

10.18686/wef.v2i4.4610

An Analysis of Vocational English Mixed Teaching Based on Intelligent Teaching Concept and Artificial Intelligence Technology

-- A Case Study of Software Technology

Zhenxiao Zhang

Hainan Vocational University of Science and Technology, Haikou, Hainan 571126

Abstract: Smart education is a new educational concept, which refers to integrating teaching resources with digital technology, updating teaching mode and innovating teaching scenes. With the development of artificial intelligence technology, this paper analyzes the teaching measures combining intelligent education and artificial intelligence technology, and takes software technology as an example to analyze the application of software technology in English mixed teaching in higher vocational colleges.

Keywords: Wisdom education concept; Artificial intelligence technology; Vocational English

The emergence of artificial intelligence, using traditional teaching methods, can not meet the needs of the development of The Times. Therefore, to improve the quality of education, artificial intelligence technology needs to be introduced. Nowadays, the concept of smart education has emerged and has been widely used in the classroom. Micro-class and flipped classroom are the teaching modes proposed by the concept of smart education. Intelligent teaching is the future development trend. In order to improve English teaching methods, schools introduce hardware equipment, and artificial intelligence technology is one of the introduced equipment. This paper analyzes the integration of intelligent concept and artificial intelligence technology.

1. The role of artificial intelligence in education

In the field of education, artificial intelligence technology has been widely used, especially the emergence of intelligent teaching concepts and the emergence of various intelligent teaching systems. In terms of intelligent teaching, the emergence of artificial intelligence makes the teaching model more unified, and promotes the design of intelligent teaching model in the tutoring system. Artificial intelligence technology can achieve multi-dimensional optimization of education services, and its application in different scenarios has been demonstrated. In the process of designing the intelligent concept classroom, the use of artificial intelligence technology can improve students' satisfaction with teaching according to the English learning content. With the help of artificial intelligence, teachers' teaching efficiency has been improved, teaching resources have been optimized, and cloud computing and big data technology have been applied to achieve good teaching results. In general, the integration of artificial intelligence technology into education will gradually transform the teacher-centered classroom into a student-oriented classroom. The use of artificial intelligence technology by teachers can stimulate students' interest, improve students' interest and sense of experience, realize smart classroom, and make learning no longer boring, but gradually become a kind of enjoyment.

2. Current situation of English teaching for software technology majors combined with wisdom education concept

In the English teaching of analysis software technology majors, the problems existing in the teaching process should be analyzed in detail before applying the wisdom concept into the artificial technology innovation method. The article creates a list of software professional analyses, as shown in Table 1:

The above results show that there are many problems in the English teaching stage, but through continuous improvement of the teaching program, various problems have been solved.

3. Innovative teaching measures

3.1 Construct English ecological teaching

In the English teaching of artificial intelligence technology, it is necessary to have the ability to build a smart classroom, establish a good

Table 1. Analysis table of teaching challenges for software majors

Challenge the reason	Impact indicators	The current level	Ideal goal	Gap exploration	Improvement scheme	Effect display
Students' self-learning ability is weak	Self-study completion efficiency	49%	84%	35%	Reasonable design of adaptive platform	Students' independent learning ability has been improved
The teaching evaluation system is backward	Student satisfaction	59%	89%	30%	Reasonable adjustment of teaching feedback mechanism	The level of teaching has been improved
Resources are improperly allocated	Utilization rate of laboratory equipment	74%	89%	15%	Increase equipment investment, purchase advanced equipment	Equipment utilization is improved
Lack of student experience	Project completion results analysis	3 semesters	5 semesters	5 semesters	Schools work with companies to develop learning programs	Students' learning experience is improved
Teachers have a single knowledge structure	Breadth of teaching content	69%	94%	25%	Adopt multidisciplinary cooperation to train teachers' ability in different fields	Teachers' knowledge is enriched
Theory is disconnected from practice	Practical operation ability	64%	89%	25%	Experiment practice should be increased and case teaching should be adopted	Improve students' practical ability

relationship between teachers and students, and build a smart ecological evaluation system. With the help of artificial intelligence, teachers need to interact with students and let students act as subjects to realize intelligent teaching. Through the use of ecological knowledge of education, the construction of artificial intelligence technology, the development of scientific plans, so that the needs of English teachers can be met, the integration of teachers and artificial intelligence, students feel more interesting English knowledge, the application of big data, to provide students with accurate evaluation, in the teaching stage, teaching environment, teachers and students, artificial technology can bring unlimited possibilities.

3.2 Construct an English learning model

Students are the main body of the classroom, and to improve the quality of English teaching, it is necessary to conduct individual analysis. Artificial intelligence data technology provides technical support for English teaching in higher vocational colleges. Artificial intelligence technology is used to dig deeper the learning archives of higher vocational colleges and provide help for teachers' teaching through data analysis.

In the stage of constructing vocational English learning situation, through the application of educational administration system and platform, students' learning process and files are collected. The English learning file contains students' English learning results, learning interests and learning goals, etc. The English learning process data includes English test results, watching English videos, learning time after class, etc. Students' daily English files include English competition and English sentence structure, and deep learning methods are adopted to promote the construction of English learning model.

3.3 Construction of intelligent teaching evaluation system

With the help of artificial intelligence technology, teachers can comprehensively evaluate teaching activities and timely understand the learning terminals of students and teachers, which is conducive to the construction of ecological teaching activities. Adopt a variety of evaluation methods, including teacher-student cooperation evaluation, student self-evaluation, machine evaluation, etc., to promote the classroom evaluation more complete. Through the use of self-assessment measures, students can understand their own shortcomings. The English classroom evaluation stage includes the instant evaluation of the intelligent learning platform, and the teacher can delay the evaluation. In addition to the above, with the help of software, we can create a dynamic evaluation system and complete the teaching objectives.

3.4 Provide students with a good learning environment

According to the English learning goal, integrated into the intelligent program, in the intelligent ecological teaching environment, and with the help of mobile teaching software, artificial intelligence technology has been widely used in English teaching. This kind of teaching method needs the support of data, takes the student as the center, and promotes the realization of the goal of the wisdom teaching concept. Smart vocational education and other apps are applied to accurately analyze students' learning conditions, and create teaching environments such as practical ecology, resource acquisition, and extra-curricular ecology. With the help of intelligent technology, students are provided with learning resources, and with the help of intelligent learning partners, students will not be restricted in English listening, speaking, reading

and writing. By creating a smart teaching platform, teachers can supervise students' English learning and evaluate students' learning process based on students' correct guidance and analysis of data, so as to improve the accuracy of assessment.

3.5 Rational use of artificial intelligence technology

Through the use of artificial technology, teachers set up virtual teaching situations and take problems as drivers to strengthen students' thirst for knowledge and curiosity. With the help of network teaching cloud platform, mobile terminal and virtual hybrid technology, the intelligent learning environment can be created, which can effectively use intelligent resources, realize intelligent classroom interaction, and complete the innovation of teaching methods. Smart teaching platforms such as micro-video database and graphic organizer resource library help students create targeted learning space and create a good atmosphere, which can improve teaching quality and improve learning efficiency. On the teaching platform, teachers carry out test activities such as cloud classes and wechat public accounts to understand the learning effects of students. In addition to the above, with the help of artificial intelligence technology, teachers collect students' answers and provide help to students, and students' logical ability and thinking ability have been improved.

To sum up, the advent of the era of artificial intelligence has been widely used in English teaching in higher vocational colleges, and has also realized the creation of wisdom classroom. By combining the wisdom concept and artificial intelligence technology to build a teaching method that is harmonious, dependent on each other, interacts and influences each other, the classroom environment is optimized, the wisdom evaluation system is improved, and the construction of the main body of the classroom is completed. From cultivating teaching objectives, maintaining the relationship between teachers and students, creating an efficient classroom, and promoting the integration of wisdom concept into English classroom teaching. At the same time, artificial intelligence technology has been fully applied.

References

- [1] Fan Yuning. Research on English Teaching Reform in Higher Vocational Education based on Artificial Intelligence [J]. *Public Relations World*, 2024, (8): 148-150.
- [2] Tao Tingting. Architecture design of intelligent translation system for College English teaching based on artificial intelligence technology [J]. *Modern Information Technology*, 2024, 8 (8): 51-54.
- [3] Zhou Tong, Wu Xiaoliang. Artificial intelligence enables civil aviation English teaching: Transformation Strategies and Challenges [J]. *Journal of Civil Aviation*, 2024, 8 (2): 140-143.
- [4] Shao Yinan, Liu Jun. Research on the Change of Business English Teaching Mode in the background of Artificial Intelligence [J]. *China Informatization*, 2024, (3): 22-25.

About the author: Zhenxiao Zhang, 1990.05, female, Han nationality, Shanxi, Postgraduate, Lecturer, Research direction: Higher Vocational English Teaching