

Research on the Training of Engineering Cost Professionals Based On OBE Concept

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Abstract: With the rapid development of market economy, high-quality applied talents have become the main demand of society, which is the key to promote the development of social economy. Under the background of transformation and development, the training of engineering cost applied talents in Colleges and universities should follow the educational law. Therefore, we should learn from advanced teaching concepts, especially the "OBE" education concept, which will better train applied talents. By integrating the "OBE" education concept, we can establish a systematic engineering cost training system for application-oriented majors, including the determination system of talent training objectives, innovative talent training mode, teaching evaluation system, and continuous improvement training mechanism. First of all, this paper analyzes the implementation characteristics of OBE education concept. Then, this paper puts forward some problems in the training of applied talents. Finally, some suggestions are put forward.

1. Introduction

The abbreviation of outcomes based education is OBE, which is a new teaching mode. OBE based teaching design and teaching objectives are the final learning achievements of students, which will represent a kind of ability structure realized through curriculum teaching. OBE first appeared in the reform of basic education in the United States and Australia. At present, OBE teaching concept has become the mainstream of education reform in the United States, Britain, Canada and other countries. In the concept of OBE, the construction of curriculum system will play an important role, which is closely related to students' learning achievements. There should be a clear corresponding relationship between ability structure and curriculum system, and each ability should be supported by corresponding curriculum. Through the course support of the course system, we can realize the contribution of the ability structure, which will enable students to have the expected ability structure.

2. Implementation characteristics of OBE education concept

OBE education concept is a goal oriented teaching method, which has many implementation characteristics, as shown in Figure 1.

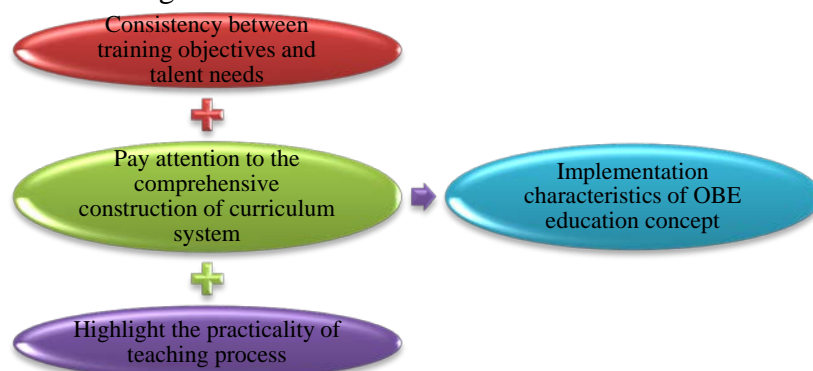


Figure 1: Implementation characteristics of OBE education concept

2.1 Consistency between training objectives and talent demand

At present, there are contradictions between higher education and actual needs. Therefore, colleges and universities in China should introduce the education concept of OBE, which can highlight the practicality of education and the importance of educational achievements. In personnel training, colleges and universities can take learning achievements as the goal of training, which can fully meet the demands of all parties, such as industrial needs, government, schools, parents, students, etc. Therefore, through the OBE concept, colleges and universities can ensure the consistency of training objectives and talent needs. Traditional disciplines tend to be more logical and systematic, which will be difficult to meet the internal needs of the country and society. However, through the "reverse design and forward implementation" of OBE oriented education, colleges and universities will take the actual needs of society as the premise of their own training plan, which can determine the final learning results of students. Finally, through learning outcomes, we can decide on training objectives.

2.2 Pay attention to the comprehensive construction of curriculum system

There is a certain relationship between different courses, which will eventually form a complete course system of interaction and interdependence. Through the OBE concept, the curriculum system will be more close and comprehensive, which will avoid the phenomenon of curriculum fragmentation. In the process of implementation, the OBE education concept will over emphasize the ability standard, which will pay more attention to students' understanding of knowledge. OBE education concept pays more attention to students' learning results, which will require students to have comprehensive knowledge and ability. Through the OBE education concept, colleges and universities can reconstruct the comprehensive curriculum system, which will correspond to the ability structure of students. Therefore, the comprehensive curriculum system based on the OBE education concept will form a clear mapping relationship.

2.3 Highlight the practicality of teaching process

In the process of implementation, OBE education emphasizes the practicality of teaching process, which will pay more attention to the practical ability of students and the practical function of education. OBE education concept emphasizes "student-centered", which will pay more attention to the guidance of teachers. Through the integration of OBE education ideas, the university education and teaching will increase diversified practical projects, such as: internship projects, independent projects, comprehensive projects, etc. Through practical teaching, students of engineering cost will be placed in a complete process environment, which will improve their self-professional knowledge and related basic abilities. Through continuous successful experience, teachers can encourage students to make use of team strength to learn in depth, such as design and creation ability, analysis and comprehensive ability, leadership and communication ability, etc.

3. Problems in the training of engineering cost professionals

A total of 1000 questionnaires were issued, and 971 questionnaires were valid, with an effective rate of 97.1%. The specific analysis is as follows.

3.1 The vague target of talent training

At present, the form of talent training program in Colleges and universities is too single, and the target orientation of talent training is not updated in time. The teaching process ignores the cultivation of students' ability and quality, which will lead to the imbalance of the cultivation of knowledge, ability and quality. According to the survey results, the main problem is vague orientation of talent training objectives, accounting for 79.8%. The second is poor social practice teaching, accounting for 61.5%. Details are shown in Figure 2.

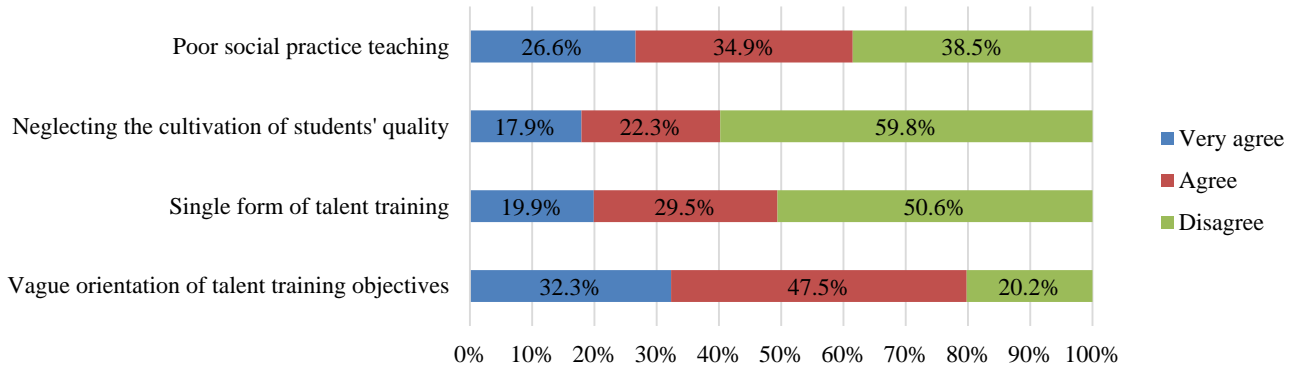


Figure 2. The vague target of talent training

3.2 The single evaluation method

The multiple needs of talents and training objectives require the evaluation system to develop in the direction of diversification. However, the paper and pencil test is still the main evaluation method in many colleges and universities, which reduces the students' practical operation, initiative and enthusiasm. According to the survey results, the main problem is overemphasis on learning outcomes, accounting for 84.7%. The second is lacking of diversified evaluation system, accounting for 65.6%. Details are shown in Figure 3.

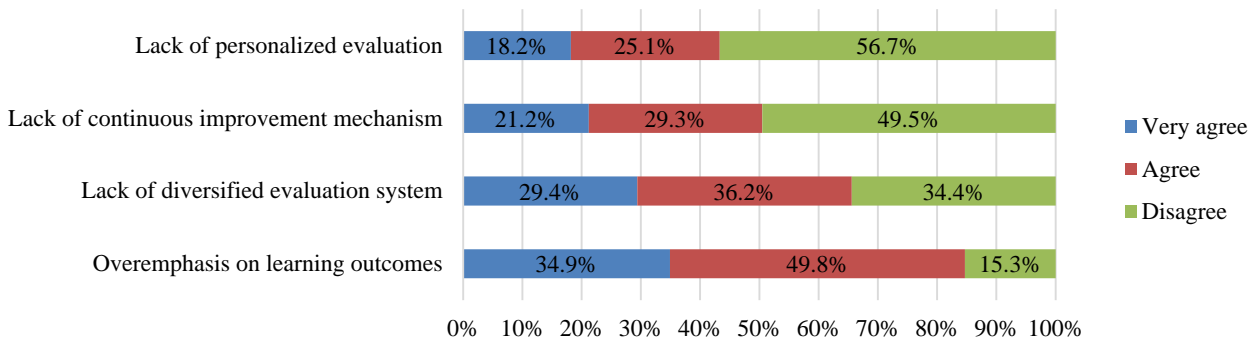


Figure 3. The single evaluation method

4. Measures for the training of engineering cost professionals

4.1 Operation rules of innovative personnel training mode

The rules of talent training system are the important conditions to ensure the normal operation of a system. This paper constructs an OBE based talent training model for engineering cost specialty, which has a variety of rules, as shown in Figure 4.

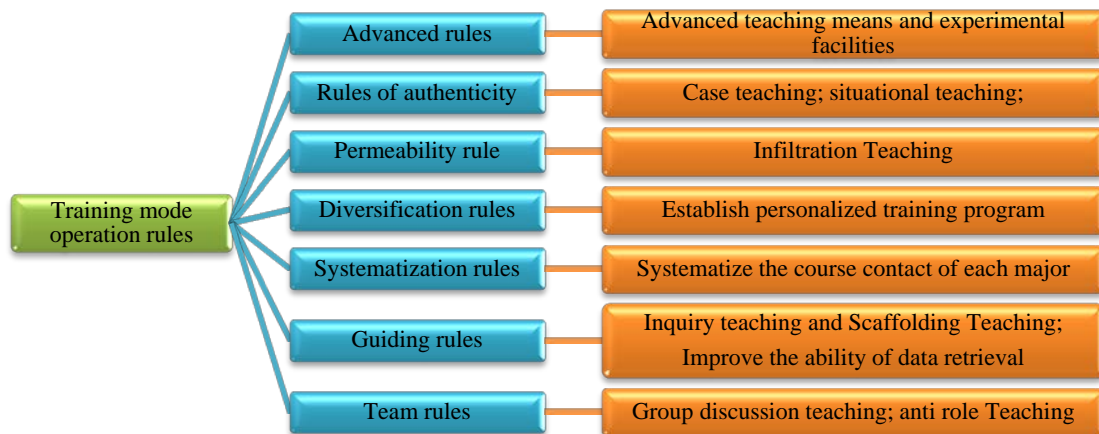


Figure 4. Operation rules of innovative personnel training mode

4.2 Reform student assessment methods

Written examination is the most important way of examination at present. We must change the single way of examination at present. Therefore, colleges and universities can be carried out from the following aspects. First, the content of the test is connected with practice, which will improve the students' practical ability. Second, the test topic setting focuses on the detection of innovation ability, which will improve the students' innovation ability. Third, the combination of open book examination and closed book examination, written examination and oral examination will improve students' comprehensive application ability. Fourth, the combination of diversified and free choice of questions will cultivate students' spirit of research.

5. Conclusions

Through the OBE concept, we can guarantee the consistency of training objectives and actual needs to the greatest extent. Therefore, the OBE education concept has a far-reaching impact on the talent training model. We should build a complete theoretical system and implementation model. Through a variety of assessment methods, students will complete the understanding of the key points and difficulties, which will become part of the assessment of the quality of the test paper.

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