### DISCUSSION ON RESEARCH CAPABILITY OF TEACHERS IN PEDAGOGICAL UNIVERSITIES/FACULTIES TO MEET THE REQUIREMENTS OF THE NEW GENERAL EDUCATION CURRICULUM 2018

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#### Abstract

The new general education curriculum 2018 has had impact on the teaching professionals in pedagogical universities/faculties; and the development of teachers' research capability is absolutely vital in the reform context. The article outlines the significance and essential qualities of teachers in scientific research activities. On that basis, strategies to enhance research capability for teachers in pedagogical universities/faculties are suggested to meet the requirements of the new general education curriculum issued in 2018.

Keywords: New general education curriculum issued in 2018, research capability, teachers.

### BÀN VỀ NĂNG LỰC NGHIÊN CỨU KHOA HỌC CỦA GIẢNG VIÊN Ở CÁC TRƯỜNG/KHOA SƯ PHẠM ĐÁP ỨNG YÊU CẦU ĐỒI MỚI CHƯƠNG TRÌNH GIÁO DỤC PHỔ THÔNG 2018

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### Tóm tắt

Đổi mới chương trình giáo dục phổ thông 2018 đã tác động đến đội ngũ giảng viên ở trường/khoa sư phạm, trong đó vấn đề phát triển năng lực nghiên cứu khoa học của giảng viên là rất cần thiết trong bối cảnh đổi mới chương trình giáo dục phổ thông 2018. Bài viết nêu ra tính cấp thiết và những tố chất cần có của người giảng viên trong hoạt động nghiên cứu khoa học. Trên cơ sở đó, đề xuất định hướng nâng cao năng lực nghiên cứu khoa học cho giảng viên ở các trường/khoa sư phạm, đáp ứng yêu cầu đổi mới chương trình giáo dục phổ thông 2018.

Từ khóa: Chương trình giáo dục phổ thông 2018, giảng viên, năng lực nghiên cứu khoa học.

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#### 1. Introduction

Teaching and researching are two closelyrealated activities which are considered as the central tasks of the teaching staffs, especially for those in the teacher training institutions. Resolution No. 29-NQ/TW dated November 4th, 2013 on radically and fundamentally innovating education and training to meet the requirements of industrialization and modernization in the socialist-oriented market economy and international integration, which was issued in the 8th plenary session of the 11th Central Executive Committee, highlighted some of the tasks and solutions such as "To keep radically changing the teaching and learning methods towards modernism; encourage the learners' independence, creativity, and application of knowledge; avoid imposition of knowledge, passive learning, rigid memorization. To focus on teaching learning and thinking methods, encourage and enable the learners to update knowledge themselves, improve their intellect, skills, and capacity. To diversify the methods of learning, focus of social activities, extra-curricular activities, and scientific research". (Communist Party of Vietnam, 2013). In the direction for implementing the current fundamental and comprehensive educational renovation project, while the renovation of educational management and the development of teachers are seen as a breakthrough to enhance the quality of education, stimulating and investing in scientific research activities in educational institutions are an important ground for education to truly become a driving force contributing to the country's socio-economic development. This article aims to discuss research capability of teachers in pedagogical universities/faculties, one of the decisive factors for the implementation of the New General Education Curriculum 2018.

### 2. Teachers' roles in the new context

Based on Resolution No. 29-NQ/TW and Resolution No. 44/NQ-CP, the Ministry of Education and Training has issued an Action Plan of the education sector implementing the Government's Action Program to implement Resolution No. 29-NQ/TW which has identified that "Educational and training institutions, scientific research institutes need to strengthen scientific research and apply the achievements of science and technology in teaching practice and educational management; to develop and implement the national research program in educational and training sciences; to promote students' scientific research activities". These are of major actions of the sector to fundamental and comprehensive reform in education and training.

Additionally, globalization has made the educational environment sharply changed, which imposes higher requirements for teachers' qualities and capabilities. In the role of a teacher, the teacher has to know how to "stimulate" learners' understanding, support their thinking abilities and lead them to overcome difficulties and challenges (Vu Ngoc Hai, 2007). That requires teachers to be flexible in designing teaching activities in order to better facilitate and improve the quality of learning. Today, the teaching method is gradually shifting from informing to involving students' participation. The teachers' role is no longer a presenter, but an instructor and an organizer who provides guidance for learners in their learning activities, under the combination of knowledge delivery, values education and creativity development. Vu Ngoc Hai (2006) stated that university teachers play a role of an instructor who guide learners to knowledge and sciences through the best and shortest way on which there is always innovation; learners are continuously provided opportunities for self thinking, self discovering and self decision making.

As researchers, university teachers should concentrate on clarifying and predicting natural and social problems that have not been explained by humans and science, exploring and transfering technology and science's products. Currently, the results from teachers' research are becoming more diverse, which are evidence for quality and productivity measure. This does not only create opportunities but also heighten pressure on the teaching staffs in teacher training institutions in the present context. Besides traditional research products, teachers are first and foremost required to generate those ones which are highly applicable and in response to the demands of the new general education curriculum 2018.

As designers, teachers not only have profound knowledge in their professional fields but also fully understand the rules of cognitive process in the learning procedure. Teachers need to organize suitable learning activities to facilitate students' cognitive process and guide them through inevitable difficulties in the subjects. Moreover, working in teacher training institutions, university educators also need to help learners (as teachers-to-be) progressively form the ability to foster their students' cognitive development as well.

Under the role of consultants, teachers ought to create an overall vision and generate team spirit for students. In every learning activity, teachers should encourage students'participation and provide timely and constructive advice for them to achieve the vision. Together with this, teachers need to design assessing taks in alignment with the requirements, objectives and learning outcomes, thereby their skills for academic assessment are built step by step.

Besides, the New General Education Curriculum has set out new requirements for teachers in terms of skills, capabilities and teaching methods; and it also demand ability to apply ICT in teaching and learning from students. Most importantly, *these requirements are belived to be best satisfied by teachers' scientific research activities*.

It is the fact that while teaching ability is a requisite, research capability is considered vital and indispensable to the teaching job. Therefore, there is a need to keep these two activities concurrent and complementary to each other in the development process. Improving scientific research capability for teachers is a process that helps teachers constantly acquire scientific knowledge, develop thinking skills and creativity, towards detecting and properly solving arising practical problems. It can be achieved through some significant actions such as (1) helping teachers deepen their professional knowledge while self information updating from various sources to promptly adjust inaccurate contents in their lectures; (2) enhancing creativity, independence in thinking and working, strategies for cognitive process and philosophical outlook for teachers; (3) improving the quality of education via innovating teaching content and methods; (4) increasing teachers' intrinsic motivation, position and prestige through the publication of high-quality scientific research results, journal articles and proceedings papers.

In summary, the improvement in teachers' research capability will not only enable them to complete their given tasks but also promote the school's educational quality enhancement. As a result, they are partly contributing the radical and comprehensive innovation of education.

## 3. Teachers' essential qualities to do scientific research

According to the theory of educational science,

the development of research capability of the teaching professionals in teacher training institutions should be ongoing under consideration of subjective and objective factors. Therefore, for the education towards integration, there is a special need for building a model of teachers with essential qualities to do scientific research. From our perspectives, to meet the standards, teachers ought to possess the following qualities:

*First of all*, teachers should have intellectual qualities, "exemplary perception, exemplary behavior, exemplary knowledge and exemplary effectiveness" (Vu Duc Thu, 2006). In other words, they need to have personal and professional intelligence to fully acquire knowledge of conducting scientific research activities: (1) know the basic knowledge of science and scientific research methods; (2) understand the method of detecting research problems and writing research outlines; (3) know the steps and process to carry scientific research activities; (4) master the rules for making comments and offering criticisms on research works (Nguyen Van De and Phan Trong Nam, 2015).

Secondly, teachers should gain skills for doing scientific research, including: (1) employing research outlines stage by stage; (2) searching and using scientific documents for research; (3) managing and supervising research projects; (4) dealing with statistics; (5) organizing workshop on scientific topics; (6) writing summaries and reports on topics; (7) presenting and defensing thesis; (8) transfering research results; (9) using foreign languages in research; (10) group working in doing research (Nguyen Van De and Phan Trong Nam, 2015).

*Thirdly*, teachers need to show right attitudes towards scientific research activities. Specifically, scientists in general and each teacher in pedagogical universities/faculties in particular need to display the following qualities: (1) having an enthusiastic, positive attitude and passion for research activitities; (2) looking for new ideas, judgments, carefully observing and considering the research objects; (3) being proactive and bold to think, to do in research; (4) being disciplined, persistent and honest in scientific works (Nguyen Thi Thanh Huyen and Nguyen Thi Man, 2011).

To sum up, research capability is expressed in the ability to grasp scientific facts; to know how to operate the system of knowledge and to solve research problems independently, creatively with practical results. Research capability is only established in those people who are adequately dedicated to their work and possess appropriate characteristics. The mentioned qualities above should be fully expressed in all circumstances and situations that teachers are set to cope with. It is believed that for the teaching job, teachers need ethics, knowledge, skills and beliefs; and these elements are also indispensable for conducting scientific reseach activities.

4. Orientation to foster research capability of teachers in pedagogical universities/faculties to meet the requirements of the educational innovation

# 4.1. Raising awareness, strengthening the motivation and passion for doing scientific research for teachers

The research capability of teachers will be formed and developed during their active participation in scientific research. The heart of that positivity is the right motive and purpose in conducting scientific research activities. In order to effectively strengthen the motivation and research purposes of teachers, it is necessary for pedagogical institutions, and administrators to fully present the direction for scientific research outlined in Resolution No. 8-NQ/TW and Resolution No. 29-NO/TW of the 11th Central Executive Committee. Based on the general requirements, each individual should figure out the solutions for significant problems of the society, the education sector, and the reality of reforming the educational program by his/her own scientific awareness and motivations with clear and practical research goals and plans. On the other hand, the institutions need to well prepare from the stage of planning to effectively maintaining scientific research activities, creating favorable conditions for teachers to participate in scientific research at various levels. Furthermore, individual and group scientists obtaining outstanding research results should be promptly praised in order to encourage their interest and participation.

# 4.2. Enhance knowledge, creativity and teamwork skills in doing research activities for teachers

This is one of the mandatory requirements which enable teachers to be trained and improved in research activities. Teaching and learning require careful planning, and doing research is even more demanding. Through developing and implementing comprehensive plans, teachers' self-training activities are ensured to work effectively. Moreover, it is obvious that doing research is a process of discovering; therefore, each teacher should be independent in thinking and creative in doing research so as not to stick to repetition. As researchers in pedagogical environment, teachers should pay attention to issues in teaching, from classroom problems to challenges in the educating process. That would contribute to the advance in teaching methodology and the construction of professional working style.

On the other hand, for greater scientific works, there is a need for group work with the participation of many members; therefore, in addition to promoting independence and creativity, the development of strong researcher groups and the improvement in teamwork skills have great significance for enhancing research capacity of the teaching staffs. It is believed that teamwork in doing research requires solid agreement among members on ideas, plans and task division. Every teacher should take self responsibility, be willing to listen and respect the researcher results of coworkers, and eager to cooperate with other researchers for accomplishing research goals and tasks.

## 4.3. Renovating mechanisms and policies in the management of scientific research activities

A set of specific measures for administrators to foster research activities that benefit the educational environment and the society should be well constructed. Those measures are built based on legal documents on scientific research activities. To do so, the administrators of scientific research activities in pedagogical universities/faculties need to do as follows:

- To fully identify the system of legal documents related to the scientific research activities to have a basis for developing a system of policies and regulations in the institution. Together with this, it is necessary to regularly adjust, supplement, complete or build new regulations on scientific research and management of scientific research activities.

- To be flexible in granting funding to create favorable conditions for teachers to participate research activities. Besides, it is important to develop an open and transparent selection process in order to select qualified and professional teachers to host the given scientific research.

- To develop a mechanism of independence and coordination to support the institutional office in charge of scientific research management to best facilitate teachers' research activities. - To build a decentralized mechanism in scientific management in terms of functions, tasks, roles and power such as: Scientific Council, Rector, Vice Rectors, Deans, Team Leaders, etc.

- To reward scientific research achievements, consider awarding the special titles, salary raise, and promotion and so on.

- To develop policies to encourage and motivate young teachers to participate in scientific research on school-level topics and actively involve selfimprovement of research capicity.

## 4.4. Creating optimal conditions to facilitate scientific research activities

In fact, according to data from the Department of Science, Technology and Environment - Ministry of Education and Training, currently the number of teachers in pedagogical universities/faculties participating in scientific research activities is limited with low frequency. To solve this, pedagogical institutions should constantly innovate and improve the quality of scientific research by creating favorable conditions such as: regularly providing scientific information; building an environment of updated information and knowledge, gradually operating an informatics system connecting pedagogical universities/faculties; organizing practical research activities on innovative issues of general education, in order to give teachers opportunities to stay updated, improve their ability to explore, and form research directions to meet requirements of the New General Education Curriculum.

In addition, it is of great importance to ensure the maintenance of funding, facilities, and technical equipment to serve teachers' scientific research. Regarding funding, besides official sources from the institutional and national budget, it is necessary to attract sponsors for social funding sources from agencies, organizations and individuals. The means and technical equipment for research should be timely provided and of high quality thanks to the close and steady coordination among educational components and institutions.

### 5. Conclusion

In the professional field, especially for the teaching job, if the staffs are satisfied with their trained abilities and accomplishment, they would be probably left behind. The practice of innovation in general education has required educators in teacher training institutions to constantly improve their professional qualities and competencies. Therefore, the improvement in teachers' performance, especially in research capability is a requisite in the current context. This means that owning a master degree or a doctorate degree cannot be considered adequately qualified, especially in the cases of young teachers who possess less teaching experiences and professional practice. Hence, in an attempt to meet requirements of the New General Education Curriculum 2018 and constantly improve teachers' capability, pedagogical universities/faculties ought to focus on improving the scientific research capacity, which is considered as short-term and long-term solutions for sustainable development. It is strongly belived that with the great dynamism and strong desire, teachers in pedagogical institutions will definitely obtain significant achivements in scientific research activities, in order to meet the current requirements of fundamental and comprehensive educational innovation.

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