service behaviors, and continuously improve the efficiency of credit classification supervision. Only in this way can we achieve long-term and effective development.

• \* \* \* \*

## DYNAMIC MODELING AND ANALYSIS OF VOCATIONAL EDUCATION TEACHING QUALITY EVALUATION SYSTEM BASED ON COGNITIVE PSYCHOLOGY

#### Qiudong Yu

# College of Information Technology Engineering, Tianjin University of Technology and Education, Tianjin 300222, China

Background: Vocational education is an important branch of education in China, which aims to train technical workers with good professional skills. The teaching quality of vocational education directly determines the technical level of graduates. In order to improve the quality of vocational education and enhance students' knowledge and technical level, it is necessary to establish an appropriate teaching guality evaluation system to continuously improve and optimize the current vocational education policy and content. However, in the current field of vocational education, the importance of the evaluation system is not enough. Some vocational schools do not have corresponding teaching evaluation systems, and some schools have evaluation systems, but they are not mature and perfect. Among the schools implementing the teaching quality evaluation system, the vast majority choose to use the general evaluation system to measure teaching and take the minimum standard as the evaluation index. Such a teaching quality evaluation system does not show a dynamic, continuous development and optimization process, which is difficult to meet the specific situation of vocational schools and the needs of today's vocational education. In the current academic research on the teaching quality evaluation system, psychological means are used to model the evaluation system. The teaching quality evaluation system based on cognitive psychology is one of the research hotspots. Cognitive psychology is a subject rising in the 1950s. It mainly studies the basic human psychological process, that is, the systematic law of the process of human knowledge from input to output. Contemporary cognitive psychology believes that the ability to solve problems is not directly proportional to the amount of knowledge stored in the brain, but related to the ability to organize and extract knowledge. The cultivation of students in vocational education is mainly aimed at the mastery of technology and the ability to use technology to solve problems. In this process, students should be the main body, so that students have a structured and strategic knowledge system, and can find solutions to problems according to the clues provided by problems and the existing knowledge structure. The construction of teaching quality evaluation system by using cognitive psychology to guide vocational education in accordance with the law of human acquisition of knowledge is conducive to optimize teaching methods, improve teaching quality and cultivate vocational school graduates with excellent practical ability.

**Objective:** Teaching quality is the core of the development of vocational education. In order to improve teaching quality, this study constructs the teaching evaluation system based on cognitive psychology. The evaluation index should not only become the standard to judge the teaching quality, but also become the research direction of teachers in different periods. According to the law of students' learning and absorption, we should constantly improve the teaching methods, help students establish a mature knowledge system and exercise their ability to solve problems, so as to cultivate technical talents who can adapt to the current social development.

**Subjects and methods:** The online evaluation of teachers' teaching quality is carried out by means of computer information collection, and the online evaluation of teaching is carried out by the participants of multiple subjects such as leaders, teachers, students and experts to evaluate the teaching effect of the whole semester.

**Study design:** This study collected the online teaching evaluation results of the investigators through computer network.

**Methods:** Using SPSS 17.0 software, this paper analyzes the teaching quality evaluation system of vocational education based on cognitive psychology.

**Results:** Through the statistics and analysis of the results of teaching evaluation, we can clearly see the effect of teaching methods at the current stage. The results of the subjects' satisfaction with the current teaching methods are shown in Figure 1.

Figure 1 shows that most of the respondents are basically and generally satisfied with the teaching quality and teaching methods, of which 50.5% are basically satisfied with the current teaching and 36.2% are generally satisfied. The number of dissatisfied people accounted for 7.5% of the total, and the number of

very satisfied and very dissatisfied people was the least. Therefore, the current teaching methods can basically meet the students' training standards, but there is still room for improvement.

**Conclusions:** The development of scientific evaluation indicators can improve the objectivity and accuracy of evaluation. The significance of teaching evaluation does not lie in the assessment and evaluation of teachers. Its main purpose is to let teachers get the feedback of teaching effect in time and understand the shortcomings of current teaching methods and teaching contents, so as to improve teaching management and improve teaching quality. Teaching quality evaluation system needs to be continuously explored and improved in practice to promote the rapid development of vocational education.





Acknowledgement: The research is supported by: Image verification code recognition software for quality safety dial test system, Horizontal cooperation projects in 2021(NO.HX2021N1); Intelligent detection and recognition algorithm for infrared and visible images, Cooperation project of Beijing Institute of environmental characteristics in 2021 (NO. HX2001M4).

• \* \* \* \*

## STRATEGIES FOR SOLVING THE COMMUNICATION ADAPTATION OBSTACLES OF BIDDING PROCUREMENT IN THE PROCESS OF LABORATORY CONSTRUCTION

### Chunlei Cai

#### Asset and Infrastructure Division, Nantong Institute of Technology, Nantong 226000, China

**Background:** The construction period of the laboratory is long and there are many construction tasks, including planning and design, project application, bidding procurement, construction, cost control, schedule management, risk avoidance and other links. In these links, scientific and effective management is needed to reduce the construction cost and improve the efficiency and quality of laboratory construction and after it is put into use. Laboratory construction process management is inseparable from communication. Effective communication can greatly improve work efficiency, especially in the link of bidding and procurement. Bidding procurement communication involves multiple communication parties, such as Party A, Party B, third-party stakeholders, project team and project team members. Due to multiple communication parties, there may be a variety of communication adaptation obstacles in the actual situation. If one party has no fixed communicator, is unfamiliar with the business, is busy with work, has few communication opportunities and does not participate in the buck passing, it will cause invalid communication and affect the progress of bidding procurement. Considering the safety factors, the components of the experimental equipment are fine and have high requirements. Therefore, the problems caused by the lack of effective communication are not only the waste of resources and time in the construction process, but also the potential safety hazards for the use of the laboratory in the future. The current research shows that about 82% of the factors causing waste and failure in bidding procurement are due to poor communication. In order to safely and effectively complete the task of laboratory bidding procurement, we need to do a good job in multi-party communication and make good use of the advantages