Post-graduate training in Vietnam: Analysis from a manager's perspective

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Abstract---With the explosion of knowledge and science-technology, the development of post-graduate training programs needs to be continuously adjusted, built and enhanced to suit the needs of society. In the context of current educational innovation, the development of post-graduate training programs is a global, inevitable trend in institutions and a good solution for higher education. In this study, the author will give general comments from the manager’s angle about post-graduate training in Vietnam.

Keywords---Training program, post-graduate training, educational innovation.

Introduction

The education and training reform process in Vietnam has been setting new requirements for training content and programs at all levels in the national education system. However, the educational development strategy for the period 2011 - 2020 has pointed out some shortcomings of this field such as: "Program content, teaching and learning methods, examination, testing and assessment are yet to have a quick renew. The content of the program is still heavy on theory... the institutes has not been closely associated with economic and social life; not yet strongly switch to training according to social needs; yet to pay attention to life skills education or promote the creativity and practical capacity of learners" (Government, 2011; N.T. Binh, 2011).

Reality has shown that the development of training programs in universities in Vietnam has not been given enough attention, not many institutes have invested in this work, training programs in the same field often have the same subjects, there are no specificities of each institute, some institutes organize to teach subjects based on the capacity of lecturers, rather than teaching subjects that society and learners need; there are institutes that focus too much on theory;
Some institutes focus too much on equipping practical skills and be weak on knowledge base; training programs could not keep up with the development and requirements of the society... Or “... lack of people with intensive training in developing programs...” (T.T.M. Hang, N.D. Trung 2020; T.T.M. Hang 2020).

From (http://tuoitre.vn, May 7, 2020), extracted from the report of the Ministry of Education and Training of Vietnam, in the 2016-2017 academic year, the total number of masters and PhDs graduates is 35,918. In which there are 1,234 PhDs. By the academic year 2017-2018, the number of graduates increased to 38,021, including 1,545 PhDs. This data does not include national defense, security and international institutes. The number of new masters and PhDs candidates has also increased continuously for many years. Except for the academic year 2018-2019, the number of masters decreased slightly compared to the previous year, the number of new research student enrollments decreased by more than 50%. The 2018-2019 academic year report did not record the master and PhDs graduation figures. However, the scale of master’s and PhDs training in this academic year is 108,134 people, of which 11,000 are research students (source Ministry of Education and Training of Vietnam).

From the above analysis, it can be seen that the development of post-graduate training programs in universities in Vietnam is highly necessary and must be changed in order to improve the content, to amend and add new contents, making post-graduate training more suitable to the situation and needs of our country and ensuring the trend of integration, removing limitations in post-graduate training programs. In addition, changes in society tend to necessitate corresponding changes in post-graduate education, because that is the final stage of formal education and an important stepping stone for learners to participate in the world of working. The innovation of training programs plays an important role in improving the quality of human resource training.

According to (T.T.M. Hang, N.D. Trung 2020; T.T.M. Hang 2020) It is necessary to innovate and develop the current post-graduate training program:

- There are many training institutions with the same major. Therefore, in order to attract students to study, training institutions need to develop attractive and high-quality training programs;
- Renovate the program to match the development trend of the education system around the world;
- Head towards the goal of improving training quality, achieving optimal efficiency.

The renewal of post-graduate training programs plays an important role in improving the quality of human resource training. Post-graduate program development is an ongoing process of program improvement. Developing post-graduate Programs is a key factor in ensuring the quality of human resource training to meet the development requirements of the economy - society. However, in reality, there are not many training institutions that invest properly for this work.
Theoretical framework for post-graduate training
Concept of training program

The term “training program” is mentioned a lot in the field of education. Currently, there are many different concepts of training program because scholars and educators approach this concept from different angles. According to Hollis and Campbell (1935), training includes all the knowledge and experiences that learners have under the guidance of the institute. Thus, the training program is considered as a series of experiences developed to help learners strengthen discipline, develop thinking and acting capacity. The training program includes all the knowledge that learners need to acquire in order to achieve specific goals and objectives; According to Wheeler (1976), training program means experiences that have been planned and given to learners under the guidance of educational institutions; Tanner (1975) defines training programs as pre-constructed learning experiences and learning outcomes that are established from the outset through the systematic provision of knowledge and experiences to develop learners continuously, improve knowledge, personal capacity and social capacity of learners; Wentling (1993), a training program is an overall design for a training activity. That activity could be just a training session lasting a few hours, a day, a week, or several years. That master design outlines the entire content to be trained, clearly shows what learners can achieve after participating in the program. On the other hand, the training program also outlines the necessary process to implement the training content, training methods and methods of testing and evaluating learning outcomes and all arranged according to a strict timetable.

According to (MOET 2016), the training program includes: objectives, standards of knowledge, skills and attitudes that learners need to achieve after graduation; training content, methods and activities; conditions of physical - technical facilities, organizational structure, functions, tasks and academic activities of the unit assigned to conduct training in that field. Accordingly, we stated that the concept of training program is approached from many different angles, but basically all consider the training program as the overall design for a training activity to achieve the training goal in a given framework of time.

Developing post-graduate training programs

Post-graduate training program is a form of training for university graduates with the goal of equipping post-graduate knowledge and improving practical skills to build a team of scientists that have political and ethical qualities, have a sense of serving the people, have high qualifications, and meet the needs of Vietnam’s socio-economic, scientific and technological development. Post-graduate training helps students to add and improve the knowledge they have learned at university; modernize specialized knowledge; strengthening interdisciplinary knowledge; have the capacity to carry out professional work and scientific research in the training major. Post-graduate training programs are research-oriented and/or application-oriented, specifically:

- Research-oriented training programs provide learners with in-depth knowledge of relevant major, disciplines and scientific research methods so that they can independently research and develop opinions and scientific
theories, initially form scientific ideas, discover and test new knowledge; have the ability to work in research, teaching, consulting and policy-making positions or other positions in the field of training industry or specialization; can continue to participate in the training program at PhD level (P.Q. Trung, T.H. Hoan, 2019; N.T. Tinh, 2019).

- Application-oriented training program helps learners to improve their professional knowledge and operational skills; have the ability to work independently and creatively; have the ability to design products, apply research results, discover and organize the implementation of complex jobs in professional activities, promote and effectively use specialized knowledge in implementing specific jobs that are suitable to actual conditions at agencies, organizations and economic units; can learn some additional basic knowledge and research methods as required by the PhD training major to continue participating in the PhD training program (N.Q. Tri, L.V. Thang, N.N. Phuong, 2019; N.X. Thanh, 2019).

Post-graduate training program development is the review, analysis and evaluation to adjust and supplement the current program; making the program always updated, meeting the requirements of the country in the new context and be integrate with the international trend (N.T. Thanh 2019; Tinh, 2019). Research and development of post-graduate training programs is the regular work of the specialized agency. It is a cyclical process with the basic steps: design - develop - implement - manage - evaluate - review - design. It can be represented by the following model (Figure 1):

![Training program development model](image-url)

Figure 1. Training program development model
With the goal of training high-quality human resources, contributing to the current educational and training innovation, it is necessary to develop post-graduate training programs based on approaching the model such as: The training program that follows the CDIO model, the objective model, the process model, the situation analysis model, the research-oriented training model, and the training model associate with foreign elements.

**CDIO model training program**

In the 80s of the 20th century, universities in developed countries began to realize the widening gap between the capacity of post-graduates and the actual requirements of society. The strong development in all aspects of society requires workers to have the intellectual abilities and specific skills of the profession necessary to master that progress. To achieve this, training programs need to be rebuilt in a more appropriate approach, emphasizing the technical background in the context of Conceiving – Designing – Implementing – Operating (CDIO) systems and products.

The CDIO Initiative is a major international project aimed at reforming training programs. The goal of the project is mainly focus on learners around the world, with the desire to give them an education that emphasizes the technical background through 4 important stages from input to output. The CDIO initiative has three general goals to train learners with the following abilities:

1. Gain a deeper understanding of the fundamentals.
2. Leading the way in creating and operating new products, processes, and systems.
3. Understand the importance and strategic impact of research and technical development on society.

According to the CDIO approach, when building and upgrading training programs, strict processes must be followed, from the development of output standards, the design of the program framework, the transfer of the framework into practice and the evaluation of student learning outcomes as well as the entire Program.

**Target model**

Affirmation of general aim, specific goal and objective: The first stage in this model is often started in the national philosophy of education. Common goals of universities are reflected in their mission as approved by the Government when the university was founded. Specific goals and objectives are also formed in association with the general policy framework (Arguelles, Antonio & Gonczi, Andrew, 2000).

**Process model**

Developing a training program using a process model involves formulating teaching methods and materials that are consistent with the principles, concepts, and criteria underlying those activities. In this design, the process is established (learning content, teaching methods and criteria are formed in activities). The end
product is not predetermined by behavioral goals but can be evaluated based on criteria located in the knowledge domain. The phases in this model do not occur consecutively as in the objective model. Stages in the training program development process model: (i) Select content; (ii) Select principles and procedures; (iii) Determine teaching methods and facilities; (iv) Assessment according to criteria in the knowledge domain (Bradley, M.J; Seidman, R. H, & Painchaud, S.R, 2011)

*Research-oriented training model*

The post-graduate training program focuses on improving the research capacity of students through: research topics, seminars and activities related to research and academics. The educational program is academic in nature, developing in-depth theoretical knowledge, with an emphasis on developing strategic skills. Fewer extracurricular hours; many specialized courses.

*Model of joint training with foreign elements*

Model of joint training with foreign elements: is a training and research model with the combination of a foreign university. They will transfer training programs, lecturers, programs, languages. Therefore, post-graduate students will have access to a new, advanced and modern curriculum. Thereby, there is a comparison and selection of learning contents and methods.

*Proposing measures to develop post-graduate training programs in Vietnam*

Improving the quality of training is always a requirement and a vital condition of educational institutions. At the same time, determining the quintessence of a training institution is reflected in the quality of its post-graduate training. To improve the quality of post-graduate training, we propose a number of management solutions as follows:

*Innovation management of admissions*: Improving the quality of enrollment is always a matter of particular concern to institutes, students and educational management agencies. The recruitment work of educational institutions has always been evaluated as serious and objective, creating trust for everyone in all entrance exams. For post-graduate training, enrollment and entrance examination in graduate training play a particularly important role, having a decisive impact on the training quality of any institute. Doing well in enrollment management in post-graduate training will contribute to improving the institute’s training quality. Raising awareness about the importance of enrollment will help to properly implement the selection process, ensuring transparency, accuracy, objectivity and fairness.

*Updating content and training programs*: Develop post-graduate training programs to ensure training quality, being suitable to learners' needs. In which, innovation of training content is an important requirement to improve the quality of post-graduate training of the Academy. In order to innovate training content, the institute determines to more closely link teaching with scientific research practice, professional development in society, serving the requirements of socio-
economic development of the country, accessing to the advanced education level of the region and the world; develop students' creative research potential, professional skills, capacity to work in the community and ability to start a business.

The training content is a system of knowledge, skills, techniques and attitudes regarding the training field and profession on the basis of being inherited, selected and developed from the culture, science and technology of humanity, which the institute organizes through the lecturer for learners to actively perceive the personality requirements according to the set goals. The content of post-graduate training is specified in training plans, training programs, and learning materials and curriculum. Develop training content and programs in a reasonable way, both ensuring the quality of professional knowledge and ensuring vocational skills for learners.

Clearly defining the content of the training program, stratifying knowledge at all levels, building a system of textbooks and references to meet the content of the training program is a fundamental and core issue in assuring training quality. Perfecting the system of textbooks and documents for post-graduate training, improving professionalism in post-graduate training. Strengthening scientific research and connecting scientific research; organizing domestic and international scientific conferences, many scientific activities for cadres, civil servants, officials and lecturers of the Academy.

*Ensure connection between training levels:* Ensure the connection between training levels, well solve the relationship between the amount of knowledge and study time between general subjects and specialized subjects. The Academy will periodically evaluate and improve, supplement and adjust the curriculum framework and detailed program of the modules on the basis of 20% of the annual allowable in order to update the latest achievements in the fields, to meet the needs of society. On the other hand, directing the training program towards the goal of linking research with training, making use of research results into teaching practice; must be approached from an interdisciplinary, multi-sectoral perspective; increase practice time; increase study time on research methods, integrate research directions and research approaches in modules, with attention paid to access to modern world research methods.

*Improve the quality of assessment of students' research results:* Improve the quality of teaching and learning, in parallel with improving the quality of criticism and evaluation of theses and research at all levels; make the most out of the teaching staff's practical experience, wisdom and research results. Strictly organize the enrollment process, improve the quality of the input, increase the opportunity to select excellent students to improve the quality of training. Building strict institute discipline, innovating management methods flexibly, raising the sense of spirit and responsibility, strictly observing the rules of the students in order to improve the quality of knowledge acquisition.

*Strengthen international cooperation and training links:* Strengthen international cooperation in training, establish relationships and sign cooperation documents with a number of domestic and foreign organizations on postgraduate training
and research in order to attract intellectual and experienced foreign experts, gradually building and developing the Academy into a prestigious research-oriented training institution in the country and in the region.

Upgrade facilities and conditions for the training process: In order to improve the quality of training, in addition to the leading role of the lecturer and the active self-discipline of students, the issue of facilities and equipment for teaching is highly important, contributing to improving the quality of training. Institutes need to focus on investing, building modern classrooms and library systems. The library system increases the number of international scientific books, newspapers and journals, helping to provide adequate reference materials, facilitating postgraduate students to study relevant documents and inherit research results.

Conclusion

The quality of training at any level depends on all factors of the training process. In order to improve the quality of postgraduate training in Vietnam in general, it is necessary to realize that this is the process of training scientists and managers with high theoretical and practical qualifications, capable of discover and solve new problems in practice. This requirement requires that the training process should promote the creativity of the students, change the students' awareness and conception of learning and scientific research process. Therefore, the training organization also needs to be renewed in terms of program content, methods, forms of training organization and the assessment process to suit the requirements of graduate training. The above proposed measures are all aimed at meeting the requirements of educational innovation, creating conditions for scientists and post-graduate training institutions to promptly access information and manage training following the innovation direction, in order to meet the requirements of educational innovation in the era of the 4.0 revolution.

References


