

Original Research Article

Exploring the Role and Necessity of Improving Testing Activities and Quality Assurance in University Training

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Abstract: Testing is the examination and assessment of educational outcomes with learners, through a rigorous process to measure the level of knowledge, skills, attitudes, or abilities of learners. Theoretical and practical studies have shown that testing activities have a position and importance in university training. The purpose of this study is to explore the role and necessity of improving testing activities in university training in the current period. The research results show that testing activities have many roles in university training. However, testing activities still reveal many limitations that need to be improved in the coming time. Based on exploring the role and necessity of improving testing activities in university training, this study recommends solutions to further promote the role of testing activities in university training. Because it is only an initial study, there are still some limitations that need to be further studied and improved in the future.

Keywords: Discovery, role and necessity, improvement of activities, testing, quality assurance, university level.

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INTRODUCTION

Testing and quality assessment of education began to be implemented since the establishment of the Department of Training Quality Assessment (January 2002) under the Department of Universities, Ministry of Education and Training, then expanded to other levels and training levels after the Department of Testing and Quality Assessment of Education was established in 2003 (now the Department of Quality Management). Organizing testing and quality assessment of education objectively will create a unified standard, a common ground on the correlation between degrees and competencies. The results of testing and quality assessment will be an important source of information to help schools review and adjust their operational processes.

Testing and quality assurance in higher education institutions is a set of values, ideas, actions

and attitudes built in the higher education community, aiming to ensure the highest quality of education. Improving testing and quality assurance in higher education institutions is a set of values, ideas, actions and attitudes aimed at improving the quality of higher education through continuous improvement and innovation (Ministry of Education and Training, 2019). In recent years, the training quality of many universities has been significantly improved and enhanced due to many innovative activities, updating the content of training and fostering programs; improving teaching methods in a positive and effective direction; tightening discipline, learning discipline of students and teaching of lecturers; increasing the application of information technology in teaching and training management (Ministry of Education and Training, 2021).

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In addition, an indispensable activity in contributing to improving this quality is to diversify the forms of examinations, tests and assessments of learning outcomes of learners in particular and the examination work of universities in general. However, compared to the requirements and tasks of the period of innovation, national development and international integration, the era of technology 4.0, artificial intelligence AI, digital transformation, energy conversion, etc., the training and fostering activities of universities still need to be constantly improved and further enhanced, especially improving the quality of examination work and quality assurance.

LITERATURE REVIEW

Chapter VII of the Law on Higher Education (2018) with 5 specific Articles detailing the activities of quality assurance and quality assessment of higher education: Objectives, principles and subjects of quality assessment of higher education; Responsibilities of higher education institutions in ensuring the quality of higher education; Duties and powers of higher education institutions in quality assessment of higher education; Organization of quality assessment of education and Use of results of quality assessment of higher education. Circular 08/2021/TT-BGDDT on Regulations on university level training issued by the Ministry of Education and Training; Circular 17/2021/TT-BGDDT regulating training program standards; development, assessment and training programs of higher education levels issued by the Ministry of Education and Training; Circular 23/2021/TT-BGDDT on Regulations on admission and training of master's degrees issued by the Minister of Education and Training; etc.

From the legal documents of the State, the work of testing and ensuring the quality of training is reflected in three main aspects, including: Testing, quality assessment and quality assurance, which are all activities related to assessment in the education system. This assessment is carried out using objective measures and consistent standards. Specifically, as follows:

- (i) Testing is the examination and assessment of educational outcomes for learners, through a rigorous process to measure the level of achievement of learners in terms of knowledge, skills, attitudes or abilities.
- (ii) Quality assessment is the assessment of the performance and results of a university training institution or a training program according to a clearly defined process and standards.
- (iii) Quality assurance is a systematic review and assessment of the activities of departments in the school, proposing procedures to

ensure that all processes and work results of the school meet the standards of quality assessment. In a broad sense, quality assurance is an action program to systematically assess and monitor many different elements of a project, a service, or an agency or unit to ensure that it meets certain quality standards. Assessment is considered a measure to ensure quality.

Thus, testing and quality assurance work in universities helps lecturers know the effectiveness and quality of teaching, adjust teaching content and methods; helps students know the quality of learning, adjust learning methods; helps managers make decisions about students' learning outcomes, adjust and perfect training programs and teaching organization as well as affirm the brand and value of universities.

MATERIALS AND RESEARCH METHODS

Research material: Some documents on examination work in universities. Specifically: (i) Law on Higher Education amended in 2018; (ii) Decree 99/2019/ND-CP guiding the implementation of the Law on Higher Education amended; (iii) Circular 08/2021/TT-BGDDT on Regulations on university level training issued by the Ministry of Education and Training; (iv) Circular 17/2021/TT-BGDDT regulating training program standards; development, assessment and training programs for university levels issued by the Ministry of Education and Training; (v) Circular 23/2021/TT-BGDDT on Regulations on admission and training for master's degrees issued by the Minister of Education and Training; etc. Industry and interdisciplinary research methods: the main methods used in this study are logic-history, analysis-synthesis, comparison-contrast, deduction-induction, etc.

In addition, to have accurate and objective assessments, this study refers to several regulatory documents of universities on testing and quality assurance activities in Hanoi. Referring to the regulatory documents of universities helps the analysis and evaluation activities to be consistent with the current status of testing and quality assurance activities. Survey method: This study surveyed 51 people who are working in the field of testing and quality assurance activities at several universities through a questionnaire with related issues such as: (i) The importance of testing and quality assurance activities in universities; (ii) The role of testing and quality assurance activities in universities; (iii) The need to improve testing activities and ensure quality in current universities.

Data processing: The topic uses SPSS 26 to process data collected from survey forms with a Likert

scale of 5 levels: from 1 point (Strongly disagree/ Weak/ Very unnecessary) to 5 points (Strongly agree/ Good/ Very necessary) on the agreement and level of achievement of ethics teaching activities for primary school students in the context of digital transformation of education and the feasibility of proposed measures. With a 5-level scale, the scale is converted to an interval value scale (Maximum - Minimum)/n = (5-1)/5 = 0.8.

RESEARCH RESULTS AND DISCUSSION

Evaluating the importance of testing activities in university training

Studies have shown the importance of testing activities in university training. To get more accurate results, this study surveyed 51 people working in management, teaching, testing and quality assurance at many universities. The results are shown in Figure 1.

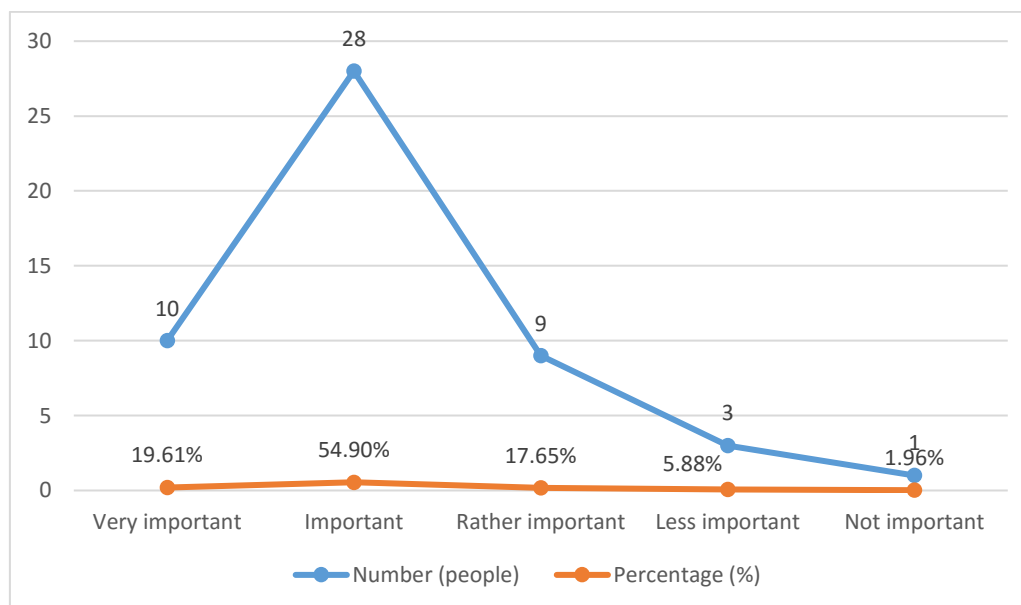


Figure 1: Assessing the importance of testing activities in university training

The survey results show that the assessment focuses on "Important" with 54.90% of the assessors (with 28/51 respondents); followed by "Very important" with 19.61% of the assessors (with 10/51 respondents); 17.65% of the assessors are "Rather important" (with 9/51 respondents). There are still 5.88% of the assessors who are "Less important" (with 3/51 respondents) and 1.96% of the respondents are "Not important". The survey results show that there are still some managers and lecturers at some universities who have not properly assessed the importance of testing activities and quality assurance in university training. Therefore, there is a

need for solutions to raise awareness among managers and lecturers.

The Role of Testing and Quality Assurance in Higher Education

Studies have shown that testing in higher education plays a major role in improving the quality of education and the brand of the University. To obtain more accurate results, this study conducted a survey of 51 people working in management, lecturers and testing and quality assurance at a number of universities. The results are shown in Table 1.

Table 1: The Role of Testing and Quality Assurance in Higher Education

Order	Content	Rating Level					XTB	Level
		1	2	3	4	5		
1	Testing activities play an important role and influence on students, lecturers, training programs as well as the reputation and brand of the training institution	1	7	15	21	7	3.51	1
2	The content, methods and use of assessment results also affect the content and teaching methods of lecturers	2	8	16	20	5	3.35	2
3	For the Training Program, information on student learning outcomes helps education managers evaluate the effectiveness of the	1	6	15	21	8	3.57	3

	training program and training activities to make necessary adjustments to increase training effectiveness							
Total average		1.33	7.00	15.33	20.67	6.67	3.48	

The survey results in Table 1 show that, with XTB = 3.48, it is at the "Has a role" assessment level. This shows that testing and quality assurance activities in university training play a role in the development of universities. However, the survey results also show that there are still some managers, staff, and lecturers who have not properly assessed the role of testing and quality assurance activities in university training. Based on previous theoretical and practical studies, based on the survey results and interviews with several managers, lecturers, and staff at several universities, the role of testing and quality assurance activities in university training can be analyzed specifically as follows:

Testing activities play an important role and influence on students, lecturers, training programs, as well as the reputation and brand of the training institution. For students, the content, methods, ways and results of assessment directly affect the behavior, attitude, learning motivation and development opportunities of each student (Thuy, 2020; Van, 2022; Vu, 2023). Most students tend to pay more attention to the content that will be assessed during the learning process. Because assessment results are often used as the basis for making decisions that greatly affect students, such as being confirmed to complete a module, completing a course, being awarded a scholarship, or being selected for a good job position, etc., assessment activities also play an important role in motivating students to learn (Hang, 2020; Duchiep, 2022). Assessment results can help students recognize their progress to help maintain positive learning motivation. When assessment objectives are consistent with teaching and learning objectives, assessment activities help guide students' learning, help them better understand their learning objectives to self-control their learning, and have appropriate and effective learning attitudes and strategies.

The content, methods and use of assessment results also affect the content and teaching methods of lecturers (Kim, et al., 2006; Hong, 2022a). With the desire to help students achieve high results, lecturers often spend more time on the content that will appear in the assessment. The results of regular and periodic assessments can help lecturers assess their teaching effectiveness to make adjustments in teaching methods and content to achieve higher efficiency (OECD, 2005).

For training programs, information on student learning outcomes helps educational

managers evaluate the effectiveness of training programs and training activities to make necessary adjustments to increase training effectiveness. The combination of these activities has an important impact on the brand and reputation of training institutions. In particular, after the Government issued Resolution No. 14/2005/NQ-CP on fundamental and comprehensive innovation of Vietnamese higher education, the university training model shifted from elite education following the model of the former Soviet Union to an open education model to meet the human resource requirements for the country's industrialization and modernization.

From 2005 to 2015, the number and types of higher education institutions increased significantly. Currently, there are not only public and private schools but also international schools, schools under the management of enterprises, etc. (Hong, 2022b). Therefore, the competition between higher education institutions is increasingly high (Thang, 2019). Universities are given more autonomy along with the responsibility of management, accountability, and reporting of training results to parents, the people, employers, and educational management levels.

To demonstrate effectiveness and maintain training activities, higher education institutions are required to publicly and transparently disclose the process of developing and implementing teaching activities, assessment activities, and student learning outcomes as stated in Circular No. 12/2017/TT-BGDDT on quality assessment of higher education institutions. Therefore, conducting effective and appropriate testing activities, ensuring value, reliability and accurately reflecting the actual capacity and level of students will contribute to building and protecting the reputation and brand of the training institution. It is important to emphasize that this is a dialectical relationship because the reputation and brand of the training institution will affect the output of students, the results of enrollment, teachers, as well as the training program.

The need to improve testing activities in university training

Improving the quality and effectiveness of training, fulfilling commitments on output standards, is the top goal of many universities in the new context. To achieve this goal, many universities have continuously invested heavily in innovating programs, teaching methods, improving facilities and staff, and meeting the requirements of conditions to

ensure educational quality. The field of testing and quality assurance is also an area of special interest to many universities.

At present, the examination activities of universities are being carried out well in terms of applying information technology and ensuring transparency and independence between the teaching process and the assessment of learning outcomes, as well as the work of archiving related records. The assessment activities at the end of the semester in the form of essay, multiple choice, oral or a combination of the above forms (organized by the Center (Department/Office) of Quality Management) have been systematized, applying information technology so that the work stages are separated to ensure planning, confidentiality and efficiency in the organization of centralized examination and grading.

However, besides the above strengths, the examination activities still have some basic limitations as follows: (i) many teachers still lack knowledge and skills related to the field of examination, so they are still confused in implementing the stages in the process of assessing students' learning outcomes and using the assessment results; (ii) There is no system of criteria, standards and guidelines for assessing output standards at different levels; (iii) The activities of compiling exam and test questions have not yet ensured the assessment of the level of achievement of output standards as required and have not yet ensured the balance of difficulty, value and reliability of parallel questions; the process and tools to control the organization and supervision of the assessment process of subjects with exam forms (major assignments, projects, essays) are not effective; (iv) assessment results have not been used effectively to provide feedback and support the training process.

Therefore, improving the assessment activities of universities aims at two main goals: (i) Innovating assessment methods in the direction of shifting from content-based assessment to competency assessment (according to output standards) and (ii) Improving assessment organization in the direction of applying technology to effectively manage the assessment process to improve objectivity and accuracy in stages, assessment activities and exploiting assessment results as a basis for improving the teaching and learning process.

To innovate assessment methods, specific goals include: Organizing training and coaching for staff and teachers to improve their capacity to carry out assessment activities; building a system of criteria and guidelines for assessing training programs; building sets of documents guiding the

assessment of learning outcomes of subjects, and building and managing a system of question banks for exams and tests of highly stable subjects.

To achieve the goal of improving assessment organization activities, the specific goals include (i) Developing and promulgating a system of documents (regulations, procedures, instructions) and tools (software) to manage regular assessment activities; assessment of practical courses; assessment of end-of-course courses in the form of major assignments/projects/theses/essays; (ii) Developing regulations/instructions and organizing the analysis of learning assessment results to provide feedback to students, teachers and programs; (iii) Adjusting, updating and building new functions of the examination subsystem to suit current assessment management activities; (iv) Building new software subsystems, linking with the e-University system to process and support tasks related to assessment activities and analysis of assessment results. Up to now, the testing and quality assurance work of universities has implemented several contents:

Firstly, regarding staff training: The Testing Center (Department, Board) has coordinated with units inside and outside the school to organize many training sessions, including many training courses, training courses on testing for the school's lecturers. After each training session, feedback from lecturers about the training courses was collected and the feedback was very positive.

Secondly, the Testing Center (Department, Board) has developed and submitted to the school's leaders a process for compiling and appraising documents on guidelines for assessing course learning outcomes. The Center has coordinated with lecturers of some training units to compile a guidebook with specific reference examples.

Third, the Center (Department, Board) has coordinated with training units to establish and implement the first phase of the plan to compile documents guiding the assessment of learning outcomes for 405 courses at the units. Currently, the Testing Center (Department, Board) of many universities is reviewing these sets of documents to propose that the university officially issue them. However, in the process of reviewing the sets of documents guiding the assessment of learning outcomes of many universities, it shows that the assessment of the sets of documents of some units is not of high quality and needs to be revised in the near future. Fourth, regarding the goal of improving the organization of assessment, many universities have also proposed and are currently implementing the direction of the Center (Department, Board) to ensure the quality of editing and supplementing

many functions of the Testing subsystem of the e-University system and have built a preliminary process for managing assessment courses through the form of large assignments, projects, essays, and internships.

In the coming time, universities need to continue to implement the tasks of the testing project such as professional training for staff and lecturers; Implement the compilation and appraisal of sets of criteria for evaluating training program output standards; Develop regulations and procedures for compiling and appraising test and examination question banks; Develop and manage question banks; Develop processes and tools for managing process assessment activities; Develop methods and procedures for analyzing post-assessment results to contribute to enhancing the effectiveness of teaching and learning in schools.

RECOMMENDATIONS

Due to the large amount of work and related to in-depth expertise in testing, system development and training majors. Therefore, to perform well the assigned tasks, in addition to the attention and direction of the universities's leaders, the Testing Center needs effective cooperation from units and individuals in the school such as the Training Department, the Quality Assurance Center, the Faculties, the Training Center and especially the teachers and lecturers who directly perform related tasks.

Universities need to raise the awareness and responsibility of staff, lecturers and students when participating in testing and assessment activities, organizing training sessions on the importance, position and function of testing work. At the same time, fully disseminate in writing information and regulations on the testing work of the universities. Through training sessions to exchange experiences in testing and assessing students' learning outcomes as well as systematically equip lecturers with knowledge in the field of assessment and measurement of students' learning outcomes.

For students, organize introductory sessions on the purpose, role, position, function and principles of testing and evaluating learning outcomes for students as well as regulations in the regulations on organizing exams and tests of the Academy during the first week of the semester when students first enroll and during regular meetings of academic advisors and lecturers. Universities need to continue to innovate and diversify forms of testing, assessment, end-of-term exams, and output standards.

Currently, in education and training, there are many forms of testing and testing such as: essays, questions and answers, objective tests, exercises, essays, etc. Each form has its strengths and limitations in testing the quality of students' learning. However, these forms of testing and assessment only determine understanding and application of knowledge, while analysis, synthesis, evaluation, and problem solving are still very limited. To contribute to improving the quality of education and training, it is necessary to flexibly combine many forms of testing and assessment. Based on the objectives and content of each course, it is possible to use one main type of test, combine other types of support at the end of the course, and combine different types with the score coefficient for each type in the total assessment score of the whole course.

CONCLUSION

Improving the quality of testing and quality assurance is an indispensable and very necessary content in teaching and learning activities; it is an important part and function in training management; at the same time, through testing and assessment activities, to improve the quality of education. However, testing and assessment are only effective when they are conducted purposefully, planned, linked to assessment standards, and test and assessment results are used under the requirements of each subject. Continuing to improve and enhance the effectiveness of testing and quality assurance activities is still considered one of the priority goals in the quality assurance work of universities. Testing activities in the coming years require increasing depth, enhancing efficiency and closely linking with the basic activities of the University.

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