an opportunity for each school to identify its strengths in its training strategy, attract quality human resources, and at the same time promote the process of innovation and development promote creativity and initiative in expanding the market to meet the labor resource requirements of the local or regional market, thereby restructuring the school to survive and develop, thereby leading to restructuring structure of the whole system, which is a condition for schools to maximize the sources of socialization and investment in training innovation. Diversifying financial resources is one of the basic solutions to ensure material resources for improving the quality of education and training. Financial resources can be diversified through the development of an appropriate tuition policy. Currently, in many countries, there is a tendency to diversify tuition fees according to each goal, object, subject, content,





industry, methods, means and services to support education. With the characteristics of natural conditions, socio-economic conditions in each locality, it is necessary to develop a reasonable investment attraction policy to ensure good performance of the target tasks, and to actively exploit the potentials of each locality financial resources through scientific research projects, technology transfer contracts, cooperation with enterprises, etc. In addition, social resources can be exploited through the good implementation of socialization work. However, measures to strengthen financial capacity will be ineffective without measures to combat waste in education and training.

Fourth, Improve the effectiveness and efficiency of management. Management is an extremely important step, if not a key factor to ensure the success of the whole innovation process, improving the quality of education and training at local universities. Therefore, it is necessary to improve the quality of management in a comprehensive way innovating and breaking through in thinking and management methods in the direction of improving efficiency and effectiveness. Implement administrative reform, institutionalize roles, functions, tasks, powers and responsibilities in education and training management at all levels and departments. In order to be able to manage comprehensively but still avoid overwhelming pressure because of too specific tasks, it is necessary to build an effective and effective education and training quality accreditation system. Quality management at educational and training institutions must be held accountable by these institutions. Managers at the macro level should only play the role of a conductor, thereby controlling, operating and promptly overcoming the shortcomings and inadequacies of the system.

The XIII Congress of the Communist Party of Vietnam continues to affirm the goal of comprehensive human development, making the Vietnamese people truly become the endogenous strength, the driving force for national development and national defense. Education and training is not only about imparting knowledge and training professional skills, but more importantly, creating comprehensive people both intellectually, physically and morally. Education must arouse patriotic tradition, national pride, faith and aspiration to develop a prosperous and happy country at a young age; develop talents, intelligence and qualities of Vietnamese people. The 13th Party Congress has advocated strengthening the education of patriotism, national pride, tradition and national history, and a sense of social responsibility for all classes of people, especially young people. Promote education to raise awareness, sense of respect and observance of the law, protect the environment preserve the national cultural identity of the Vietnamese people, especially the young generation. Step by step rise to overcome the limitations of Vietnamese people, building Vietnamese people in a new era, closely and harmoniously connecting traditional values with modern values [6].





3. Conclusion

Given the limited and weak results in education and training of human resources in universities, it is necessary to further promote the implementation of the policy of fundamental and comprehensive innovation in education and training. Training during the 13th Congress of the Party has shown the inheritance and consistency of our Party in the view that education and training are the top national policy and a key driving force for the development of the country clear the direction of comprehensive education, the direction of sharply changing the educational process from mainly equipping knowledge to comprehensive development of learners' capabilities and qualities; train people in the direction of morality, discipline, discipline, sense of civic and social responsibility; have life skills, work skills, foreign languages, information technology, digital technology, creative thinking and international integration. Our Party's comprehensive educational approach is completely in line with the reality of Vietnam, in line with the Marxist-Leninist philosophy on people and Ho Chi Minh's educational philosophy, with inheritance and absorption the quintessence in the educational philosophy of mankind, the achievements of education and training in the world to train high-quality human resources in universities, the application of the educational innovation perspective spirit of the document of the XIII Congress to train high-quality resources to meet the requirements of national economic development as well as international economic integration.

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A NUMBER OF ASSESSMENT METHODS ARE SUITABLE TO THE CONTENT, ORIENTATION OF CAPACITY DEVELOPMENT FOR PRIMARY SCHOOL STUDENTS IN ORDER TO ADAPT TO THE NEW NORMAL

Nguyen Thi Thu Ha¹

Abstract

The article is based on regulations on objectives, content, forms of testing, and assessment in the direction of capacity development for primary school students and adapting to new normal conditions to offer methods. The method of testing and assessment is suitable for face-to-face and online learning as well as the load reduction program applied to primary school students. The assessment methods are presented, analyzed, and clarified with advantages and disadvantages such as written test method, observation method, question and answer method, method of assessing learning records and learning products. Under the new normal, teachers select and combine the aforementioned assessment methods to develop the ability for primary school students to adapt to the new normal.

Keywords: Methods, Assessment, Capacity development, Primary school students, Adaptation, New normal

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1. Introduction

The education and training development strategy to 2020 based on the analysis of the current situation has provided important solutions for educational innovation and development. One of the solutions mentioned in the Strategy is “Innovating the content, teaching methods, exams, testing and assessment of education quality” [1]. This solution is also mentioned in the draft Education and Training Development Strategy for the period 2021-2030, with a vision to 2045.

In education, testing, evaluation is one of the factors that make up a complete whole of a closed teaching cycle, including determining teaching objectives, designing and implementing teaching programs and testing, evaluation. Testing and evaluation factors are conducted to determine the level of achievement in terms of knowledge, skills, techniques, thinking skills, and educational attainment of learners in the teaching process. Testing and evaluation is the final stage of a teaching cycle, and also the beginning of a cycle that is two sides of a process followed by a greater quality of the whole process.

For all levels of education in general and at primary school in particular, assessment is the process of collecting and processing information through activities of observing, monitoring, exchanging, checking, and commenting on students’ learning process; advising, guiding and encouraging them; interpreting information about the results of learning, training, the formation and development of some qualities and abilities of students.

In recent years, along with natural disasters, the COVID-19 epidemic has caused unpredictable consequences for the whole world and affected all countries, ethnic groups as well as all fields across the world. In response to the epidemic situation, the Government [2] issued Resolution No. 128-NQ/CP temporarily regulating “Safely adapting, flexibly, and effectively controlling the Covid-19 epidemic”. All other factors, tests, evaluations also have changed to adapt to the Covid 19 epidemic-the new normal.

The article is based on the general guiding viewpoints in education and training on teaching and developing learners’ capacity to identify testing and assessment methods suitable to the content and orientation of capacity development. primary school students to adapt to the new normal.

2. Some characteristics of Vietnamese in primary school

Vietnamese is a subject with instrumental and aesthetic-humanistic character; helps students have means of communication, as a basis for learning all other subjects and educational activities in the school; is an important tool to educate students in the



noble values of culture, literature, and national language; develop in students healthy emotions, humane feelings, benevolent and altruistic lifestyles,...

2.1 Objectives of Vietnamese in primary school

- Forming and developing in students the main qualities with specific expressions: love for nature, family, homeland; conscious of the roots; love beauty, goodness and have healthy emotions; have an interest in learning, love to work; honest, straightforward in study and life; have a sense of responsibility towards self, family, society and the surrounding environment.

- Initially forming in students general abilities, developing language competence in all reading, writing, speaking, and listening skills at a basic level: correct reading, text fluency; understand the main content and information of the text; contact, compare outside the text; correct spelling and grammar; can write a number of sentences, paragraphs, short essays (mainly narrative and descriptive essays); speak clearly; understand what the speaker is saying.

Developing literary capacity with the requirement to distinguish between poems and stories, knowing how to read poems and stories; recognizing the beauty of artistic words; having imagination, understanding, and being moved by the beauty and goodness of people and the surrounding world expressed in literary texts.

Thus, Vietnamese has the goal of contributing to the development of quality, contributing to the development of general competencies, developing professional competencies (language ability, literary ability) mentioned in the overall general education program [3, 4].

2.2 Contents of Vietnamese in primary school

2.2.1 Language skills

- Reading skills include: Reading techniques; Reading comprehension of literary texts, reading comprehension of informational texts.

- Writing skills include: Writing techniques; Write text.

- Speaking and listening skills include: Speaking and presenting; listening; Talking–listening interactively.

2.2.2 Knowledge: language, literature, corpus

- Language knowledge (Vietnamese knowledge): some basic understanding of phonetics, writing, vocabulary, grammar, communication activities, and language variations.

- Literary knowledge: some basic understanding of phonetics, writing, vocabulary, grammar, communication activities, and language variations.





- Corpus includes text types and genres; specify the length of the text; Having unique values in terms of content and art, typical of text styles and genres, standards, and creativity in language; Reflecting achievements in ideology, literature, and national culture; ...

2.3 Requirements to meet the quality and capacity of students for Vietnamese subject

The subject of Literature contributes to the formation and development of students' main qualities and general competencies according to levels appropriate to the subject and grade level specified in the comprehensive program. [3]

Qualification requirements are developed through the development of reading, writing, speaking, and listening skills on corpora with themes of patriotism, kindness, honesty, self-respect, hard-working, study hard, a sense of responsibility towards self and society, love for nature, and awareness of environmental protection.

Abilities for self-study and self-control, communication and cooperation, problem-solving, and creativity are developed through the development of specific competencies, namely language competence with learning forms and methods such as self-study, group learning, learning by problem-solving.

Literary competence is a specific competency in the Vietnamese subject that is also developed through the development of language ability.

Thus, the qualities, general abilities, and literary abilities are all developed through the main competency development axis, which is language ability, through learning reading, writing, speaking, and listening skills.

3. Selection and use of assessment methods suitable to the content, orientation of quality and ability development for primary school students, and adaptation to new normal

3.1 Principles of selection and use of assessment methods

In order for the assessment to ensure the objective of assessing the quality and capacity of students in the Vietnamese subject, it is necessary to select the methods and forms of assessment according to the following principles: Ensuring validity; Ensure comprehensiveness and flexibility; Ensure fairness and trust; Ensure regularity and systematicity; Assessment should consider both the results and the student's experiences to get those results; Assessment in the practical context and for the development of students; Assessment must be appropriate to the subject's characteristics.



3.2 Groups of suitable assessment methods

3.2.1 Group of written test methods

The written test is a traditional assessment method, in which students write answers to questions and problems in the curriculum and are suitable for direct learning.

Assessment techniques by the written test include two common forms: Multiple choice questions; Essay questions.

a) Multiple choice questions

Multiple choice questions include multiple-choice questions, True/False test questions, paired test questions. These are closed questions, students have to choose one answer from the given answer options.

- Multiple choice question: the answer is a question that has given several answers or answers, among which only one is correct or best, the rest are incorrect. or interference scheme.

- Paired (matching) questions have a structure consisting of 2 sequences of information, they need to be put together in a 1-1 correspondence fashion. Paired questions with two sequences of equal amounts of information are often easier than questions with two sets of different amounts of information. The type of paired question is easy to prepare and easy to use. However, composing paired sentences to measure a high level of knowledge requires a lot of work.

Example 1: Match the animal's name with the animal's actions in the poem Tell your baby (Tran Dang Khoa)

Crab		Barks bow-bow
Dog		Spin
Spider		Spit

b) True/False questions are questions that give an opinion for students to evaluate as true or false. This type of question is suitable for testing students' memory of knowledge. The writer of this question must give a completely clear opinion for students to evaluate either True or False. However, this type of question is difficult to assess the high level of understanding of students, the probability of students guessing the answer is very high (50%).





Example 2: Circle the letter D in the line with the correct word, circle the letter S in the line with the wrong word

1. Egg	D	S
2. Salad	D	S
3. Sweet rice dessert.	D	S

c) Essay question

An essay question is a question that requires students to form an answer on their own and allows students to freely express their opinion when presenting an answer to a problem. Essay questions assess students' experience, understanding, analytical ability, reasoning, and writing skills. The test using essay questions has the advantage of assessing higher-order thinking abilities such as students' ability to analyze, synthesize, evaluate, and create. This advantage of essay questions has overcome the weaknesses of multiple-choice questions.

Example 3: A question about using words and comparisons to write descriptive sentences for 4th graders: Write a sentence describing a dewdrop in which words are used to describe colors, shapes, and comparisons.

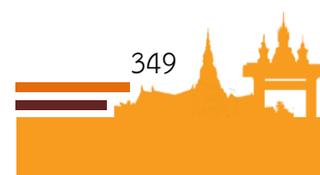
3.2.2 Observation method group

Observation is a group of methods teachers use to collect information for testing and assessment and is suitable for both face-to-face learning or online learning. There are 3 types of tools teachers can use to collect observational information:

a) Notebook of daily events

This is a tool made by teachers themselves, used to record events teachers noticed while interacting with students in the classroom. Every teacher needs to have a notebook of students' daily events. In this book, the teacher gives each student a few pages. Of course, teachers cannot record many events of many students. Therefore, teachers need to choose events to record.

The advantage of the Notebook of Daily Events is that it can describe students' behavior in natural situations, thereby seeing how students express themselves authentically. Thanks to these notes, teachers can detect students' weaknesses, positive or negative changes of students in the learning process. The limitation of this tool is that it requires teachers to spend a lot of time and effort taking notes continuously for a sufficient period of time to collect information.





b) Scale or observation sheet

The scale (also known as the observation sheet) is a tool that allows teachers to collect information to make judgments about students' learning results according to the criteria described in each level very clearly. There are many types of observation sheets. In Vietnamese, the most commonly used descriptive graphs (referred to as observation sheets)

To design an observation sheet, it is necessary to do the following: The criteria given for the observation must be the required requirements of performance skills or competence; The descriptions in the observation sheets must be evidence that can be directly observed; The levels described in the observation sheet must be clearly defined; The number of descriptive levels should be from 3-5 levels (for primary school students).

c) Check sheet

The checklist (referred to as the checklist for short) has the same form and usage as the observation sheet. The difference between the checklist and the observation sheet is that: the observation sheet shows the levels of a skill, a behavior, the checklist only asks to answer the question Yes? or No? skill or behavior to be measured. In Vietnamese, the checklist is used to evaluate students' products such as a written essay, a study record, a small project of the student. Checklists are not only a tool for teachers to evaluate students' learning outcomes, but also a tool for students to self-assess their own learning results and evaluate each other.

3.2.3 Question and answer group

Question and answer is a method of teachers asking questions for students to answer or teachers asking questions so that students can restate the questions for teachers in order to draw conclusions, new knowledge, new implementation processes that students need to understand to answer questions. perform. Question and answer are not only used in assessing learning outcomes in lessons but also at the end of each learning period (periodical assessment by oral exams) and are suitable for direct learning or online learning. In assessing the results of Vietnamese language learning, reinforcement question-answer and test-and-answer form are often used.

Teachers can use direct question and answer forms to consolidate knowledge after students discover the content of a new lesson in order to consolidate basic knowledge and skills, systematize them, and overcome incorrect understanding about new knowledge and skills.

Examples of reinforcement question-and-answer form (4):

Teachers use questions to consolidate students' knowledge about other purposes of the question:





- The person who asked the question: “Why are you so skillful?”

What is the purpose?

- The person who asked the question: “Can you ask the teacher for permission to let me in late?” What is the purpose?

The question-and-answer form is used before, during, and after the lesson to test students' knowledge and skills in a quick and timely manner so that teachers can have reverse information from students, thereby supplementing or solidifying newly acquired knowledge and skills for them.

3.2.4. Group of methods for assessing learning records and learning products

An academic record is a relatively systematic collection of the product of a student's activities. Learning records help teachers assess the progress of students over a period of time. In Vietnamese, teachers can let students make study records to learn to read widely the texts on the same topic. The content of the learning record in Vietnamese subject should have the following products: The products of the student's learning process; Finished products of students; students' essay. This method is suitable for both face-to-face and online teaching.

Thus, groups of assessment methods (written test, observation, question and answer, assessment of learning records and products) complement each other so that teachers can collect enough information about students' academic outcomes in the learning process. Depending on the actual situation of teaching and learning, teachers can use methods of written test and question and answer in direct learning conditions; can use the form of observation, assessment of learning records and products in the condition of online learning. Therefore, in order to be effective in testing and evaluating students, each teacher needs to master all these groups of methods to implement appropriately in the context of responding to the Covid-19 epidemic.

4. Conclusion

Training according to the goal of developing learners' ability has become an inevitable and universal trend in the education of most countries around the world. Assessment of learner ability focuses on assessing what learners can do and solve rather than know what. As mentioned at the beginning of the chapter, the quality assessment and the general competency assessment in Vietnamese are integrated with the assessment of language ability, that is, the assessment of what students can do to solve the reading, writing, speaking, and listening tasks. Assessment of ability in general and assessment of language competence in particular focus on two objectives:





- Evaluate the progress of each student in the learning process to get feedback and influence on students, teachers take measures to improve the level of achievement of students' competency requirements.
- Evaluation of results (about student's ability) after a learning period.

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FLEXIBLE REGULATION RESPONSES TO THE COVID-19 PANDEMIC IN SCHOOLS AND DIFFICULTIES FACED BY TEACHERS IN TUYEN QUANG PROVINCE

Tran Thi My Binh¹

Abstract

The Covid-19 pandemic has affected educational systems worldwide including Viet Nam. In Tuyen Quang, although the Covid-19 pandemic has appeared later than the other provinces in the country, there has been many complicated developments. Policy responses to the Covid-19 Pandemic in Vietnam are concretized into flexible regulation responses to the Covid-19 Pandemic in schools. This ensures the progress and learning rights of learners. However, these regulations have caused difficulties for teachers and put them under a lot of pressure. By using descriptive statistics and comparative statistical methods, conducting a survey of 200 teachers, this study was conducted to assess the difficulties faced by teachers, then propose some solutions to reduce difficulties and support teachers while implementing flexible responsive regulation to the Covid-19 Pandemic in schools.

Keywords: Difficulty, Regulation, Flexible response to covid-19

¹Tan Trao University





1. Flexible regulation responses to the Covid-19 Pandemic applied in schools in Tuyen Quang Province

The Covid-19 pandemic has impacted seriously on Vietnamese education for two years. According to the statistical report of the Ministry of Education and Training, as of January 14, 2022, more than 20 million students temporarily stopped going to school, switched to online learning, learned via television for many consecutive months. The private preschool education system has been impacted greatly. Many educational institutions have been closed and transferred. Many workers in the education sector have lost their jobs and there are about 1.2 million preschool children at risk of not having places to go to school. About 70,000 university students could not graduate on time, hence it has affected the supply of human resources to the labor market. Many schools were requisitioned as makeshift hospitals and isolation areas for Covid-19 epidemic prevention. There are only 9 provinces and cities nationwide that hold to teach directly for all students in the areas; 35 provinces and cities hold to teach face-to-face and combine with online learning; 19 provinces and cities hold to teach online and through television (Ministry of Education and Training, 2022). Compared to the whole country, the Covid-19 epidemic has appeared in Tuyen Quang province quite late, but the speed of spread was fast and complicated. The total number of infections among students and teachers in Tuyen Quang accounted for 23.9%. Thousands of students have to pause their studies at least once a school year. Only in Tuyen Quang city, there are 12/19 primary schools that teach online. The attendance rate of preschool children is only 30-40%. The number of students without online learning devices accounted for 49.7% (Department of Education and Training of Tuyen Quang Province, 2022). The Covid-19 epidemic has caused learners suffer a lot in terms of knowledge gaps, mental and physical health, social development, nutrition for children, increasing the risk of harm to children.

To ensure learners' right in the context of the complicated developments of the Covid-19 epidemic, The Ministry of Education and Training has issued many regulations and implemented many important tasks to guide and support localities and educational institutions to respond to the Covid-19 epidemic. The local government of Tuyen Quang province has implemented regulations to prevent Covid-19 epidemic in schools. Details:

(1) Change of teaching formats flexibly according to 4 levels of Covid-19 prevention, which are: at Levels 1 and 2 (low and medium risk) face-to-face teaching and always ready to change of another format of teaching when the epidemic is complicated; at level 3 (high risk) face-to-face teaching is combined with online teaching and teaching





on television; at level 4 (very high risk) online teaching, teaching on television or instruction self-learning. (Ministry of Education and Training, 2021B, 2021C).

(2) Guidelines for cutting teaching contents on principles, which are: retain the minimum required knowledge for each subject or grade; do not require students to carry out advanced learning contents, overlap between subjects, and old contents; contents which are integrated by topics to save time but have to ensure the requirements of knowledge, skills, qualities and capacities for learners. Based on the common requirements, teachers design flexible teaching curriculum. (Ministry of Education and Training, (2021A)

(3) The format of the quality assessments is flexibly applied according to reality; do not periodically assess content of construction self-study and self-implement, practice and experiments. (Ministry of Education and Training, 2020).

(4) Teachers connect with parents through electronic contact books to propagate, check and monitor students' epidemic prevention measures before going to school. (Ministry of Education and Training, 2021C).

(5) Educational institutions have to manage learners about educational quality, physical safety, and health management of learners in order to prevent and early detect suspected cases of Covid-19 infection; ensure that students and teachers keep distance while leaving school and going home. (Ministry of Education and Training, 2021C).

(6) Educational institutions have to design plans and scenarios into details; rehearsals to handle situations that occur in face-to-face teaching, prepare measures to ensure safely to prevent Covid-19. (Ministry of Education and Training, 2021C).

(7) Ensure hygiene safely for areas: classrooms, hand washing areas, toilets, trash cans with lids at suitable areas, transportations for students. (Ministry of Education and Training, 2021C).

The implementation of Covid-19 prevention regulations in Tuyen Quang province has contributed to control the disease development in schools. Educational institutions have implemented seasonal and flexible plans well. So that they have ensured rate of progress and plans according to the frame of school year. The efforts of the local government and educational institutions have also received the trust and positive feedbacks of the people.



2. Difficulties faced by teachers in Tuyen Quang while implementing flexible regulation responses to the Covid-19 Pandemic in schools

As described in part 1, responsive flexible regulations to the Covid-19 Pandemic in schools were issued to require schools to respond flexibly in the context of the Covid-19 epidemic. Based on the basic regulation, principal assigns many assignments to teachers. Beside the work they usually do, in the context of the covid-19 pandemic, teachers have to do a lot of other things that make them suffer more hardships, pressures and difficulties both physically and mentally. In groups of social networks, thousands of teachers joined forums to share their struggles and difficulties caused by the Covid-19 pandemic. Most educational management agencies only pay close attention to helping learners without really looking at the consequences of regulations regulating activities, which has caused many difficulties and frustrations for teachers. This study examines the direct impact of flexible responsive regulation to the Covid-19 Pandemic in schools on teachers. “Difficulty” in this study is understood as obstacles and shortages for teachers that require them to overcome.

2.1 Increase the number of works while implementing regulations on converting teaching formats flexibly according to 4 levels of Covid-19 epidemic prevention

Implementing regulations on changing teaching formats flexibly according to 4 levels of Covid-19 epidemic prevention, teachers' workload increases in preparing and teaching flexibly. Investigate how teachers prepare to deal with unexpected changes. The results are shown in the figure 1

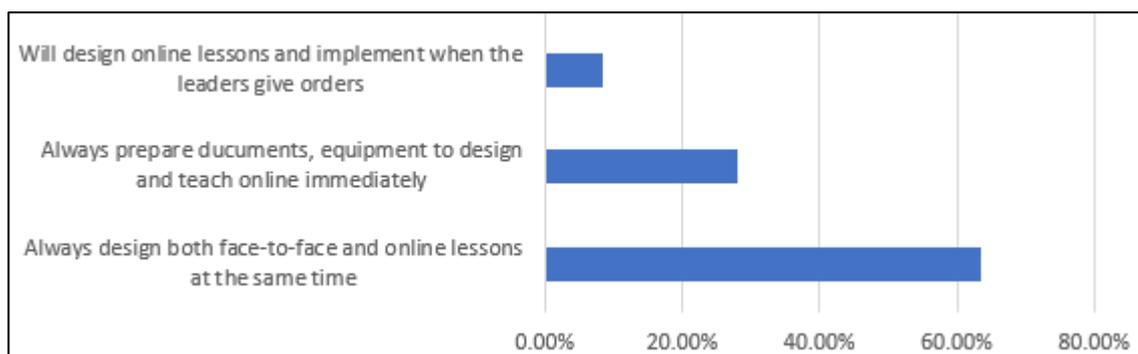


Figure 1: How teachers prepare to deal with unexpected changes

The survey results show that only 8.5% of teachers are passive to design online lessons and implement when leaders give orders; 63,5% teachers always design both face-to-face and online lessons at the same time; 28% teachers always prepare documents, equipment to design and teach online immediately. Disease information is





updated hourly. Even if a case of Covid-19 is detected in the school, the students go home immediately and the teachers change the teaching format immediately. According to the results of this survey, teachers are very ready to teach online however they are afraid and do that to deal with regulations more. To study more about the comparisons of teachers' workload growth between face-to-face and online teaching, we gathered comments in Figure 2

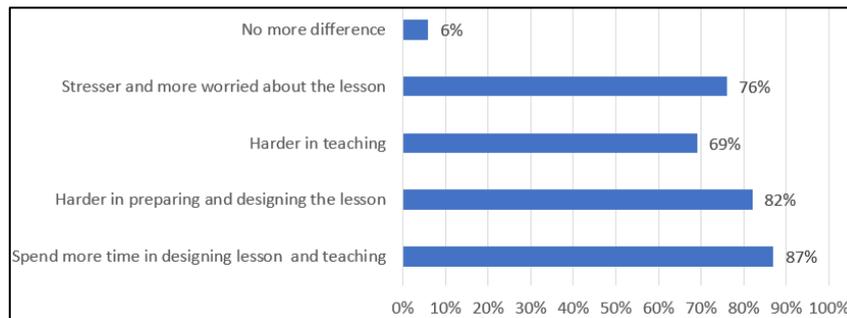


Figure 2: Teachers are harder in designing lessons and teaching online (compared to face-to-face teaching)

Teachers complain about their heavy workloads: spend more time in designing lesson and teaching (87%); harder in preparing and designing the lesson (82%); harder in teaching (69%); Stresser and more worried about the lesson (76%). Only 6% of teachers answered no more difference. For face-face teaching, teachers only prepare one teaching plan with methods and equipments for one class. However, flexible regulation responses to the Covid-19 Pandemic in schools require that if there are cases of F0 infection in the class or students related to epidemiology have to learn online for 3-7 days, while other groups still study as usual. Teachers always have to prepare many options for different groups of students in the same class. This change can even be calculated on a per lesson basis. The content in each subject is adjusted and cut by the teachers to ensure the basic content. To assess the impact of curriculum reduction regulations to ensure the progress of the course time, only 12.5% of teachers said there was no impact; 87.5% think it has serious impact. Teachers have been instructed to reduce the program, but if students are absent to learn online classes, teachers must arrange other time to tutor students in knowledge when they come back.

Besides working harder to design and teach, teachers also have to do many other works.



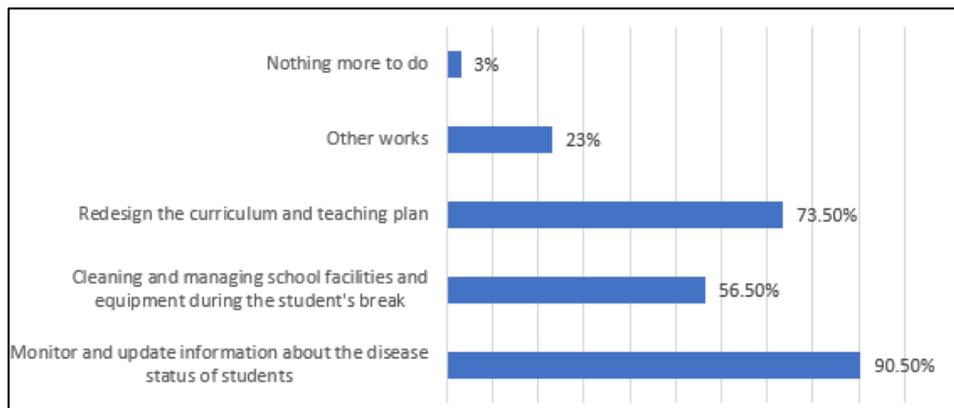


Figure 3: Increase the number of works of teachers (before the Covid-19 epidemic appeared)

Looking at the chart, it is readily apparent that only 3% of teachers answered that they don't have to do anything else. 97% of teachers have to do more other works, including: Monitor and update information about the disease status of students (90.5%); Cleaning and managing school facilities and equipment during the student's break (56.5%); Redesign the curriculum and teaching plan (73.5%); Other works, administrative procedures (23%). Teachers often call things outside teaching is "no name works". However, these unnamed things take away a lot of their time. However, we asked about being given preference for working in the context of the Covid-19 epidemic, up to 90.5% of teachers have not been given any preference for extra works.

2.2 Difficulties in teaching online

Before the Covid-19 outbreak, almost teachers in Vietnam did not teach online regularly. The Covid-19 epidemic appeared quite late in Tuyen Quang. The first cases were detected at a high school in the highland district. Online teaching format is applied quickly. Teachers also have faced many difficulties in using teaching methods and equipments.

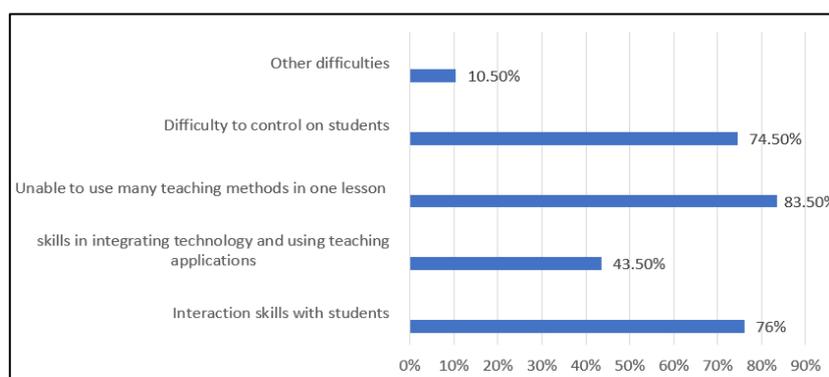
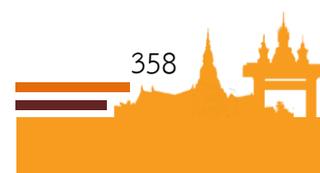


Figure 4: Difficulties in using methods and equipments to teach online





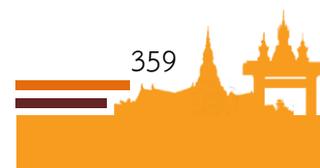
The survey results show that 94.5% of teachers have many difficulties, such as: Interaction skills with students (76%); skills in integrating technology and using teaching applications (43.5%); unable to use many teaching methods in one lesson (83.5%); difficulty to control on students (74.5%), other difficulties (10.5%). A more in-depth survey with teachers teaching practical lessons and exercises, up to 73.5% said that it is difficult to describe through cyberspace; 76.5% can not control over students. Flexible response regulations that allow practice and exercises can be reduced so that it is even more difficult for teachers to choose a teaching method that ensures time and ensures students can understand instruction content.

Regarding the difficulties related to material conditions that affect the quality of online teaching, we have investigated specific conditions:

Table 1: Difficulties in material conditions affect the quality of online teaching

Difficulties	Levels of difficulty (n = 200)					
	Very Difficult		Difficult		medium	
	Quantity	%	Quantity	%	Quantity	%
Speed and quality of internet connection	136	68	16	18	28	14
The teacher's teaching equipment is not good enough	29	14.5	47	23.5	124	62
The student's learning equipment is not good enough	98	49	57	28.5	45	22.5
The application's features do not meet teaching	40	20	32	16	128	64

Implementing flexible regulation responses, teachers and students have to change of teaching online and learning without much support from local authorities. Although the percentage of Vietnamese population using the internet accounts for 70.3% of the population, the simultaneous use of the internet for studying and working online in other fields is a big challenge for information infrastructure. People often use cheap service packages to serve the needs of information connection, but they do not meet the needs of working online. Only 14% of teachers answered that speed and quality of internet connection does not affect online teaching much; 86% of teachers have difficulties or problems with teachers or students. The teachers do not have many difficulties in teaching equipment (62% had moderate difficulty with auxiliary equipment or the



computer operating system is too old to be suitable for online teaching applications that can be easy to add). 36% of teachers answered difficult and very difficult because of the teaching application features are teachers who teach practical parts and exercises. The biggest difficulty in terms of material conditions is students have no good learning equipment. 49.7% of students do not have online learning devices. To ensure the right of learners, teachers have to teach online for students who have devices, besides they have to also bring lessons to students who do not have learning devices at home. This increases the difficulty and workload for teachers.

How to do middle test and midterm and final exam to ensure fairness for students, as well as properly assess the quality of teaching and learning. That is a big challenge for teachers. The results of the survey on difficulties in assessing the quality of students' learning are shown in Figure 5.

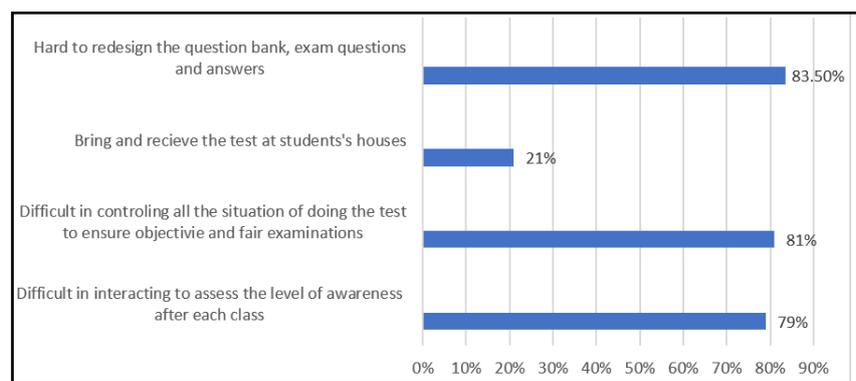


Figure 5: difficulties in assessing the quality of students' learning

Through the chart above, we see: difficulty in interacting to assess the level of awareness after each class (79%); difficulty in controlling all the situation of doing the test to ensure objective and fair examinations (81%); Bring and receive the test at students's houses (21%). Exam questions are high security. Although 83.5% teachers are hard to redesign the question bank and exam questions and keys, letting students do their own test at home is not objective. Students are not really self-aware. They maybe cheat by copying available documents or getting help from others. So, Why don't teachers design more difficult exam questions to limit the negativity in test-taking? Because they are under pressured from order quality goals that are often reflected in student's marks. Paradoxically, teachers commented that students had many knowledge and skill gaps because of learning online, but reports showed good results or high marks. This reflects that students' test is not really true and self-disciplined.





2.3 Difficulties in managing students

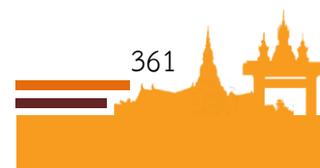
Flexible regulation responses to the Covid-19 Pandemic in schools order teachers have to manage students before and during at school. These are:

Table 2: Levels of difficulties in managing students

Difficulties in managing students	Levels of difficulty (n = 200)					
	Very Difficult		Difficult		medium	
	Quantity	%	Quantity	%	Quantity	%
Difficulties in propagandizing and managing students before going to school through electronic contact books (or social networking applications)?	61	30.5	79	39.5	60	30
Difficulties in managing students at the school	74	37	85	42.5	41	20.5

Every day, teachers have to connect with parents regularly through electronic contact books or social networks to propagadize, manage students, and update students' health status. 70% of teachers answered that they had difficulties with difficult levels (difficult 39.5%, very difficult 30.5%). The causes of the difficulties were mainly because of bad parent-teacher cooperation and dishonest reporting of the student's epidemiological history. About managing students at the school, only 20.5% of teachers have medium difficulty; up to 79.5% answered that they have difficulty and high difficult in managing students at school.

The difficulties in managing students taking measures to prevent Covid-19 epidemic at school were specifically surveyed. Educational institutions must manage students, ensure epidemic prevention measures according to regulations. The survey results show that: Lack of disease prevention equipment as prescribed (sanitizing water, masks, sitting distance between students... (68,5%). The Ministry of Health has announced a message featuring 5K (in Vietnamese) Khau trang (facemask)-(Khu khuan) disinfection-(Khoang cach) distance-(Khong tu tap) no gathering-(Khai bao y te). The biggest difficulties are how to ensure the distance and not to gather in large numbers because of the sitting distance between students and collective activities in school. Teachers have to supervise and remind students to limit contact. 76% teachers have difficulty in reminding students of epidemic prevention measures. Most primary school teachers experience this pressure.



According to the report of Tuyen Quang Department of Education, as of January 20, 2022, 40.5% of workers in the education sector have been vaccinated the 3rd dose of Covid-19 vaccine. Students from 12 to 17 years old have been vaccinated with the 2nd dose, accounting for 93.9% and have not been vaccinated with the 3rd dose. Primary students have never been vaccinated. Preventive measures for primary students at school are reminded by teachers constantly. In fact, among the covid-19 cases are students, mostly primary students. It's difficult to take preventive measures for children. 73.5% of teachers said they spent a lot of time in managing and reminding students continuously at school. They rarely took breaks.

2.4 Teacher's mental pressures

Surveying the mental pressure of teachers we got notable results at

Figure 6.

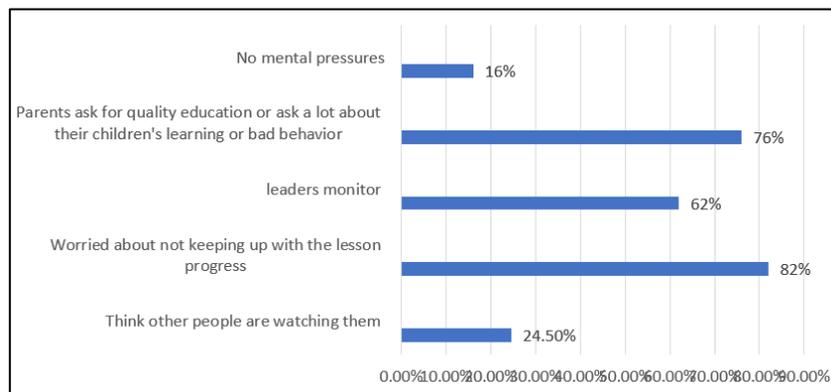
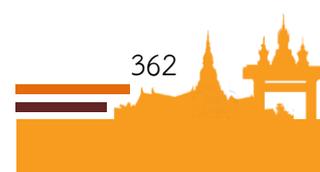


Figure 6: Teacher's mental pressures

The line graph shows: Worried about not keeping up with the lesson progress (81%). The causes of the slow ending class time such as: Interactive skills with students, managing student skills and Time management skills are not good. The equipment infrastructure is not responsive. Teachers have to teach according to a set schedule that is checked and supervised by leaders. 62% of teachers feel psychological pressure because of supervisors. Regulations on management of online teaching allow administrators to check unannounced schedule. Because teachers have not yet mastered of the skills and methods in teaching online, so that they feel stress. Many situations of bad behavior of parents are shared by teachers. While the teachers were teaching online, many parents who supervised their children's study said many vulgar words, disparaged the teacher, questioned or interrupted the teacher's work... 76% of teachers feel psychological pressure when parents ask for quality education or ask a lot about their children's learning. Unstable learning conditions, mutilated learning content, and poor students' sense of learning are the causes of low quality. Parents ask many questions and discuss about





their children's learning status with both positive and negative attitudes. There have been cases of students being electrocuted, smart phones exploding while learning online. Public opinion has questioned the responsibility of teachers for not detecting students' accidents early in online class. In addition to focusing on teaching enough content and enough time, teachers are also responsible for managing students during online class.

Talked about their feelings when having to work more than usual to implement the flexible regulation responses. 85.5% of teachers showed negative emotions, including: fatigue, boredom (68.5%); more anxiety (84%); irritability (48.5%); unhappy when working overtime without paying more money (78.5%). Because of the erratic change of class schedule, learning format, content adjustment, extra work, supervision, etc., many teachers get burnout syndrome. They often worry and speculate about the next day's works but doing nothing well.

3. Solutions to minimize difficulties and support teachers and help them overcome difficulties

From the study of teachers' difficulties in implementing flexible regulation responses to the Covid-19 epidemic in schools, the Study proposes some solutions to minimize difficulties and support teachers and help them overcome those difficulties as follows:

Firstly, teachers need to innovate themselves, self-forming self-study, researching and adaptation skills; improve interactive skills through cyberspace, skills of designing and teaching, skills of assessing in many various situations. Many teachers are still afraid of innovating with online teaching. The Covid-19 pandemic is both a challenge and an opportunity for the Education sector to promote digital transformation in teaching. Changing old habits is not easy it is an imperative of modern society.

Secondly, Psychological Support

As the survey results showed above, negative emotions appear in most teachers. One question is: despite having many difficulties why do not teachers give feedback to educational authorities about their difficulties? A huge barrier due to the one-way administrative management from top to bottom. There are many other regulations such as working, emulation and reward regimes that points are not really clear. Even though they have democratic rights, in order to work with peace of mind, they don't criticize. They often work in silence and discomfort. To provide psychological support for teachers, specific measures are: training on work-life balance skills; switchboards or organizations that operate independently of management agencies, providing care, counseling, and supporting to relieve psychological stress for teachers; get their feedback





and needs before enacting regulations; hold emotional sharing forums that managers participate in equality and friendly instead of letting teachers discuss in spontaneous forums

Thirdly, Training online teaching skills

The sudden change to online teaching is a big challenge for teachers. Most teachers have no experience of teaching online. Hold training skills such as: Interaction skills, information technology skills, Time management skills, Curriculum design skills, student management skills. Online teaching skills training courses are holden for teachers at each grade level.

Online teaching is the trend of modern education. Therefore, Tan Trao University needs to implement some specific solutions: adjust the teacher training program according to the needs of society; adding the module “Online teaching methods” to the training program; training curriculum design skills flexibly; skills training, especially critical skills.

Fourth, Promoting democratic culture and culture of behavior in school.

Education managers need to listen to them and respect teachers’ opinions instead of blaming them irresponsibly and not making efforts to adapt flexibly in the Covid-19 epidemic; reward and encourage teachers promptly instead of just punishing and assigning more tasks to them; promote culture of behavior between leaders and teachers, teachers and parents, and teachers and students. Everyone establishes a good relationship of openness, respect and sympathy.

Fifth, Increase benefits for teachers

To implement regulations on flexible response to COVID-19 in schools, most teachers have to work overtime, increasing their responsibilities and pressures... Need to increase salary and money for testing covid-19, allowances for teachers participating in the fight against the epidemic. What teachers care most about is their working mode. In order to have an online lesson, teachers must spend more time on preparing for their lessons. The Ministry of Education allows principals to decide on their own whether to convert an online lesson to face-to-face teaching. This leads to inequality between teachers in different schools and abuse of teachers without paying money. Therefore, there should be specific and unified regulations on converting an online teaching period into face-to-face teaching hours. Estimating work is increased. So that, according to the research team, education managers should convert from 1 online teaching period to 3 face-to-face lessons. After the teacher completes the work quota, the hours worked in excess will be paid more.

Salary, allowances for teachers, convert from 1 online teaching period to 3 face-to-face lessons





Sixth, call for volunteering and humanitarian activities

Call for sponsors to help students with online learning devices; establish a network of volunteers to support schools. Tan Trao University establish volunteer groups of pedagogical students to support teachers and students at home while learning online. The benefit of this activity reduces the pressure on teachers, and also increases the online teaching experience, helping students to be more confident.

4. Conclusion

It is necessary to implement regulations to prevent Covid-19 epidemic in schools in the context of the Covid-19 epidemic. These regulations have brought great value to learners, but it will be one-sided if the leaders do not care about teachers-who are the soul of education. They are asked to give unconditionally. This is unfair to them. Online teaching is the trend of modern education. Maybe Teachers and students are not really ready for online learning now. The immediate solutions to help teachers overcome difficulties such as: increase benefits, online teaching skills training, the support of volunteers... Beside that, it is necessary to implement long-term solutions that universities play a great role, such as: supplementing and adjusting teacher training curriculum; hold workshops to train teachers; design extracurricular programs for students; consulting for leaders to develop policies for teachers.

Acknowledgment: This study was supported by Tan Trao University.

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SOLUTIONS FOR ELEMENTARY EDUCATION STUDENTS IN TEACHING AND LEARNING IN NEW NORMAL CONDITIONS

Le Thanh Mai¹

Abstract

The COVID-19 pandemic has profoundly affected all countries in the world, all aspects of social life, including education. Nearly 200 countries closed off their educational facilities; more than 1.5 billion students around the world could not go to school. In Vietnam, over 1.7 million students are unable to concentrate on their studies amid social distancing. In order for learners to “stop going to school but don’t stop learning”, Vietnamese universities have been responding to the pandemic in many different ways. From a positive perspective, universities have been looking for ways to utilize opportunities due to pressure from Covid19, becoming smart universities. Faced with these challenges, Tan Trao University has implemented online learning to promptly respond to the complicated developments of the COVID-19 epidemic. However, reality shows that, in the process of implementing this scheme, students still confront many difficulties and barriers. Through an online survey with 140 students at the Faculty of Primary and Early Childhood Education, Tan Trao University, the research results clearly showed the psychological, environmental, and learning means/devices factors considered to be the main reasons why online learning students encounters many obstacles. Consequently, on the basis of this research’s results, the article will propose some practical solutions to adjust online education to achieve better efficiency in the future.

Keywords: Solutions, Students, Adaptation, Teaching and learning, New normal

¹Students of the K6 Primary School, Faculty of Primary Education-Preschool, Tan Trao University, Tuyen Quang





1. Raise the issue

Since the COVID-19 outbreak at the end of December 2019, up to now, an acute respiratory infection caused by a new strain of corona virus (nCoV) (referred to as the COVID-19 Pandemic) has manifested a turning point and major changes in socio-economic life in most countries in the world, including Vietnam. In which, education is considered as one of the areas that are hit the hardest. According to UNESCO, since the start of the pandemic till April 8, 2020, nearly 1.6 billion pupils around the world have been affected; 188 countries were forced to close schools nationwide, affecting 91.3% of the total number of students worldwide [3].

Up to now, Vietnam has experienced 4 outbreaks of COVID-19 disease in most provinces and cities across the country. Like other countries, the COVID-19 pandemic not only has a strong impact on socio-economic activities, but also greatly affects educational activities in Vietnam. Specifically, from March to April 2020 when the first outbreak of the epidemic broke out in the country, all schools were forced to close and all students had to leave school to prevent the epidemic according to Directive No. 16. /CT-TTg of the Government. According to statistics by April 2020, all 63 provinces and cities have allowed students to stay at home [3]. Up to now, due to the complicated development of the epidemic, the Government of Vietnam has repeatedly implemented social distancing measures across the province, city or even on a national scale. In that context, in order to prevent the spread of the COVID-19 epidemic; while maintaining the quality of teaching and completing the program on schedule, ensuring the learning of students; many schools have applied teaching in the online form (online) for almost all levels of education. In fact, the transition from traditional learning to online learning has created many challenges for students. Research by the group of authors Dang Thi Thuy Hien, Tran Huu Tuan... on barriers to online learning of students of Faculty of Tourism-Hue University has pointed out some difficulties in terms of learning space as well as other problems. Psychological factors affect the academic performance of students. Specifically, up to 64% of students said that there is no private space to study online and are often affected by noise 79.1%; 71% of students emphasized that they are often bothered by family members and feel constrained, not allowed to travel, accounting for 73.7%. Along with that, psychological factors such as “Difficulty concentrating”, “Lack of motivation” are also one of the barriers that students face when studying online [1]. In addition, the research results of the authors Lu Thi Mai Oanh and Nguyen Thi Nhu Thuy at the same time show that the interaction process between the teacher and the learner also partly shows the influence on the learning outcomes of students. Specifically, up to 88.5% of students think that it is partly and completely true that it is difficult for students and





lecturers to interact and exchange and 73.3% of students think that teachers are not attractive. as lively as teaching directly in a traditional classroom [2].

Online learning is one of the advanced and developed learning models in many countries around the world, but difficulties and barriers of this form are still very present. Because of this, many studies have been carried out to identify adverse factors to overcome barriers, towards improving the quality of learning for this form of training. According to Mungania, online learning barriers are obstacles encountered in the online learning process (at the beginning, during and after the training course is completed) that can negatively impact the learning experience of learners. . Thus, it is extremely necessary to identify the difficulties and barriers of students in the online learning process. In the past time, there have been many research projects that have identified the factors affecting online learning of learners. For example, research by Renu Balakrishnan et al. has shown four barriers related to psychological, economic, social, and technical [4].

Meanwhile, Wong's research has pointed out some limitations of the curriculum, which are: "Technological limitations, limitations related to individual learners and other limitations. For individual learners, the use of new technologies can be a disadvantage or barrier in an online learning program [4]. The lack of information, communication skills and technology can be barriers to online learning as learners may experience frustration from this unique learning environment." In general, studies on the difficulties and barriers of online learning are quite popular, but in the context of the COVID-19 epidemic, not many topics have been implemented. Meanwhile, the COVID-19 epidemic is in a strong outbreak stage and may be difficult to end in the future. Online learning may have to continue to be maintained to ensure epidemic prevention and maintenance of teaching, so it is necessary to have more studies related to online learning and teaching to clarify the picture of advantages and disadvantages of online learning and propose solutions to ensure the effectiveness of online teaching in schools. On that basis, this article hopes to contribute to clarifying the difficulties that students face when learning online through a case study of students majoring in Social Work at the University of Science, University of Science and Technology. Hue. Thereby, proposing some practical solutions to ensure the learning quality of students when studying online in the near future.

2. Content

2.1 Context and situation of response in teaching and learning in Vietnam

The COVID-19 pandemic has been affecting the lives of more than 212 countries and territories. According to Worldometer statistics, as of April 10, 2020, the world has 11,600,185 cases of infection, of which the number of deaths is 95,561 people.





This global crisis has caused many countries to almost immediately decide to close, not to conduct teaching and learning in schools, colleges and universities.

Like other countries in the world, the Covid-19 epidemic has profoundly affected education in general and higher education in Vietnam in particular. In response to the complicated situation of the epidemic, Vietnamese higher education institutions have gradually changed from a passive position to an active learning plan in the context of epidemic prevention and control to ensure the safety of students, learners and staff and lecturers.

In that context, in order to prevent the spread of the COVID-19 epidemic; while maintaining the quality of teaching and completing the program on schedule, ensuring the learning of students; many schools have applied teaching in the online form (online) for almost all levels of education. However, the survey results show that the technical guidance for most students is only for response purposes or they have to learn by themselves to be able to participate in online classes (accounting for 70.6%). Meanwhile, for the school's staff (lecturers, support staff and administrators), most schools organize training and technical preparation to adapt to the online teaching method. The software applied in online teaching at universities is extremely diverse, depending on the preparation and conditions of each school, of which Microsoft Teams is used the most by teachers (30.6%). users), followed by Zoom with 27.4%, Learning Management System (LMS) with 15%, Google Meeting with 9%, Skype with 7.9% and 3.4% choose livestream via facebook. Only 0.5% choose to use Viettel study and VNPT learning software, the rest is to use other software such as Google Classroom, Zalo, Trans, Hangout... or software written by the school itself. The fact that only about 1% use software of domestic origin shows that the ability to research and deploy educational technology in the country is still limited, in addition, dependence on foreign technology can lead to difficulties in the implementation process due to dependence on international internet connections, and at the same time difficulties in controlling network security. The results of the survey on investment in information technology infrastructure of schools show that 69.1% of lecturers use copyrighted software invested by the university, 23.8% of lecturers use free software. the rest is supported by the school to buy software or teachers to buy themselves. 49.4% of lecturers at non-public schools use the software platform invested by the school, 44.6% are using free software. While, up to 80.9% of lecturers in fully autonomous public schools use online teaching software platform invested by the school, this number of partially autonomous and public schools has not autonomy is 61.8% and 69.1%, respectively. The rate of free software usage among public schools is 12.7%, 28.5% and 24.3%, respectively. The fact that a relatively large proportion of lecturers use free software also shows a potential risk of network security.





It can be seen that Vietnamese universities have gradually shifted from the initial passive response to the active adaptation. Many schools have taken into account the scenario when the epidemic lasts so as not to affect too much the school year plan as well as meet the requirements of the course knowledge. Specifically, by April 10, 2020, many schools have studied online exam options when the translation is prolonged to ensure the learning progress of students. The survey results showed that 52% of respondents said that the school had a plan to adjust the exam schedule and exam format for the end of the semester. Only 5.3% of comments confirmed that the school did not postpone the exam schedule but only adjusted the exam format to suit the epidemic situation. 32% of respondents confirmed that the school had postponed the exam schedule without any plan to adjust the exam format. 10.3% said that the school has no new plan compared to the original plan.

In the academic year 2020-2021, online learning of Tan Trao University is carried out using Google Meet software so that lecturers and students can deploy online learning activities according to the schedule arranged in the calendar. Learning program on the university training website. In addition, with the elearning application, instructors can post lessons during online training. To facilitate the organization of online training activities, the school quickly used the Microsoft service to provide personal accounts for students via email addresses. Using the school's account provides teachers and students with a way to log in to online training support systems in a synchronous and controlled manner, facilitating teaching management- Online Learning.

2.2 Some difficulties and barriers for students in online learning

During the Covid19 pandemic, like many other industries, education in general and Vietnamese universities in particular have been facing many challenges. Difficulties and challenges in organizing the implementation of teaching and learning activities, in scientific research, in ensuring revenue sources to cover the current activities of the university as well as to maintain its operation and development after the pandemic.

For higher education, due to the prolonged epidemic situation, there are still 20 training institutions that still have students who have not completed the end-of-year assessment, mainly in the arts and culture schools. Health training school. Many higher education institutions have not yet organized the recruitment of masters and doctoral students. According to the Minister of Education and Training, "Online learning and television learning in infrastructure conditions are still very difficult and lacking, which has caused many negative consequences and effects. Students are stressed, tired, teachers are tired and pressured, parents are angry, society is worried. The tragic stories, the heartbreaking things that happened are hard to tell..." [5]





To participate in an online class effectively, students need a certain level of technology proficiency and appropriate learning methods to participate in classes and interact in cyberspace. In traditional classrooms, the process of transmitting and receiving information is direct and fast, students can directly respond and give opinions. This face-to-face interaction makes the learning process easier, richer, and more receptive.

In which, for students majoring in education, teaching Vietnamese is a compulsory course in the primary school teacher training program of the Faculty of Primary Education, Tan Trao University. The objective of this subject is to help students practice and supplement their knowledge, skills and pedagogical style in teaching. Specifically, each teacher practice preparing lectures, making teaching aids, preparing to display electronic lesson plans and conducting teaching in front of lecturers and other students (acting as primary school students). The content of the lesson that students choose to prepare for teaching belongs to the Vietnamese Primary School program, in all subjects such as Reading, Spelling, Storytelling, Word and Sentence Practice, Writing Practice, and Writing Practice. Along with the professional preparation process, teachers also practice professional skills such as organizing classroom learning activities, classroom management, pedagogical practice, voice adjustment and sports skills. work with teaching aids. Although teaching in a simulated classroom environment, teachers are still trained in real-life situations posed by other teachers because they have had 2 months of internship in elementary school. Solving these pedagogical situations will help teachers practice their professional competence. Teaching Vietnamese is considered a necessary preparation step for students to be firm when entering the internship period at primary school because it strengthens their knowledge, professional skills, and equips them with pedagogical skills. students to be productive during their internship period and for their future careers. However, completely converting to online teaching has caused many difficulties for learners due to the lack of some necessary skills in learning and the survey results (Table 1) clearly show this.

Specifically, 25% of students said that they lacked interaction skills with lecturers and limited skills in using information technology equipment and facilities, accounting for 24.28%. Notably, the percentage of students who are depressed and not interested in online learning accounts for 42.85%. It can be said that the mental state of students during the learning process also reflects the effectiveness of online learning. Online learning for a long time, students have to spend a lot of time in front of computer screens, lack of communication between lecturers and students, leading to psychological fatigue of most students. Therefore, the fact that students feel bored and uninterested is one of the biggest disadvantages of online learners. The lack of direct relationships prevents interaction in the learning process and can leave students feeling unmotivated





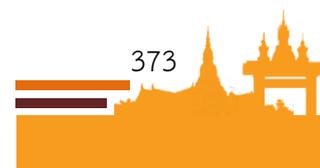
to learn. This will greatly affect the quality of students' learning, because psychology is considered a core factor and plays a very important role in determining learning efficiency. Therefore, psychological factors of learners need to be considered and paid more attention in the coming time.

Table 1: Survey of students' difficulties when participating in online learning in 2021 of 140 students of the Faculty of Primary and Preschool Education at Tan Trao University

Factors causing difficulties	Survey votes	Number of reviewers	Percentage
Space inconvenient study location	140	45	32,1
Unstable internet or no internet connection	140	91	65
No learning facilities exercise (computer, phone, ..)	140	36	25,7
Lecturer does not/less interact with students	140	3	2,14
Students lack skills to interact with lecturers	140	35	25
Psychologically depressed, no interest in learning	140	60	42,85
Poor IT skills	140	34	24,28

Objective factors:

According to the survey results in Table 1, the study support devices and spaces are considered as one of the biggest difficulties for students in online learning. In which, the unstable network connection and internet connection is the difficulty of most of the students participating in the survey (accounting for 65%). For students participating in online learning, a reliable internet connection is a prerequisite for their own learning. A weak internet connection can greatly affect tracking and continuing. Collect knowledge from students in lessons. Besides, other difficulties in terms of learning conditions such as unfavorable study space with the rate of 32.1%; as well as the absence or unsafe learning facilities have significantly affected the online learning process of students (accounting for 25.7%). In addition, when studying at home, up to 29% of students commented that: "I am affected by ambient noise during online learning". One student's opinion said: "Currently, I personally feel that studying online is not very difficult except that the environment around my house is sometimes a bit noisy because the place I live is a bit special. selling and repairing electronics, so I often fix speakers, try music, radio broadcasts, etc. So there are times when I want to interact via texting." Thus, it can be seen that students are currently suffering from many subjective and objective factors affecting their online learning activities. However, in general, the main





cause was pointed out to be the problem of internet connection, study skills and some manifestations related to psychological factors in the learning process of students. Therefore, it is necessary to propose solutions to support students in the online learning process in the context of the current complicated situation of the COVID-19 epidemic.

2.3 Opportunities for students in online

learning Actual online learning still has many outstanding advantages compared to traditional learning at school. Online learning is also very good, learners can record the lesson to listen to it again to help understand the lesson better, can take pictures of the slides or save the document as a soft file for long-term storage, more compact.

For the students. Online learning creates a certain freedom and comfort for teachers and learners. Travel time and costs are reduced. Students from far away can also study at home instead of renting in big cities. Online teaching methods can help improve teaching efficiency, thereby improving the quality of education and encouraging creativity of teachers and students.

Online teaching also creates opportunities for students to actively access useful learning resources on the Internet for teaching and learning. Through online teaching, both lecturers and students can improve their ability to apply information and communication technology in teaching, contributing to the innovation of teaching methods and assessment.

In any case, teaching and learning needs efforts from all three sides, from teachers, instructors, parents and most importantly, the learners themselves. Although online learning still faces many difficulties, the Ministry of Education and the State have also introduced many measures to overcome, encourage and support schools and especially students who are still facing difficulties. The most important thing still needs self-discipline, self-control, and self-study. Thus, online learning can become a new and really effective direction.

3. Solution

Future teachers, in addition to learning and acquiring knowledge, must gain experience, research and create innovative teaching programs suitable for all possible circumstances. happen, promote youth dynamism, use 4.0 technology to help learners receive knowledge wherever they are. Without adapting to the “new normal” of society, future teachers will not be able to creatively improve their capacity to develop new curriculum. Especially in the context of the current society when we are adapting to the





epidemic day by day, the lack of construction innovations to improve curriculum creativity is the cause of ineffective teaching and learning.

Over the past time, the COVID-19 pandemic has had a huge impact on higher education because of the almost complete transition from face-to-face to online training. This is considered a timely measure to respond to and overcome disruptions to the education sector in the context of the current complicated epidemic situation. Obviously, in the future, when online teaching is recognized, this means that long-term solutions and plans must be taken into account, but still must ensure the quality and effectiveness of teaching. Therefore, identifying the difficulties and barriers of learners in the process of online learning is considered necessary to be able to minimize the negative impacts and improve the quality of online learning in the future. From the results of the actual survey on the difficulties and barriers that students are facing today, the author proposes the following solutions

For learners

First, to overcome difficulties in the online learning process, the school needs to have policies or activities to advise and support students in a timely manner to ensure that students' learning is not interrupted. segments, especially students from disadvantaged backgrounds and/or living in remote areas with difficulty accessing and connecting to the internet.

Second, improve the effectiveness of online education by changing teaching methods, teachers' access to technology, and the school's management and leadership capabilities. From the inadequacies in the process of interaction between lecturers and students, educational institutions need to pay attention and organize training courses to innovate teaching methods to improve teaching quality in the future.

Third, the school needs to pay attention to equipping students with skills in using information technology, skills in information security, skills in exploiting and effectively using applications for learning activities.

Fourth, lecturers need to increase interaction and exchange with students to create psychological comfort and excitement for learners. That is, teachers need to diversify teaching forms and integrate many activities in the curriculum to create interest in students' learning, create an environment for students to present and share their views. Dear.

From the side of the Ministry of Education and Training and related ministries/sectors

Firstly, the Ministry of Education and Training should soon propose to the Government to develop a comprehensive strategy for development of higher education and training, in which clarify the smart university model. Building a standard





framework for the development of smart universities so that the schools clearly orient their goals and striving paths, avoid calling smart universities according to the trend as before using the term "research-oriented university".

Second, develop and complete university training regulations, which clarify regulations on the application of blended learning training methods (with a close combination of face-to-face training and online training). to make the most of the training tools.

Third, it is necessary to evaluate the effectiveness of investment in building online training models in the past time at some universities to develop more effective investment strategies for schools in developing public platforms. information technology for online training. An investment fund to develop an information technology platform for online training and management can be formed to support schools in developing this form of training to ensure publicity and transparency.

Fourth, on the issue of managing the training process, ensuring the motivation as well as the legality of the current online teaching and learning activities, the Government, the Ministry of Education and Training., the Ministry of Information and Communications and the Ministry of Science and Technology need to see this as an opportunity and a pressure to quickly digitize education as well as reduce unnecessary costs and increase uniformity in quality, It is also a way to contribute to the prevention of diseases when they arise.

On the side of the First University

Firstly, higher education institutions need to find a solution and choose for themselves a digital platform for online teaching and learning.

Secondly, it is necessary to quickly implement plans to digitize the entire teaching database for teaching and learning, and to build a digital learning system.

Third, it is necessary to develop and perfect a system of regulations on online training, the use of digital learning materials, and the use of information technology in teaching to ensure the legality and copyright of the learning materials. and digital resources. It is necessary to come up with a possible solution to be able to conduct testing, assessment and recognition of online learning, testing and examination results to ensure the requirements of educational quality accreditation, towards the published output standards. signed and consistent with level 6 in the national qualification framework just approved by the Prime Minister.

Fourth, it is necessary to stipulate standard conditions for lecturers, especially those in information technology and English skills, and have policies to support and train lecturers to improve their professional skills, skills and knowledge. Information technology and online teaching methods. Motivating and encouraging lecturers to be





able to unite and overcome difficulties and be ready to innovate with the school to build a smart and modern higher education environment.

Fifth, it is necessary to research policies to support students to be eligible to participate in online learning, to access open learning resources for better online learning. Each school, depending on the conditions and characteristics of the school, can choose different support packages and methods to reach students and ensure students' learning rights.

Within the scope of this research topic, the author only stops at describing and pointing out the difficulties and barriers faced by students majoring in Primary and Early Childhood Education at Tan Trao Hoc University in the process of studying this topic. online learning in the past. With the initial survey results, it can be concluded that students have been facing a number of barriers when switching to online training. Therefore, with the limitations of the object and research area in this topic, other studies can inherit and develop in new research directions with a more universal group of subjects. At the same time, further analyze the barrier factors affecting the quality of students' online learning; from there, proposing practical solutions to further improve the quality of online teaching in the future.

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SOME MEASURES TO CORRECT PRONUNCIATION MISTAKES OF VIETNAMESE SYLLABLES FOR PRIMARY SCHOOL STUDENTS OF THE HMONG ETHNIC GROUP IN TUYEN QUANG PROVINCE, VIETNAM

Phung Thi Thanh¹

Abstract

For ethnic minority and mountainous provinces in Vietnam, the improvement of the quality of Vietnamese language teaching for primary school students of ethnic minorities to contribute to improving the quality of education is an issue that needs to be researched and supported. Through a survey of the current situation of teaching Vietnamese to primary school students of the Hmong ethnic group in Tuyen Quang province, Vietnam, we found that primary school students of the Hmong ethnic group still make mistakes in pronouncing Vietnamese syllables. As a result, it leads to spelling mistakes and incorrect understanding and use of Vietnamese vocabulary, which negatively affects learners' future communication in Vietnamese. Therefore, it is very important and urgent to research and propose measures to correct Vietnamese syllable pronunciation mistakes, correct pronunciation, and correct Vietnamese spelling. Because primary school students of the Hmong ethnic group learn Vietnamese as a second language and still make many mistakes, teachers need to apply some measures to correct Vietnamese syllable pronunciation mistakes to help learners achieve better efficiency in learning. The reality of teaching in some primary schools in Tuyen Quang province, Vietnam shows that the proposal and application of some solutions to correct Vietnamese syllable pronunciation mistakes for primary school students of the Hmong ethnic group has achieved great results, and helped learners to use Vietnamese better.

Keywords: Hmong language, Learner, Measure, Mistake, Pronunciation, Syllable, Teaching method, Teacher, Vietnamese

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1. Introduction

Currently, the improvement of the quality of Vietnamese language teaching for primary school students of ethnic minorities to contribute to improving the quality of education is an issue that needs to be researched and supported. Through a survey of the current situation of teaching Vietnamese to primary school students of the Hmong ethnic group in Tuyen Quang province, Vietnam, we found that primary school students of the Hmong ethnic group still make mistakes in pronouncing Vietnamese syllables. As a result, it leads to spelling mistakes and incorrect understanding and use of Vietnamese vocabulary, which negatively affects learners' future communication in Vietnamese. Therefore, it is very important and urgent to research and propose measures to correct Vietnamese syllable pronunciation mistakes, correct pronunciation, and correct Vietnamese spelling. Because primary school students of the Hmong ethnic group learn Vietnamese as a second language and still make many mistakes, teachers need to apply some measures to correct Vietnamese syllable pronunciation mistakes to help learners achieve better efficiency in learning. The reality of teaching in some primary schools in Tuyen Quang province, Vietnam shows that the proposal and application of some solutions to correct Vietnamese syllable pronunciation mistakes for primary school students of the Hmong ethnic group has achieved great results, and helped learners to use Vietnamese better.

In the history of research, it has been shown that to help beginners learn a second language (except mother tongue) to acquire a new language easily, the combined use of teaching methods is very necessary and effective. (Hong et al, 2014, p. 17, our translation). Which, the communication method in language teaching is very important and associated with the model training method because the main function of language is communication. (Nga et al, 2013, p. 84, our translation). Some other authors mentioned Vietnamese teaching methods for ethnic minority students such as The Direct method, and the Interpreting method with the advantages, and limitations of these teaching methods. The Direct method is a second language teaching method that is not based on the mother tongue, and its characteristics. (Tri et al., 2001, pp. 208-209, our translation). Because the teaching method is the way that teachers and students do to achieve teaching goals. (Tuyen, 2008, p. 39, our translation).

To effectively teach Vietnamese for primary school students of the Hmong ethnic group, the study of Hmong is very important. Regarding this issue, we have researched and published a scientific report on "The tonal system of Lenh Hmong dialect in Sa Pa area-Lao Cai province" in 2005. This report has shown that the Hmong





Lenh tone system in Sapa-Lao Cai region includes 8 tones separated by criteria of pitch (pitch), voice quality (or phonation type). (Thanh, 2005a, p. 251, our translation). Next, we conducted contrastive analysis and showed that: The Lenh Hmong language tonal system and the Vietnamese language tonal system belong to the same system of morphologically contoured, registered, and voice quality. (Thanh, 2005b, p. 199, our translation). The results of our contrastive analysis of Vietnamese syllables and Hmong language syllables have shown that: Vietnamese syllables have prevocalic sound, and the Hmong language syllable does not have this component. The Hmong language does not have closed syllables like Vietnamese, although both languages have the same type of open syllables, half-open syllables, and half-closed syllables. (Thanh, 2006, p. 255, our translation). This is the basis for us to publish the research results that show that: To help teachers of the Mong ethnic group practice the correct pronunciation of Vietnamese initial sounds, it is very helpful to contrastive analysis the Vietnamese initial sounds system with the Hmong initial sounds system. (Thanh, 2011, p. 13, our translation).

To improve the quality of teaching Vietnamese for primary school students of the Hmong ethnic group, Vietnamese language teachers also need to know the Hmong language. Regarding the issue of fostering the Hmong language for Vietnamese teachers, we have published the research results on Building a Hmong language training program for Hmong teachers in primary schools in ethnic minority areas and the mountains in 2012. Which, the main teaching methods proposed to be used are the Language analysis method, Communication method, Model practice method, the combination of explanations and illustrations by visual means such as pictures, real objects, At the same time, focus on improving listening, speaking, reading, writing skills (especially skills: reading and writing) for learners. (Thanh, 2012, p. 41, our translation).

In 2013, we have published research results on Some solutions to correct Vietnamese language pronouncing mistakes made by Mong ethnic students. To correct these mistakes, we need to analyze the causes of interference and use the phonetic characteristics of the Vietnamese language to correct the mistakes for Hmong ethnic pupils, On the Journal of Educational Science Ministry of Education and Training 10/2013. To correct pronunciation mistakes of Vietnamese rhymes for Hmong students, it is necessary to pay attention to the phonetic similarities and differences between the Vietnamese and Hmong languages. Then analyze the phonetic interferences between these two languages, use the teaching method of teaching and learning Vietnamese Phonetics is suitable for students of the Mong ethnic group. (Thanh, 2013, p. 82, our translation).





The Vietnamese initial sound consonants system and the Hmong language initial sound system have similarities and differences in pronunciation method and pronunciation position. Therefore, Hmong language teachers need to pronounce well, understand the similarities and differences in phonetic-phonological characteristics between the Vietnamese initial sound system with the Hmong initial sound system. Then, teachers need to pay attention to common mistakes, analyze interference patterns to explain the causes of mistakes; Understand and use knowledge of pronunciation methods and pronunciation positions to correct pronunciation mistakes of Hmong initial sound consonants for learners. (Thanh, 2015, p. 19, our translation).

In the same direction of this research, we published the results of the study “Innovation in teaching methods of Vietnamese pronunciation for ethnic minority students at primary school level” in 2016. In which, we proposed to apply many teaching methods such as Total Physical Response (TPR), using Vietnamese Phonetics and Phonology of Vietnam features, use interpreting method (mother tongue method) to practice and correct Vietnamese pronunciation for ethnic minority students (Thanh, 2016a, p. 692, our translation). We have also researched and stated: The Hmong language in Vietnam has characteristics that show the general development trend of several languages of the same type in Southeast Asia. (Thanh, 2016b, p. 452, our translation).

Another of our studies showed that U. Weinreich indicated the four Phonetics and Phonology interference patterns as follows: Phone substitution interference, Over-differentiation interference, Under-differentiation interference, Re-interpretation of distinctions interference (Thanh, 2016c, p. 50, our translation). So Vietnamese language teachers also need to pay attention to interference phenomena that affect the Vietnamese pronunciation of learners of the Vietnamese language as a second language. (Thanh, 2016c, p. 268, our translation).

The results of our comparative analysis presented in this paper have helped to point out the similarities and differences in phonetic-phonological structure, in characteristics between Vietnamese half-open rhymes with Lao half-open ones. “The structure of Vietnamese rhyme includes prevocalic sound, nuclear sound and final sound.” (Thanh, 2020, p. 45).

Regarding the issue of teaching Vietnamese as a foreign language, in 2021, we have published research results on “Combining diversified teaching methods in training Specialized Vietnamese for Laotian students at Tan Trao University, Vietnam”. The results of this study have shown that: “During the process of teaching Specialized Vietnamese for Laotian students, Vietnamese teachers need to use a combination of Hmong teacher





such as communication method, direct method, interpreting method (mother tongue use method), Total Physical Response (TPR) method, linguistic analysis method, modeling practice method. (Thanh, 2021, p. 439).

Reviewing the research history, it can be seen that the research on some solutions to correct pronunciation mistakes of Vietnamese rhymes for primary school students of the Mong ethnic group in Tuyen Quang province, Vietnam has not been mentioned so far. Therefore, our research will meet the requirements of improving the quality of teaching Vietnamese for primary school students of the Mong ethnic group in Tuyen Quang province, Vietnam.

Within the scope and limitations of the research problem, this report is concerned with the pronunciation mistakes of 83 Hmong ethnic minority grade 1 primary school students (accounting for 50,6%) out of a total of 164 primary school students ethnic minorities in Tuyen Quang province, Vietnam.

The object of the study here is the common mistakes made by the Hmong ethnic minority primary school students in Tuyen Quang province, Vietnam when pronouncing Vietnamese syllables. Effectiveness of proposing and applying some measures to correct pronunciation mistakes of Vietnamese syllables for primary school students of the Hmong ethnic group in Tuyen Quang province, Vietnam.

Research methods used to research and write this report include The Phonological Descriptive Analysis Method, the Contrastive Analysis Method, Interference Analysis Method, Mistake Analysis Method.

2. Content

2.1 Situation of Vietnamese pronunciation mistakes of Hmong primary school students in Tuyen Quang province, Vietnam

Surveying the pronunciation ability of Vietnamese syllables of 83 Hmong ethnic minority primary school students in the range of reference materials, it can be seen that 61,4% (51/83) make Vietnamese syllables pronunciation Vietnamese syllables mistakes. These pronunciation mistakes mainly focus on basic forms such as Mispronunciation of tones, mistakes of mispronunciation of the initial sound consonant or prevocalic sound, mistakes of mispronunciation of the nuclear sound, mispronunciation of the final sound of the Vietnamese syllable (mispronouncing Vietnamese syllables of the slightly closed type and the closed type). These pronunciation mistakes negatively affect the sound representation, leading to incorrect recognition, misunderstanding of the meaning of words, and Vietnamese spelling mistakes. This situation makes primary school students of the Mong ethnic group face many difficulties in learning and communicating. Here, we will present common mistakes made by Hmong primary school students.



Through statistics and analysis of Vietnamese syllable pronunciation mistakes of Hmong primary school students, we get the results that there are some basic types of mistakes such as mistakes in pronouncing incorrect tones, initial sound consonant, rhyme (including the prevocalic sound, the nuclear sound, the final sound) of Vietnamese syllables.

The consequences of these pronunciation mistakes are the incorrect representation of language sounds, inaccurate Vietnamese syllable recognition, misunderstanding of word meanings, and Vietnamese spelling mistakes.

In this scientific report, we will present Vietnamese pronunciation mistakes that make it difficult for Hmong primary school students to overcome and analyze the causes of these mistakes. From there, we propose some measures to correct Vietnamese pronunciation mistakes for primary school students of the Hmong ethnic group.

The results of our survey have shown that most primary school students of the Mong ethnic group have pronounced the sound of Vietnamese Broken rising tone as Vietnamese Acute tone. Most of the primary school students of the Mong ethnic group have pronounced the Vietnamese Interrogative tone into the Vietnamese Low pitch one.

At the same time, most of these Hmong primary school students mispronounced the initial sound consonants *b* /b-/, *đ* /d-/, *g* /g-/, *kh* /x-/ such as: pronouncing *bạn* (you) into *mạn*, pronouncing *đắp* (apply) into *đràng*, pronouncing *gỡ* (to pick) into *mkố*, pronouncing *khỏi* (to avoid) into *k'ỏi*, ...

In addition to making mistakes in pronunciation of Vietnamese tones and initial sound consonants, Vietnamese rhymes with prevocalic sound /-u9-/ are also incorrectly pronounced by most of the Hmong primary school students. For example, Hmong primary school students pronounce the *quả* (fruit) into *cả* (whole); *loãng* (washy) into *láng* (smooth) or *lá* (leaf).

The nuclear sounds *iê* /ie/, *ươ* /uə/ in Vietnamese rhymes are also mispronounced by Hmong primary school students such as: pronouncing *nướu* (gum) into *ná* (cross-bow), pronouncing *nương* (terrace field) into *nơ* (knot), pronouncing *miền* (region) into *mền* (blanket),...

From the end of Vietnamese syllables, primary school students of the Hmong ethnic group still confuse the pronunciation of the final sounds *p* /-p/ and *c* /-k/, *n* /-n/ and *m* /-m/ or pronounce all of the *ng* /-ŋ/ in Vietnamese syllables. For example, pronunciation *gấp* (to fold) into *gắc* (gac fruit), pronounce *cam* (orange) into *căng* (to stretch), pronounce *nhãn* (label) into *nhăng* (to let slip).



Pronunciation mistakes of Hmong primary school students mentioned above adversely affect sound recognition, leading to incorrect recognition, misunderstanding of the meaning of words, and Vietnamese spelling mistakes. This situation makes primary school students of the Mong ethnic group face many difficulties in learning and communicating. Here, we will present common mistakes made by Hmong primary school students.

2.2 Causes of Vietnamese pronunciation mistakes of primary school students of the Hmong ethnic minority primary school students in Tuyen Quang province, Vietnam

From the results of the comparative analysis of the phonetic, phonological structure and characteristics of Vietnamese and Hmong language, we found the interference cases that lead to mistakes of Vietnamese syllables pronunciation of as follows:

Firstly, the cause of the fact that primary school students of Hmong primary school students make mistakes in pronouncing Vietnamese Broken rising tone into Acute tone, mistakes of pronouncing Vietnamese Interrogative tone into Low pitch tone: In the Hmong language, the native language of Hmong primary school students, there is no tone with phonetics and phonology characteristics corresponding to Vietnamese Broken rising tone. As a result, the pronunciation of Vietnamese Broken rising tone with middle down-up (bending) line, with creaky voice is difficult for Hmong primary school students. Therefore, Hmong primary school students often make mistakes of pronouncing: They pronounced Vietnamese Broken rising tone with middle down-up (bending) line becoming a rising line of Vietnamese Acute tone. However, a change of direction in lines of Vietnamese Interrogative tone does not happen as suddenly as in Vietnamese Broken rising tone, the prolonged pronunciation process of Vietnamese Interrogative tone is not Hmong primary school students' pronunciation habit. These pronunciation mistakes are caused by the effects of the Under-differentiation interference.

Another reason is that there is a Vuv tone in the Hmong language that completely corresponds to the Vietnamese Interrogative tone. But it is pronounced into variations like Vietnamese Low pitch tone by most Hmong people. This does not change the meaning of words containing syllables with the Hmong language Vuv tone. Therefore, Hmong primary school students pronounced Vietnamese Interrogative tone into a variation of Hmong language Vuv tone similar to Vietnamese Low pitch tone. These pronunciation mistakes are caused by the effects of Phone substitution interference.

Secondly, the cause of incorrect pronunciation of Vietnamese initial sound consonants such as: Pronouncing Vietnamese initial sound consonant *b* /b-/ into Hmong language initial sound consonant *b* /mp-, pronouncing Vietnamese initial sound consonant *đ* /d-/ into the Hmong language initial sound consonant *đr*, pronouncing





Vietnamese initial sound consonant *g* /*ŷ*-/ into Hmong language initial sound consonant /*mk*-/, pronouncing Vietnamese initial sound consonant *kh* /*X*-/ into Hmong language initial sound consonant *k^h*, are because Hmong primary school students are influenced by the habit of pronouncing initial sound consonants in the Hmong language. These pronunciation mistakes are caused by the effects of the Under-differentiation interference.

Thirdly, incorrect pronunciation of Vietnamese rhymes with prevocalic sound /-u9-/ in the pronunciation of most initial due to the influence of phonetics and phonology characteristics of the native language. Because in the composition of the Hmong syllable there is no prevocalic sound so in addition to the mistake of pronouncing rhyme with prevocalic sound is due to the influence of the mother tongue of Hmong primary school students. These pronunciation mistakes are caused by the effects of the Under-differentiation interference.

Fourthly, the mistake that Hmong primary school students incorrectly pronounce characteristics of the Vietnamese diphthong: Nuclear sounds *iê* /*iɛ*/, *ươ* /*uɔ*/ in Vietnamese rhyme, is due to the lack of rhyme respectively in the Hmong language. These pronunciation mistakes are caused by the effects of the Over-differentiation interference.

Finally, the cause of making mistakes in pronunciation of Vietnamese final sound consonants: *p* /-p/, *t* /-t/, *c* /-k/, *ch* /-c/; mistakes is that pronunciation of Vietnamese final sound consonants *n* /-n/ with *m* /-m/; pronouncing both into Vietnamese final sound consonant *ng* /-ŋ/ is due to the difference between types of Vietnamese syllables and Hmong language ones: The Hmong language has only half-closed syllables ending with consonants: *nh* /-ŋ/, *ng* /-ŋ/. The Hmong language does not have closed syllables ending with final sound consonants as in Vietnamese as *p* /-p/, *t* /-t/, *c* /-k/, *ch* /-c/. Hmong language also without half-closed syllables ending with *n* /-n/, *m* /-m/. These pronunciation mistakes are caused by the effects of the Re-interpretation of distinctions interference.

2.3 Some measures to correct Vietnamese pronunciation mistakes for Hmong primary school students

2.3.1 Measures to correct Vietnamese tone pronunciation mistakes for Hmong primary school students

To correct the mistake of the Vietnamese Broken rising tone into Vietnamese Acute tone, Vietnamese Interrogative tone into Vietnamese Low pitch tone, the primary teacher should be understanding the cause of the mistake, pay attention to instructing. To practice pronunciation to clearly show phonetics and phonology characteristics of these tones, as follows:





Both Vietnamese Interrogative tone and Vietnamese Low pitch tone are low tones, there is an impact on the larynx when we pronounce. But they differ in that: The Vietnamese Interrogative tone has a Broken line, there is an impact on the larynx in the middle and then it goes up. While Vietnamese Low pitch tone has a line that does not break and go down, has glottal obstruction at the end of the syllable. The same high tones when pronouncing, but the Vietnamese Broken rising tone and Vietnamese Acute tone are not the same. The Vietnamese Broken rising tone has a down-up (bending) line in the middle, there is an impact on the larynx (creaky voice) in the middle and then goes up to the end of the vocalization pitch. While Vietnamese Acute tone has a line going up until the end of the pronunciation pitch, has glottal obstruction at the end of the syllable. So, the primary teacher should base on Vietnamese phonetics and phonology characteristics, use the oral picture to pronounce samples of syllables containing Vietnamese Interrogative tone, Vietnamese Broken rising tone for Hmong primary school students to listen and repeat. Since then, primary teachers will help them practice the correct pronunciation of Vietnamese Broken rising tone and Vietnamese Interrogative tone.

2.3.2 Measures to correct Vietnamese initial sound consonant pronunciation mistakes for Hmong primary school students

Because there are no consonants in the Hmong language with phonetics and phonology characteristics corresponding to Vietnamese consonants: *b* /b-/, *đ* /d-/, *g* /g-/, *kh* /X-/. Therefore, Hmong primary school students used pronunciation of mother tongue initial sound consonants to pronounce these Vietnamese initial sound consonants.

When helping Hmong primary school students practice and correct the pronunciation mistakes of Vietnamese initial sound consonants *b* /b-/, *đ* /d-/, *g* /g-/, *kh* /X-/, primary school teachers need to allow children to directly observe the oral picture to describe pronunciation method, pronunciation position of these initial sound consonants. Primary school teachers need to guide Hmong primary school students to pronounce Vietnamese initial sound consonant *b* /b-/ according to occlusive articulation method, have no aspiration. The bilabial sound position is close lips, then pushing lips open let the air flow out. Primary school teachers should instruct Hmong primary school students to pronounce in the method of articulation as occlusive, voiced, have no aspiration, articulation position is the front flat tongue, to practice and correct pronunciation of Vietnamese initial sound consonant *đ* /d-/.





Primary school teachers should instruct Hmong primary school students to pronounce in the method of articulation as a fricative, voiced, advanced tongue root, advanced tongue root articulation position is back sound, to practice and correct pronunciation of Vietnamese initial sound consonant *g* /**Y**-/.

Primary school teachers should instruct Hmong primary school students to pronounce in the method of articulation as a fricative, unvoiced, have no aspiration, advanced tongue root articulation position is back sound, to practice and correct pronunciation of Vietnamese initial sound consonant *kh* /**X**-/.

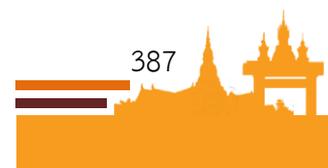
2.3.3 Measures to correct Vietnamese rhyme pronunciation mistakes for Hmong primary school students

In addition to the necessary Vietnamese initial sound consonants movement, primary teachers should instruct Hmong primary school students do more actions extra articulation is rounded lips during Vietnamese initial sound consonants pronunciation phase, the first part of the nuclear sound so that beginning of Vietnamese syllables will appear the prevocalic sound /-u9-/, to correctly pronounce the Vietnamese prevocalic.

To help Hmong primary school students correct the mistake mispronounced the diphthongs: *iê* /**ie**/, *ươ* /**uF**/ are nuclear sounds in rhymes of Vietnamese syllables, primary school teachers need to correctly identify phonetics and phonology characteristics of these diphthongs. The diphthong *ươ* /**uF**/ is pronounced from tongue elevation down to medium, the back tongue sound, not round lips. The diphthong *iê* /**ie**/ is pronounced from tongue elevation to medium of the tongue down to medium, front tongue sound, not round lips.

Next, primary school teachers need to pronounce samples of Vietnamese syllables containing these diphthongs for Hmong primary school students to listen, observe the oral picture and repeat, to practice the correct pronunciation of diphthongs: *iê* /**ie**/, *ươ* /**uF**/ are nuclear sounds in rhymes of Vietnamese syllables.

To help Hmong primary school students practice pronunciation of final sound consonants *n* /-n/, *m* /-m/, *p* /-p/, *t* /-t/, *c* /-k/, *ch* /-c/ at the end of Vietnamese syllables, primary school teachers need to distinguish pairs of front tongue-tip consonants: *t* /-t/, *n* /-n/; dorsal tongue surface consonants: *ch* /-c/, *nh* /-**ŋ**/; back tongue consonants: *c* /-k/, *ng* /-**ŋ**/; bilabial consonants: *p* /-p/, *m* /-m/. Primary teachers also need to be aware to pronounce samples for exactly these final sound consonants as follows: *n* /-n/ is front tongue-tip consonant; *m* /-m/, *p* /-p/ are bilabial consonants; *t* /-t/ is front tongue-tip consonant; *c* /-k/ is the back tongue consonant; *ch* /-c/, *nh* /-**ŋ**/ are dorsal tongue surface consonants.





In particular, primary school teachers need to be aware of the difference between the mode of articulation method and the articulation position of consonants when they are standing at the end of the Vietnamese syllables when they are standing at the beginning of Vietnamese syllables. This difference is detailed as follows: When the consonants *n* /-n/, *m* /-m/, *p* /-p/, *t* /-t/, *c* /-k/, *ch* /-c/ stand at the beginning of Vietnamese syllable, they are pronounced in their correct articulation positions, then the tongue leaves the articulation position and the lips open to combined with the factors behind them. When these consonants stand at the end of Vietnamese syllable, although they are still pronounced at their correct articulation positions, as soon as the tongue leaves the articulation position and the lips open to combine with the following elements, immediately return to the correct articulation position at the beginning to end the syllable.

To help Hmong primary school students practice pronunciation of final sound consonants *n* /-n/, *m* /-m/, *p* /-p/, *t* /-t/, *c* /-k/, *ch* /-c/ at the end of Vietnamese syllables, primary teachers need to distinguish pairs of front tongue-tip consonants: *t* /-t/, *n* /-n/; dorsal tongue surface consonants: *ch* /-c/, *nh* /-ŋ/; back tongue consonants: *c* /-k/, *ng* /-ŋ/; bilabial consonants: *p* /-p/, *m* /-m/. Primary school teachers also need to be aware to pronounce samples for exactly these final sound consonants as follows: *n* /-n/ is front tongue-tip consonant; *m* /-m/, *p* /-p/ are bilabial consonants; *t* /-t/ is front tongue-tip consonant; *c* /-k/ is the back tongue consonant; *ch* /-c/, *nh* /-ŋ/ are dorsal tongue surface consonants.

Primary school teachers should also instruct Hmong primary school students to pronounce from beginning to at the end of a syllable, all articulation parts must be opened and closed in the same dorsal tongue surface consonant and velar articulation position to help Hmong primary school students pronounce correctly Vietnamese syllables, that end with dorsal tongue surface consonant *ch* /-c/, *nh* /-ŋ/.

Primary school teachers need to instruct Hmong primary school students to pronounce from beginning to at the end of the syllable, all articulation parts must be open and close in the same position at the end of back tongue consonant and post palatal articulation position, to help them pronounce correctly Vietnamese syllable, that end with the back tongue consonant *c* /-k/, *ng* /-ŋ/.

Using Vietnamese phonetics and phonology characteristics to guide Hmong primary school students to practice, correct pronunciation mistakes of Vietnamese syllables is essential at their beginning period of pronunciation. But primary school teachers need to apply this solution to help them in the stage of teaching rhyme reading practice to correct pronunciation mistakes in Vietnamese syllables. Because Hmong





primary school students need to pronounce correctly all syllables, then they will create correct words about phonetic form, semantic content to use effectively in learning, communication, and in daily life so this is a necessary job.

Above are some measures to correct pronunciation mistakes of Vietnamese syllables for primary school students of the Hmong ethnic group in Tuyen Quang province, Vietnam. These measures can also be applied in teaching activities of Vietnamese in primary schools in ethnic minority and mountainous areas.

3. Conclusion and Discussion

Practicing and correcting Vietnamese pronunciation mistakes for Hmong primary school students in educational activities of primary teachers has a practical and useful meaning for teaching Vietnamese and bilingual education. Teaching practice shows that Hmong primary school students still have many mistakes in Vietnamese pronunciation as Most of them made mistakes of Vietnamese Broken rising tone into Vietnamese Acute tone; making Vietnamese Interrogative tone as Vietnamese Low pitch one. Hmong primary school students also incorrectly pronounce Vietnamese initial sound consonants as b /b-/, đ /d-/, g /g-/, kh /X-/. They also made mistakes in pronunciation of the Vietnamese prevocalic sound /-u9-/, diphthongs: iê /ie/, ươ /uə/ are nuclear sounds in Vietnamese syllables. Final sound consonants of Vietnamese syllables were also not correctly pronounced by Hmong primary school students or confused with the pronunciation of consonants: n /-n/, m /-m/. From the end of Vietnamese syllables, primary school students of the Hmong ethnic group still confuse the pronunciation of the final sounds p /-p/ and c /-k/, n /-n/, m /-m/ or pronounce all of the ng /-ŋ/ in Vietnamese syllables. The reason for Hmong primary school students to make mistakes in pronouncing Vietnamese syllables is because Over-differentiation interference, Under-differentiation interference, Re-interpretation of distinctions interference, Phone substitution interference. To correct the mistake of the Vietnamese syllables, primary teachers need to use Vietnamese phonetics and phonology characteristics to guide Hmong primary school students to practice, correct pronunciation mistakes of Vietnamese syllables. Next, primary teachers need to pronounce samples of Vietnamese syllables for Hmong primary school students to listen, observe the oral picture, and repeat, to practice the correct pronunciation of Vietnamese syllables. Here are some measures to correct pronunciation mistakes of Vietnamese syllables for primary school students of the Hmong ethnic group in Tuyen Quang province, Vietnam. These measures can also be applied in teaching activities of Vietnamese in primary schools in ethnic minority and mountainous areas.





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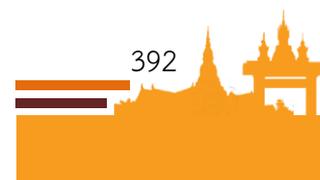


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EDUCATING COMMUNICATION SKILLS FOR PRIMARY SCHOOL STUDENTS IN HUNG DUC COMMUNE, HAM YEN DISTRICT, TUYEN QUANG PROVINCE TO ADAPT TO THE NEW NORMAL

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Bui Mai Huong²

Abstract

It is very important to educate primary school students in communication skills in the new normal to respond to the pandemic based on face-to-face or online teaching options. On the basis of the theory of communication skills education for primary school students, the author selects a case study of students in grade 4C at Hung Thang Primary School, Ham Yen District, Tuyen Quang Province. From the research results, it is concluded that the education of communication skills for primary school students in many aspects is a matter worth paying attention to.

Keywords: Education, Communication skills, Primary school students, New normal

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1. Context and problem

Communication is an essential people need in life. According to the Dictionary of Linguistic Terminology: “communication is the announcement or transmission of information by means of a certain system of codes” [1]. From that, we can understand communication as an activity between two or more people to express to each other intellectual or emotional information, a will to act, or a comment about a certain thing or phenomenon.

In the context of strong integration, education for students to develop communication skills is very important so that they have standard behavior in family, school, and society. However, in recent years, due to the complicated situation of the Covid - 19 epidemic, it has affected everyone in society, especially students, including primary school students. Within the scope of the article, the author explores the specific characteristics of the case of students in grade 4C, Hung Thang Primary School, Ham Yen district, Tuyen Quang province, and offers ways to train students to communicate appropriately fit.

2. Research content

2.1 Communication and communication skills

Author Ngo Cong Hoan [4] said that: “communication is the process of contact between people with people for the purpose of exchanging ideas, emotions, living capital, skills and professional techniques”. The concept of communication has been exploited in the relationship between people with different purposes.

Approaching from the perspective of interpersonal relationships of people, author Nguyen Quang Uan [5] writes: “communication is the psychological contact between people and people, through which people exchange information about information. beliefs, feelings, perceptions, and interactions. In other words, communication establishes and operates people-people relations, realizing social relations between one subject and another”. Here, the author has considered communication as a condition of people existence and development. Through communication, people interpersonal relationships are developed.

Thus, communication is viewed from many different angles, but in general, communication is still the process of exchanging information between people to establish relationships, mainly by means of language. Through communication, people express themselves, establish and maintain and develop social relationships.





Communication is a process formed from many communication factors. Each element is associated with a certain function. There are many views on communication factors, but we can understand communication factors including communication character, code (communication medium), message (communication content), and communication context.

Among the above factors, the communication character is a very important role. Communication characters are the people involved in the communication process. For this factor, the influence level is considered based on: communication role, communication position, communication relationship to communication activities in language. Considering the communication situation in the school, the communication role includes the peer-to-peer relationship (between students), the non-peer relationship (the relationship between teachers, school staff, and students; older students, and younger students).

Education is the leading national policy. According to Resolution 29-NQ/TW, Resolution of the 8th Plenum of the 11th Central Committee on fundamental and comprehensive reform of Education and Training, the goal for general education is to focus on intellectual development, physical fitness, forming citizenship qualities and capacity, discovering and fostering giftedness, and career orientation for students. Improving the quality of comprehensive education, focusing on education ideals, traditions, ethics, lifestyle, foreign languages, informatics, competences, and practical skills, applying knowledge into practice [5]. Therefore, we must pay more attention to the training and education of communication skills to meet the educational innovation requirements set forth by the state. Moreover, in the situation of the Covid-19 epidemic, the communication environment of primary school students in the school has changed markedly from students being educated in face-to-face communication skills to online communication.

Resolution 128/NQ-CP of the Government has set the following objectives: Maximum protection of people's health and life; to minimize the cases, severe disease transfer, death due to COVID-19; socio-economic restoration and development, ensuring security, social order, and safety; realize the dual goal of bringing the whole country to a new normal as soon as possible, striving in 2021 [4]. This forces teachers to choose the appropriate form and method of teaching communication skills for students to be appropriate and effective in the new normal.



2.2 The role of communication skills education for primary school students in the new normal

2.2.1 Educating communication skills has a positive effect on the formation and development of students' personality

Communication is an essential people need in life. Through communication, each individual will receive feedback from the object of communication with him/her. From there, it is possible to integrate and build relationships in society. Ethical standards will be objectively recognized by people and adjusted to suit the trend of the times. For primary school students, this is the age in the period of personality formation and development, so the development of communication skills plays an extremely important role. When they have good communication skills, the acquisition of knowledge will become easier. Besides, the children will be aware of the importance of moral training and confidently participate in the collective activities that the school organizes. Communication skills not only help them to listen and share but also help them express their own attitudes and handle life situations in the most reasonable way. At the same time, communication skills also help them see themselves and evaluate and adjust accordingly. If they lack communication skills, it will greatly affect the formation and development of their personality, losing a solid foundation for them in the future.

2.2.2 Educating communication skills contributes to creating a positive life value system for students

Educating students in communication skills play an important role in forming the initial foundation for them to enter the process of acquiring knowledge in life. Developing communication skills for students to help them move towards positive life values. Through communication, they will better understand cultural behaviors, moral, physical, and aesthetic values and values of life.

2.2.3 Educating students on communication skills, helping students create good relationships in life

Communication skills directly affect the establishment of relationships in life. Having good communication skills will be a strength to achieve high efficiency at work as well as in learning and training. For primary school students, communication will be the bridge connecting them with friends, teachers in school, and other relationships in life. From those relationships, they learn practice and acquire knowledge in a richer way. Today, to adapt to the new normal, communication skills are even more necessary for primary school students. Therefore, the education of communication skills for children is very important and necessary.





2.3 Basic communication skills need to be taught to primary school students in the new normal

According to the general education program 2018, there are many communication skills that need to be taught to primary students. However, with the actual situation of face-to-face learning or online learning, it is necessary to educate primary school students on some of the following basic skills:

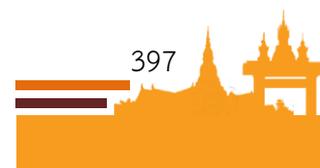


+ **Listening skills:** through face-to-face or online teaching activities to educate students to form and develop listening skills so that they can understand others, understand knowledge, messages, and behavior that the teacher wants to convey. Students listen actively, initiative, and empathically, share to receive information, and process information useful to themselves.

+ **Sharing skills:** In educational activities, it is necessary to educate primary students in sharing skills. When the students are aware of the merits of taking care and teaching of their parents, sharing with their parents the joys and sorrows, the successes and failures in life, sharing with the teachers about the difficulties they face in the study, share with their friends about the work of their class, their school...

+ **Collaborative working skills:** in learning, primary school students need cooperative work skills. When they work together, they know that sharing and cooperation will bring high results. Enlisting support and help from others, keeping promises, and persevering with chosen goals, ... Collaborative work gives students richer perspectives when evaluating or implementing a certain work.

+ **Skills for expressing emotional attitudes:** communicating with people reveals their personal feelings, therefore, in order to communicate culturally, it is necessary to educate primary school students to have skills in expressing emotions and personal attitude in the process of communication, know how to control their emotions in the process of communication such as anger, irritation, too emotional... so as not to affect the communication process and the quality of learning, training of students.





3. Exchange and discussion

3.1 Case study of students in class 4C, Hung Thang Primary School, Ham Yen district, Tuyen Quang province

Hung Thang Primary School is located in Hung Duc Commune, Ham Yen District, Tuyen Quang Province, 23 km from the center of Ham Yen District.



Figure 1: Main school site of Hung Thang Primary School

The school consists of 3 administrators, 26 teachers, and 1 accountant, totaling 30. The total number of students is 519, divided into 20 classes. In order to facilitate learning in mountainous areas, remote areas, and areas with extremely difficult circumstances, the District Department of Education and Training has divided into 3 schools (Main School site, Xuan Phan site, and Deo Te site). 99% of students attending the school are from ethnic minorities (Tay, Dao, Cao Lan...)

Surveying communication skills of 29 students in class 4C at Hung Thang Primary School, Ham Yen district, Tuyen Quang province during the holiday month, learning through online learning software integrated with training and improvement activities. High communication skills have obtained the following results:





Out of the total of 29 students in the class, 23 students (accounting for 79.31%) have good communication skills, are bold, and know-how to express their opinions. The rest are students with poor communication skills, they are still timid, but they also know how to express their opinions and need more practice in the near future.

The actual results show that communication skills education for students is very important and urgent. As society is struggling to prevent the spread of the Covid-19 pandemic, students are also very affected. With the characteristic that the school is located in a remote area, an area with extremely difficult circumstances, the majority of students attending the school are said to be from ethnic minorities.

For class 4C, 100% of students attending the class are from ethnic minorities. Access to information technology is still limited, so they still face many difficulties in learning and training in the new normal period. Therefore, teachers play an important role in finding methods of teaching communication skills when teaching online.

3.2 Some solutions to educate communication skills for 4th-grade students at Hung Thang Primary School, Ham Yen district in the new normal

3.2.1 Design lessons that integrate educational content on communication skills

- Purpose: Integrated design of communication skills education content to educate and train students in communication skills when learning online.

- Content: Besides designing knowledge lessons for students, teachers need to focus on integrating communication skills education for students through each lesson. In the subjects, teachers need to select a number of dominant and appropriate subjects to be able to integrate education in communication skills such as Vietnamese, Ethics, Nature, and Society.

The teacher will be the one to choose the appropriate communication skills for the lesson to convey to the students. It can be through the form of explaining the relationship between the content in the lesson and the situation outside the lesson or organizing games to educate students on communication skills. Eg: In the writing lesson “Practice describing parts of plants”, the teacher builds a game to help students improve communication skills, quick reflexes, and practice vocabulary used to describe things. The game is called “Lucky Crossword Game”. When participating in the game, children will be selected for themselves a number, behind the number box will be a letter. Students will guess the descriptive word related to that lucky letter.

- Efficiency: The game aims to improve students' thinking ability, help them quickly think quickly, and demonstrate communication ability when expressing opinions. Most of the students after participating in the class are more open and confident in the communication process.



3.2.2 Promote the positive and proactiveness of students through each lesson

- Purpose: the lessons not only give students knowledge but also skills. Helping students to be proactive and active in lessons will be a lever to bring them faster to an abundant source of knowledge.

- Content: teachers often choose a form for students to warm up before starting a new lesson, immerse themselves in the lesson content by letting students play the role of a character or speak their mind after every lesson. Eg:

Before each class, students will be warmed-up. This is an introductory activity that should have an emotional and intellectual impact on the students throughout the class.

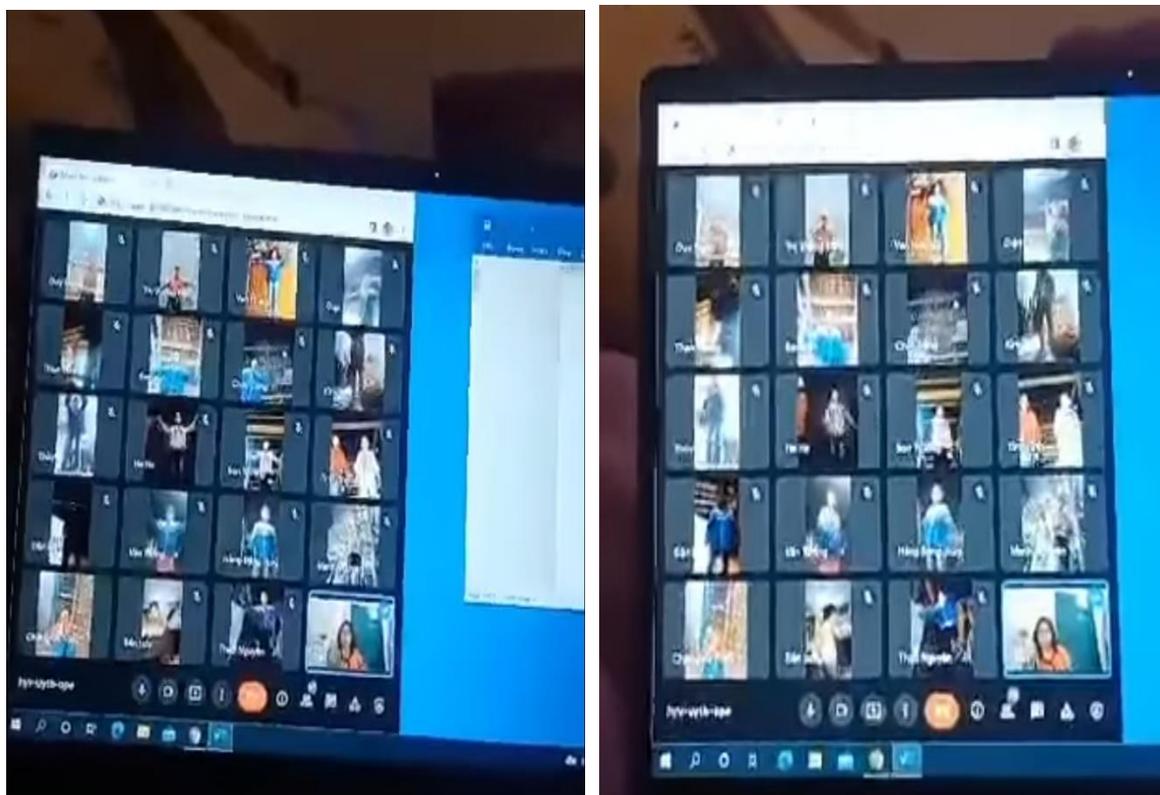


Figure 2: Students of class 4C at Hung Thang Primary School, Ham Yen District, Tuyen Quang Province participated in the warm-up before going to school

In Vietnamese, there is a story-telling subject. After learning the content of the story, students will be assigned a role to tell the story. Different from face-to-face learning in class, students will be assigned the role of teachers to tell stories on online learning software. When being assigned the role of storyteller, the students will be trained in their communication skills in front of the crowd, becoming more confident and bold.





In order to successfully complete the task of playing the role of the character, the students must pay high attention to listening to be able to coordinate well with you. After telling the story, the teacher invites other students to comment on the content, the meaning of the story, how well they acted, etc. Through the comments again, the children were able to listen and learn from their own experiences, hone their public presentation skills, listening skills, and express attitudes and feelings skill.

- Effective: These activities create excitement and self-engagement in the class. Although they have to study online, the students of grade 4C at Hung Thang Primary School always feel excited before each class because they feel excited about the warm-up activities under the guidance of their teachers. Students will be able to freely participate in warm-up activities without feeling afraid, tired, and stressed before the old test hours. Not only that, but they also develop their own positivity and initiative. From there, it is easy to grasp knowledge as well as practice communication skills.

3.2.3 Collaboration between schools and families in educating students in communication skills

- Purpose: to coordinate between families and schools in educating students when learning through the online form. Understand the student's situation at home, take timely measures to help students through the learning process.

- Content: In fact, there are students at school who are very obedient and polite, but when they return home, the opposite is true. The explanation for this we can understand when at school, the children are under the supervision and management of teachers, friends, etc., and are graded for their conduct. At home, children are only reminded by their parents, without evaluation and grading. Therefore, the family and the environment when the children go home play an important role in the development of communication skills for students. Due to the remote area, the 4C students of Hung Thang Primary School still face some difficulties in learning. In addition to the epidemic situation, students have to choose for themselves appropriate learning methods. However, the school and family have always cooperated so that the children have the best learning conditions. Students will be guided to study in groups suitable for epidemic conditions and social distancing.



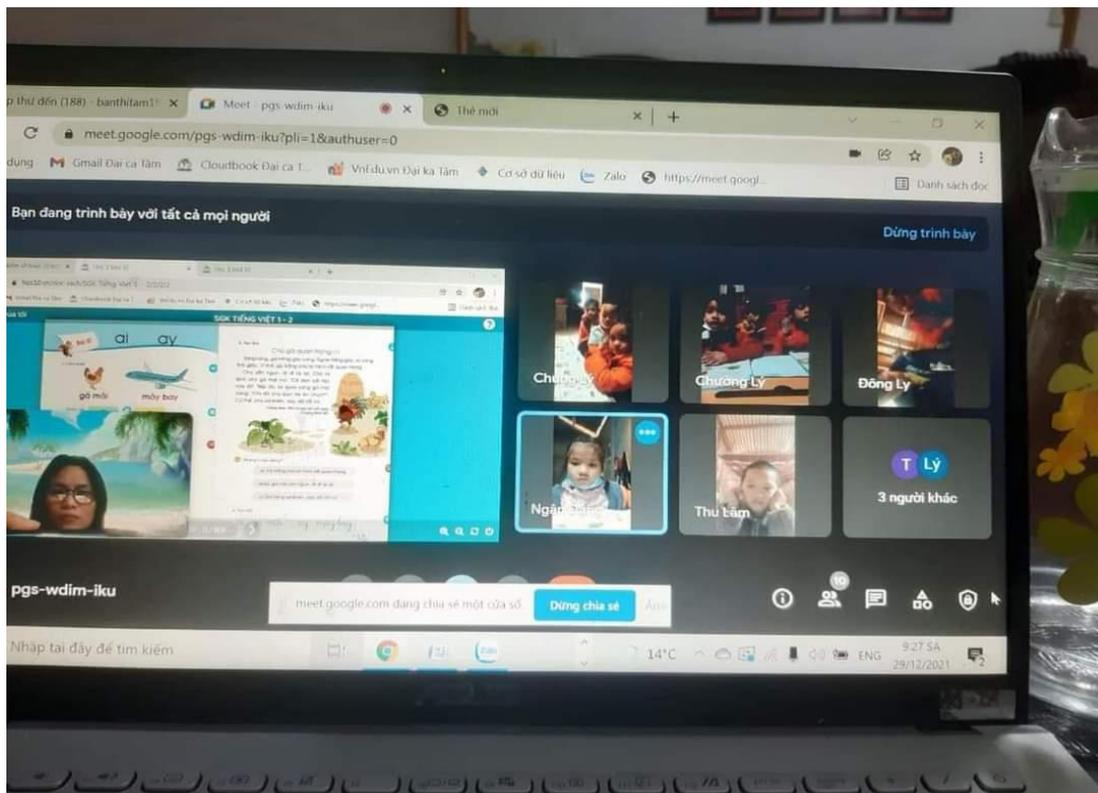


Figure 3: Grade 4C students join an online learning group

- Effective: When studying in groups at home, children will be monitored by their parents, grandparents, family members, and friends, helping each other in both studying and dealing with people. around. Teachers and families are two-way bridges. Teachers regularly exchange information with families, answer questions and give parents ways to educate communication skills when children are at home, practice communication skills and behave properly when children are at home.

4. Conclusion

The case study of students in grade 4C at Hung Thang Primary School, Ham Yen district, Tuyen Quang province is based on the theory of communication skills education for primary school students to find out practically and offer some educational solutions. Teaching communication skills to students in the new normal. With the characteristics of remote areas, 135* region, students still face many difficulties in learning. However, they still maintain the number and quality of learning in the best way. On the teacher's side, there are suitable solutions to help children develop communication skills such as Designing lessons that integrate educational content on communication skills; Promoting positivity and initiative for students through each lesson; Collaboration between schools





and families in educating students in communication skills. Thereby bringing high results in skills education for students, especially communication skills.

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DEVELOPMENT OF CURRICULUM FOR TEACHERS OF UNIVERSITIES IN THE NORTH MOUNTAIN REGION TO MEET THE REQUIREMENTS OF THE GENERAL EDUCATION PROGRAM 2018

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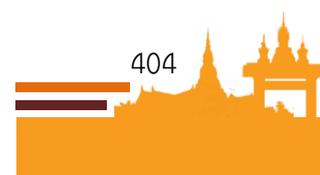
Abstract

Development of the curriculum for teachers to meet the requirements of the general education program in 2018 (GEC) is an urgent issue for pedagogical universities in the Northern mountainous region today because the Universities in most mountainous areas still have many difficulties. There are many approaches to developing a teacher training program to meet the requirements of the general education program in 2018. In the article, the authors use the following approach: Teachers are aware of the urgency to develop training programs to meet innovation requirements, thereby being fostered in pedagogical skills; identify the most central issues in innovation, the relevance of the current program and must have a reasonable program development in the next period.

Keywords: Curriculum, Curriculum development, Teacher, Northern mountainous area, General education program 2018

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1. Introduction

The curriculum plays an important role in determining the quality of teacher training in our country and the northern mountainous region. Whether a teacher can meet the practical requirements of general education depends on the program and training process. The training program of a higher education institution depends on the development orientation (research/application/practice) and the mission and vision of that institution. Schools that want to fulfill their educational mission must continuously develop their training programs.

Resolution 29-NQ/TW dated November 4, 2013, of the 11th Party Central Committee on “Comprehensive renovation of education and training to meet the requirements of industrialization and modernization in economic conditions socialist-oriented market and international integration” (Resolution 29) has helped education have many advantages for development but requires the education sector to make more efforts [1].

Implementing Resolution No. 88/2014/QH13 of the National Assembly and Decision No. 404/QD-TTg of the Prime Minister on the renovation of curriculum and textbooks, the Ministry of Education and Training promulgates universal education program 2018 [2]. The new general education program is built in the direction of developing the qualities and capabilities of learners, creating a learning and training environment to help students develop in harmony physically and mentally; become active, confident, conscious learners of career choice and lifelong learning; have the good qualities and capabilities necessary to become a responsible citizen, a cultured, industrious, creative worker who meets the needs of personal development and the requirements of a construction career. Building and protecting the country in the era of globalization and the new industrial revolution [4]. The program has many new features, notably developing students’ quality and capacity in the era of globalization and revolution Industry 4.0. Therefore, for pedagogical students to graduate to meet the innovation requirements of education, the Northern mountainous pedagogical schools should consider the development of training programs as a key task.

2. Content

2.1 Curriculum and Curriculum development

2.1.1 Curriculum

Rungchatdaporn Wahachat (2009, p. 63) stated: “A curriculum is a collection of teaching experiences organized both inside and outside the classroom, intending to help learners achieve desired goals. Creation is important in educational





institutions. The curriculum used in schools has different characteristics, depending on the conditions of each school. Training program development is to build content to suit the training program. The curriculum includes Analysis of basic information, determination of goals, determination of learning content and experiences, regulation of testing and assessment of learning outcomes, Curriculum implementation.

According to Preeyaporn Wong-Iditarod (2010, p. 25) -Thai Education manager, the training program is as follows:

1. A curriculum is a science consisting of principles, theories, and processes used in teaching according to the set goals.
2. A curriculum is a system in an educational organization that includes the following elements: Input (teachers, students, learning equipment, facilities); process (organization of teaching-learning); Output (study results, graduation results)
3. A curriculum is a teaching-learning plan to train learners to achieve a set goal.

Tran Thi Bich Lieu (2007, p. 76): “Programs are activities carried out with the support of resources to achieve specific goals for predetermined customer groups”.

According to the Ministry of Education and Training (2010, p. 65): “The higher education program represents the goals of higher education; stipulate standards of knowledge, skills, scope, and structure of higher education content, training methods and forms, and methods of evaluating training results in subjects, disciplines and training levels.

In the article, the author believes that the curriculum is a way to gather experience and is a document presented in the form of a teaching and learning organization plan, or an educational organization program. The regulation of teaching and learning organization methods to help students achieve learning results according to the program’s aspirations or goals.

2.1.2 Curriculum development

According to Rungchatdaporn Wahachat (2009, p. 40): Curriculum Development is a term with the same meaning as Curriculum Planning. The term usually now means Curriculum Materials, which includes the devices that students use to learn. It is not the construction of the training program plan, but the results obtained from the development of the training program plan. In short, the development of a training curriculum means the improvement and change of the old curriculum so that it achieves better results for both the purposes of organizing teaching and learning, testing, and evaluating results. All achieved new goals, higher than the previous period.

- Curriculum Planning is the process of developing the desired curriculum plan or a plan for use in teaching.





- Curriculum Materials and Curriculum Revision is the compilation and improvement of subjects.

- Curriculum Improvement is an improvement or development of a curriculum plan.

Good (1973, pp. 157-158) cited by Rungchatdaporn Wahachat (2009, p. 40) analyzed as follows: "Curriculum Development has two characteristics: improvement and program change. Curriculum Improvement is a curriculum development approach tailored to the institution. And changing the curriculum means making a difference from the old curriculum, creating a new learning environment.

Preeyaporn Wonganutarod (2010, p. 32) source from Tyler (1959), said that development must follow a suitable system. Applying the principle of development to the teaching and learning program must answer the following four questions:

1. What is the purpose of the teaching-learning program that the school will apply to students?

2. What learning experience will the school provide students to achieve the set goals?

3. What kind of learning experiences will the school provide to students?

4. What criteria determine the completion of the goal?

In short, curriculum development makes the curriculum more and more complete, better, more relevant. Therefore, the curriculum must be improved according to the regulations of the Ministry of Education and Training, following the local circumstances, and must be continuously improved. At the same time, it is necessary to change the teaching-learning program, that is, to build a new teaching program to improve the quality of life, in line with the times, thereby helping universities to develop in the international integration trend.

2.2 Limitations in teacher curricula in northern mountainous pedagogical schools

Summarizing the studies [4] [6] [7] [8] [10], we summarize the following shortcomings and limitations:

According to the training program of the Ministry of Education and Training (2006), the structure of the teacher training program is 210 units of study and the training period is fore years. Converting to training credits (from 120 to 140 credits), the pedagogical training program still has some limitations.

Through the research and analysis of many education researchers, there are three limitations in educational programs at pedagogical universities:





Firstly, the training time for subject knowledge is not reasonable. Pedagogical knowledge from 33-36 units (accounting for 16-18%); an internship is 10 units/210 units; General knowledge accounts for 38%.

Second, it is unreasonable for all majors to have the same general education knowledge. Assoc. Prof. Bui Van Nghi said that in the computer science training program, there should be no computer subject in general education knowledge, in the psychology training program, there should be no general psychology subject, etc.

Third, the curriculum is not suitable for each school. The internship period of the students is short, from 8 to 10 weeks of internship.

The Project on Renovating the Teaching Program for Middle School and High School Teachers of Hanoi National University of Education (2015) has analyzed the shortcomings of the curriculum: Experiential teaching program; there is no credit-oriented, academic-oriented curriculum. There is no connection between the university program and practical knowledge; not prioritizing the development of students' competencies, such as self-study and self-research capacity; did not mention the integrated and differentiated teaching capacity in teaching. Students are not fully trained in skills in comprehensive education (vocational skills, school counseling, how to organize experiential activities, etc.), so it is difficult for students to apply to teach after graduation.

To meet the requirements of educational innovation, pedagogical schools are renovating curricula, designing and rebuilding curricula accordingly. To do well, pedagogical schools should have scientific and specific orientations.

2.3 Measures to develop teacher curricula in pedagogical universities in the Northern mountainous region

2.3.1 Raise awareness among faculty and administrators about curriculum development Raise awareness among faculty and administrators responsible for developing the necessary curriculum. The person in charge of program development must be aware of the importance and urgency of developing the program in the direction of comprehensive innovation in education in the trend of globalization and industrial revolution 4.0; Thereby, improving the quality of training, meeting the requirements of real-life and future social development trends, improving the quality of training and the brand of the school [12]. Teachers must be aware of their roles and responsibilities in developing the program, in order to improve the quality of training and meet the social requirements of the school. From there, carefully study the development process and content, how to implement and evaluate the program, hone the necessary skills, and regularly carry out curriculum development at different levels, such as training, subjects, lectures. When having the right perception, the teacher will do it with the highest will and determination to develop and implement the program with good results.





2.3.2 Training teachers in charge of program development

One of the conditions to ensure the quality of education is that the teacher must have the pedagogical capacity (teaching capacity and educational capacity). Teaching competence includes many components, including [8]:

- Organizational capacity: Including components such as organizing teaching-learning activities between teachers and students, between students and students; between teachers and teachers in teaching activities, supporting activities, sharing educational experiences; the coordination and mobilization of resources to solve the problems of learning and life.
- Capacity to organize educational activities: including organizing educational programs (in class and activities outside of class time); mobilizing the participation of social forces to organize experiential activities for students; using methods and forms of organizing educational activities suitable to age characteristics and local conditions, etc.
- Capacity for social activities inside and outside the school: including pedagogical communication between teachers and students, between teachers and students' parents and other educational forces inside and outside the school; participate in local social activities; coordination between schools-families-society-employers-production and business establishments.
- Assessment capacity: teaching in the direction of capacity development, teachers need to change the way they evaluate students appropriately; need regular assessment during the learning process; To encourage students' efforts, assessment must be accurate, fair, objective, and suitable for each student. The purpose of the assessment is that students see their strengths and weaknesses, from there, guide them to overcome their weaknesses, and do not compare this student with other students.

In order to form the above-mentioned teaching competencies, the curriculum should be designed according to the central issues, in the direction of taking learners as the center, learning theory coupled with practice, students must participate in hands-on activities, experience in practice, learn how to detect and solve problems in a multi-dimensional relationship, learn how to self-study for career development, and self-development.

2.3.3 Update and refer to the curricula of universities around the world

Globalization and the fourth industrial revolution, training should interact with world education. One of the current advanced approaches that many universities have approached and applied in building and developing curricula, such as the CDIO curriculum, is an advanced training quality, meeting social requirements based on





determining output standards, from which to design training programs and plans. CDO is a scientific, reasonable, and logical way, which can be applied to many different training fields. According to the CDIO approach, students, in addition to learning knowledge, also learn skills (personal, communication, product creation, ...) to develop professional capacity, personal and social capacity [11]; help students after graduation have the ability to adapt well when working and in social relations. Therefore, when developing the curricula they teach, they should research to apply them by the conditions of the school.

2.3.4 Developing a learning system

It is recommended to update and add new materials continuously to enrich the learning resources. When the program has developed, but without supporting materials for research, teaching, and learning, it will face many difficulties to implement. Therefore, it is advisable to develop rich sources of learning materials and curricula to well implement the curriculum. Developing resources, curricula, and documents should be carried out continuously and applying science and technology to digitize documents for easy access by teachers and students. It is necessary to create links with publishers, libraries of domestic and foreign universities to enrich learning resources. It is advisable to promote the internal resources of the school in compiling documents and textbooks from the school's researchers, or researchers from other schools so that the learning resources are always added new.

2.3.5 Develop curriculum in a logical progression

With the view that curriculum development is the process of supplementing, editing, and updating existing programs and creating positive changes, we propose the following [9] [10] [13]:

1) Identify/determine social requirements, innovation requirements

It is necessary to have an actual survey of the social requirements for the training industry, compare the guiding views, regulations of the management levels, and forecast the development according to the vision of the university, to identify innovation requirements and directions.

2) Review the current program with the new program

Review the current program to assess the level of meeting innovation requirements, the program's suitability compared with the conditions of facilities, students and teachers, etc., thereby adjusting and updating updated, supplemented accordingly.

3) Linking, a system of innovation requirements

Organize, link, and system innovation requirements compatible with the current program, while keeping content focused and relevant innovation.



4) Tool design, the assessment process

To assess program relevance and success, appropriate evaluation criteria, tools and processes should be designed.

5) Organizing program implementation and evaluation

Organize teaching and evaluate to adjust and supplement in time to complete the developed program.

The steps in the process need to be done carefully, with the participation of stakeholders (lecturers, managers, employers, students) to ensure the program is feasible and achieves good results.

2.3.6 Decent remuneration for teachers in charge of program development

The curriculum will determine the quality of training, so it is necessary to have people with enthusiasm and good knowledge. Remuneration shows respect for talented people and encourages them to promote their wisdom to contribute to the growing school.

3. Conclusion

To develop the curriculum for general teachers to meet the content innovation of the general education program in 2018, it is recommended to raise the awareness of teachers about the urgency of developing the program according to the requirements of innovation the core issues of innovation. It is necessary to provide professional training and capacity building for those in charge of program development and to have a remuneration regime for them. When developing the program, it should be done in a reasonable order, compatible with the existing program, suitable with the conditions of facilities, characteristics of learners, with the active participation of the subjects for the program to be highly feasible.

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RESEARCH FOR BUILDING SOLUTIONS FOR DEVELOPING PHYSICAL DEVELOPMENT OF 6TH-GRADE STUDENTS DONG HOI CITY, QUANG BINH PROVINCE, VIETNAM

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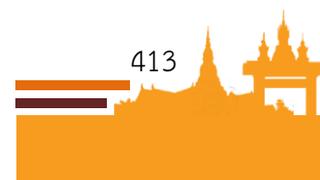
Abstract

The research results have analyzed, evaluated, and classified the physical ability indexes of students, thereby building five potential solutions. All of which have specific provisions on: purpose, content, implementation measures, implementation time, and management coordination. That is the basis for effective application of solutions into practice.

Keywords: Solutions, Sixth-grade students, Physical development, Quang Binh, Vietnam

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1. Introduction

Physical development is the process of forming and changing according to the rules during a relatively long life of each person in terms of form, function, and physical qualities, which has a direct effect on the ability to function physically and intellectually of each person. However, to do that, first of all, it is necessary to pay attention to physical education for the young generation. In Vietnam, from the school year 2021-2022, the new physical education subject program has been applied to the secondary level. Therefore, if appropriate physical development solutions are developed, physical education will become more and more complete and develop, contributing to improving the quality of training.

2. Object(s)

Research object: Physical development solutions for 6th-grade students in Dong Hoi city, Quang Binh province, Vietnam.

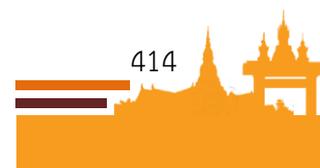
3. Research Methodology

Research method: The study used the method of analysis and synthesis of documents, method of interview–discussion, and mathematical and statistical method.

Synthesize, refer to, analyze and use all kinds of documents, books, journals, documents, domestic and foreign research works related to the field of the research topic. The method of analyzing and synthesizing documents also aims to systematize knowledge about Directives, Resolutions, State documents, guidelines of the Physical Education and Sports industry and the Education-Training sector. related to the topic under study.

Collecting information through questions and answers between researchers and different individuals on issues of concern in the form of direct or indirect discussions through questionnaires, in addition through interview methods to collect opinions of experts on physical development solutions for students.

Using statistical mathematics as a data processing tool through calculation software.





4. Literature Review

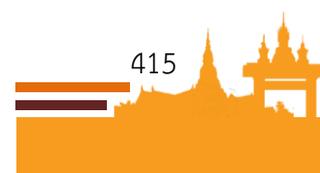
Physical examination, assessment, and classification of 6th-grade students in Dong Hoi city, Quang Binh province, Vietnam

4.1 Check and assess the physical indicators of 6th-grade students

The study was conducted on 386 students in grade 6 with the age of 12 at secondary schools in Dong Hoi City-Quang Binh, Vietnam (including 197 boys and 189 girls). The test results are presented in Table 1. The basic statistical parameters are presented such as: mean (\bar{X}), standard deviation (S), coefficient of variation (Cv%).

Table 1: Results of the assessment of physical indicators of students in grade 6

TT	Indicators	Gender	$\bar{X} \pm \delta$	Cv%	ϵ
1	Standing height (cm)	Man	147.87 \pm 8.16	5.52	0.01
		Women	147.92 \pm 5.0	3.38	0.01
2	Weight (kg)	Man	37.24 \pm 8.22	22.07	0.04
		Women	38.79 \pm 6.64	17.12	0.03
3	BMI (kg/m ²)	Man	18.94 \pm 2.38	12.57	0.02
		Women	19.37 \pm 2.57	13.27	0.03
4	Pulse frequency (times)	Man	81.72 \pm 4.8	5.87	0.01
		Women	82.32 \pm 5.18	6.29	0.01
5	Vital capacity (liter)	Man	2.35 \pm 0.27	11.49	0.02
		Women	1.99 \pm 0.39	19.6	0.03
6	Cardiac function. (HW)	Man	7.96 \pm 2.17	27.3	0.05
		Women	8.41 \pm 1.92	22.83	0.04
7	Long jump on the spot (cm)	Man	178.13 \pm 13.96	7.84	0.02
		Women	154.88 \pm 6.57	4.24	0.01
8	Supine abdominal flexion for 30s (times)	Man	14.39 \pm 2.61	18.14	0.04
		Women	11.85 \pm 2.5	21.1	0.04
9	30m high start run (s)	Man	5.51 \pm 0.55	9.98	0.02
		Women	6.44 \pm 0.46	7.14	0.01
10	5 minute run based on strength (m)	Man	907.05 \pm 65.21	7.18	0.01
		Women	792.24 \pm 61.62	7.78	0.02





The analysis in Table 1 on the coefficient of variation (Cv%) reflecting the variation among individuals in the sample and population in all indicators of the study population indicates that:

- For men:

The test results of indicators having high homogeneity in the inter-individual data set ($Cv \leq 10\%$) including standing height, pulse frequency, long jump on the spot, 30m high start run, and 5 minute run based on strength; indicators of average homogeneity in inter-individual data ($Cv \leq 20\%$) including BMI, vital capacity, supine abdominal flexion; indicators with low homogeneity in inter-individual data ($Cv \leq 30\%$) including weight and cardiac function.

- For women:

The results of the examination of the indicators with high homogeneity in the inter-individual data set ($Cv \leq 10\%$) including standing height, pulse frequency, long jump on the spot, 30m high start and 5-minute run depending on strength; indicators with average homogeneity in inter-individual data ($Cv \leq 20\%$) including weight, BMI, and vital capacity; indicators with low homogeneity in inter-individual training data ($Cv \leq 30\%$) including cardiac function and supine abdominal flexion for 30 seconds.

From the above results, it can be seen that although the degree of variation of the sample population in some indicators has average and low homogeneity, the sample mean values are representative enough (≤ 0.05) for the overall student population, which is the fundament for analyzing and evaluating the results of the indicators in the study.

4.2 Results of grading physical ability of students in grade 6

The study is based on the 2 δ rule and the results of the index tests in Table 1 to classify students according to specific levels presented in Table 2.





Table 2: Results of physical classification by each criterion of students (Male) in grade 6

TT	Indicators	Ratio	Classify				
			Very good	Good	Average	Weak	Poor
1	Standing height (cm)	SL	0	25	172	0	0
		%	0	12.69	87.31	0	0
2	Weight (kg)	SL	1	48	105	43	0
		%	0.51	24.37	53.30	21.83	0
3	BMI (kg/m ²)	SL	16	0	162	14	5
		%	8.12	0	82.23	7.11	2.54
4	Pulse frequency (times)	SL	0	31	128	34	4
		%	0	15.74	64.97	17.26	2.03
5	Vital capacity (liter)	SL	18	11	162	6	0
		%	9.14	5.58	82.23	3.05	0
6	Cardiac function. (HW)	SL	14	11	154	16	2
		%	7.11	5.58	78.17	8.12	1.02
7	Long jump on the spot (cm)	SL	4	12	157	17	7
		%	2.03	6.09	79.70	8.63	3.55
8	Supine abdominal flexion for 30s (times)	SL	9	4	158	17	9
		%	4.57	2.03	80.20	8.63	4.57
9	30m high start run (s)	SL	0	9	150	31	7
		%	0	4.57	76.14	15.74	3.55
10	5 minute run based on strength (m)	SL	0	55	123	14	5
		%	0	27.92	62.44	7.11	2.54
Average rate		%	3.15	10.46	74.67	9.75	1.98

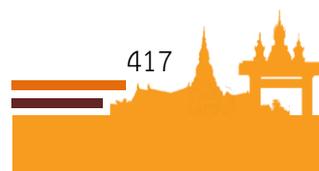
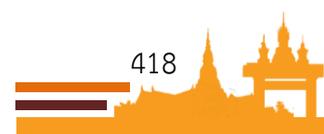




Table 3: Results of physical classification by each criterion of students (Female) in grade 6

TT	Indicators	Ratio	Classify				
			Very good	Good	Average	Weak	Poor
1	Standing height (cm)	SL	6	18	140	22	3
		%	3.17	9.52	74.07	11.64	1.59
2	Weight (kg)	SL	1	33	119	36	0
		%	0.53	17.46	62.96	19.05	0
3	BMI (kg/m ²)	SL	21	4	155	3	6
		%	11.11	2.12	82.01	1.59	3.17
4	Pulse frequency (times)	SL	0	41	117	26	5
		%	0	21.69	61.90	13.76	2.65
5	Vital capacity (liter)	SL	8	13	142	22	4
		%	4.23	6.88	75.13	11.64	2.12
6	Cardiac function. (HW)	SL	7	14	146	20	2
		%	3.70	7.41	77.25	10.58	1.06
7	Long jump on the spot (cm)	SL	1	16	139	23	10
		%	0.53	8.47	73.54	12.17	5.29
8	Supine abdominal flexion for 30s (times)	SL	7	7	145	30	0
		%	3.70	3.70	76.72	15.87	0
9	30m high start run (s)	SL	6	5	140	33	5
		%	3.17	2.65	74.07	17.46	2.65
10	5 minute run based on strength (m)	SL	0	35	130	21	3
		%	0	18.52	68.78	11.11	1.59
Ratio %		%	3.02	9.84	72.65	12.49	2.01

Based on the results in Tables 2 and 3, it is shown that: for men, the excellent type accounts for 3.15%, the good type accounts for 10.46%, the average type accounts for 74.67%, the weak type accounts for 9.75%, the poor type accounts for 1.98%; for women, the excellent category accounts for 3.02%, the good category accounts for 9.84%, the average category accounts for 72.65%, the weak category accounts for 12.49%, the poor accounts for 2.01%.





5. Results of the research paper

Select and develop solutions to develop morphological, functional, and physical qualities for students

5.1 Results of selection of physical development solutions for students

From the research and analysis of the practical basis, local conditions, and reference to relevant professional documents, the research has conducted to take solutions to develop the physical fitness of the research subjects. After developing solutions, the research uses the method of collecting opinions of experts to determine the solutions that account for the “very important” and “important” selection rates of over 80%, which will be put into use. The results are presented in Table 4.

Table 4: Results of interviewing solutions through experts’ opinions (n=26)

Solutions	SOLUTION CONTENTS	Very important		important		Not important	
		n	%	n	%	n	%
1	Propagating and educating students on the sense of discipline by applying health, ethics, personality, and lifestyle education knowledge to students.	22	84.62	3	11.54	1	3.85
2	Integrating forms of education activities outside of class time, mid-hour gymnastics associated with physical education contents.	21	80.77	2	7.69	3	11.54
3	Forming and developing sports training needs and habits, the ability to choose and use appropriate sports to practice for health.	23	88.46	3	11.54	0	0.00
4	Focusing on instructing students on the method of practicing motor exercises and the method of individual practice and group practice with assessment. Combining innovation in physical education teaching methods in the direction of positivity, developing students' initiative and creativity in PE lessons.	21	80.77	2	7.69	3	11.54
5	Forming and developing a sense of responsibility for the health of themselves, their families, and the community.	11	42.31	2	7.69	13	50.00

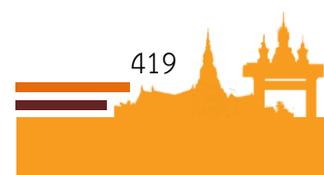


Table 4: (Cont.)

Solutions	SOLUTION CONTENTS	Very important		important		Not important	
		n	%	n	%	n	%
6	Focusing on renovating the teaching organization of Physical Education in an appropriate and individual way (classifying students' health, fitness, and aptitudes in each class).	24	92.31	1	3.85	0	0.00
7	Establishing a school sports club following the trend of socialization, creating favorable conditions for staff-teachers and those interested to participate.	8	30.77	7	26.92	11	42.31
8	Proposing investment from facilities and teaching equipment and enhancing forms of competition inside and outside the school.	4	15.38	6	23.08	16	61.54
9	Strengthening communication and propaganda work in the mass media.	6	23.08	7	26.92	13	50.00

Analysis of the results in Table 4 shows that there are 05/09 solutions that the research has developed that are selected by experts as “very important” and “important” to deploy the application, including solutions 1, 2, 3, 4, 6.

5.2 Deploying and building physical development solutions for students

5.2.1 Propagating and educating students on a sense of discipline through the application of health, ethics, personality, and lifestyle education knowledge to students

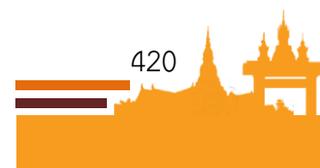
Purpose: To raise students' sense of learning about physical education, understanding, and being aware of the position, role, and position of physical training to improve health.

Contents of the solution

(1) Focusing on thoroughly understanding for administrators and teachers to have the right awareness of the required goals and basic content of school physical education and sports.

(2) Doing a good job of monitoring, supervising, and checking teachers' awareness of physical education and school sports.

(3) Strengthening cooperation with socio-political organizations inside and outside the school to organize internal and extra-curricular activities.





(4) Advising and coordinating in organizing cultural, artistic, and sports activities of students.

(5) Disseminating knowledge of health, ethics, personality, and lifestyle education to students in different forms.

Measures to take

(1) Organizing propaganda, campaigning, and educating the implementation of documents of the Party, government, and upper-level mass organizations on school sports work.

(2) Through educational forces to carry out the task of both educating and educating, helping students improve their physical fitness and self-train their moral qualities, ensuring science, effectiveness, and quality in physical education.

(3) Organizing many internal/extra-curricular activities to help students realize the correct position and learning tasks, raising awareness, motivation, and positive attitude to participate in school sports activities.

(4) Through major holidays to integrate and coordinate the organization of cultural, artistic, and sports activities for students in order to strengthen exchanges, solidarity, and mutual learning in collective activities.

(5) Coordinating with educational forces in schools to disseminate basic knowledge about health education, ethics, personality, and lifestyle to students.

Time: On collective activities, holidays of the year

Coordination, administration, and implementation

(1) Coordinating with all levels of Party committees, school administrators, (to direct).

(2) Ho Chi Minh Young Pioneers Union and Executive Committee of the Youth Union, (for coordination).

(3) The team of homeroom teachers of grade 6 and the Physical Education Department, (to preside over the implementation).

5.2.2 Synthesizing and integrating forms of education activities outside of class time, mid-hour gymnastics associated with physical education contents

Purpose: To help the subject of physical education have a variety of activities, suitable to the conditions of the school and the characteristics of the students' interests, creating motivation for self-discipline and positivity and developing initiative and creativity in physical education lessons.

Contents of the solution

(1) Designing a lively and attractive mid-hour exercise.

(2) Designing a number of lessons according to real-life topics.





(3) Integrating collective activities with game activities that have team characteristics and physical movement characteristics.

(4) Diversifying the implementation in teaching time with various physical games combined with games for physical development.

Measures to take

(1) Coordinating with the Physical Education Department to build a mid-time exercise associated with music performed in the style of folk dance, dance to dance, etc. to increase the attractiveness of the activity.

(2) Designing thematic group activities suitable to the actual activities of the school (for example, combining rhythmic gymnastics with lively and attractive songs with thematic themes, such as: performing activities, running, mitting,...).

(3) Building collective activities on Friday or Saturday afternoon according to the periodical activities of Ho Chi Minh Young Pioneers Team to exercise physical activity to improve the quality of Union-Team-Association activities and education intertwining altogether.

(4) Strengthening the application of movement games combined with games for physical development in the course of the lesson to increase the attractiveness of the teaching content, avoiding boredom when studying physical education.

Time: depending on the characteristics of each school to build a reasonable timetable

Coordination, administration, and implementation

(1) Ho Chi Minh Young Pioneers League and Branch Executive Committee, (for coordination).

(2) Team of homeroom teachers for grade 6 and Physical Education Department, (to preside over implementation).

5.2.3 Forming and developing the needs and habits of physical exercise and sports and the ability to choose and use appropriate sports to practice for health

Purpose: To form and maintain regular exercise and sports habits suitable to the physical characteristics, psychophysiology, age, gender, and specific conditions of the students.

Contents of the solution

(1) Guiding students to apply the contents learned in class into daily exercise to improve their health according to their personal schedule.

(2) Establishing a multi-sports club in the school to give students a participating environment.





(3) Developing a school-level competition plan for each school year in order to select high-achieving students to compete in regional tournaments.

Measures to take

(1) Physical education teachers are responsible for imparting knowledge to students about physical education, health improvement, and harmonious and reasonable motor-quality development.

(2) The Department of Physical Education advises the Board of Directors to establish a club with many active sports, organize activities to attract students and exercise enthusiasts in order to build a movement in the direction of specialization according to each content.

(3) Strengthening the leadership attention of the Party committees, authorities, and unions at all levels, closely following the competition plan of the industry and locality, and strictly following the direction of the school's leaders. The physical education department sets up training plans and programs on a yearly, quarterly, monthly, and weekly basis and directly applies new training methods.

Time: on weekly afternoons, without overlapping expertise
Coordination, administration, and implementation

(1) Time to conduct on weekly afternoons (the school arranges weekly afternoons without regular classes)

(2) Number of training sessions: 2 to 3 sessions/week. Training time for each session is 90 minutes (club organization as regular class time, direct training by physical education teacher).

5.2.4 Focusing on instructing students on the method of practicing motor exercises and the method of individual practice and group practice with assessment. Combining innovation in physical education teaching methods in the direction of positivity, developing students' initiative and creativity in PE lessons.

Purpose: Strengthening the model of sports practice in professional groups suitable to the needs and characteristics of students

Contents of the solution

(1) Guiding students to practice according to interest groups, monitoring, checking, and evaluating teachers' results, and building a standard system of physical training.

(2) Launching and directing the emulation movement to innovate and flexibly use teaching and learning methods, integrating with some other subjects in the program to enhance students' adaptability.





(3) Directing homeroom teachers and physical education teachers to organize fostering and actively use gifted students to develop a focused training method for this subject.

Measures to take

(1) Building a team club with common interests in various subjects, forming and implementing extra-curricular sports exercises to attract an increasing number and diversity of sports to create highlights, attracting more and more players; propagandizing to help learners understand the health, fitness, and stature of Vietnamese people, which is: “improve fitness and stature for future generations”.

(2) Applying information technology in teaching theory by using slideshows and videos to teach and increasing the use of vivid pictures to illustrate difficult movements.

(3) Detecting and fostering gifted students in order to prepare well for Phu Dong health festivals according to each age group. Besides, it is necessary to develop a reasonable training plan to promote the internal strength of the learners.

Time: in the hours students do not study culture

Coordination, administration, and implementation

(1) The physical education team and the homeroom teacher check the physical fitness of students at the beginning and end of the school year to assess the level of physical development in each stage.

(2) Increase the time to exchange experiences to improve the quality of lessons, apply information technology in the teaching process (especially vivid and rich visual images).

(3) Coordinate with the physical education team to develop a suitable training plan to the students’ psychophysiological characteristics and rest time.

5.2.5 Focusing on renovating the teaching organization of Physical Education in an appropriate and individual way (classifying the health, fitness, and aptitude of students in each class)

Purpose: Innovating teaching methods, teaching facilities, appropriate physical education subject content, orienting the development of modern sports, and combining with the development of existing local ethnic sports.

Contents of the solution

(1) Based on the results of the physical fitness test regarding Decision 53/2008/QD-BGDĐT, classifying students into groups, managing, and keeping records to monitor students’ health.

(2) Deploying teaching in healthy groups, developing content and practice methods for each group of students.





(3) Developing a training program for gifted groups as planned, organizing a gifted sports group, including students in the health and gifted groups.

Measures to take

(1) Organizing the classification of students' health, fitness, and sports technical level into 3 groups, including a good group implementing the general program, a weak group of students with mobility impairments, chronic illnesses, and poor health ratings, and a group of gifted students).

(2) Developing training content and methods for each group of students according to gender, health condition, physical condition, and athletic ability.

(3) Organizing a gifted sports group, including students from the health and initial gifted groups who wish to practice sports of their choice. This group is also organized and has a curriculum by grade, classroom, gender, and can be from the first grade.

Time: throughout the school year

Coordination, administration, and implementation

(1) The school management board directs the implementation.

(2) The homeroom teacher and the Executive Committee of the Union team coordinate supervise the implementation.

(3) The gymnastics team presides over the implementation.

6. Conclusion and Discussion

The results of the assessment of physical indicators of 6th-grade students show that the fluctuations of the sample set in some indicators are representative enough for the overall student population, which is the basis for analyzing and evaluating the results of the indicators in the research and conducting physical classification considering each student's criteria.

At the same time, they selected and built 05 solutions, clearly defining the purpose, content, measures, time, and management coordination for research subjects.





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THE INFLUENCES OF FACEBOOK ON VIETNAMESE VOCABULARY LEARNING OF LAO STUDENTS AT QUANG BINH UNIVERSITY

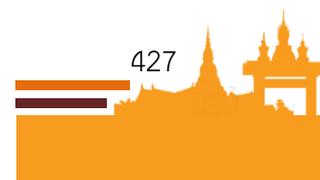
Vo Thi Dung¹

Abstract

Vocabulary plays an important role in the acquisition and production of language communication. Therefore, foreigners who learn Vietnamese language have always made a great effort to enhance and enlarge their vocabulary. It is undeniable that Facebook has been regard as supporting tool in many parts of the world. Consequently, Facebook has been recently considered as a rich material resource for learning Vietnamese of Lao students by encouraging them to interact online. This study was conducted to investigate Lao students' attitudes towards using Facebook in vocabulary learning at Quang Binh University (QBU) and to suggest some recommendations for using Facebook more effectively to improve Lao students' vocabulary.

Keywords: Vocabulary, Lao students, Influence, Facebook, Quang Binh University

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1. Introduction

Developing vocabulary plays a very important role in the process of learning foreign languages. It has a strong link to 4 skills for foreign language learners in general and Lao students in particular to understand more of what is written or spoken in many cases. According to Wilkins (1985), a person with a limited vocabulary will never be able to speak, write, read or understand language effectively. He wrote that “while without grammar very little can be conveyed, without vocabulary nothing can be conveyed” (pp. 111–112). Today Facebook is used for various noticeable benefits to humanity in many sectors, such as socialization, entertainment, business and advertisement... Many people find social website helpful in studying language because it is a new method that yield a lot of advantages for learners.

Originated from desire to deepen the knowledge about vocabulary learning, a great deal of research focusing on this subject has been done. These researches, however, did not exploit deeply vocabulary learning on Facebook. Therefore, the investigation about how Lao students use Facebook to improve their vocabulary, then promote solutions in order to enhance the self-study result at Quang Binh University.

2. Objectives

The purpose of this study is to find out Lao students’ perception about the importance of vocabulary learning on Facebook. The research focuses on the benefits and difficulties that Lao students encounter when using Facebook and offers some recommendations to help them learn effectively not only in their study but also in their future job.

The study was conducted with 200 Lao students in different courses at Quang Binh university) to answer our questionnaires.

3. Literature Review

There have recently been a number of studies conducted to investigate vocabulary learning on Facebook. Northcote and Kendle (2001) postulated that participating in online learning activities such as discussing in online forums/groups and searching for information online may give students the opportunity to acquire many practical online skills. Some of these skills are critical analysis of resources, effective online communication, and filtering and deciphering information. According to Blattner and Fiori (2009), Facebook can be used to increase motivation and improve the performance of language learners. N. P. Tuân, N.T. Tư (2013) advocated that Facebook had a huge influence on students’ study in the North region of Vietnam. Facebook was a bridge that





connected students themselves for private classroom communication, lessons, assignments, other school-related purposes, learning outcomes, and students-instructors relationship [8]. As Blatter & Lomicka (2012) described social networking created an environment through which participants may engage in relationship with others. They pointed out learners must be provided with appropriate strategies to be integrated as a viable resource in language learning environment [2]. Amichai-Hamburger, Y., & Vinitzky, G. (2010), Sim Monica-Ariana & Pop Anamaria-Mirabella (2014) stated that social media - Facebook affect students' development and progress in the foreign language [1], [4]. Phan Thi Kim Thao (2021) confirmed that three issues are reflecting Vietnamese students' attitudes towards the use of Facebook applications for language learning. However, some researchers have pointed out certain negative impacts from the use of Facebook for learning [8]. Fodeman and Monroe (2009) argued that students waste or overspend too much time on Facebook [3]. Nadzrah Abu Bakar (2010) warned Facebook is not an appropriate environment for learners and teachers to cooperate effectively. Still, rare studies were interested precisely in the influences of Facebook in vocabulary learning of Lao students in Viet Nam.

4. Conceptual Framework

4.1 Online learning activity

Online learning first introduced in the 1990s with the creation of the internet and also called e-learning. It allows students from different geographical areas to engage with an academic institution and learn flexibly. Learning activities in which students interact with a vast amount of resources, or other students using the capabilities of the Internet or other computer-based communication networks. Northcote and Kendle (2001) stated that participating in online learning activities may give students the opportunity to acquire many practical online skills. Roth (2009) suggested that online learning should include 3 main activities: (1) mutual engagement of individuals in actions where meanings are negotiated; (2) negotiation of a joint enterprise that reflects mutual engagement, active participation and mutual accountability; and (3) a shared repertoire that includes routines, words, stories... among others.

4.2 Definition of Incidental Learning

Incidental learning in education contributes to unintentional or un-planned learning that results from other activities regardless of those activities are academic or non-academic (Kerka, 2000). Incidental learning is a process through observation, repetition, social interaction, and problem solving. (McFerrin, 1999). This kind of learning especially facilitate reading comprehension and vocabulary. (Shahrokni, 2009). Incidental learning is that it involves the learning of formal aspects through a center of attention on semantic



aspects. Incidental learning can occur in many modes inclusive of observations, communications with others about tasks and adapting to new situations. Incidental learning has also been portrayed as implicit when knowledge is acquired independent of conscious attempts to learn. (Shahbaz Ahmed, 2017).

5. Research Methodology

To gain some better insight into the use of Facebook in Vietnamese vocabulary learning, the data study is collected, categorized and analyzed based on the qualitative and quantitative approaches to explore the research problems. Overall, the result revealed that Lao students in Vietnam expressed positive attitudes towards leveraging the Facebook platform.

5.1 Quantitative method: This method helps with the collection and analysis of the questionnaire data.

5.2 Qualitative method: It is used to evaluate Lao students' awareness of perception about the importance of vocabulary learning in improving their Vietnamese competency.

* Data Collection

- Interview: individual interviews were conducted to have an insight into students' attitudes towards the effects of using Facebook as a tool for learning Vietnamese.
- Questionnaire: A questionnaire was delivered to 200 students of Lao students. It involves 10 questionnaire questions that were mainly categorized into students' habits of using Facebook when learning words and the influences of Facebook on vocabulary learning.

6. Results of the research paper

6.1 Student's attitudes and perceptions of using Facebook for vocabulary learning

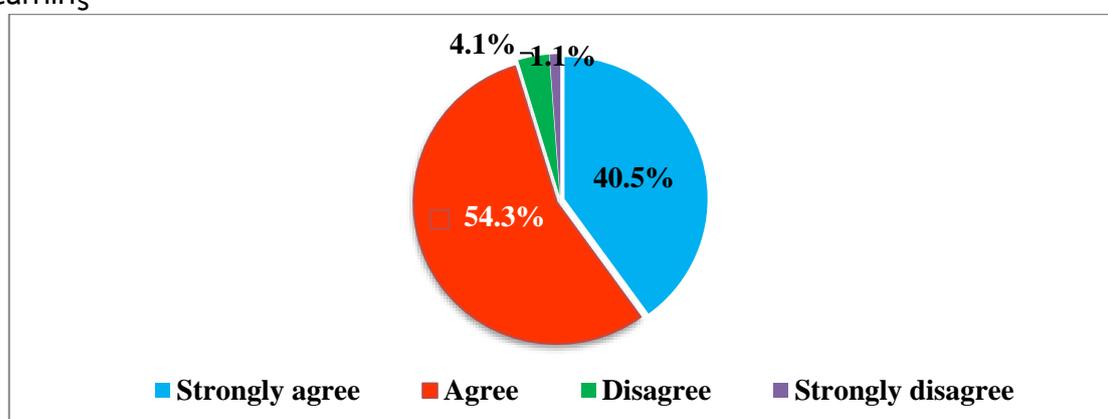


Figure 1: Student's perception toward the benefit of Facebook on vocabulary learning

From the result survey in Fig. 1, almost 94% of respondents agreed that Facebook has a beneficial effect on vocabulary building. However, about 4.1 percent of students disagree with the researcher's statements and just 1.1% of Lao students give the opinion that they strongly disagree about it. Throughout the result, a majority of Lao students had a positive attitude and know how to use Facebook fluently. Hence, they believe that Facebook is very essential to enrich their vocabulary. Similarly, a few students think that Facebook is an unnecessary social networking tool for learning vocabulary.

6.2 Students' frequencies of using Facebook to learn vocabulary

Table 1: The rate of using Facebook of Lao students at QBU

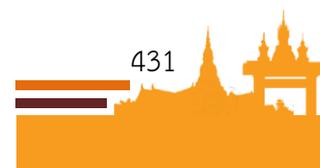
Spending an hour a day using Facebook	46%
Spending 2 hours a day using Facebook	33%
Spending 3 hours a day using Facebook	15%
Spending 4 hours a day using Facebook (sometimes)	6%
Joining in groups on Facebook to learn vocabulary	55%
Knowing vocabulary learning groups on Facebook	43%
Learn new words on Facebook incidentally	77%
Be proactive in learning new words on Facebook	40%

As the table 1 shows all learners owned a smart phone or computer and were interested in participating in the study. According to the survey, the majority of Lao students engaged in Facebook for at least an hour a day and 77% of them learn new words incidentally. It was considered quite positive that a large number of students intended Facebook as a useful tool to assist them with their study.

6.3 The influences of Facebook on Lao students' vocabulary learning

Table 2: Students' opinion about the effects of Facebook on their vocabulary learning

Opinions	Rate (%)
Facebook has become the biggest distraction for students when trying to get homework done.	29%
Facebook has negative impacts on their studying.	28%
Facebook is not an appropriate environment to learn new words.	14%
Facebook helps students be more confident when using Vietnamese words.	68%
Facebook is a useful tool to enlarge vocabulary.	86%
Facebook enhances students' motivation on their academic performance.	86%





After analyzing, the table displays approximately 29% of Lao students admit that they get distractive while 28% of them agree Facebook has negative impacts on their studying. Due to Facebook, Lao students deepen their range of knowledge (86% of students). Facebook also makes them more confident and motivative on their academic performance (86% of them agree that). According to the table 2, Facebook is not only for their result of task but also for students in skills, knowledge and be more confident as well as awareness.

7. Conclusion and Discussion

7.1 The effects of Facebook on vocabulary learning

1) Positive impacts

Based on the collected data with a number of 200 Lao students who participated in the questionnaires, 55% claimed that they joined groups on Facebook to learn new words. 68% of participants expressed that Facebook could be an online site to improve their vocabulary by chatting with friends or getting timely information. This perhaps because Facebook attracts students to engage quite often and learn the language in life. Incidental learning on Facebook also scored the result with 77% showed that students looked up new words for communication skills. 86% participants showed the positive attitude towards Facebook since it might be a platform for them to effectively practice Vietnamese. A large number of students confirmed that Facebook is a useful environment to learn and to share new words as well as new method more effectively. Furthermore, many students felt more confident when using Vietnamese for chatting and discussion.

2) Negative impacts

The result of the study revealed 29% of the students highlighted that using Facebook was time-consuming and was considered distracting to their studying. 14% of participants agreed that Facebook is not an appropriate online environment language because it must be through academic reading of books, articles and other materials. The research also shows that some of Lao students who spend too much time on Facebook (3-4 hours a day). Even though Facebook may be perceived as an enjoyable website, but students sometimes arise from overuse correlate to bad effects in their study.

7.2 Difficulties in vocabulary learning on Facebook and solutions

29 % of the students claimed that Facebook disturbs them while studying by advertisements or gossiping with their friends on Facebook. 14% said that some groups on Facebook are not qualified. Some students complained they sometimes could not log in Facebook. Therefore, they should set a limited time to use on Facebook or ask for





advice to choose suitable groups. Moreover, they use some software (Hostpot Shield, Ultrasoft...) to sign easily in Facebook. Another reason is that it seemed the students needed to be better equipped to use Facebook and to have a better understanding of what they were required to do for their self-study.

7.3 Conclusion

Based on the data and views expressed in this study, Facebook could be utilized as a social networking tool to facilitate the learning of Vietnamese vocabulary of university-aged youth. The study showed that a large number of Lao students at QBU in Vietnam were aware of the way how they should use Facebook to engage in learning language besides socializing for non-academic purposes. Many students spent several times a day using Facebook (from one to three hours). The results of the study also found some aspects that Facebook can facilitate Vietnamese learning in QBU, including students' attitudes, language skills, motivations, and confidence in which attitudes played the role more remarkable.

8. Suggestions

Lecturers should create a group on Facebook to share some helpful materials or encourage students to actively participate in forums of their interests and choice in order to give opportunities for students to practice. Lecturers should also guide students to search relevant study materials on Facebook; introduce them to sites, tools that can help them access lectures, video sessions and various courses in Vietnamese to reinforce their lessons such as Ling, Duolingo, Google play...

Students can share and absorb information as well as study resources positively. They should use useful tools to improve their vocabulary learning.

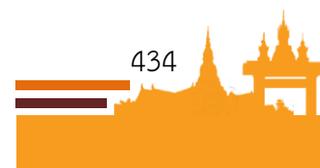
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THE DEVELOPMENT OF PROGRAMME IN VIETNAMESE LANGUAGE AND CULTURE FOR FOREIGNERS: ACHIEVEMENTS AND CHALLENGES

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Do Khanh Y Thu²

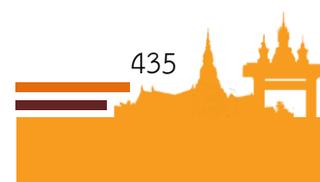
Phan Thi Kim³

Abstract

Vietnamese language and culture for foreigner – the program is attracting many international students. As one of the training place in this field in Vietnam, the Faculty of International Studies, University of Foreign Language Studies – The University of Danang has made great achievements with the increase in the number of students, the diversity of countries where foreign students enroll, as well as the increase in the number of lecturers and the quality of teaching. The program is currently facing great opportunities and prospects. However, besides the opportunities, there are also many challenges. The main content of this article introduces the history and the achievements of the program. Analyze the advantages and disadvantages of the program as well as analyze the opportunities and challenges that are posed to the development of the program.

Keywords: Vietnamese language and Vietnamese culture, Achievements, Challenges

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1. Introduction

Nowadays, globalization is considered a prominent trend worldwide, especially in recent years. Therefore, researching and teaching foreign languages and indigenous cultures to international students is becoming an interest topic in transnational education. Teaching the Vietnamese language and culture for foreigners in Vietnam is promoted in many localities, especially in big cities where many foreigners work and live. Following the two national universities at the two ends of the country, Hanoi and Ho Chi Minh City, the University of Danang in Da Nang city - The economic and cultural center of the Central region - Highlands, is also the ideal destination for many international students in choosing a prestigious educational institution to learn Vietnamese and culture.

For nearly two decades, the Faculty of International Studies - University of Foreign Language Studies – The University of Danang is highly honored and proud to have become a reliable destination for international students in educating Vietnamese and culture. The training programs include the Master's degree in Comparative Linguistics, the bachelor's degree, and the short-term Vietnamese language training courses according to the 6-level Foreign Language Language Competency Framework of the Ministry of Education and Training of Vietnam. Going through a process that is not long but not short, the Faculty of International Studies - University of Foreign Language Studies (UFLS) – The University of Danang has trained a relatively large number of international students and foreigners with many outstanding achievements so far. In the current globalization context, the educational picture of the world and Vietnam stands out with new popular education trends, according to which, the Vietnamese language and culture training program at the Faculty of International Studies – UFLS is also facing many opportunities and challenges to develop further, becoming an attractive module and a quality educational institute.

2. Objectives

2.1 Introduce Vietnamese language and culture training program to countries around the world.

2.2 Promote the strengths, overcome the limitations of Vietnamese language and culture for foreigner program, help the module to develop more and more.





3. Conceptual Framework

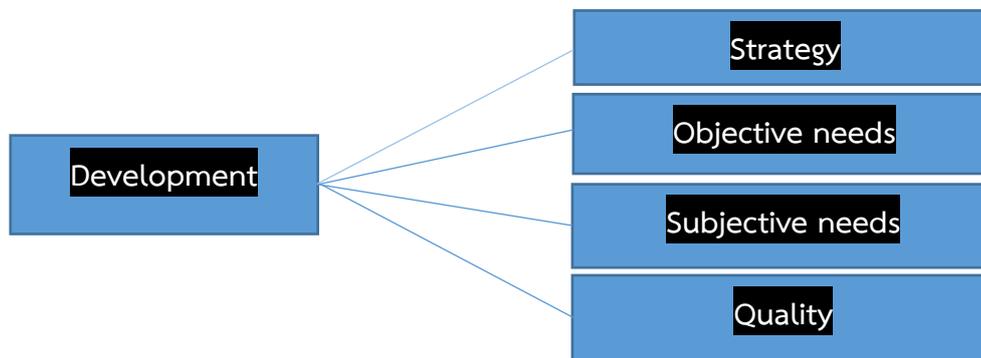


Figure 1: Conceptual framework

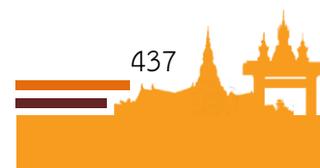
4. Research Methodology

We use the main research method which is the method of analysis and summarization of experience. Specifically, we research and review the achievements that have been achieved in Vietnamese language and culture training activities since it was established until now. We find the strengths of the module to promote, and find the limitations, weaknesses to come up with solutions to overcome them.

5. Results of the research paper

5.1 Creation history

According to Decision No. 796/QD-TCCB dated April 13, 2006, the Faculty of International Studies was established by the President of the University of Danang. As soon as its first establishment, the faculty was in charge of two majors: International Studies; Vietnamese Language and Culture for foreigners. The establishment of the Faculty of International Studies aims to meet the needs of training human resources for foreign affairs, international exchanges, and international cooperation of the whole country in general and the Central - Highlands region in particular, simultaneously promoting mutual understanding between Vietnam and other countries worldwide in the current trend of integration and globalization. With the goal of training, providing students with basic, systematic, modern, and practical knowledge about the Vietnamese language and Vietnamese culture, the Vietnamese language and culture major helps learners after graduation to be capable of researching and teaching about Vietnamese language and Vietnamese culture, able to communicate directly in Vietnamese. Born in the context that Da Nang city in particular and Vietnam, in general, are reaching out in the period of integration, strong economic development, especially in tourism and international trade, has helped the Vietnamese language industry & Vietnamese culture can approach learners



more efficiently, attracting many learners (students, students, workers, researchers, ...) from many different countries worldwide with diverse learning purposes. After 15 years of construction and development, the Vietnamese language and culture industry is confident with a team of experienced and enthusiastic lecturers in teaching and research.

5.2 Achievements

When it was first established, the program of Vietnamese Language and Culture mainly trained foreign students in the field of exchange. From 2006 to 2013, there were regular courses for 3rd year students of Guangxi University for Nationalities, China come to study for 1 year at the Faculty (3+1 program). For the full-time undergraduate training, the program of Vietnamese Language and Culture has been recruiting and training students since 2009 until now. With great enthusiasm and determination to develop a diverse audience of learners, the Faculty of International Studies overcame many difficulties, built and took advantage of relationships and cooperation channels to promote the teaching and learning process, teaching Vietnamese language and Vietnamese culture to universities and academies of other countries. The Vietnamese language and culture program has also gradually maintained and affirmed its name through cooperation programs on Vietnamese language training and Vietnamese culture research and discovery with long-time partners such as Guangxi University for Nationalities (China) which signed the MOU, Sakon Nakhon Rajabhat University (Thailand) which signed the MOU, Jica Foundation (Japan),...

In recent years, the Faculty has welcomed and organized exchange programs to learn Vietnamese language and Vietnamese culture with students from high schools and universities from the US, France, Australia, Hungary, Taiwan, China, Japan, Korea, Thailand, Laos, Indonesia,... and received positive feedback from students of these schools. (attached photo)



Figure 2: Students from Korea ChungAng University participate in a Vietnamese language and Vietnamese culture lesson at the Faculty of International Studies





Figure 3: The annual “Tet in me” program for foreign students is organized by the Faculty of International Studies



Figure 4: Pictures of exchanges between international students and Hasanuddin University, Indonesia

With the attention and investment of the leaders of the university and the Faculty of International Studies, students and students majoring in Vietnamese and Vietnamese Culture at the Faculty always have useful programs and activities that include both study and learning, practical experience, enhance language practice and cultural exchanges between international students, to help foreign students and students to facilitate participation in activities in many fields. (art contests, photography, sports, elegant students, volunteers and support liaisons for the APEC Summit Week in Danang in 2017). These achievements show the encouragement and facilitation of the university and the faculty to give students the best learning environment. That has contributed to attracting learners, creating a brand for the major and the Faculty. As a result, over the past time, the number of foreigners registering to study at the Faculty of International Studies has increased in both quantity and quality.





Along with the comprehensive attention and facilitation of the leaders of the university, the leaders of the Faculty of International Studies have gradually built up a strategy for the development of the Vietnamese language and culture major, improving the competitiveness in the field of international studies, recruitment and training. From a small group of members in terms of initial number (1 PhD, 2 MA, 2 Bachelor – statistics in 2014), up to now, the permanent lecturers of Vietnamese Language and Culture major include 3 PhDs and 5 MA.. Besides, the major also enjoys the long-term teaching attachment of the lecturers in the Faculty, in the university, creating a reputation for the major and attracting a large number of learners over the years.

Every year, in addition to the regular training system, the Vietnamese Language and Culture program also accepts exchange students, exchange students to study Vietnamese, short-term courses of the 6-level Vietnamese program, according to the National Vietnamese Language Competency Framework, the Vietnamese language program for working people. For each class, the faculty conducts surveys to survey student satisfaction, students' comments on the program, lecturers, facilities, etc., thereby organizing classes and programs. Training, curriculum and content, teaching methods have been gradually improved and more complete. From 2015 up to now, the regular training program of Vietnamese language and Vietnamese culture has had 4 rounds of review and adjustment, helping the quality of teaching become more and more specialized and having its own brand.

Besides investing in the quality of teaching in the classroom, the Vietnamese Language and Culture program also continues to deploy extra-curricular activities, gala, book fairs, student clubs for academic exchange, to improve communication ability as well as create opportunities for learners to practice Vietnamese, allowing access to abundant learning resources at the University library, create learning motivation and increase excitement and positivity in learning among foreign students towards Vietnamese language and Vietnamese culture.

5.3 Opportunity and challenge

It can be said that the Vietnamese language and culture discipline is having a promising future with the initial achievements obtained during the constructing and following the correct strategy of the University of Foreign Language Studies and the International Studies Faculty's period and following the world's current trend. Thus, with a lot of potential and opportunities, at the same time this discipline's also facing with many internal challenges as well as external influences, forcing the department to act right.





5.3.1 Opportunity

The development potential of the Vietnamese language and culture discipline is remarkable when Vietnamese itself is an interesting and attractive language because of its characteristics. In the book *Babel: Around the World in 20 Languages*, published by Nha Nam by author Gaston Dorren, the Dutch linguist chose to write about 20 “giants” out of 6,000 world languages and languages. Vietnamese is mentioned in the very first chapter of the book while the author of this book who more than 15 languages is fluent, also tried to learn Vietnamese. It can be said that this is a living proof of the interestingness of Vietnamese language - one of the “charms” that help bring learners to Vietnamese language and Vietnamese culture.

In fact, in August, *Insider Monkey Magazine* has just announced 25 most used languages in the world which including Vietnamese , and, according to a data in 2019, Vietnam also in the top 25 most visited countries in the world. This is a reliable evidence for future development after the Covid epidemic is under control. Vietnam will continue to be an interesting destination for international tourists, which is an opportunity for foreigners to interact with the culture and language. In particular, Da Nang is also a dynamic tourist city, a livable city of Central Vietnam, which is certainly a huge strength in attracting foreigners to come here and experience the living environment, learn about the local culture, looking for job and investment opportunities, etc. and learning Vietnamese is an indispensable condition along with those desires.

With the strength of UFLS in linking with both domestic and international educational institutions, localities, universities and research institutes are increasingly focused on expanding and strengthening exchange students, trainees program. The university is also one of the few institutions that are licensed to hold the Vietnamese language proficiency test and issue certificates according to the regulations on the 6-level Vietnamese competency framework for foreigners issued by the Vietnam Ministry of Education and Training. The Vietnam language and culture courses in UFLS is assessed every year, divided into different levels, levels, and training durations. With the strength of the location of the training institution, the modernity of facilities and learning materials, it increasingly meets the diverse needs of learners. Besides, with a team of qualified lecturers and rich practical content such as charity activities for the community, out-class activities learn about specific historical - cultural - religious sites, teambuilding, ...) to promote learners’ interest.





Figure 5: Students from China Guangxi University for Nationalities participate in a Vietnamese language and Vietnamese culture lesson at the Faculty of International Studies



Figure 6: Students from Thailan Khamsean Wittayasan School participate in a Vietnamese language and Vietnamese culture lesson at the Faculty of International Studies





Figure 7: Students from Thailand Sakon Nakhon Rajabhat University participate in a Vietnamese language and Vietnamese culture lesson at the Faculty of International Studies-Outclass

In recent years, with the city's policy of attracting foreign investment, the number of foreigners living and working in Da Nang is increasing day by day. Foreigners increase their length of stay and the need to study Vietnamese. This is a great opportunity for the UFLS and the Faculty to further expand the number of foreign students of Vietnamese language and culture training programs.

In the last two years, although the Covid-19 epidemic has caused many difficulties for face-to-face teaching and learning, the language studies become easier thanks to online platforms with investment and maximum exploitation of advances in cutting-edge technologies. With a stable online learning platform, an ever-expanding learning material system combined with teachers who young and proactively exploiting all the preeminent features of online learning platforms to support learners, the number of foreign students is still considerable, while the quality of training, progress and learning efficiency are always guaranteed. It can be said that it is not only a guarantee of training quality but also opens a new direction in Vietnamese language training of the Faculty and the university in the context that the epidemic is still a great obstacle for direct contact between people.





As part of the University's development strategy and orientation, the International Studies Faculty and the Vietnamese Language and Culture for foreigner Department increasingly believe in the developing strategy from the very beginning. Following this strategy, the Faculty position is asserted. While Vietnamese more accessible and close to friends around the world, learners are attracting not only for the professional purpose but also for the love and interest in the country and people of Vietnam.

5.3.2 Challenge

Facing these opportunities, the Department of Vietnamese Language and Vietnamese Culture under the Faculty of International Studies - University of Foreign Language Studies – The University of Danang has been very sensitive in the process of approaching and grasping. However, it is a fact that the field of study currently has problems of weaknesses that need to be overcome as well as a number of requirements and challenges that are not small.

Regarding the current training status of the major, although many achievements have been achieved, there are goals set by the faculty that have yet to be achieved. The first is to diversify the countries where students come to study. In recent years, a large number of learners are mainly concentrated in Asian countries such as China, Korea, Laos, Thailand, etc., but have not been expanded to other distant continents. In addition, the number of full-time students in each course is not many, not to mention some students leave school midway without completing the course. This has many causes, both subjective and objective. These causes are, after all, the challenges of the major, first of which must be mentioned the difficulties in competing for enrollment of the major with other training institutions in the country.

Secondly, the Vietnamese language, Vietnamese studies, and Vietnamese culture majors for foreigners are now available in many domestic training institutions, especially in big cities such as Ho Chi Minh, Hanoi, and Hai Phong. Phong, Thai Nguyen, are at long-standing training institutions and have advantages in experience, geographical location, etc. Meanwhile, the Vietnamese language and Vietnamese culture major for foreigners is at the Faculty of International Studies, the University of Foreign Language Studies - The University of Danang was born later, with limited resources in all aspects, so it is a big problem to compete with other institutions. Because many learners are people who have stable jobs in Vietnam, they choose a place to study that is convenient for them to work and live. With this competitive angle, Da Nang cannot compare with Hanoi and Ho Chi Minh City.

Besides, the peculiarity of choosing to learn Vietnamese language and Vietnamese culture is that students want to approach Vietnamese with standard pronunciation. Da Nang is in the Central region - an area with a relatively difficult voice





compared to other areas in the country, making it difficult for learners to communicate. This is also one of the factors affecting the choice of training institution of learners. Instead of choosing Da Nang, many foreigners will choose another locality to be more convenient in communicating in their Vietnamese language.

In addition, the current general trend, many foreign students want to study in Vietnam in a specific major such as tourism, international trade, economics, business administration, ... This is also one of challenges for the Vietnamese language and Vietnamese culture industry in terms of enrollment.

And the common difficulty of the whole world, in all fields, in which education is one of the areas most seriously affected, that is the current outbreak of the Covid-19 epidemic. For the Vietnamese language and culture majors, who are foreign students, the problem of the global epidemic is the most difficult. Restrictions on travel, the time difference between countries has become a big challenge that the industry can hardly find a solution to. The recruitment of the industry, or the study of students, is no longer as simple as when the world is normal anymore. Students and trainees cannot come to Vietnam to study. Many students and students experience interruptions when participating in online learning because the time zone difference is too big compared to Vietnam. Hopefully in the not too distant future, objective causes like these will soon be overcome by the world.

6. Conclusion

With remarkable achievements in the training period which is not long enough as described above, the Faculty of International Studies - University of Foreign Language Studies – The University of Danang needs to make more efforts to be able to do so, maintaining the quality, raising the position of the industry to the region and the world, attracting more and more attention from students and students in countries across five continents. With what the Department of Vietnamese and Vietnamese Culture belongs to International Studies - University of Foreign Language Studies – The University of Danang has been doing, hopefully in the future, the training program for Vietnamese language and culture Vietnam will always seize and receive opportunities, quickly overcome weaknesses, integrate and adapt to common challenges of the world, will always be the ideal destination for students, foreign students in many countries in choosing where to study Vietnamese language and Vietnamese culture.





7. Discussion

7.1 In the current context (epidemic, economic inflation, personal needs, ...) how to stimulate learners' interest and registration to learn Vietnamese language and culture?

7.2 In order to compete with other training institutions, what content does UFLS need to improve?

8. Suggestions

8.1 There are many forums related to national and international expertise for teachers of Vietnamese language and culture to participate, learn from experiences, and share learning materials.

8.2 Set up a question bank for Vietnamese language and Vietnamese culture for foreigners.

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THE LEVEL OF CADMIUM, MERCURY, AND LEAD IN YELLOWFIN SEABREAM (*ACANTHOPAGRUS LATUS* HOUTTUYN, 1782) FROM THE COAST QUANG TRI, VIETNAM AND HUMAN HEALTH RISK

Thiep Vo Van¹
Vuong Nguyen Duc²

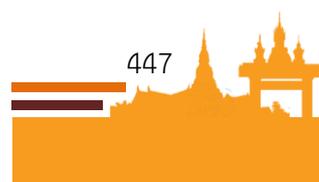
Abstract

Heavy metal contamination of fish species is one of the most serious issues globally (especially non-essential metals such as Cd, Hg, and Pb), due to fish play an important role in the human diet. Yellowfin seabream from Quang Tri, Vietnam was chosen for assessment of the bioaccumulation of Cd, Hg, and Pb in their tissues, further, determinate the associated hazard to consumer health. The concentrations of Cd and Pb were determined with a flame atomic absorption spectrometer (AAAnalyst 200, PerkinElmer, USA), while the Hg concentrations were measured with a cold vapor atomic absorption spectrometer (MA-2, NIC, Japan). The mean concentration of Cd, Hg, and Pb was ranged from 0.024–0.283, 0.035–1.148, 0.274–2.160 $\mu\text{g}\cdot\text{g}^{-1}$ w.w., respectively. The total target hazard quotient value for consumption is less than 1. Therefore, it exposed no to a significant health risk at the time of the study.

Keywords: Cd, EDI, health risk, Hg, Pb, THQ, Yellowfin seabream

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1. Introduction

Quang Tri Province is located in central Vietnam, it is bordered by Quang Binh Province to the north, Thua Thien Hue Province to the south, Lao PDR to the west, and the Eastern Sea to the east. The province has about 75 km of coastline, two river estuaries namely Cua Tung and Cua Viet, and a large fishing ground of 8,400 km² with a variety of valuable seafood (Le et al., 2011). In 2020, towards industrialization and modernization, the target is that the economic structure of Quang Tri province will reach 56%, 31%, and 13% of the industry, service, agriculture, respectively (Prime Minister, 2011). In recent years, the economy of Quang Tri province has tended to significantly develop and grow, in which the province's economic structure has shifted in the right direction, consistent with the general trend of the whole country, the proportion of the industry, construction were increased, while this ratio was reduced in the agriculture, forestry, fishery (PPCQT, 2019). However, the fast industrialization, urbanization, population growth, agricultural and other human activities have been discharged into the environment a momentous amount of hazardous substances (Hossain et al., 2018). While significant quantities of toxic metal from such activities are released into rivers, follow runoff into the sea, as heavy metals cannot be degraded, which are deposited, assimilated, and biomagnified along the water, sediment, and entered aquatic organisms (Linnik and Zubenko, 2000; Xu and Tao, 2004; Gulf et al., 2014).

Yellowfin seabream (*Acanthopagrus latus* Houttuyn, 1782) in the genus *Acanthopagrus*, the family Sparidae, the order Perciformes is the most widespread fish species in warm, coastal waters of the Indo-Pacific (Iwatsuki, 2013). Thus, they are one of the most important fish species not only in Vietnam but also in China, Japan, Korea, Taiwan, the Persian Gulf, and the Oman Gulf (Eryalcin, 2018).

Considering the existing scientific data on metals content in fish, the lack of comprehensive data focused on metals concentration in fish species from central Vietnam is noticeable. Besides that, water pollution was posing a serious threat to the environment as well as the lives of aquatic organisms, while previously, in 2016, the area experienced an environmental pollution disaster of Formosa Ha Tinh Steel Corporation, which discharged toxic industrial waste into the ocean through underwater drainage pipes. Which has led to mass deaths of fish along the coast of central Vietnam, official reports documented that the number of collected fish carcasses had surpassed 100 tonnes (Hai, 2019).





2. Objective(s)

Therefore, the main objective of this study was to investigate Cd, Hg, and Pb bioaccumulation in different organs of Yellowfin seabream from Quang Tri coast, Vietnam and to assess the potential human health risks associated with these fish species consumption.

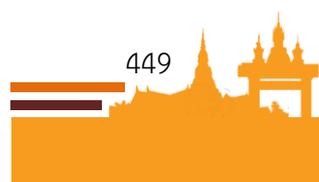
3. Literature Review

Among the aquatic organisms, fishes are relatively occupied at the top of the aquatic food chain, therefore, they are normally are concentrated heavy metals from food, water, and sediments (Yilmaz and Ozdemir, 2007; Zhao et al., 2012; Idriss and Ahmad, 2015). Malik et al. (2010) have shown that the metal content in their tissues tends to be higher than that in the surrounding environment by absorption process through gills or by consumption of contaminated food. Thus the content of contamination substances in fish usually reflects levels found in sediment and water of the ambience environment from which they are lived and time of exposure (Nhiwatiwa et al., 2011; Annabi et al., 2013). Because of that, they are could be used as excellent biological markers of pollutants in the aquatic ecosystem (Nsikak et al., 2007; Ahmed et al., 2015a; Authman et al., 2015). Besides, it is well known that fish is an important part of the human diet of the globe because they provide a major source of protein, healthy lipids, vitamins, and minerals (Sioen et al., 2007; Kruzikova et al., 2013; Bassey et al., 2014). Therefore, consumers are facing the risks of affecting health when consuming fish that contains high levels of heavy metals in their body, while its consumption has been increasing worldwide (Ali and Khan, 2018; Rajeshkumar and Li, 2018). Hence, the assessment of heavy metals (especially non-essential metals such as Cd, Hg, and Pb) in the fish bodies is very much important.

4. Research Methodology

4.1 Fish sampling

The liver, muscles, and gills of Yellowfin seabream (n=50) were randomly collected between June and October 2018 from fishermen in the local markets at 2 sampling points located from Quang Tri province, Vietnam (S1: Cua Tung (CT) and S2: Cua Viet (CV)) (Figure 1). The samples were taken, put in labeled polythene bags and stored at -20 °C. During the transport from Vietnam to Poland, samples were also kept in the ice chest at -4 °C. They were stored at -20 °C in the laboratory at the Institute of Biology, Pedagogical University of Krakow (Poland) until the time of the analysis.



4.2 Determination of metal concentrations

All analyses were made in the Institute of Biology, Pedagogical University of Krakow (Poland). The concentrations of Cd and Pb were measured in ca. 2g of wet weight, firstly oven-dried (60 °C, SUP-100W dryer, WAMED), then mineralized with hot nitric acid (65%, Baker Analyzed, JT Baker, USA) in the open mineralization system (Velp Scientifica DK20). Mineralized solutions were diluted up to 10 mL with ultrapure water (18.2 MΩ cm at 25 °C, Direct-Q 3, Merck-Millipore, Germany) and analyzed with a flame atomic absorption spectrometer (AAnalyst 200, PerkinElmer, USA). The initial results obtained in µg/g of dry weight were recalculated and expressed as µg/g of wet weight (moisture content was approximately 25%).

Hg concentrations were measured with a cold vapor atomic absorption spectrometer (MA-2, NIC, Japan) in ca. 100 mg of fresh sample (with 2 repetitions). The initial results obtained in µg/g of wet weight.

All analyses were run twice and the average was considered as the final result. If the RSD between repeats was higher than 15%, the analysis was checked again. Every ten samples, the spike and quality control solutions with the known concentrations were tested. All the recoveries were ranged from 90 to 110% for each metal (Table 1).

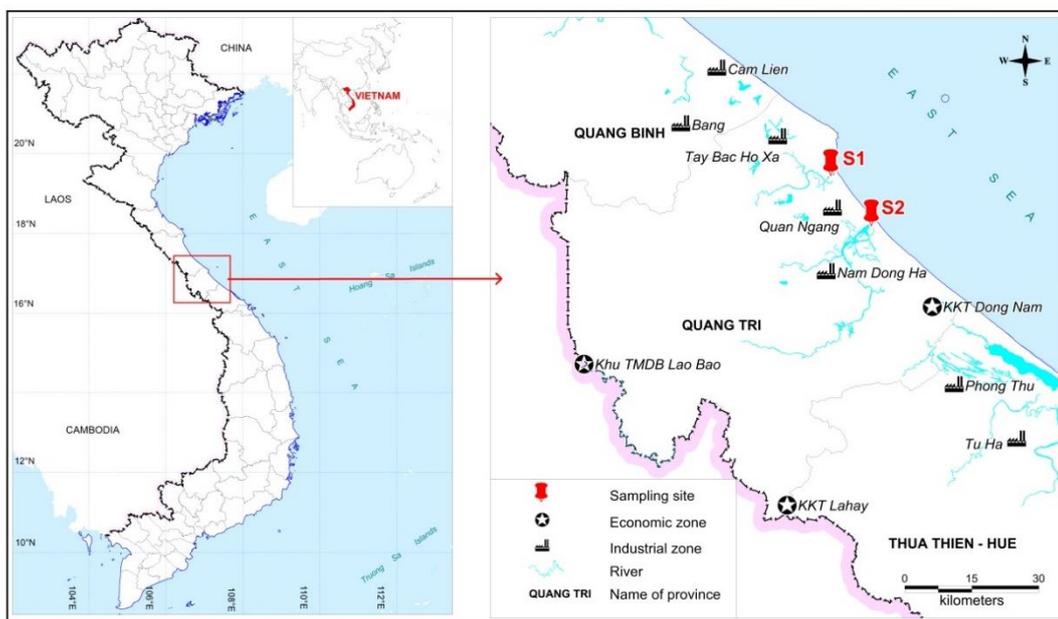


Figure 1: Area of carried research

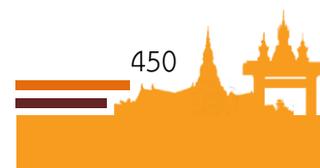




Table 1: Characteristics of the analytical method used: limits of quantification (mg/L) in the mineralized solutions (LoQ), recoveries for certified reference material analyses (CRM) and relative standard deviation (RSD) between replicates

Metal	Wavelength λ (nm)	LoQ (mg L ⁻¹)	Recovery (%)	RSD (%)
Cd	228.8	0.010	91.6	4.3
Hg	253.7	0.208*	97.1	2.6
Pb	217.0	0.107	93.7	6.2

* LoQ value for Hg expressed as a ng per sample

4.3 Human health risk

The estimated daily intake (EDI)

EDI provides an estimation of expected dietary exposure and was calculated for Vietnamese fish consumption (Ahmed et al., 2015b). The parameter was calculated as follows:

$$EDI = \frac{CM \times CONS}{BW}$$

Where, CM: metal concentration measured ($\mu\text{g/g}$ w.w.); CONS: the fish consumption rate (average was 45.85 g/day for an inhabitants of central Vietnam (Needham and Funge-Smith, 2014)); BW: body weight (average was 54.6 kg for adult inhabitants of central Vietnam (Tran et al., 2019)).

Target hazard quotient (THQ) for non-carcinogenic risk assessment

THQ is an indicator of the subject's risk after pollutant exposure, which is expressed as a ratio of metal EDI to its reference dose (RfD) (mg/kg/day), if the ratio is less than 1, no health risk should be observed (USEPA, 2019). The THQ was determined according to the following equation:

$$THQ = \frac{EDI}{RfD} \times 10^{-3}$$

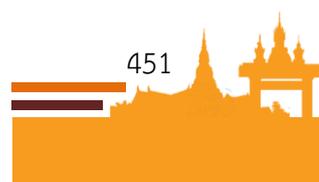
Where, EDI: estimated daily intake ($\mu\text{g/g}$); RfD: reference dose (RfDs of Cd, Hg, and Pb are 0.001, <0.0013, and 0.004, respectively (USEPA, 2019)).

Hazard index (HI)

A summation of the THQ for all metals to which an individual is exposed was used to estimate the HI:

$$HI = THQ_{Cd} + THQ_{Hg} + THQ_{Pb}$$

Where, THQ: the target hazard quotients (calculated for Cd, Hg, and Pb, respectively).





4.4 Statistical analysis

The heavy metal concentrations in the samples were tested for normality using the Shapiro-Wilk test. The Tukey's test and Kruskal-Wallis test were used to identify any significant differences in the accumulation of heavy metals in fish organs or in locations study. All statistical calculations were carried out with Statistica 13.3 (StatSoft, Poland). In all the statistical tests, the significance level was set at 0.05.

5. Results of the research paper

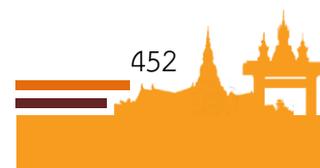
5.1 The concentration of Cd, Hg, and Pb in tissues of Yellowfin seabream

The analysis of heavy metals showed the presence of Cd, Hg, and Pb in the liver, gills, and muscles of all tested samples (Table 2 and Figure 2).

As mentioned in the previous section, after fish absorb contaminants from food and water, they are dispensed throughout body organs (Ruelas-Inzunza et al., 2009). Depending on the different functions, the tissues have different metal accumulation. This work also disclosed the concentration of metals was differences in diff

Table 2: The mean, standard deviation (SD), standard error (SE), minimum (Min) and maximum (Max) value of Cd, Hg, and Pb in liver, muscles, and gills of Yellowfin seabream ($\mu\text{g}\cdot\text{g}^{-1}$ w.w)

		Cua Tung			Cua Viet		
		Liver	Gills	Muscles	Liver	Gills	Muscles
Cd	Mean	0.134	0.084	0.074	0.156	0.089	0.068
	SD	0.065	0.031	0.022	0.075	0.027	0.019
	Min	0.034	0.024	0.038	0.034	0.043	0.034
	Max	0.283	0.149	0.125	0.283	0.149	0.125
	p (Shapiro-Wilk)	0.004	0.895	0.405	0.020	0.152	0.062
	Kruskal-Wallis	H=20.598, p<0.001			H=11.786, p<0.001		
Hg	Mean	0.275	0.238	0.082	0.341	0.416	0.083
	SD	0.215	0.126	0.040	0.312	0.320	0.049
	Min	0.058	0.084	0.038	0.046	0.051	0.035
	Max	0.723	0.463	0.220	1.148	1.095	0.219
	p (Shapiro-Wilk)	0.001	0.005	0.001	<0.001	0.006	0.001
	Levente test	F=24.432, p<0.001			F=28.219, p<0.001		
Pb	Mean	1.444	0.935	0.741	1.556	0.950	0.870
	SD	0.477	0.337	0.305	0.441	0.426	0.525
	Min	0.331	0.302	0.274	0.331	0.302	0.274
	Max	2.006	1.469	1.493	2.006	1.843	2.160
	p (Shapiro-Wilk)	0.004	0.667	0.372	0.001	0.199	0.007
	Kruskal-Wallis	H=27.524, p<0.001			H=23.561, p<0.001		



Cd concentrations in Yellowfin seabream from Quang Tri between 0.024-0.283 $\mu\text{g}\cdot\text{g}^{-1}$, while the highest average was detected in the liver from Cua Viet (0.156 $\mu\text{g}\cdot\text{g}^{-1}$). Cd levels were found to be considerably higher than the threshold limits set by the Vietnam Ministry of Health and the European Community (0.05 $\mu\text{g}\cdot\text{g}^{-1}\text{w.w}$) (EC, 2005; MOH, 2011). The order of Cd concentrations from both studies area is as follows liver > gills > muscles. With the Kruskal-Wallis test (Table 2), the multiple comparisons p values were checked, which presented that the accumulation Cd in the liver was significantly higher than in muscle ($p < 0.001$), gills ($p = 0.001$) in Cua Tung. While in Cua Viet, Cd content in muscle is presented noticeably lower than in the liver ($p < 0.001$) and gills ($p = 0.045$). Statistical analysis results also showed that there was no significant difference in Cd content between the two study areas. In comparison to previous studies, Cd levels in this study were lower than the value, which was detected by Hosseinkhezri and Tashkhourian (2011) at coastal of Persian Gulf, Iran (0.55, 0.19, and 0.12 $\mu\text{g}\cdot\text{g}^{-1}$ in the liver, gills, and muscles, respectively), and lower than reported in Southeast Asia by Agusa et al. (2007) (10.8 and 0.059 $\mu\text{g}\cdot\text{g}^{-1}$ in the liver and muscles, respectively). Meanwhile, at the Persian Gulf, Iran, Saei-Dehkordi and Fallah (2011) have recorded an approximate value with this report in the muscle (0.072 $\mu\text{g}\cdot\text{g}^{-1}$).

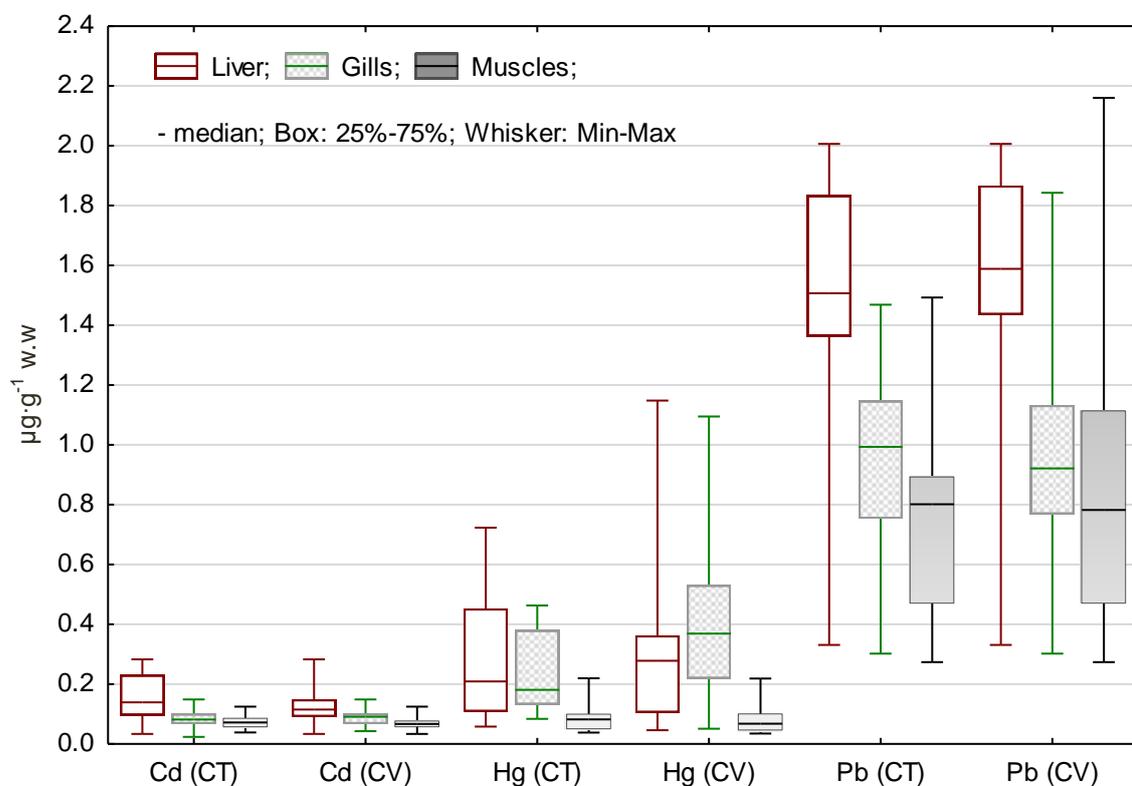
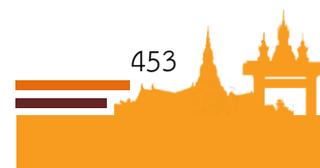


Figure 2 The concentration of Cd, Hg, and Pb in liver, gills, and muscles of Yellowfin seabream in Cua Tung (CT) and Cua Viet (CV) from Quang Tri, Vietnam





Hg accumulation in Yellowfin seabream from Quang Tri ranged from 0.035-1.148 μg^{-1} . The highest mean Hg was found in the liver from Cua Viet (0.416 μg^{-1}), while the lowest was disclosed in muscles (0.083 μg^{-1}) from Cua Tung. In this work, the average Hg in muscles wasn't above the specified threshold by the Vietnam Ministry of Health (2011) and the World Health Organization (2016) (0.5 μg^{-1} w.w.). In Cua Tung, the order of Hg is as follows: liver > gills > muscles, while in Cua Viet is as follows: gills > liver > muscles. However, there was no significant difference between the same tissues from two study areas. Meanwhile, statistical analysis results showed clear differences between different tissues, as they were demonstrated by Levente test (Table 2). Tukey HSD test also concluded that the concentration of Hg in muscles was plenty lower than in the liver ($p < 0.001$ for two locations) and gills ($p = 0.001$ and $p = 0.002$ in Cua Tung and Cua Viet, respectively). As with previous studies, the accumulation of Hg stored in tissues of Yellowfin seabream is quite small (Agusa et al., 2007; Hosseinkhezri and Tashkhourian, 2011).

Pb levels ranged from 0.274-2.160 μg^{-1} . The highest average Pb was found in the liver from Cua Viet (1.556 μg^{-1}), while the lowest was declared in muscles (0.741 μg^{-1}) from Cua Tung. Which was noticeably higher than FAO and MOH (2011) stipulated limit levels of Pb in muscles (0.3 μg^{-1}). The sequence of Pb concentrations in analyzed tissues was liver > gills > muscles from both studies area; nevertheless, no significant variations were observed between the same tissue sample collected in two locations. While the Kruskal-Wallis test analysis showed that there were significant differences between the different tissues in the same study area (Table 2). The multiple comparisons p values were proved the trace of Pb in the liver was fairly higher than muscles ($p < 0.001$ in both studies area) and gills ($p = 0.001$ and $p < 0.001$ in Cua Tung and Cua Viet, respectively). In comparison to previous studies, Pb levels in this study were higher than the report at t coastal of Persian Gulf, Iran by Hosseinkhezri and Tashkhourian (2011) (0.85, 0.61, and 0.44 μg^{-1} in the liver, gills, and muscles, respectively), a report in Southeast Asia by Agusa et al. (2007) (0.887 and 0.072 μg^{-1} in the liver and muscles, respectively), a publication at the Persian Gulf, Iran by Saei-Dehkordi and Fallah (2011) (0.471 μg^{-1} in muscles).

5.2 Human risk assessment

The data from the muscle samples were used to calculate the local population health risk (Table 3).



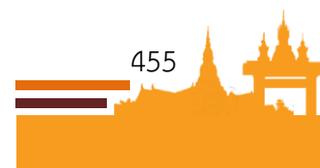
Table 3: Estimated dietary intakes and hazardous level of Cd, Hg, and Pb through the consumption of *A. latus* in Quang Tri, Vietnam

	Heavy metal			HI
	Cd	Hg	Pb	
EDI	0.06	0.07	0.677	
THQ	0.06	0.233	0.169	0.462

In this study, the potential health hazard for only three toxic metals (Cd, Hg, and Pb) was assessed since the Provisional Tolerable Daily Intake (PTDI) provided by WHO (2016) and MOH (2011). The EDI values of these metal were still lower than the PTDI guidelines. THQ values of Hg accounted for the highest proportion of 50.43%, followed by Pb of 36.58%, while Cd of 12.99%. Earlier, Ali and Khan (2018); Bi et al. (2018); Zhang et al. (2019) also revealed that THQ of Hg was significantly higher than that of the remaining metals in their reports. THQ values of three metals were less 1, which recommended that the adverse effect on human health might not happen. Likewise, the HI value also conformed the THQ trend. Thus, there may no potential non-carcinogenic influence for the consumers due to the intake of Yellowfin seabream from Quang Tri, Vietnam. However, it should be noted that the THQ value does not provide a quantitative estimate of the probability of exposed inhabitants experiencing adverse health effects, they rather serve as an indicator of the risk level due to contaminant exposure (Kalogeropoulos et al., 2012). Moreover, in this presentation, we have mentioned only three highly toxic metals, further, a human can dramatically suffer due to multiple simultaneous pollutants or previous long exposure (Li et al., 2013).

6. Conclusion and Discussion

Two of three the toxic metals (Cd and Pb) encountered at concentrations greater than the maximum permissible limits in most of the samples while Hg samples occurred at levels below their respective permissible maximum. Nevertheless, the estimated daily intakes of these metals also were below their PTDI guidelines. Besides that, the estimated THQ for all metals of these samples of Yellowfin seabream was less than 1. Hence, it intimates no long-term significant health risk from consumption at the present condition but it must be noted enormous intake of these products could also establish long-term health threats.





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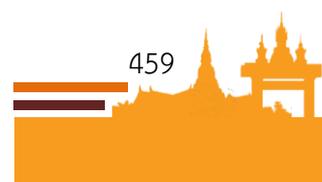


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