Design and Application of Hybrid Teaching in Higher Vocational Courses from the Perspective of Deep Learning

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Abstract: This paper discusses the mixed teaching design and application of higher vocational courses under the background of deep learning. At the same time, it discusses and describes the concrete application of this teaching model. It is hoped that it can provide support for the effective development of related teaching activities, further improve the teaching quality of higher vocational courses and promote the realization of related teaching objectives.

Keywords: deep learning; higher vocational courses; hybrid teaching; design; application

The rapid development of information technology has laid a solid foundation for the wide application of hybrid teaching. The effective application of this teaching mode can not only improve the interactivity and pertinence of teaching activities, but also provide strong support for the subsequent teaching evaluation. However, due to the influence of many factors, many higher vocational colleges still have a serious phenomenon of “pseudo learning” in the process of applying this teaching mode, which leads to the failure of this teaching mode to play an effective role. To strengthen the application of the concept of deep learning can not only improve students’ cognitive level, autonomous learning ability and thinking innovation ability, but also effectively supplement the mixed teaching. In order to improve the current mixed teaching situation in higher vocational colleges, this plays a very positive role in the realization of the goal of talent training in higher vocational colleges. Therefore, it is necessary to carry out in-depth research on the relevant contents.
I. The Significance of Strengthening Hybrid Teaching Design for Higher Vocational Courses under the Background of Deep Learning

First, in vocational education, work-oriented, pay attention to the skills learning to meet the relevant jobs, attach importance to students’ experience, reflection and creation in learning, in order to promote students to realize the internalization of professional ability and accomplishment in practice. The hybrid teaching model based on deep learning has strong interactivity and practicality. It not only pays attention to the mastery of students’ subject knowledge, but also attaches great importance to the formation of students’ vocational skills and literacy. And this and vocational colleges work-oriented concept has a high degree of agreement.

Second, in vocational education, the main goal of its curriculum system construction is to cultivate students’ professional ability. Therefore, its teaching content is based on professional ability, with obvious characteristics of task and project. Therefore, the teaching activities of vocational colleges have strong flexibility in teaching and learning. The mixed teaching mode under the background of deep learning takes the work flow of students’ specialty as the main line, makes good use of the task to carry on the teaching drive in the teaching, can carry on the teaching design with the student’s study as the core, pays more attention to the student’s skill formation process, and the student’s participation in the classroom breadth and depth, which is precisely the main method of cultivating the student’s vocational ability and promoting the achievement of the employment-oriented goal in higher vocational colleges[1].

Third, although vocational education can provide applied talents for specific fields or posts, due to the rapid development of modern science and technology, it is obviously impossible to meet the development needs of modern society. This requires vocational colleges to cultivate students’ professional knowledge, but also their thinking ability, innovation ability, teamwork ability and lifelong learning ability, so that they can show strong applicability in social development. The mixed teaching mode under the background of deep learning pays great attention to the cultivation of students’ comprehensive quality and ability, which can effectively improve students’ social adaptability and play a very positive role in improving the quality of talent training in vocational colleges.

A. Design and Application of Hybrid Teaching in Higher Vocational in the Context of Deep Learning

a. Construction of Related Teaching Patterns

This paper mainly combines the theory of deep learning, starts with the related fields and dimensions of deep learning, based on the cultivation of students’ ability, and discusses the construction of mixed teaching mode for higher vocational courses. They are as follows:

First of all, taking the goal of deep learning ability as the guide, the related teaching activities, teaching methods and teaching evaluation before, during and after class are designed. The whole teaching model covers the cognitive field, interpersonal field and personal field, in which the teaching goal of cognitive field is to strengthen the cultivation of students’ ability and accomplishment on the basis of paying attention to the students’ knowledge of the subject. For example, the ability to innovate,
the ability to explore problems, and the ability to solve problems. The goal of interpersonal field is to cultivate students’ communication ability and teamwork ability. In the personal field, students are required to learn to learn, and have the corresponding learning perseverance, that is, to achieve self-regulation in the process of completing the relevant learning goals, and through the flexible application of various learning methods, Face the challenge with a positive attitude and complete the learning task with high quality.

Secondly, in the case of teachers’ comprehensive understanding of students’ cognitive ability, learning foundation and interests, some challenging activities are set up. However, before the formal implementation of teaching activities, teachers need to use the guidance task list and autonomous learning evaluation form to cultivate students’ autonomous learning consciousness and ability. In class, it is necessary to create the problem situation and stimulate the students’ interest effectively, so that their thinking activities can get a strong driving force, so as to improve the students’ thinking ability. In addition, some activities with coordination and interaction should be included in the class to develop students’ teamwork and communication skills. In the after-class part, it is necessary for teachers to guide students to participate in various practical activities, and to guide according to their performance so as to promote the individualized development of students.

Finally, under the background of deep learning, the mixed teaching evaluation is mainly aimed at the evaluation of the students’ deep learning situation during the study period. The evaluation involves the students’ self-evaluation before class, the evaluation of the process in class, including the thinking of the problem, the debate, the report and the mutual evaluation on. There is also after-class unit test evaluation and practical task evaluation.

b. Hybrid Teaching Design and Application of Related Courses

First, learning situation analysis. Under the background of deep learning, the mixed teaching design of the course must analyze the characteristic factors of the students themselves. Therefore, before the teaching design, teachers need to carry out a comprehensive investigation on the students’ learning habits, learning motivation, communication ability, cooperation consciousness and information literacy, etc., which can be completed by questionnaire survey or various test activities. According to the investigation, it is not difficult to find that the students in higher vocational a weak sense of autonomous learning and ability, often in a passive state in curriculum learning, and have a greater dependence on teachers. Therefore, in the process of designing the mixed teaching mode, teachers must improve the interest of teaching design in order to stimulate students’ interest in learning and make their subjective initiative fully play out. In order to actively participate in teaching activities.

Second, Teaching goal design. Under the background of deep learning, the mixed teaching mode design of higher vocational courses must be reasonably set up to ensure that students’ thinking ability and core accomplishment can be effectively cultivated. The specific teaching objectives are as follows: first, in terms of knowledge and skills. Students are required to master the core knowledge of the major, and can solve practical problems through the rational application of relevant knowledge.
students’ problem-solving ability, innovative thinking and discipline core literacy can be effectively improved; secondly, in the process and method. Students are required to be able to flexibly apply various learning methods, can effectively meet the needs of autonomous learning, and can work with the team to complete various learning tasks so that students’ autonomous learning ability, teamwork ability can be effectively cultivated; finally, in terms of values and emotional attitudes. Students are required to be able to manage and control themselves in the process of completing related learning tasks and devote themselves to learning tasks. While improving students’ interest in learning, we should cultivate their positive, pragmatic and realistic attitude towards learning, so as to cultivate students’ good study habits and firm learning perseverance.

Third, teaching content design. For students, deep learning requires them to complete the construction of knowledge system independently, and solve practical problems through the effective application of knowledge. This requires teachers to combine the teaching objectives of in-depth learning and the curriculum characteristics of each major to strengthen the combing of teaching content a good job of reorganization. In order to set up for students conducive to knowledge integration and transfer of teaching content. At the same time, teachers should realize that only when the teaching content has a strong attraction to the students, can the students consciously participate in the teaching activities and realize the effective construction of the knowledge system. Therefore, in the process of teaching content design, students can be guided to explore and think through the setting of problems, and keep the corresponding space for them to innovate their thinking and promote the exertion of their team wisdom. In this regard, teachers can take the professional work flow of students as the main line of teaching, reorganize the content of the course, and combine the main line of teaching with the way of micro-film to create the theme admiration class and micro-class, so as to provide support for students’ autonomous learning.

Fourth, the construction of teaching environment. For the hybrid teaching model in the context of deep learning, information technology is a very key content. Using the relevant advantages of information technology, such as controllability, dynamics, situationalization, concretization and visualization, it can provide a tool for students to obtain information, situational communication, cognitive processing and subsequent evaluation. Therefore, in the construction of teaching environment for related courses, it is necessary to strengthen the construction and improvement of hardware and software facilities. For example, offline wisdom classroom, online teaching platform, training base and a variety of mobile terminal equipment and technology and so on. For example, the application of VR technology can set up a situational teaching environment for the curriculum items of a certain subject, so that students can immerse themselves in the situation and obtain a new cognitive experience. This has a very positive effect on the stimulation of students’ interest in learning and the learning and application of related knowledge. It is also the key to realize the effective application of hybrid teaching and achieve the goal of deep learning.

Fifth, the design of teaching activities. In the mixed teaching design, teaching activity design is
a very key content. Scientific and effective teaching activities can not only stimulate students’ desire to explore, but also help them learn how to communicate and cooperate with their peers, and realize the transfer and application of knowledge in cooperation, and then obtain the corresponding sense of achievement and joy. Therefore, in the process of designing teaching activities, teachers should not only design some activities that can cultivate students’ thinking ability, but also consider the social and cultural factors and emotional factors that affect students’ learning results.[6]

**Conclusion**

To sum up, under the background of deep learning, strengthening the mixed teaching design and application of higher vocational courses can significantly improve the scientific and rational design of higher vocational courses, which plays a very positive role in improving the teaching quality of higher vocational colleges. Therefore, higher vocational colleges must attach great importance to the relevant contents, combine with the reality, carry out the work effectively, so as to improve their own talent training quality.

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