

## **Innovative Teaching and Learning Methods in Vietnamese Higher Education**

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### **ABSTRACT**

*The change of curriculum planning from a semester based system into a credit-based system in Vietnamese colleges and universities has posed an urgent need for innovation in all sectors of higher education in general and in teaching and learning methods in particular. However, studies in the field of higher education teaching and learning in Vietnam do not keep pace with other elements of the education domains and currently require an adequate investment. This paper will discuss contingent issues in teaching and learning methods in Vietnamese higher education such as perspectives, current problems and the popular teaching methods widely used. The paper also initiates suggestions for change in the teaching and learning methods as the key factors affecting the effectiveness of Vietnamese higher education currently.*

**Keywords:** *Technical teacher education, Teaching method innovations, Higher education management, teaching effectiveness*

### **THE QUEST FOR AN ENTIRE INNOVATION IN TEACHING METHODS IN HIGHER EDUCATION**

The blueprint paper of the 11<sup>th</sup> National Congress of the Vietnamese Communist Party has highlighted the aim of rapidly developing high-quality human resources capable of carrying out a total renovation in the national education system. In effect, technical education in colleges and universities takes the role of a lifting force to produce a highly qualified manpower and requires more attention and investment.

Vietnamese instructors also perceive the core and the purpose of teaching in higher education is actually the facilitating process in which students develop their interests and abilities in learning and doing research under the guidance of teachers. Furthermore, the competence framework associated with an engineer in

the technological area nowadays is far different from that of the 1950s. However, the procedures and the basic implementation of the training of the engineering sector are under various constraints.

It is widely accepted that the aim of higher education is to produce human resources with highly professional capability, possessing critical and independent thinking, creativity and maturely interpersonal skills. However, the teaching methods used at higher education levels are usually similar to those applied in previous educational levels, though more diversified and more specific to a certain extent. Therefore, it is time to wholly revise the objective, the contents and the methods of teaching and learning in higher education (Ngo Tu Thanh, 2008).

## **THE MAJOR ISSUES IN TEACHING AND LEARNING EFFICIENCY IN VIETNAMESE HIGHER EDUCATION**

The overview picture of teaching and learning situations in the Vietnamese higher education system is vividly presented in a large scale research carried out by a group of educational specialists from the Vietnamese Institute of Educational Science, the National University, Hanoi, the University of Pedagogy, Hanoi, the Department of Higher Education and the Department of Science, Technology and Environment (Dao Thai Lai et al. 2011). The study conducted a survey with 367 administrators at institutional and faculty levels, plus 1,342 lecturers and 1,386 students. In-depth interviews were also conducted at seven universities.

It found that around 50% of surveyed lecturers understood quite well and were able to apply the method of lecturing. Regarding the project based approach, 60.4% never used this approach, and 19.5% used it occasionally. Similarly, 58.7% made use of e-teaching and learning, and 10.1% never used this facility.

The study also significantly discovered that there were nine most commonly used methods at Vietnamese universities, namely lectures, lectures and conversations, lectures with audio aids, group work, seminars, experiment and practice, computer-assisted teaching and self-directing teaching. The relatively effective methods include those of lecturing, group work, seminar, situational teaching, while the new approaches are not used effectively.

Among 32 universities participating in this study, only 19 have established a committee for innovations in teaching methods. Moreover, 83.3% of institutional administrators have announced plans for enhancing teaching quality. The remaining number did not pay much attention to the documentations of this plan. In addition, the study reveals that 85.7% of institutional managers and 75.9% of faculty level managers reported class observation schemes with qualified lecturers taking place at their institutions. In addition, 61.2% of university managers and 55.2% of faculty level managers have formulated the policies of encouragement and acknowledgement given to lecturers who have adopted new teaching methods. Moreover, 64.7 % of university managers and 67.1% of

faculty managers have included the improvement of teaching methods as one criterion for performance evaluation. This is considered as a necessary means to increase the involvement of lecturers in modernising their instructional skills.

The survey conducted with 1,342 lecturers from 43 universities showed that only 60% of the lecturers had received professional training. Similarly, only 39.5% of institutional managers said that their institutions provided pedagogical skill courses. However, only a few universities produced reference materials on higher education teaching methods, though the need for self reading resources was reported as high among instructors.

Another matter that directly relates to the quality of teaching in higher education is the obvious neglect of research studies on teaching and learning effectiveness. According to a report by the Department of Science, Technology and Environment, there were 35 studies out of 3,064 ministry-level projects relating to teaching methods (The Reference).

The study also significantly reveals that 87.2% of university managers and lecturers alike perceive the urgent need to reform teaching methods in higher education. The majority of surveyed participants suggest that reform in teaching methodologies should take place at the same pace with reforms in the curriculum and professional development. Besides, the factors that strongly affect the effectiveness of the reforming process include the awareness by the instructors themselves about the need to change and the facilitation given by the leaders and managers.

Another important finding from the study is the instructors' perspective on the two crucial requirements for qualified instructors, namely good methodologies and good professional knowledge. The study also finds the important role of technology in reforming the teaching and learning. However, teaching with technologies is normally associated with the use of Power Point in classroom instructions.

Learning efficiency is another aspect that the study investigated. The majority of the students involved in this study did not find appropriate learning methods, nor did they have a good understanding of learning styles. The students viewed that the cause of the inefficiency of the instructional methods lay in the mismatch of teaching methods and learning styles. Moreover, the students still relied closely on instructional materials as group work did not bring practical outcomes.

All institutional managers, instructors and students participating in the study unanimously viewed that the most prominent obstacles resulted from the poor quality of the instructional environment, overcrowded class sizes, low proficiency of foreign language skills and the lack of appropriate learning methods.

In fact, there is no doubt that all universities and colleges have made real efforts to enhance the efficiency of the teaching and learning. However, not many

institutions are successful in the innovative process. There are various reasons for this, some of which are mentioned below.

Firstly, teachers generally believe that the specific subject or field of study can only be taught by those who have strongly mastered the field. It comes from the judgment that concepts in teaching methodology cannot directly deal with terminologies and concepts of the professional field.

Secondly, a number of teachers do not see a need for changes in teaching methods. They believe that they are doing a good job in the class, which in fact low down their interests in participating into instructional skills enhancing workshops.

Thirdly, the innovative contents do not keep pace with the individual needs for change among instructors. Fourthly, the instructors do not receive adequate encouragement to join in certain innovative projects. This is due to their laidback habits more than a possible intention of rebelling against change.

Fifthly, as at 2010, the number of university lecturers exceeded 65,112. However, only 67% of those have received some kind of training in instructional skills. In addition, a large numbers of lecturers have not been exposed to the new teaching approaches (Dao Thai Lai et al., 2011).

## **OBSTACLES TO THE EFFECTIVENESS OF TECHNICAL AND ENGINEERING TEACHING IN VIETNAMESE HIGHER EDUCATION**

The problem of technical education in Vietnamese universities takes its root from the traditional perspective on the objectives of higher education. In effect, knowledge construction heavily outweighs skill and competence formulation in all programs of study including the technical and engineering sectors (Ngo Tu Thanh, 2008). The causes of this dilemma mainly come from the historical background of technical education in Vietnam and the low effectiveness and insufficiency of professional development programs catering for technical instructors in higher education.

There are presently five institutions and a few faculties offering educational programs for prospective technical teachers. The most established one is the Technical Education University, Ho Chi Minh City, which was founded on 5 October 1962. It offered training for technical and engineering instructors at undergraduate and postgraduate levels. The other institutions have initiated their programs in the last ten years.

The very first technical teacher training programs were initiated by the Committee of Technical Pedagogy Colleges in Saigon with the professional support of a group of specialists from the Southern Illinois University, USA and the Board of Directors of the Department of Technology of Southern Vietnam.

The initial curriculum took on two pathways: the Level I professional instructor which required 3,570 learning hours and the Level II professional instructor, which required 4,230 hours. Courses on education and pedagogy accounted for 25% of the learning hours. Since 1976, training programs for technical teachers have been centrally managed by the Ministry of Education and Training. The number of hours for education and pedagogy courses was obviously reduced to 14% (Vo Thi Xuan, 2006).

The latest requirements for the professional competence of university instructors set by the Ministry of Education and Training (MOET, 2013) treat all instructors as one group. In effect, all university instructors need to undertake a formal professional development program prior to or during their teaching career. The contents of the pedagogical profession development courses provide the basic theories and practice on the management and teaching in higher education. The eight courses with a total of 20 credit hours include (1) Psychology in Higher Education Teaching, (2) Higher Education in Vietnam and other countries, (3) Teaching theories for Higher Education, (4) Curriculum Development and Instructional Formulation, (5) Assessments and Quality Assurance in Higher Education, (6) Technologies in Higher Education Teaching, (7) General Psychology, and (8) Educational Science. It is obvious that little of the content deals with technical and engineering teaching theories and practice in particular. In fact, the Ministry of Education and Training also implements a compulsory certificate course on vocational and technical teaching profession. However, this is for teachers of further education institutions and vocational colleges.

As a noticeable result, the professional development programs catering for technical instructors are not highly effective. The majority of 235 technical and engineering teachers from Ho Chi Minh City and other nearby provinces involved in a survey in 2006 criticised the low effectiveness of current training programs (Vo Thi Xuan, 2006). The following table shows part of the survey outcomes. It is obvious that the contents and the teaching methods strongly affected the effectiveness of the current training programs. The ranges are from 1, most agreeable to 5, least agreeable.

In other words, university instructors in technical and similar fields receive exactly the same forms of professional training. Therefore, just like instructors of other courses in the curriculum, instructors of technology and engineering normally apply similar approaches to teaching. Though the instructors' understanding about currently used approaches of teaching varies widely, the main methods include most of those stated by Sajjad (2005). These are lectures, group discussions, individual presentations, assignments, seminars, workshops, conferences, brainstorming, role-play and case studies. Other methods and approaches under experimentation at some institutions are project-centred approach, action learning, competence-based approach, active learning, and learner-centred approach. These new approaches have been studied and experimented mostly by those instructors who take graduate courses in Education Science in Vietnam and overseas. All of the experimental projects gain their successful results and can be implemented in a larger context.

**Table 1: Obstacles causing the low effectiveness of teacher training programs**

<b>Obstacles affecting the effectiveness of technical teacher training programs</b>	1	2	3	4	5
1. The contents are not updated with new developments in technology and science	96 40.8%	54 23%	33 14%	21 9%	31 14.2%
2. The equipment and facilities for practice are outdated	68 29%	72 30.6%	48 20.4%	35 14.8%	12 5.2%
3. The management at all levels is poorly performed	50 21.3%	43 18.3%	90 38.3%	22 9.4%	30 12.7%
4. The professional ability of teachers is low	28 11.9%	39 16.6%	68 29%	74 31.5%	26 11%
5. The teaching methods and attitudes are not adequate	25 10.6%	44 18.7%	43 18.3%	45 19.2%	78 33.2%

(Source: Vo Thi Xuan, 2006)

The obstacles to the teaching and learning of technical and engineering course are therefore, obvious and dramatic. Vietnamese scholars identify the main causes of these obstacles as the lack of managerial competency at all levels of the system, the limitation of financial and material resources for technical and engineering practice, the inefficiency of professional development for instructors, the inappropriate learning styles and strategies of the students, the outdated contents and methods of instruction, and the lack of instructional skills of the teachers (Ngo Tu Thang, 2008; Vo Thi Xuan, 2006). These obstacles actually put forward the urgent needs for a complete reform in the higher education sector, and also the accurate changes in terms of curriculum development, teaching methodologies, learning strategies and professional development for technical teachers.

## **SUGGESTIONS FOR THE ENHANCEMENT OF TEACHING QUALITY IN HIGHER EDUCATION IN VIETNAM**

It is necessary to put a stronger emphasis on the implementation of changes to teaching and learning methods. For instance, quality assurance criteria need to extend to the innovative efforts and proofs of changes in teaching methods and teaching efficiency. More research studies on teaching efficiency and learning strategies should also be encouraged and given adequate investment.

The present professional development programs need further evaluation on their effectiveness to instructors in general and instructors of technical education in particular. The curriculum of the professional development courses needs to provide more instructional skills essential to technical education teachers. Besides, the contents also need to introduce to the learners the current practice and issues of technical and engineering education in other higher education systems. Parts of the training contents can be presented in the forms of published reference materials or on the websites of each institution. Nowadays, the trend to set up a teaching and learning support centre at each university is in high demand as the credit-based system has created many challenges and difficulties for instructors and students alike.

It is also a prime time to develop a healthy linkage between industry, enterprises and Vietnamese higher education, especially in reforms of higher education. Cooperation with industrial companies and enterprises is beneficial to the reforms in all aspects such as curriculum planning, instructional environment, professional development, teaching contents, learning outcomes and funding for research and teaching.

Applying Information and Communication Technology (ICT) in teaching and learning at the level of higher education is necessary to improve the quality and effectiveness of higher education. It not only changes the way teachers teach and the way students learn, but also enhances the learning outcomes and increases the effectiveness of the education.

Last but not least, higher education institutions in Vietnam have recently made substantial efforts in experimenting and implementing various new approaches of teaching. Therefore, it is necessary to promote studies that look into both theoretical and practical aspects of teaching and learning methods implementable in the present system of higher education in order to enhance the effectiveness of the system.

In brief, as in other higher education systems, the challenges facing Vietnamese higher education seem critical and endless. However, the willingness to adopt changes among the trained instructors - the catalysts of the innovation, and the more effectiveness of the professional development programs can lead to more positive outcomes for reforms in the current national higher education system.

## **REFERENCES**

Dao, Thai Lai et al. (2011). The current changes on the teaching methods in higher education. *Thực trạng đổi mới phương pháp dạy học ở đại học. The Proceedings of the Conference on Educational Sciences in Vietnam, 21*, 116-123). Ministry of Education and Training, Vietnam.

MOET, (2013). *The Degree 12/TT-BGDĐT. The professional development programs for higher education instructors. Chương trình bồi dưỡng nghiệp vụ*

*su phạm cho giảng viên cơ sở giáo dục đại học*. The Ministry of Education and Training, Vietnam.

Ngo, Tu Thanh (2008). The solutions to change the teaching methods in Vietnamese ICT universities. Giải pháp đổi mới phương pháp giảng dạy tại các trường đại học ICT Việt Nam hiện nay. *The Journal of Science The National University – Hanoi, Social Sciences and Humanities 24 (2008)*. `237-242.

Sajjad, S. (2005). *Effective teaching methods at higher education level*. University of Karachi, Pakistan

Vo, Thi Xuan. (2006). *The study on solutions to increase the effectiveness of technical instructional skills. Nghiên cứu đề xuất giải pháp nâng cao hiệu quả đào tạo kỹ năng sư phạm kỹ thuật*. The Ministry-level research project carried out at The University of Technical Education, Ho Chi Minh City.

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