

Research and Practice on Improving the Teaching Ability of Vocational College Teachers in the Digital Era

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Abstract: Through the implementation of immersive practice teaching, we can cultivate more capable, more practical, more adapt to the market demand and enterprise satisfaction of talents. This study explores the significance of immersive practical teaching for the cultivation of talents in vocational colleges and its potential in the needs of school education and industrial enterprises. This study reveals the importance of immersive practice teaching for the promotion of school education and talent training, and directly affects the needs of enterprises and the development of regional economy.

1. Introduction

This study explored the importance of immersive practice teaching in vocational colleges for developing competent, adaptable, and qualified professionals. The ability of vocational schools to adapt to market demands depends largely on how accurately and effectively they integrate these elements of immersive practice teaching. Immersive teaching methods can effectively enhance students' interest and potential for future career development. Introducing immersive teaching methods into the framework of vocational education can have a positive impact on the development of higher vocational education and better promote regional social and economic growth.

2. Background of immersive practical teaching in higher vocational colleges

With the rapid development of information technology, the immersive practical teaching is gradually approaching, and the vocational education has entered into the education and teaching link of schools. At present, the education mode of higher vocational colleges is mainly theoretical teaching, but lack a clear understanding of the requirements of this industry and the needs of enterprises. Traditional classroom teaching is teacher-centered, emphasizes teachers' teaching, and the role of students is mainly to participate in and cooperate with teachers' teaching. This teaching strategy is no longer adapted to the needs of today's enterprises, and students generally report the lack of interest in learning. They find that there is still a big gap between the knowledge learned in school and the actual situation of enterprises.

2.1. Literature Review

Immersion in different fields, immersion theory has different meanings. In the field of education, some scholars propose that immersion theory refers to building an immersive immersion space. Once students enter the field, they can quickly know the task objectives, and the knowledge and content and learning effect can get timely feedback. In recent years, the academic research of practical teaching in vocational colleges mainly revolves around the cooperation between schools and enterprises. For example, the concept of "Factory in school, school in factory" mentioned in the early days is to establish a connection and a platform between enterprises and schools, so that both sides can share their own resources as much as possible, so that schools can cultivate talents needed by enterprises, and enterprises can also recruit satisfactory employees^[1]. However, the scale of this cooperation mode is not large, and the enterprises and schools participating in the cooperation are relatively single, so it is difficult to cultivate a large number of talents to meet the overall needs of

the regional economic development and the industry.

Immersive education, as a contemporary teaching method, is becoming more and more important to vocational education. Vocational colleges can establish an immersive learning system to put students in the industry environment and help them effectively adapt to the market demand. In an immersive learning system, specific professional quality training can be integrated, including fostering business loyalty, fostering team spirit, improved self-management skills, and improved endurance to cope with setbacks and challenges^[2]. In the process of immersive learning, students can quickly resonate with teachers' teaching, and realize knowledge transfer, and finally complete the construction of knowledge.

The existing literature has identified considerable problems in implementing this approach in vocational colleges. Problems often revolve around imperfect security systems, erroneous evaluation mechanisms, and unclear division of responsibilities, which hinder the advancement of immersive methods, and need to explore effective implementation mechanisms^[3]. Furthermore, there is a clear gap in studying how to effectively address these challenges, how to organize educational structural innovation, and how to establish a cyclical communication pipeline between faculty groups mutually developing in immersive practical teaching, emphasizing the urgent need for further research in this area.

It is some important key areas of training to establish cooperation between vocational colleges and industries, explore the potential of immersive practical teaching, and combine school education and strategies to improve the overall effectiveness of industrial needs. These problems can enable vocational colleges and industries to effectively perform their duties and adopt appropriate management mechanisms while playing their respective responsibilities^[4].

2.2. Definition and concept of immersive practice teaching

Immersive practice teaching is a comprehensive teaching method in higher vocational colleges, which mainly provides knowledge, skills and practical experience by fully integrating students into the real working environment^[5]. It emphasizes that the teaching process of the course is closely linked to the actual work, placing students in an environment both as a classroom and as a work space.

The ideological premise of immersive practical teaching comes from the perspective of education. Education believes that learning is a process of active participation, and learners are the subjects and participants of their education, not just the recipients of knowledge^[6]. To bridge the realistic gap between theoretical teaching and professional practice, immersive practice teaching will focus on providing students with the ability to be directly applicable to their future work schedules.

Immersive practice teaching seeks to combine classroom teaching with applicable skills and processes prevalent in industry requirements. This is a didactic response to the needs of graduates who have not only theoretical knowledge of their respective disciplines but also practical knowledge of how to apply it in the workforce.

In addition, immersive practice teaching encourages students to engage and "hands-on" learning exercises. This "doing learning" in the real world not only improves the students' practical skills, but also improves their understanding of the theoretical concepts. Therefore, the essence of immersive practice teaching is to promote both intellectual learning and experiential learning, so that students can control the consistency and application of theoretical knowledge in a practical working environment^[7].

In essence, immersive practical teaching is a transformative education that develops traditional vocational training into dynamic, experiential and comprehensive learning experiences to improve students' practical ability to meet the needs of specific industries, cater to social development, and navigate the reality of the workplace.

2.3. Analysis of immersive practical teaching mode in higher vocational colleges

Traditional teaching methods focus on indoctrination theoretical understanding, and immersive practice teaching takes priority over experiential learning, which greatly improves students'

practical skills, which are needed by enterprises. Immersive practical teaching well responds to the question of how schools cultivate talents and what kind of talents enterprises need, and bridges the previous problems of talent training in higher vocational colleges.

First, immersive practice teaching ensures that students acquire the necessary skills and knowledge needed for their future careers by combining research with practical work situations in different industries. This professional practice-oriented, realistic orientation adequately prepares graduates to enter the workforce immediately, thereby increasing their competitive potential within the industry.

Then, immersive practical teaching creates a close connection between vocational colleges and industry. Students in higher vocational colleges can directly contact with industry standards and directly participate in the practice of enterprises, and enterprises also have a relatively stable source of well-trained and skilled labor force. This kind of mutual cooperation is beneficial for both enterprises and schools.

Third, immersive practical teaching enables vocational colleges to keep up with the changing trends and demands in the job market. Through deep integration with enterprises, vocational colleges can continuously improve their curriculum and teaching methods to meet the needs of enterprises. At the same time, this teaching mode is also effective, promoting the mutual development and learning among teachers in higher vocational colleges.

Immersive practical teaching also has significant economic advantages at the regional level. By directly adapting to the market demand, higher vocational colleges indirectly promote the regional economic development, industrial expansion and the overall social development.

3. Case Studies

This section aims to analyze the practical application of immersive practical teaching models in vocational colleges. We delve into different scenarios, examining in detail how training and management mechanisms can contribute to improving immersive practice teaching methods in these professional colleges.

3.1. Analysis of immersive practical teaching models in different vocational colleges

Higher vocational colleges adopt different models in the immersive practical teaching methods. The core of these models is the concept of "Factory in school", "School in factory", giving learners the opportunity to receive practical hands-on training in the work environment, thus bridging the gap between academic knowledge and the actual needs of the labor market. It provides dual benefits for learners and learning institutions, while also providing a training base for the company's employees.

Some vocational colleges introduce enterprises into schools and set up some of their production lines on campus for students to practice. This can not only solve the problem of insufficient enterprise space, but also solve the problem of insufficient practical training facilities on campus, allowing enterprises and schools to share resources and achieve a win-win situation.

There are also interactions between vocational colleges and enterprises, and cooperative enterprises can participate in formulating the school's teaching plan, assigning professional personnel to participate in the school's professional teaching, and providing the school with necessary resources such as training bases, equipment, and raw materials. Schools can also provide training for professional personnel in enterprises. In this mode, students can improve their professional skills and increase their social practice experience. At the same time, the professional competence of enterprise personnel can also be improved.

3.2. Comprehensive analysis of the case study results

In the practice of vocational education teaching, it is necessary to fully leverage the role of various teaching elements, and interact from three dimensions: immersion in course teaching content, immersion in teaching resources, and immersion in learning environment, highlighting the student-centered "immersive experience" and actively resolving the academic "learning

helplessness" dilemma of vocational education students.

In each case investigated, it was clear that vocational colleges tended to be collaborative models in their immersive practical teaching methods. The cooperation and interaction between the school and the industry play a key role in realizing an effective practical teaching mode. Special emphasis is placed on developing professional qualities in the curriculum to develop comprehensive individuals who can meet and meet the needs of the labor market. The development of this professionalism includes elements such as ethical training, career planning, and the establishment of an assessment system to assess professionalism.

The results of these case studies highlight the basic principles behind immersive practical teaching: combining school education with industry requirements to foster competent and practical talent. To achieve this, mutual development and learning of regular communication pipelines between faculty groups are necessary. The construction of an immersive experiential learning environment requires teachers to actively enhance the student-centered concept in vocational education, adapt to role transitions, and have a correct understanding and full respect for the individuality and differences of each student. They should become mentors for students' learning, life, and future development, establish mutual respect, sincere mutual assistance, and positive and harmonious teacher-student and classmate relationships, and create positive and proactive practices. A learning atmosphere of daring exploration and practice, exploring and cultivating students' personalities and interests, enabling them to actively, confidently, and healthily learn and grow.

There is growing evidence that immersive practice teaching, if implemented properly, will not only directly affect students and schools, but also indirectly affect the economic development of the region. It is clear from the case study that the integration of university industry cooperation promotes a good learning environment consistent with the market model, thus creating a sustainable development model for immersive practice teaching.

4. Conclusion

Providing every student with the opportunity to excel in life is not only the society and family's aspiration for a better life, but also the earnest expectation for vocational education^[8]. This study provides a deep exploration for immersive practical teaching in higher vocational colleges, and the significance of implementing immersive practical teaching in vocational colleges lies in the potential of combining teaching with industry needs.

The research shows that the standard teaching method focusing on the dissemination of theoretical knowledge lacks the practical advantages to meet the industrial needs, and the current talent training mode of higher vocational colleges lacks the attention to the students' practical ability, and fails to make breakthroughs in the educational methods. At the same time, enterprises are looking for graduates with both theoretical knowledge and familiar with their practical experience, and the gap between education and teaching and industrial demand is widening. Immersive practical teaching makes up for this deficiency, which plays an important role in cultivating capable and practical talents to meet the constantly developing market demand.

To sum up, implementing immersive practical teaching in higher vocational colleges can become a feasible and win-win model for the development of schools and industries.

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