Cultivation Methods of Information Technology Educational Ability of English Teachers in Higher Vocational Colleges

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Abstract. With the maturity of modern IT and the increasing popularity of computer multimedia applications, English-teaching in our country has also developed with the times. Informatization teaching represented by computer, multimedia and other IT is gradually emerging. However, from the overall situation of English informatization teaching (EIT) in China, the situation of EIT is not optimistic. Promoting the informationization of English-teaching resources has become an important task for English-teaching reform. The purpose of this article is to discuss the methods of cultivating English teachers' IT skills. This article surveyed 160 teachers from the aspects of English-teaching methods and teaching content. Using the research method of qualitative research and quantitative research to understand the problems and reasons of English information teaching. Taking into account the characteristics of higher vocational colleges (HVC) and improving the quality of graduates of HVC as the starting point, a method for optimizing EIT of English teachers under the background of educational informatization is proposed.

Keywords: Higher Vocational Colleges, English-Teaching, Information Teaching, Training Mode

1. Introduction
Informatization technology has become an important way to cultivate high-quality, high-skilled application-oriented talents. Information-based instructional design should adopt a systematic approach to promote changes in learning-centered learning methods [1-3]. Make full use of modern information resources, scientifically arrange all links and elements of the teaching process, and optimize the teaching process [4, 5]. It has become an inevitable trend for IT to participate in English-teaching in HVC [6].

The traditional teaching method in HVC is teacher-centered, which predominates in the classroom, and students are passively accepted. Higher vocational students generally lack innovative thinking and ability to adapt to the needs of social development [7-10]. The use of advanced IT in the English-teaching process can not only give play to the guiding role of English teachers in HVC, but also fully reflect the role of students. English-teaching with IT is a traditional English-teaching method that combines IT, information resources, and course content [11, 12]. Their integration has completed the task of teaching modern English [13, 14]. English teachers in vocational colleges become the
organizers and guides of classroom teaching. Modern educational technology is a profound change in the field of education. It requires not only the construction of infrastructure and hardware, but also the corresponding changes in education concepts and talent training methods.

This article illustrates the theoretical basis for supporting this research. After reviewing the literature on English information teaching at home and abroad, this article analyzes the current situation, problems and reasons of English information teaching in HVC. Finally, a method is proposed to improve the teaching design ability of English teachers in English vocational colleges. Design learning tasks suitable for student level, improve the ability of English teachers in HVC to use IT, and build an interactive information-based learning environment. Pre-set teaching activities that combine summative assessments with regular assessments. Improving the teaching design of IT in English-teaching.

2. Method

2.1. Informatization of Education

Education informatization is the process of using IT to promote education reform and promote education modernization. The content of education informatization is based on the information network, with information resources as the core, and the purpose of the use of information resources and the application of IT. Informatization teaching ability is the comprehensive ability of using information resources to engage in teaching activities and complete teaching tasks for the purpose of promoting student development. Informatization teaching ability of English teachers in HVC is the core competence of professional development of English teachers in HVC in the information society. Its purpose is to promote the development of higher vocational students. The information resources used are information-based teaching resources related to teaching.

Intelligence makes the system humane in teaching behavior, human-computer communication is natural, and task agent is complicated. This paper considers that information-based instructional design is a systematic teaching method guided by system theory and constructivist learning theory. Informatization teaching in HVC means that in the English courses of HVC, English teachers in HVC need to make full and effective use of information resources and network technology. Reasonably design and arrange all links in the teaching process, and focus on the design of learning tasks to focus on the learning environment of the learner. Focus on students, better serve students, and train the talents needed in the information society.

2.2. Computer Aided Language Teaching

Computer-aided instruction (CAI) is the process in which teachers rely on a series of computer functions to help complete the teaching process. Computer-assisted instruction is an important application of computers in the field of education and the birth of a new type of educational technology teaching method. CAI can effectively shorten students' learning time inside and outside the classroom, and the teaching effect is obvious. It can optimize the teaching goals in the shortest time. Computer-assisted language teaching is divided into two phases. The first phase is the computer-aided learning phase. This stage mainly uses the functions of the computer, such as fast calculation, graphics, animation, etc. Can help English teachers of English Vocational College to solve difficult knowledge in teaching. Most of them are based on courseware presentations. At present, the concept of IT education has not been proposed. The second stage is personalized teaching. This phase emphasizes the use of computers to gather information, self-learning by instructors, and discussion of questions and answers. Help English teachers in vocational colleges arrange learning programs, with greater emphasis on computer-assisted learning.

3. Experiment

This article has established a more rigorous research framework through rigorous preparation and research design. In view of the accuracy and reliability of the above research process, we can ensure
that the questionnaire in this article has good content validity. This article hopes to analyze the status quo of information teaching ability of English teachers in HVC. In addition, this question also introduces the research objects of English teachers in HVC. The research methods and data collection and implementation process are explained in detail.

This paper makes a random survey on the information-based teaching ability of English teachers in English vocational colleges. Randomly selected 160 English teachers in vocational English colleges as the research object. The interview was conducted after the investigation. A total of 15 English teachers from English vocational colleges were randomly selected and interviewed from 160 respondents. Four of them are novice English teachers with two years of vocational teaching experience and two graduate students with one year of postgraduate teaching experience. 5 skilled undergraduate vocational English teachers, 3 undergraduate teachers with 5 years of vocational English work experience and 2 master's degree teachers. And 6 professional English teachers with 10 and 12 years experience respectively. This article mainly analyzes the basic information of English teachers in HVC from the aspects of gender, specialty and whether to participate in educational practice. Table 1 shows the overall situation of sample data statistics. It can be roughly understood through the relevant data in Table 1. In the formal 160 questionnaires, 34 men and 126 women participated in the survey.

Table 1. Basic information of the questionnaire

| Basic Information                   | Attributes | People |
|------------------------------------|------------|--------|
| Gender                             | Male       | 34     |
|                                    | Female     | 126    |
| Education                          | Specialist | 2      |
|                                    | Undergraduate | 101  |
|                                    | Master's Degree | 57   |
| Whether To Participate In Educational Internship | Yes | 145 |
|                                    | No         | 15     |

4. Discuss

This article sent a total of 160 questionnaires. Collected 156 questionnaires. The questionnaire recovery rate was 97.5%. The author randomly selected 68 questionnaires and tested their reliability and validity using SPSS17.0 software. In this paper, the Cronbach α coefficient is used to test the internal consistency of the questionnaire. The reliability statistics table is shown in Table 2.

Table 2. Reliability statistics

| Cronbach's Alpha | Number of items |
|------------------|-----------------|
| 0.842            | 20              |

From the data in Table 2, it is found through investigation that English teachers in English Vocational Colleges highly recognize the role of information-based teaching ability in their professional development. In the current higher vocational education, English-teaching has become increasingly prominent. According to the actual situation of HVC, colleges and universities should use the strength and resources of their own educational technology centers. Organize various English teachers' information skills training and lectures.

The problems in English-teaching in higher vocational education affect and restrict the development of higher vocational college education to a certain extent. Students in HVC generally suffer from poor English foundation, high English learning pressure, poor oral expression ability, traditional teaching methods, and rigid English-teaching environment, which have seriously affected students' professional English learning. The quality of teaching directly affects the training of vocational talents. In view of the problems in English-teaching in HVC, we must start from the height of the times and the needs of international competition. According to the survey and statistical data, the statistical distribution of English teachers' gender in HVC is shown in Figure 1. As can be seen from the data in the gender statistics distribution chart in Figure 1, the proportion of men and women participating in this questionnaire survey is very different. Male students accounted for only 21.3% of
the total number of respondents, and female English teachers in vocational colleges were significantly higher than male English teachers in vocational colleges.

![Gender distribution of vocational teachers](image)

**Figure 1.** Gender distribution of vocational teachers

At the same time, HVC and universities should pay more attention to the formation of the cultural atmosphere of IT. Expand the application of IT in the service system of HVC, so that teachers and students in HVC can fully enjoy various information resources. In this learning process, teachers in vocational colleges will learn and use IT in a subtle way. The professional teaching and training of IT is the most effective way to improve the information teaching ability of English teachers in HVC. IT training content should be changed from a single isolated computer. It can be the basic skills to learn a variety of IT skills in the network environment. It can realize the optimization and integration of IT and English courses, so as to improve the information teaching ability of English teachers in HVC. HVC should establish and improve the training system of English teachers' information education technology ability in HVC. According to the actual situation of HVC, we should make full use of the various resources of HVC, and actively create an atmosphere and environment for training in terms of policies, personnel and facilities. Establish a practical IT training plan and corresponding incentive measures. Create an atmosphere conducive to vocational English teachers' education and learning of IT, and promote English teachers' active participation in IT training.

5. Conclusion

The level of informatization is now more and more extensive. The reform of English-teaching in HVC based on IT is imperative. Informatization teaching ability of English teachers in English vocational colleges has become an important issue in the development of modern information education. The information literacy and ability training of English teachers in HVC requires a perfect curriculum and environment, but it is inseparable from the efforts of English teachers in HVC. Therefore, the establishment of training mode must be based on the actual situation of English teachers in HVC and help English teachers in HVC adapt to the new requirements put forward by the information society. Help higher vocational English teachers change their ideas, strengthen the cultivation of IT literacy, and adapt to the continuous development of information education. Studying the development and optimization strategies of English information teaching in HVC is conducive to the development of professional learning and has a very important impact on improving the efficiency and quality of English-teaching in HVC.

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