Enhancing the Quality of Scientific Research Activities of young lecturers in Tan Trao University, Tuyen Quang Province, Vietnam

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Abstract

Scientific research activities in higher education institutions are one of the important and indispensable tasks for lecturers, especially young lecturers. They are young intellectual teams with high qualifications, enthusiasm and leading forces in the innovation strategy and in improving the quality of the university. This study conducted a survey on 150 young lecturers at Tan Trao University in order to assess the current situation of scientific research activities, accordingly propose some effective solutions to enhance the quality of scientific research activities for young lecturers in general and young lecturers at Tan Trao University in particular.

Keywords: Young lecturers, Scientific Research, Tan Trao University.

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1. Introduction

In higher education, scientific research activities are necessary and play a very important role because it not only contributes to improving the quality of training, enhancing the prestige and maintaining the brand name of a university but also creates new knowledge and new products for the development of mankind (Times Higher Education, 2021). Doing research helps teachers develop their thinking, creation, ability in working independently, cultivate knowledge and scientific cognitive methods. It also helps to update information for teaching and learning activities, thereby helping teachers to be proactive in their professional work (Uoc, 2013). According to the regulations of the Viet Nam Ministry of Education and Training, scientific research is considered as a compulsory task and necessary criterion to evaluate the working capacity of lecturers every year (Ministry of Education and Training, 2020).

Tan Trao University has been established since 2013 and is a public university in Viet Nam. The university offers multidisciplinary training, focusing on the following fields: education, socio-economics, culture, tourism, medicine, basic science, agriculture and forestry. Although it is a young university, the university currently has more than 10,000 students enrolled and 205 lecturers directly teach. Scientific research activities of lecturers are always interested and focused by the university. In recent years, the university's lecturers have published many scientific research works. By the end of 2020, the university has 1471 scientific products including research, national scientific projects, textbooks, reference books. Many research papers of lecturers have been published on the prestigious national and international journals. Contributing to this overall result is the large participation of young lecturers at the university (accounting for 72.8%). However, the research activities of young lecturers still have many limitations such as: the number of researches, articles published in international conferences, articles published in international journals or prestigious scientific journals in the country are not much; Young lecturers participate in writing textbooks, reference books with the role as members, not main authors; Some young lecturers do scientific research for the purpose of having enough hours of scientific research as prescribed and have not yet had serious investment in expertise. As a result, the quality and effectiveness of scientific research of young lecturers is still not high.

The study used descriptive and comparative statistics, and conducted a survey of 150 young lecturers at Tan Trao University to assess the current status of the faculty's scientific research activities, consider the causes that lead to ineffective scientific research works; on that basis, propose some solutions to improve the quality of scientific research activities of young lecturers in general and at Tan Trao University in particular; meet the educational and training requirements of higher education institutions in the new situation.

2. Research results

1. Characteristics of young lecturers at Tan Trao University

Currently, Tan Trao University has 150 young lecturers under 35 years old, accounting for 73.2% of the total number of lecturers. This is an advantage for the university to promote the implementation of development strategies, because although the young lecturers do not have as much experience as the old lecturers, they are the core and successor force in the future.

Table 2.1. Structure of young lecturers at Tan Trao University in 2020

Criterion		Quantity (persons)	Ratio (%)
	PhD	21	14,0
Degree	Postgraduate	23	15,3
	MA	98	65,3
	BA	8	5,4
Teaching	Over 5 years	117	78,0
experience	Under 5 years	33	22,0

Source: Department of Organization and Politics, Tan Trao University, 2020

According to the statistics in Table 2.1, most young lecturers at Tan Trao University have a Master's degree or higher (accounting for 94.6%). This shows that teachers at Tan Trao University have been equipped with basic scientific research capacity and have access to in-depth scientific researches. However, the percentage of young lecturers with a doctorate degree is still low (accounting for 14%), which also affects the results and quality of scientific research products of young lecturers. Because if they have a doctoral degree, they will not only have more methodical and in-depth scientific research methods, but also have independent research ability and better English proficiency to be able to publish scientific research works themselves in international iournals.

2. Current status of scientific research activities of young lecturers at Tan Trao University

2.1 Results of scientific research activities of young lecturers

Over the years, the university's young lecturers have participated in all scientific research activities and have had products (Table 2.2). Specifically, in the period 2014-2020, out of a total of 1471 scientific research products of the whole lecturer's university, the number of contributions made by young teachers is 1071 products, accounting for 72.8%. Although the quantity of scientific research products of young lecturers accounts for a high proportion, the quality is still limited. Young lecturers has only focused heavily on research and writing articles published in domestic journals, or participating in national scientific conferences (accounting for 86.6%). The number of articles published in prestigious international journals with ISI or Scopus index is quite small (reaching 9.3%). Teachers have participated in implementing university-level projects, but the number only reached 37.9% of the total.

Although the number of products are textbooks and reference books have reached 42,6% and international articles have achieved 48.7%, young lecturers 's role in these products is only a participant, not as main author. Not only that, these products are only concentrated in the number of teachers who are studying abroad or a few teachers with good foreign language ability.

Table 2.2. Statistics on the number of scientific research works of young lecturers

N0	Scientific research works	Quantity	Young lecturer's	Ratio
			quantity	(%)
1	Projects at provincial level or	22	2	9,1
	higher			
2	University level projects	169	64	37,9
3	International scientific journal	113	55	48,7
	papers and international			
	conference papers			
4	ISI/ Scopus papers	75	7	9,3
5	Domestic scientific journal articles	963	834	86,6
	and conference papers			
6	Textbooks, reference books	129	55	42,6
	Total	1471	1071	72,8

Source: Department of Scientific Management – International Cooperation, Tan Trao University, 2020

Thus, it can be seen that although the young teaching staff of the university have achieved positive results in scientific research activities, the quality is not high. Young lecturers are still lack of experiences in doing research and limited in its ability to conduct in-depth researches. Besides, weakness in English is also a big barrier for young lecturers to be able to study and write international articles. These are also typical situation of lecturers of universities in mountainous areas.

2.2.2 Advantages and disadvantages for young lecturers' scientific research activities * Advantages

Firstly, the young lecturers at the university have a good awareness of the importance role of scientific research activities and have a passion for doing research. That is very important because it determines their attitudes and motivations in scientific research (Table 2.3).

Table 2.3 Survey results on the perception of young lecturers about scientific research activities

No	criteria	Rating Level					
		Very important		Important		Unimportant	
		Quantity	%	Quantity	%	Quantity	%
1	Improving teaching expertise	62	41,3	88	58,7	0	0
2	Developing thinking, creative capacity and ability to work independently	58	38,7	82	54,7	10	6,6
3	Help teachers update information and knowledge effectively	45	30,0	105	70,0	0	0
4	Factors contributing to improving the reputation of the university itself	44	29,3	77	51,3	29	19,4

No	criteria	Rating Level					
		Very important		Important		Unimportant	
		Quantity	%	Quantity	%	Quantity	%
	and the position of the university in society						
5	Good opportunities for teachers to have an environment to foster their own scientific research capacity	43	28,7	107	71,3	0	0
6	Acquire necessary relationships in the course of work	36	24,0	87	58,0	27	18,0

The above survey results show that 80% of teachers highly evaluate the importance of scientific research activities for improving professional knowledge and contributing to the development of thinking, creativity, ability to work independently; Over 70% of teachers think that scientific research is an important activity to update information as well as effective knowledge for teaching, and at the same time a good opportunity for teachers to have an environment to foster their own scientific research capacity.

Secondly, teachers always receive the support of the university in scientific research activities. Specifically:

- For scientific articles published in foreign journals with ISSN codes, the University will support VND 5,000,000/article, journals with ISI and Scopus indexes will be supported VND 40 million/article. Scientific articles published in domestic scientific journals with a scientific score of 1 point or more are supported with VND 1,000,000/article. (Tan Trao University, 2019)
- Support to publish textbooks, reference books with ISBN code from 10,000,000 VND to 30,000,000 VND/time. (Tan Trao University, 2019)
- Support 100% of tuition fees for teachers going to study to improve their doctorate level. (Tan Trao University, 2019)
 - Organize training sessions to improve the capacity of conducting research
- The university library provides abundant learning resources and connects with a number of other national and international libraries to support teachers in the process of finding research materials.
- Organize and coordinate to organize national and international scientific conferences to create a scientific research environment for participating teachers.

In order to see more clearly the effectiveness of the university's scientific research support policies, the study conducted a survey on the satisfaction of teachers with these support policies. The results are summarized in Table 3.4.

Table 2.4 Survey results on the level of satisfaction with the university's support policies on scientific research

No	Support	Rating Level					
		Very satisfied		Satisfied		Unsatisfied	
		Quantity	%	Quantity	%	Quantity	%
1	Funding to support publication of articles,	93	62,0	52	34,7	15	3,3

No	Support	Rating Level					
		Very satisfied		Satisfied		Unsatisfied	
		Quantity	%	Quantity	%	Quantity	%
	publishing of books, textbooks						
2	Funding to support the implementation of scientific research projects	33	22,0	95	63,3	22	14,7
3	Organizing training sessions on scientific research methods	17	11,3	60	40,0	73	48,7
4	Provide a resource for reference	43	28,7	93	62,0	14	9,3
5	University library with space for self-study	19	12,7	66	44,0	65	43,3
6	Creating a scientific research environment for teachers such as: organizing seminars, collaborating on research with partner universities	37	24,7	97	64,7	16	10,6

The survey results show that the majority of young lecturers are satisfied and very satisfied with the university's support on scientific research, especially the policy of funding support for articles published on the prestigious domestic journals and international scientific journal, funding to support the publication of textbooks and reference books (reaching the rate of 62% at the very satisfied level). That is a good policy with high encouragement for teachers to both improve their foreign language ability and improve their ability to write international papers. Accordingly, the number of international articles by teachers of Tan Trao University has also increased gradually in recent years. The university should continue to maintain this policy in the coming years.

Among the support policies, teachers rated the level of dissatisfaction (48,7%) with the organization of training sessions on scientific research methods for teachers. In fact, the university has also implemented this activity with a low frequency such as: in the whole period 2014-2020, the university has just organized 2 training sessions on scientific research methods for teachers (Tan Trao University, 2020). This also shows that teachers are very conscious and need to improve their capacity in doing scientific researches.

In addition, up to 43.3% of teachers also rated the level of dissatisfaction with the university's facilities, specifically the space for self-study at the university. Currently, the university library also has a space for self-study and research, but it hardly attracts teachers and students to use because the library is located quite close to the lecture area. Hence, the surrounding space is not really quiet and convenient.

* Disadvantages

Besides the advantages, the scientific research activities of young lecturers at the university also encountered some difficulties (Table 2.5).

Table 2.5 Survey results on difficulties for young lecturers when participating in scientific research activities

No	Difficulties	Quantity	Ratio (%)
1	Lack of scientific research skills and methods	107	71,3
2	Reference books	57	38,0
3	Limitations on funding for scientific research implementation	66	44,0
4	Lack of ideas in Scientific Research	62	41,3
5	Limitations on ability to use foreign languages	140	93,3
6	Not much time for research	125	83,3

Source: Author's own compilation

The survey results show that young lecturers at Tan Trao University are currently facing the most difficulty, which is limited ability to use foreign languages (the rate is 93.3%), which not only makes young lecturers difficult access to foreign references in the research process, but also limited ability to write and publish their research work in international journals.

The next difficulty is also quite high in the assessment, that is: not having much time for research (accounting for 83,3%) and lack of skills and methods in scientific research (accounting for 71,3%). These difficulties stem from the fact that most of the young lecturers are those who do not have much experience in teaching and research, have not had the conditions to accumulate and foster professional knowledge; which leads to the lack and weakness of skills and scientific research methods. In addition, young lecturers do not know how to effectively manage timetable, the balance between teaching, research and family works are not scientific. These are the reason why young lecturers do not have much time for scientific research activities.

Lacking of ideas in scientific research is also a difficulty for young lecturers (accounting for 41.3% of the survey respondents), due to their young age and less experiences, they have not been approached or recognized problems on many aspects to identify new research ideas.

3. Some solutions to improve the efficiency of scientific research activities of young lecturers at Tan Trao University

From the analysis of the current situation and difficulties for young lecturers in scientific research activities, the study proposes some solutions to improve the quality of scientific research activities of young lecturers at Tan Trao University as follow:

* To the university

Firstly, the university needs to pay more attention to the scientific research activities of young lecturers, considering this as a key solution to improve the quality of the university's training. The university needs to improve the quality of facilities for scientific research activities, establish a club "Young lecturers for scientific research" to serve as a place to exchange, sharing and supporting scientific research activities of young teachers.

Secondly, universities need to have mechanisms and measures to coordinate and exchange research between universities and colleges at home and abroad to create conditions for lecturers, especially young lecturers to participate in scientific researches. Through this, young lecturers have the opportunities to approach reality, contact and exchange in foreign languages, thereby, both improving foreign language skills and creating opportunities for young lecturers to practice and foster their scientific research methods.

Thirdly, the university needs to promote the equipping of young lecturers with a number of skills and methods of scientific research through short-term training courses, seminars on scientific research. These will create a good foundation for lecturers to carry out scientific research tasks. This activity can take advantage of qualified and senior human resources, scientific research experience of the university. For specialized faculties, it is possible to establish research groups with both young and senior lecturers in research to tutor and support young lecturers in the process of doing scientific research.

Fourthly, the University Science Council should encourage young lecturers when they register for basic topics. Most universities have a Scientific Council, but the council only organizes acceptance and evaluation, and has not yet set forth annual scientific research orientations for lecturers. For inappropriate research proposals of young lecturers, the university's scientific council can suggest ideas for young lecturers to identify new research directions.

* To the young lecturer

Young lecturers need to improve their own knowledge, actively participate in scientific research, actively write research articles, exchange and participate in seminars and publish prestigious journals, participate as scientific project managers at all levels. Because the more young lecturers participate in scientific research, the more they will hone their writing skills, improve the quality and ability of their own scientific research.

In particular, young lecturers need to actively study to improve their qualifications at home or abroad to have the opportunity to access scientific research methods and sources as well as practice their own scientific research skills. Dear.

4. Conclusion and Discussion

In the context of comprehensive fundamental and comprehensive renovation of education and training, improving the quality of teaching and scientific research activities is an indispensable and objective requirement, especially for young lecturers, who are pioneering, leading in the innovation process. Improving the quality of young lecturers' scientific research activities not only benefits the university but also the lecturers themselves. The fact that young lecturers are active and active in scientific research will contribute to improving their thinking capacity, the ability to solve practical problems, and improve the prestige and position of the university in the future.

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