



To Remove Difficulties in Scientific Research at Vietnamese Universities

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ABSTRACT: In recent years, scientific research activities at universities in our country have always been underestimated in terms of both the stature and effectiveness of scientific research topics. The surveys show that most of the activities of universities in Vietnam tend to focus on training and teaching, while scientific research has not been paid too much attention, so both the quality and quantity of scientific research has been reduced. Analyzing and clarifying the current situation and causal factors, the article proposes a number of solutions to reduce a number of difficulties and problems, and to promote the development of scientific research at Vietnam's universities.

KEYWORDS: human resource, scientific and technologic human resources, Vietnam

I. THE REAL STATE OF SCIENCE RESEARCHES AT UNIVERSITIES AND COLLEGES

The survey shows that current scientific research activities of university lecturers in Vietnam have made a significant contribution to the overall achievements of their units. These include; textbooks, online lectures, and reference material combined in a major textbook that are the crystallization of the scientific research process. However scientific research should not only be used for teaching at universities as it also meets the needs that society and the demands of the social economy such as manufacturing high quality products, machine-tools, etc, in order to serve production.

However, in order to create a good scientific research environment for lecturers, the universities need to ensure the following conditions: have a favorable working environment for teaching and scientific research; arrange potential timing and physical condition for their research; knowledge of economic management and experiences in completing documents; scientific research products and technology transfer. Research lecturers

themselves must: Create and nurture their passion for scientific research in a reasonable direction; Continuously follow the actual production, find the direction of the topic to observe reality and be useful; Systematically organize and implement the topic in collaboration with colleagues working on the same research; Extract results from scientific research and technology transfers to systematize and supplement their lectures.

In recent years, wide ranging scientific research across numerous public and private universities is weak in both quality and quantity. The universities' main activity is teaching. According to statistics, the number of articles published in domestic journals or works published at different levels per university lecturer shows that there are many university lecturers with doctorate degrees, assistant professors or veteran teaching staff who have not had an adequate number of research projects nor done any research work as yet.

Currently, all over the country there are about 700 universities, institutes and colleges with a total of 74,991 faculty staff. The number of faculty staff and their scientific titles for the 2017-2018 school year compared to 2016-2017 has increased significantly, but the number of units with internationally recognized articles (with ISI / SCOPUS articles) is very modest.

II. THE REASON OF SHORTCOMINGS AND DIFFICULTIES

Scientific research which is conducted at universities across the country is facing many difficulties, which include:

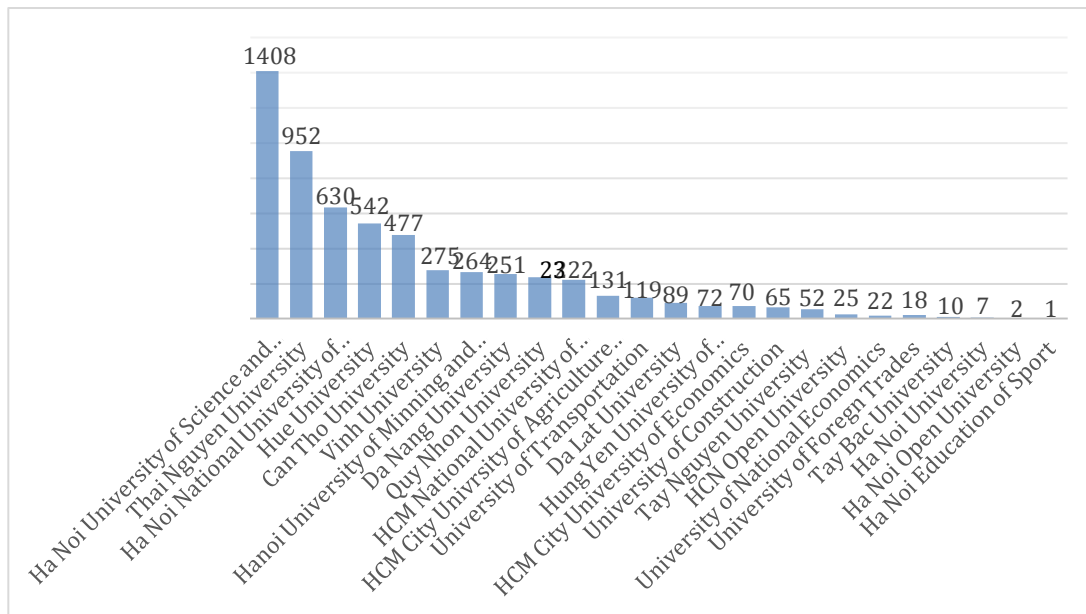
Firstly, the mechanism to attract and incentivize lecturers to participate in scientific research is ineffective. There is a lack of linkage between schools and businesses to create research outputs. On the other hand, lecturers are not always aware of the importance of scientific research, so most lecturers have not actively proposed research



topics. Many topics that are studied are based on previously researched models, or did not come from

the actual needs of the lecturers themselves, or the needs of the majors or disciplines.

List of universities managed by the Ministry of Education and Training of Vietnam with publication of international articles



Secondly, the quality of the topic is not commensurate with the budget and the monitoring mechanism and evaluating the research capacity are not fit for purpose, the subject managers are not qualified, and budget allocation is mainly calculated on the number of researchers with scientific degrees ... In addition, the teaching and scientific research of lecturers in general is too passive. The reason for this is due to the distributed teaching schedule, and uneven assignment, which can sometimes overload lecturers. This in turn means they spend too little of their time researching. Scientific research is therefore not systematic, and it lacks focus, which means that lecturers remain fragmented. Scientific research has not really attracted sufficient numbers of lecturers to participate. According to statistics of the Ministry of Education and Training, there are 74,991 faculty staff in universities and colleges, but only about 1,100 lecturers (3%) participated in

scientific research and very few young lecturers participate in any form of scientific research.

Thirdly, in terms of funding. This is the most critical and problematic issue of scientific research in universities. Every year, the state invests 2% = 0.5% of GDP into scientific research. From this funding, the Ministry of Science and Technology (S&T) only receives about 8 -10% of the total budget expenditure. This amount of funding is proportionately smaller, when compared to other countries such as Indonesia, the Philippines, etc. Also, the funding received by Vietnamese universities is not adequately distributed in order to meet the needs at either central or local level, nor between one agency and another. Therefore, the real funding for scientific research in universities is very limited, indeed some lecturers consider that scientific research is a required condition of the funding, and so they have to complete it.

Growth rate in human resource size and qualifications of units of the Ministry of Education and Training in the period 2012-2020

Unit: Person

	2012	2020	Growth rate (%)
Total number of lecturers, researchers	23312	25000	7.2
PhD.	4243	5557	31
Associate Professors	1169	1947	66.6
Professors	104	184	76.9



Fourthly, on remuneration. This largely depends on the leadership's vision and perceptions, including their rights and policies. These factors are very limited, so the researcher does not focus on the research problem. Scientific research is a specialist role, and therefore researchers need to enjoy preferential policies.

III. PROMOTION OF SCIENTIFIC RESEARCH IN UNIVERSITIES

In order to overcome the shortcomings, difficulties, and promote scientific research activities at universities in Vietnam, in the future I suggest that it will be necessary to pay attention to the following solutions:

Firstly, increasing funding for scientific research. Although the funding for scientific research in our country compared to some other countries in the region is currently not too low, the way resources are currently allocated has affected effectiveness and efficiency and is therefore a key factor in recommending that the scientific research budget be increased. It is therefore recommended that relevant agencies and universities recognize and accept this issue in order to allocate resources and to use them more effectively and efficiently.

Secondly, to implement priority policies to encourage research. Specifically: to issue policies on training, retraining, recognition, and treatment, and to honor the highly specialized role of scientific research staff. At the same time, reform the recruitment, placement, evaluation and appointment of scientific research staff based on their outstanding contributions in the field of scientific research and technical innovation. Also to have preferential policies that can attract domestic and foreign experts and scientists, which will in turn encourage them to participate in much needed scientific research activities.

Thirdly, to change the way S&T tasks are organized, according to research programs

associated with the goals of each stage, avoid spreading, and to plan the development of science and technology potentials associated with training sectors, towards research of high quality scientific products. Besides, promoting the socialization of science and technology activities associated with businesses towards university-based autonomy.

Fourthly, to change the science and technology operation policy for scientists in universities, so that scientists can thereby mobilize capital, and to better utilize resources and equipment to invest in product development and commercial products by forming additional business units within their universities. Also to change the organizational model of science and technology organizations in universities towards product development associated with the training of high-quality human resources.

Fifthly, universities need to promote the restructuring of their science, technology and training activities towards practical and interdisciplinary application in the direction of autonomy, creating an open mechanism to attract scientists to participate in research, such as receiving % benefit from the creation of scientific research projects, schemes and topics; Enjoy% of the cost from the transfer of science and technology products with commercialization and practical application.

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