

Innovating Practice Teaching Methods At Vinh Long University Of Technology Education

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Abstract: Proper application of teaching methods will help students form the ability to conduct their self-study and self-research, create a dynamic learning environment and adhere to technological processes as well as manipulation patterns to form students' professional skills. The current situation of applying practice teaching methods at the Vinh Long University of Technology Education is regarded as being well-implemented as the practice teaching methods are consistent with the teaching objectives, content, and time. In addition, practice teaching methods conform to the technological processes, manipulation patterns, technological applications, etc. However, there is still a growing need to foster the teaching staff with the aim of innovating practice teaching methods and practice evaluation methods to improve the performance of practice teaching.

Keywords: Teaching methods, practice teaching, professional practice, students.

Introduction

Teaching methods are the ways to conduct teaching activities, playing an important role in determining the effectiveness of teaching. Teaching with proper methods will not only convey knowledge in full but also arouse students' interest, self-discipline, and initiative (Hang & Van, 2020). Lecturers, especially vocational lecturers, should always have appropriate and creative practice teaching methods in order to provide practice skills for technical students to meet the actual needs specified by employers (Trung & Van, 2020).

The innovation of teaching methods requires appropriate conditions in terms of facilities, facilities and teaching organization, and conditions on organization and management. In addition, teaching methods are subjective (Vu Hong, 2022). Each teacher with his or her own experience needs to identify ways to improve teaching methods and personal experience.

One of the basic orientations of educational reform is to move from academic education, away from reality, to an education that focuses on forming action capacity, and promoting

initiative and creativity. created by learners. An important orientation in the innovation of teaching methods in general and the innovation of university teaching methods, in particular, is to promote positivity, self-reliance, and creativity, develop action capacity, and work collaborative capacity. of learners. Those are also inevitable trends in the reform of teaching methods in each school (Cuong, 2013; Van, 2022).

The Resolution of the 8th Plenum of the Central Committee of the XI session on a fundamental and comprehensive renovation of education and training stated: "Continue to strongly renew teaching and learning methods towards modernity; promote positivity, initiative, creativity, and application of learners' knowledge and skills; overcome the one-way imposed transmission, remembering machines. Focusing on teaching how to learn, how to think, encouraging self-study, and creating a basis for learners to update and renew knowledge, skills, and capacity development (Trung & Van, 2020; Vu Hong, 2021). The shift from studying mainly in class to organizing diverse learning forms, paying attention to social activities, extracurricular activities, and scientific research.

Promote the application of information and communication technology in teaching and learning". In order to well implement the goal of a fundamental and comprehensive renovation of education and training according to Resolution No. 29-NQ/TW, it is necessary to have a correct awareness of the nature of innovation in teaching methods in the direction of developing learners' capacity and some measures to innovate teaching methods in this direction (DucHiep et al., 2022).

Therefore, the Vinh Long University of Technology Education finds it a must to well manage the practice teaching methods in order to form students' competence in self-study and self-research, create a dynamic learning environment, conform to the technological processes and manipulation patterns to form students' professional skills as well as providing opportunities for students to experience and promote their personal strengths, etc. The innovation process requires managers to learn the nature and the way to apply effective teaching models and methods in accordance with the conditions of both the university and the students while the training process is still ensured. Innovating practice teaching methods have to ensure the orientation of lecturers and students in applying effective methods to each profession, and regularly encourage lecturers' creativity in applying advanced methods and students' learning through the mentioned methods.

Research results and discussion

The situation of applying practice teaching methods at Vinh Long University of Technology Education

Normally, a vocational training process goes through 3 stages: 1) preparation phase, 2) implementation phase, and 3) closing phase. Particularly in the implementation phase, specific teaching methods are applied scientifically depending on the objectives, content, and nature of the lesson. The teaching and practice organization methods are mainly

built on the basis of J. Watson's behavioral theories (1878-1958), taking the repeated repetition of combined exercises and movements. thinking process to gradually perfect the exercises and movements, thereby forming professional skills and techniques.

For the implementation stage in the process of organizing lessons, there are 3 basic teaching methods: 4-step practical teaching method, 3-step practical teaching method, and 6-step practical teaching method.

In the process of organizing practical lessons, based on the objectives, content, and nature of the lessons, teachers will choose and apply appropriate teaching methods for a practice lesson. specifically in order to promote the activeness and initiative of students and improve the effectiveness of the lesson.

In order to investigate the current situation of applying practice teaching methods at Vinh Long University of Technology Education, in August 2021, we conducted a field survey on managers and lecturers teaching practice in technical majors such as Electrical & electronics engineering, Manufacturing Engineering, Mechanical Engineering, Automotive Engineering, and Information Technology.

The survey subjects include 15 managers and 75 practice lecturers. The survey content of practice teaching methods includes (1) practice teaching methods and teaching objectives, content, and time; (2) practice teaching methods for each course, module, and specific features of each profession; (3) Practice teaching methods in promoting students' self-discipline and activeness and meeting students' competence; (4) Practice teaching methods conforming to technological processes, manipulation patterns to form students' professional skills; (5) Practice teaching methods in combination with both traditional and modern teaching methods and application of new technologies; and (6) practice teaching in consistence with self-study instruction, testing and assessment methods.

Evaluating the necessity for practice teaching methods

The survey results show that the majority of managers and lecturers asserted that practice teaching methods are necessary for training professional skills for students. In specific, 3 factors agreed as the most necessary include: Practice teaching methods must be consistent with the teaching objectives, content, and time (90%); Practice teaching methods need to be innovated in order to promote students' self-discipline and activeness and to meet students' competence (88%), and Practice teaching methods must ensure the conformance with technological processes and manipulation patterns to form students' professional skills (92%). Practice teaching methods also need to be combined with traditional and modern teaching methods and technological applications (93%).

However, there is still a sector of practice teaching methods that have not been given much importance and a number of lecturers consider it less necessary, which involves the consistency between practice teaching methods and self-study instruction, testing, and assessment methods (52 %). In reality, lecturers in charge of practice teaching have not instructed students to apply the such method in their self-study. This obtained result needs to be reconsidered because this

method is very important in teaching practice to students.

Evaluating the performance of practice teaching methods

The survey results in Table 1 show the managers' and lecturers' performance of practice teaching methods as follows:

The majority of managers and lecturers insisted that, during their practice teaching, they equipped themselves with appropriate teaching methods meeting the content and objectives of teaching programs (92%), and being relevant to each course, module, and specific characteristics of each profession (90%), conforming to technological processes and manipulation patterns to form students' professional skills (95%). Besides, the performance of practice teaching methods in combination with traditional and modern teaching methods, and the application of technologies have been properly applied by lecturers (90%). This shows that the vast majority of lecturers in charge of practice teaching are experienced and highly skilled in producing manipulation patterns and instructing students to practice on modern technological machines in order to shape their professional skills.

Table 1: The results of the survey on the necessity for and performance of managers and lecturers on practice teaching methods at Vinh Long University of Technology Education (Percentage: %)

Oder	Content	Level of necessity (%)			Level of performance (%)		
		Necessary	Not very necessary	Unnecessar y	Excellent	Good	Average
1	Practice teaching methods meet the teaching objectives, content and time.	90	10	0	92	7	3
2	Practice teaching methods meet each course, module and specific characteristics of each profession.	75	25	0	90	10	4
3	Practice teaching methods need to be innovated in order to promote students' self-discipline, and activeness and meet students'	88	12	0	41	55	4

	competence.						
4	Practice teaching method ensures conformance to technological processes and manipulation patterns to form students' professional skills.	92	8	0	95	5	5
5	Practice teaching methods need to be combined with traditional and modern teaching methods, and technological applications.	93	7	13	90	10	4
6	Practice teaching methods are consistent with self-study instruction, testing and assessment methods.	38	52	10	35	60	5

(Source: Survey figures – August 2021)

Besides, the performance of practice teaching methods still consists of certain limitations. In specific, the innovation of practice teaching methods to promote students' self-discipline and activeness and to meet students' competence has not been thoroughly implemented by the lecturers and was rated at 55%. During the teaching process, a number of lecturers have not been proactive enough to innovate their teaching methods to promote students' competence and strengths, or have made some innovations but such innovations were not really effective, or the adoption of methods failed to meet students' competence. Therefore, the applied methods, to some extent, have not promoted students' creativity and not stimulated their activeness in participating in training activities of practice skills.

In addition, the consistency between practice teaching methods and the self-study instruction method and testing and evaluation method was rated at a Good level (60%) by lecturers. This result shows that some lecturers in charge of practice teaching still overlook the instruction of self-study and self-research methods for students and the testing and assessment still mainly focus on evaluating the final products, not the learner's competence. Therefore, the university management needs to pay close attention to directing and having solutions to innovative practice teaching methods so that all lecturers

teaching practices could apply them in the most effective manner.

Innovating practice teaching methods at Vinh Long University of Technology Education

Fostering the innovation of practice teaching methods among lecturers

There is an urgent need to raise lecturers' awareness of innovating practice teaching methods in order to attain the most important goals of helping students achieve high performance, promoting students' independent thinking and creativity, and enhancing students' self-study ability and acquisition of scientific and technological knowledge, professional practice and skill improvement. Instructing students technical students in experience, self-study, and self-research should also be strengthened.

The university needs to conduct a review and an evaluation of the current situation of teaching quality of lecturers through specific activities such as attending classes, organizing lectures, and organizing lecturer skills contests... to classify or categorize lecturers on the appropriate basis. On such a basis, the university will be able to actively direct the planning of retraining and fostering lecturers in specialized academic branches and faculties.

To innovate practice teaching methods for

training majors, it is necessary to focus on providing teachers with practice teaching competencies such as the ability to design practice teaching activities, and the ability to identify steps in teaching a practice lesson in a certain sequence, which meets students' acquisition capacity and skills in designing situations in practice teaching.

For the building of lecturers' practice teaching competence, it is necessary to focus on the identified contents. Fostering methods of designing practice lessons for training majors in the direction of training students' practice skills should be emphasized. The quality of lecturers' instruction always acts as the most important condition in the formation of students' skills. Therefore, lecturers' meticulous preparation is the factor determining students' active participation in learning activities.

The adoption of teaching methods in each faculty, academic branch, and the course must be flexible to suit students' competence and the available facilities at the university. Simultaneously, the university needs to prepare plans for sending lecturers to training and retraining courses to improve their capacity, which can be flexibly carried out in various forms such as short-term training and retraining courses on the campus.

Innovating the evaluation and promoting the application of technologies in practice teaching

Practice teaching methods must be consistent with the method of testing and evaluation, in which the results are not based on products, but on learners' competence. The method of testing and evaluating practice teaching results needs to be innovated to ensure the accuracy, objectivity, publicity, scientific basis, and professional practice content. Evaluation results can truly reflect the level of students to encourage and motivate students to be active and creative in learning.

In order to perform the innovation of practice teaching methods, it is necessary to consider a number of important factors, one of which is the application of technologies and modern teaching equipment. Specifically,

vocational lecturers themselves always have to learn and conduct research to be aware of how to skillfully use and operate all kinds of modern machinery and equipment in order to instruct students to achieve the best practice performance.

In addition, it is necessary to increase the technical equipment in terms of quantity to meet the number of students in a class to help them have enough time for skills practice. The university also needs to equip modern and advanced devices in line with the region's production and labor markets. Besides, it is necessary to expand training affiliations with other universities and strengthen practice coordination at enterprises to take advantage of the advanced technology and equipment, especially for professions requiring high-tech skills.

Fostering students' positive learning methods and attitudes

Self-reliant learning methods play an important role in actively promoting students' creativity. In various forms, it is necessary to provide students with general learning methods and learning methods in their specialized courses. Thus, there are many ways to innovate teaching methods with different approaches. The innovation of teaching methods requires appropriate conditions in terms of equipment, teaching facilities and organization, and management conditions.

Before teaching professional skills, teachers need to instruct learners that learning is a self-reliant goal. When learners determine that learning is to equip themselves with the ability to do an oriented job, learners will learn to acquire the necessary professional knowledge and skills. When this goal is identified, learners will have the motivation and passion for learning. It is not merely for the purpose of dealing with exams or getting qualifications, but for working. However, students attending universities also establish a higher target, which is learning to be creative and reach the peak of knowledge and creativity, and thus they will be passionate about learning. Once learners do not have the desire to create things, they will not be self-disciplined, determined, and enthusiastic

about learning (Ty, 2007; Tuan, 2012). Therefore, the university needs to heighten the right awareness among students in practice learning, so that the application of practice teaching methods can promote students' initiative and dynamism.

During the practice process, the arrangement of seating, practice locations, lighting, temperature, etc. will also have a positive impact on students, causing them to have excitement and stimulating their positive learning motivation. At the same time, students should be encouraged to adopt self-practice methods to enhance their activeness and self-discipline in practice learning and gradually form their professional skills. In addition, lecturers need to pay attention to creating conditions and assisting students in self-acquiring new knowledge, forming and developing self-study skills, cooperation skills, and self-assessment skills.

In addition to applying basic methods such as modeling and positive training, it is necessary to organize group teaching or experiential learning, problem-solving teaching; project-based teaching, along with other teaching techniques to make students more interested in learning as well as gaining more personal experience.

Conclusion

At present, methodological innovation is one of the central tasks of the education sector. Implement innovation in teaching methods in the direction of promoting students' positivity, initiative, and creativity, and increasing the application of knowledge in practice. Teachers are the organizers of learning activities, suggesting, leading students to experience themselves, interactive activities through textbooks, documents, real objects, utensils, etc. to exchange with friends, etc. to create and acquire knowledge. Thanks to that, students' abilities and qualities are formed and developed.

Innovating practice teaching methods is considered an important and necessary requirement in training students in technology

education. When lecturers apply appropriate practice teaching methods, this will help students acquire a huge amount of knowledge and obtain firm professional skills, contributing to improving the quality of high-tech human resources training, and meeting the practical requirements of the engineering industry in the period of industrialization, modernization, and international integration.

REFERENCES

1. Cuong, N. V. (2013). *Modern Teaching Theories*. Vietnam: Hanoi University of Education.
2. Chau, N. H. (2006). *Basic issues concerning the teaching program and the teaching process*. Hanoi: Education.
3. Dung, T. V. (2010). *Methods of teaching*. Hanoi: Education.
4. DucHiep, H., VoThanh, H., & Vuhong, V. (2022). The changes in education policy in the context of educational innovation in Vietnam. *Revista on Line De Política E Gestão Educacional*, 26(esp.1), e022043. <https://doi.org/10.22633/rpge.v26iesp.1.16772>
5. H. V. Van., & Hiep, H. D. (2019). Innovating teaching and learning methods to improve the quality of human resource training in Vietnam today. *International Journal of Science and Research* 8 (8), 1853-1861. DOI: 10.21275/ART2020713
6. H. V. Van. (2022). Education policy in the context of Vietnam's international integration: Problems raised and proposed solutions. *International Journal of Health Sciences*, 6(S4), 3562–3571. <https://doi.org/10.53730/ijhs.v6nS4.9019>

7. Hang, L. T., Van, V. H. (2020). Building Strong Teaching and Learning Strategies through Teaching Innovations and Learners' Creativity: A Study of Vietnam Universities. *International Journal of Education and Practice*, 8(3): 498-510. DOI: 10.18488/journal.61.2020.83.498.510
8. Trung, N. S., Van, V. H. (2020). Educating Traditional Cultural Values in Vietnam Universities. *South Asian Research Journal of Humanities and Social Sciences* 2(3), 210-214. DOI: 10.36346/sarjhss.2020.v02i03.006
9. Trung, N. S., & Van, V. H. (2020). Vietnamese Cultural Identity in the Process of International Integration. *Journal of Advances in Education and Philosophy* 4(6), pp. 220-225.
10. Tuan, N. V. (2012). *Teaching Methods for Technical Specialties*. Vietnam: Ho Chi Minh City National University.
11. Ty, D. P. (2007). *Teaching Methods in Industrial Engineering*. Hanoi: Science and Technics.
12. Van, V. H. (2022). The State's Legal Policy and Management on Civil Servants: The Current Situation and Issues Raised. *International Journal of Early Childhood Special Education*, 14(3). DOI: 10.9756/INT-JECSE/V14I3.688
13. Vietnam National University, Ho Chi Minh and National Council for Education and Human Resource Development. (2014). Document of the International Integration Workshop in Vietnam's educational reform process.
14. Vu Hong, V. (2021). Management of educational activities in schools towards the approach of learners' competency: a case study of a high school. *Nuances: Estudos Sobre Educação*, 32(00), e021005. <https://doi.org/10.32930/nuances.v32i00.9118>
15. Vu Hong, V. Managing traffic safety education activities in primary schools: status, necessity, and influencing factors. *Revista online de Política e Gestão Educacional*, Araraquara, v. 25, n. 3, p. 2535-2551, Sep./Dec. 2021. e-ISSN: 1519-9029. DOI: <https://doi.org/10.22633/rpge.v25i2.15840>