

**MEASURES TO IMPROVE THE QUALITY OF SCIENTIFIC RESEARCH AND TECHNOLOGY TRANSFER ACTIVITIES AT UNIVERSITY OF EDUCATION, THAI NGUYEN UNIVERSITY, VIETNAM**

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<https://doi.org/10.54922/IJEHSS.2023.0509>

**ABSTRACT**

In response to the requirements of general education reform, University of Education, Thai Nguyen University must simultaneously perform two tasks of improving the quality of training and developing scientific research activities and technology transfer. Therefore, many tasks for the teaching staff are studying and fostering to improve their professional qualifications, informatics, foreign languages, investing in research, compiling programs, textbooks, and learning materials. In the renewal of training objectives from providing knowledge as the main thing to promoting the capacity and qualities of students, scientific and technological activities play an important role. Students experience through scientific research activities to practice their thinking methods and practical problem-solving skills. At the same time, scientific products will enhance the reputation of the university. In fact, the university's scientific research and technology transfer activities have prospered, but have not been really synchronous and effective.

**Key Words:** Measures, improvement, scientific research, technology transfer, University of Education, Thai Nguyen, Vietnam.

**1. INTRODUCTION**

On the basis of inheriting theoretical achievements and views on science and technology in previous documents of the Communist Party of Vietnam, the resolutions of the second meeting of the VIII Central Committee (1997), The Resolution of the Ninth National Congress of the Communist Party of Vietnam clearly states that the basic thought for science and technology development in the current period is: "Development of science and technology is really the driving force of science and technology. It is the key to the process of rapid and sustainable development", "Strong development of science and technology as a driving force to accelerate the process of industrialization, modernization and development of the knowledge economy; contributing to the rapid increase in productivity, quality, efficiency and competitiveness of the economy, and the rapid and sustainable development of the country. It is necessary to synchronously perform 3 main tasks: improving scientific and technological capacity, renovating the management mechanism and promoting applied research. The 6th Conference of the Central Committee of the Communist Party of Vietnam, term XI, approved Resolution No. 20 - NQ/TW on the development of science and technology to serve the cause of industrialization and modernization in the conditions of socialist-oriented market economy and international integration. The resolution identifies five perspectives on the role, innovation, investment and international integration.

In the field of education and training, Resolution No. 29 - NQ/TW dated November 4, 2013 of the 8th Central Conference of the XI session on fundamental and comprehensive renovation of

education and training stated: Strengthening capacity, improving the quality and efficiency of scientific research and technology transfer of higher education institutions; connecting training and research, training institutions and production and business establishments; prioritizing investment in the development of basic science, spearhead science, key laboratories, specialized laboratories, high-tech centers, modern experimental production facilities in a number of higher education institutions; having policies to encourage students to do scientific research. University of Education - Thai Nguyen University is one of the leading higher education institutions in training and fostering a contingent of high-quality teachers and educational administrators. It is a center for research and application of science and technology in the field of education, serving the cause of education - training and socio-economic development of the whole country, especially in the Northern Midlands and Mountains of Vietnam. In the renovation process, the university focuses on renewing training programs and developing scientific research and technology transfer activities. The two tasks are closely related. Efforts to innovate programs and teaching methods will create a practical basis for scientific research and development. At the same time, scientific research results are transferred in teaching activities, improving the quality of training and fostering of the university.

The new general education program was promulgated in 2018 and implemented according to the roadmap from 2018 - 2023 at all levels. Therefore, universities of education have a very important role in training the new generation of teachers - who hold key positions in the implementation of new programs. Therefore, improving the quality of training products is the central goal. That means that the quality of the teaching staff of the University of Education - Thai Nguyen University must be improved in the context of integration and development. Along with the task of studying to improve professional qualifications, informatics and foreign languages is a scientific research activity - an arduous path that brings a lot of value and develops personal abilities that teachers must persistently pursue and make unremitting efforts. Moreover, the need for training to improve the professional capacity of teachers to meet the requirements of the new program is very high. That requires lecturers to make real efforts to study the deficiencies that need to be supplemented by teachers, to conduct empirical research and to transfer research results, and to exchange and experiment to jointly apply them more effectively in practice.

## 2. RESEARCH METHOD

To carry out this study, we used the documentary retrospective method to study documents related to the Communist Party of Vietnam's policies on science and technology development. On that basis, we proposed some measures to improve the quality of scientific research and technology transfer activities at University of Education, Thai Nguyen University, Vietnam.

## 3. RESULTS AND DISCUSSION

### 3.1. Applying the perspective of the Communist Party of Vietnam on science and technology development in the context of a socialist-oriented market economy and international integration

#### \* *Target*

Each lecturer in the University should be aware of the role and responsibility of university lecturers in performing the task of developing and applying science and technology to serve the cause of industrialization and modernization in the context of a socialist-oriented market economy and international integration are also directly implementing the mission of the university.

*\* Implementation measures*

The Party Committee, the University's Board of Directors and each lecturer, each scientist must clearly understand that the development and application of science and technology is the most important driving force for socio-economic development that education and training are the top task, should be prioritized for investment. The leadership of the Party Committee, the University's Board of Directors and the enthusiastic talents of the scientific research faculty contribute to the success of the development of science and technology in the University of Education and the Northern mountainous region in particular, the whole country in general;

Stronger and more synchronous innovation should be carried out in operation mechanism, strategy formulation, science and technology development plan of Thai Nguyen University of Education. The university's method of calling for investment, research coordination, remuneration policy, and autonomy mechanism of scientific activities and technology transfer of the University need to be suitable with social reality, especially in the mountainous areas.

There are policies to develop and promote, and to respect lecturers for scientific research with applied products and technology transfer; focus on applied research and technology transfer in the fields of humanities, social sciences and education; actively integrate into the world to update the world's advanced scientific and technological knowledge, attract resources and experts; adopt policies to encourage students to do scientific research; develop interdisciplinary research.

**3.2. Creating a market for science and technology in society - humanities, philology education**

*\* Target*

Proposing national science and technology programs focusing on research and development of education, culture and society for mountainous provinces, especially in the field of education and training. Focusing on expanding international cooperation to develop science and technology and transfer technology for economic and cultural development in mountainous areas.

*\* Implementation measures*

The State uses tax and credit tools to support provinces, districts and schools in applying modern technology in line with the state's priorities. For Thai Nguyen University, University of Education should stipulate a reward system for employees and authors for inventions, technical improvements and application of new technologies to educational, social and cultural development.

The Mountainous Humanities and Social Research Institute of the University of Education provides consultancy and technology transfer in the fields of socio-humanities.

Having policies to expand international cooperation, enlisting the help of other countries and international organizations; attracting good experts from the world to our country for cooperation, fostering scientific research faculty and transferring modern scientific and technological achievements.

Promoting science and technology information services about applied products to schools and mountainous provinces; developing and managing well a network of collecting and processing information on foreign science and technology; providing technical, information and synchronous equipment for a number of research rooms of the Institute of Mountainous Humanities and Social Research and faculties in the university.

**3.3. Focusing on building a team of scientists in the field of social - humanities and philology education**

*\* Target*

Contributing to the development of a team of scientists from universities of education across the country with deep professional qualifications, scientific quality, practical knowledge, and passion for scientific research. These will be experts in teaching, researching and applying science and technology to improve the quality of training equally among universities and schools in different regions of the country; thereby, developing education in a sustainable way, integrating with the education of advanced countries in the world and promoting the development of the country.

*\* Implementation measures*

Actively developing a strategic plan to develop faculty capable of scientific research into scientists in specialized fields. Every year, the University organizes seminars to discuss research directions, market analysis and scientific potential connections, and set up research groups to propose scientific tasks at all levels. Each lecturer develops a goal to strive for in terms of scientific research tasks for each stage and implementation method.

Strengthening training on writing international articles; organizing and connecting with international seminars and journals, guiding international publishing procedures for lecturers. Currently, the demand for international publication of the lecturers is very high, but the conditions of contact with international journals of the majority of the lecturers in the University are still limited.

Building a team of key lecturers and leading experts to serve as the core for regular on-the-job training for lecturers. It is necessary to link teaching and scientific research activities of lecturers with reality in schools; conducting research and application of educational science in schools; participating in writing textbooks, compiling textbooks, monographs, reference books, and training topics for teachers.

Having a satisfactory salary policy for lecturers doing science and implementing programs and projects. Besides, there is a regime of bonuses, allowances and subsidies for valuable scientific and technological works. There is a mechanism for scientists to secure adequate income through participation in research and development contracts and do science in the spirit of patriotism, ambition, and idealism, passionate about science; applying many forms of praising and honoring the social status of leading scientists and technology experts.

Strengthening the training and fostering of lecturers in social sciences and humanities, philology education; rejuvenating the team of scientists of the University; arousing the enthusiasm of the young generation to pursue scientific careers. The State shall allocate an appropriate budget to send virtuous and talented people for training in the fields of social sciences and humanities, with priority given to countries with developed science; encouraging and creating favorable conditions for staff and technology, especially young cadres, to go abroad for training and scientific exchange.

Developing and implementing regulations on ensuring democracy, promoting creative spirit, strengthening solidarity and sense of social responsibility of scientists in research and development activities; encouraging and appreciating scientific discoveries, proposals for different solutions to problems of nature, technology as well as socio-economic. There are reasonable organizational forms, methods and mechanisms to maximize the collective intelligence as well as individual talents of scientists. There are many forms of using and promoting the capacity of the dedicated senior intellectuals; encouraging and making favorable conditions for science and technology staff to transfer advanced scientific and technological knowledge.

### 3.4. Developing students' scientific research talents

*\* Target*

Developing scientific research capacity for students creates a premise for them to study and improve their qualifications at home and abroad. After graduation, students can work at research centers and become researchers of educational and socio-cultural development of localities, contributing to the realization of sustainable development goals in regions throughout the country.

*\* Implementation measures*

Actively developing strategies to develop scientific research potentials in students and know how to exploit the strengths of scientists and open scientific problems in practice; starting from choosing a field, research problem of scientific and practical significance proposed by an individual, or a group of lecturers, to selecting students with scientific research potential to assign tasks and prioritizing research time for the group of instructors and the group of students; encouraging students to implement and lecturers to guide in groups so that the research problem is exploited more effectively. In fact, in universities of education, students and lecturers often work independently, while universities with high awards often carry out projects in groups of students and students.

Creating an academic environment in students by organizing groups of students to participate in seminars, research on a number of tasks of topics at all levels chaired and implemented by lecturers. To experience research work such as surveying, data processing, reception, organizing seminars, collecting fieldwork in localities, attending scientific seminars, writing papers, writing scientific articles... students will form and develop scientific research skills, form scientific ideas and have a passion for scientific research. Organizing annual scientific research conference for faculty students. If only organizing the current student representative courses, many students will not be able to study and nurture their passion for scientific research. In fact, many students participating in scientific research have never been able to attend the Student Scientific Research Conference.

### 4. CONCLUSION

Improving the quality of scientific research and technology transfer activities at University of Education, Thai Nguyen University is an indispensable requirement of higher education in the period of industrialization and modernization, when General education requires high quality of human resources. University of Education, Thai Nguyen University has been improving the quality of training and scientific research to help students meet the needs of society and the education sector in the context of integration and development. Therefore, the faculty and staff of the University need to have high professional competence, ethics, healthy lifestyle and dedication to the profession. However, the process of innovation and international integration requires universities and each faculty member to constantly make efforts to gradually innovate and improve their professional capacity, scientific research capacity, and keep pace with universities and colleges in the region and the world.

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