

Learning Characteristics and Teaching Strategies of Vocational College Students in the Context of Blended Teaching

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Abstract: *With the rapid development of intelligence and digital technology, blended learning is increasingly receiving high attention from the education community, key research from teachers, and widespread popularity among students. In the context of blended learning, it is of great significance to conduct in-depth research on the learning characteristics of vocational college students and continuously adjust and improve teaching strategies based on their learning characteristics, in order to improve the quality of education and teaching.*

Keywords: *blended learning; Vocational students; Learning characteristics; Teaching strategies*

1. Introduction

With the continuous deepening of intelligence, digitization, and the integration of education, blended learning in vocational colleges continues to innovate and iterate, and forms such as MOOC and SPOC (private broadcasting courses) are also constantly innovating. In this context, it is particularly important to pay attention to students' learning characteristics. Students are the main body of learning, and the teaching effect of blended learning ultimately needs to be reflected by students. Therefore, it is necessary to analyze the learning behavior characteristics of vocational college students in the context of blended learning mode, in order to better improve teaching strategies.

2. The necessity of studying the learning characteristics of vocational college students in the context of blended teaching

In the era of intelligence and digitization, blended teaching has become an important mode of classroom teaching in vocational colleges. Compared to undergraduate classroom teaching mode, blended teaching mode in vocational colleges has its own characteristics, among which the learning characteristics of vocational students are different from those of undergraduate students, which is one of the important factors. Therefore, it is necessary to conduct in-depth research on the learning characteristics of vocational college students in the context of blended learning.

2.1. The need to explore blended teaching models

Blended teaching is a combination of face-to-face and online teaching through intelligent and digital means. Vigorously promoting blended teaching has become an inevitable trend for vocational colleges to deepen teaching reform, accelerate teaching informatization construction, and respond to digital challenges in the field of vocational education. Blended teaching must be based on a student-centered philosophy, and the entire teaching process must be completed through a combination of online and offline methods. In terms of online teaching, it is necessary to provide rich and diverse content for different student groups based on the professional characteristics of the courses taught, so that different students have more choices and can better teach according to their aptitude; In terms of offline teaching, the first step is to evaluate students' learning situation during the online teaching stage based on online teaching content, and use intelligent methods to detect knowledge points. For common and individual knowledge point problems, analysis should be conducted from the perspective of students' learning behavior characteristics, summarize students' learning characteristics and laws, gradually improve the online teaching content setting, and supplement the text, video, and Online resources such as PPTs are used to revise the learning process and improve the diagnostic methods for learning outcomes, providing theoretical support for better exploration of blended learning models.

2.2. The need to improve teaching quality

The blended teaching in vocational colleges is not only a combination of online and offline learning methods, but also the integration of students' autonomous learning and cooperative learning, the integration of theory and practice in class, and the integration of knowledge content from different disciplines. From the perspective of these blended learning forms with the characteristics of vocational colleges, it can be seen that teachers have transformed from lecturers to organizers, students have transformed from passive learning to active learning, and learning evaluation has shifted from emphasizing summative evaluation to emphasizing procedural evaluation. Therefore, from these changes, it is necessary to carefully analyze the learning characteristics of vocational college students in this context, and propose corresponding teaching strategies based on their learning characteristics. On the one hand, it can promote personalized learning, deep learning, and autonomous learning for students, and comprehensively enhance the development of vocational college students' comprehensive abilities; On the other hand, it promotes teachers to update their teaching concepts, improve teaching methods, improve teaching efficiency, and comprehensively enhance their comprehensive teaching level and ability, thereby comprehensively improving the quality of teaching.

2.3. The need to improve the quality of classroom education

Blended teaching is different from traditional face-to-face teaching, especially online teaching, which lacks face-to-face communication with students and lacks a thorough understanding of their psychology and thoughts. Therefore, how to improve the quality of classroom education in the context of blended teaching is a major challenge. Deeply analyzing the learning characteristics of vocational college students in a mixed background can provide an accurate prediction of their learning behavior. By implanting corresponding student learning feature information in course teaching and management, digital platform construction, course resource construction, and teaching mode exploration, we can better achieve individualized teaching and achieve precise education.

3. Analysis of Learning Characteristics of Vocational College Students in the Context of Blended Teaching

Blended teaching has experienced nearly 20 years of development, and both researchers and educational practitioners have basically reached a consensus, especially in the concept of "Internet plus education" and under the digital and intelligent technology means, hybrid teaching in higher vocational colleges shows new connotation. In response to the practicality of teaching objectives in higher vocational education, the connotation of the blended learning mode in higher vocational education is not only a mixture of online and offline learning, but also includes the alternating mixing of teaching methods for applied knowledge transmission and practical skill cultivation, as well as the integration of fragmented knowledge learning and systematic knowledge structure construction learning methods for students in the intelligent era. In this context, factors such as the source of students, academic performance, daily behavior habits, and family background of vocational college students affect their learning motivation, attitude, and habits, and also affect the further expansion of blended teaching in vocational colleges.

3.1. The dimension of learning behavior characteristics of vocational college students in the context of blended teaching

The characteristics of students' learning behavior refer to the state and style they present during the learning process, such as learning motivation and attitude. Vocational college students have their own unique characteristics, so it is necessary to first clarify the dimensions of vocational college students' learning behavior characteristics. In Teacher Wen Yali's article "Research on Academic Behavior Characteristics of Vocational College Students", the behavioral characteristics of vocational college students were studied from five aspects, namely achievement motivation, learning attitude (cooperation, initiative), attention/persistence, strategy/flexibility/creativity (STRA), and self-efficacy. The conclusion of this study is that, "From the perspective of the school, schools should strengthen guidance for students' learning and improve their academic behavior level. In the process of guidance, not only should we pay attention to changes in students' behavior, but also research the psychological mechanisms that affect students' academic behavior, so that they can generate learning enthusiasm psychologically, in order to achieve lasting results." [1] Yao Changjia's article "Research on the

Characteristics of Social Media Use Behavior of Vocational College Students" conducted an empirical study on the characteristics of social media use behavior of vocational college students from three dimensions: motivation and method of use, time and dependence, and information dissemination intensity and preference. One suggestion drawn from this study is that schools should stimulate vocational college students' learning and cognitive needs for social media usage motivation through various channels such as campus media construction, integration of professional curriculum teaching, and club practice activities. By offering media literacy related courses, vocational college students' awareness of social media operation and relevant information dissemination laws and regulations should be enhanced"^[2]The above research results have respectively studied the behavioral characteristics of vocational college students from the perspectives of academic performance and social media usage. The perspectives of these two studies are highly consistent with the study of learning behavior characteristics of vocational college students in a mixed background. From the above research results, vocational college students can have different research dimensions based on different majors, different scenarios, and the different needs of researchers. Therefore, The dimensions of learning behavior characteristics of vocational college students in blended teaching can be referenced from the above research results. Given the research premise in the context of blended teaching in this article, the learning behavior characteristics of vocational college students studied in this article can be summarized into the following aspects: achievement motivation, learning attitude (cooperation, initiative), attention, strategy/creativity, self-efficacy, use of time and dependence.

3.2. Analysis of learning characteristics of vocational college students in the context of blended learning

After entering vocational education, students will face changes in their living environment, learning environment, school environment, and social environment, and their learning behavior characteristics will also undergo corresponding changes. Especially, the application of intelligent, networked, and digital teaching methods will have a significant impact on students' learning behavior characteristics.

Vocational college students have their own unique characteristics. From the perspective of students' sources and academic performance, many students do not form good learning habits before entering university, have weak learning motivation, lack initiative in learning, lack concentration, and are unable to persist for a long time. They do not have a good grasp of learning methods, and have unreasonable time arrangements for their own learning. The author selected all freshmen from a certain university to conduct a corresponding questionnaire survey. The author conducted data analysis from six aspects, including achievement motivation and learning attitude, among vocational college students. The conclusions drawn from the data analysis are basically consistent with this. From the learning situation of sophomore students in a certain school, many students do not adapt to the management mode of vocational colleges. After entering vocational colleges, the academic burden of students is not heavy, the management of teachers is not strict, parental supervision is not enough, and students' learning resilience is insufficient. As a result, a considerable number of students have no goals in their studies and are free to do what they want. Some students are immersed in things unrelated to their studies such as shopping, playing games, and surfing the internet, and have long forgotten about their studies. Especially during the three-year period of the epidemic, schools conducted a large amount of online teaching, and the effectiveness of online teaching was difficult to make up for in a timely manner. Blended teaching became pure online teaching, and offline practical teaching was also roughly completed online. There was no comprehensive evaluation of the entire online teaching stage. From the results of interviews with some students, it can be seen that many students' learning behavior characteristics reflected in online teaching are not optimistic. Some students play games while listening to video teaching, some cannot persist in learning for a long time, and do not actively communicate and communicate with teachers about corresponding issues. From the analysis of the situation of vocational college students after enrollment and the implementation of blended teaching, it can be seen that the learning characteristics of vocational college students have not improved with the continuous improvement of blended teaching forms. Therefore, blended teaching in vocational colleges must solve the problems of students' learning behavior through ideological mobilization, psychological conversation, daily management, method teaching, and other aspects, so as to improve students' achievement motivation, learning attitude (cooperation, initiative) Having a reasonable psychological expectation and behavioral preparation before starting blended learning, such as attention, strategy/creativity, self-efficacy, usage time, and dependence, can effectively promote the effective integration of students' learning and teachers' teaching.

4. Teaching Strategies of Vocational College Teachers in the Context of Blended Teaching

Based on the analysis of the development trend of blended learning and the characteristics of students' learning behavior in this context, teachers should propose corresponding teaching strategies to improve their teaching ability and level, promote the improvement of students' comprehensive abilities, and comprehensively improve the quality of education and teaching.

4.1. Teachers should enhance their ability to build information technology for professional course content

Informatization platforms are an important way for teachers to carry out blended learning. Although relevant platform enterprises will develop corresponding platform apps according to the needs of school teachers, for teachers, they need to continuously delve into the application technology of information platforms, work hard on professional course informatization and even digital content, improve the effectiveness of course content, and also solve the problem of platform course resources not meeting the needs of students. "This comprehensively enhances the level of teachers' information technology capabilities and blended learning business skills, thereby enhancing their information technology capabilities and laying the foundation for carrying out blended learning."^[3]In the era of networking, informatization, and digitization, blended teaching should focus on highlighting the manifestation of online teaching content, media dissemination forms, and dissemination methods. Teachers should master corresponding technical means at these three levels based on the learning behavior characteristics of vocational college students. In terms of the expression form of teaching content, teachers should innovate various forms of teaching content such as animations, images, and pictures, which are more in line with the learning characteristics of vocational students; In terms of communication forms, teachers should pay attention to the technical application of various communication media, such as Douyin, video accounts, live streaming, etc; In terms of communication methods, teachers should master the skills of interactive platforms to strengthen communication and exchange with students. In short, the visualization, visualization, mobility, and convenience of blended teaching content, as well as the learning characteristics of vocational college students, pose higher technical requirements for teachers.

4.2. Teachers should enhance their ability to understand students' psychological and behavioral dynamics

Putting students at the center is a teaching principle that must be adhered to in the context of blended learning. Teachers should not only pay attention to students' learning behavior characteristics from aspects such as course construction design, teaching methods, and teaching methods, but also make full use of offline teaching opportunities to deeply communicate and exchange with students, and do a good job in educating and answering questions and difficulties for offline teaching students. "Teachers should fully recognize the importance of mastering students' psychological and behavioral dynamic work methods in the context of intelligence, networking, and digitalization."^[4] Starting from students' specific needs, combined with the characteristics of students' thinking and learning styles in the information age, teachers should stimulate students' initiative. Only by fully understanding students' psychological cognition and behavioral dynamics, and paying attention to students' online teaching experience and feelings, can teachers stimulate students' initiative, Fully tapping into the resources students need for online learning, accurately placing them during the teaching process, answering questions accurately offline, and being prepared to deal with various students' problems from the source can comprehensively improve the teaching and educational quality of blended learning.

4.3. Teachers should pay attention to the transformation of their roles

Online and offline blended teaching has become an irreversible trend in classroom teaching. Teachers are the core of implementing blended learning, and high demands are placed on their abilities in various aspects such as course content design, application of technical means, and student management. Especially in the process of blended learning, teachers should make full use of constantly updated technical skills to continuously adjust their role positioning. In blended teaching, teachers should shift from focusing on "teaching" to guiding students how to "learn". The teaching mode of teachers should shift from the teacher's "teaching paradigm" to the student's "learning paradigm". Through technical means, students should be guided to actively acquire knowledge in teaching modes such as deliberative learning, practical learning, and group learning, effectively promoting the

transformation of education mode from "knowledge imparting" to "ability cultivation". "In teaching evaluation, teachers should shift from result based evaluation to process based evaluation. "[5]Throughout the entire teaching process, the application of digital technology provides technical support for teachers to shift from focusing on teaching outcomes to focusing more on the teaching process. Teachers can conduct a comprehensive analysis of teaching data presented online, offline, and online, to digitally diagnose the overall learning situation of students, and to understand the learning situation of each student. Teachers combine students' process learning data with final assessment data to form more scientific, three-dimensional, and accurate student learning evaluation results, thereby more effectively improving teaching effectiveness. In terms of teacher development, teachers need to transform from educators to educational researchers and lifelong learners. In the future, blended learning will continue to iterate and update in the process of continuous evolution of networking, digitization, and intelligence technologies. New technological means will be constantly integrated into course content, teaching tools, and teaching methods. Students' ways of thinking, life, and learning will also change with the technological era. Therefore, from various aspects such as student subjects, educational carriers, and teaching content, Teachers should continuously conduct learning and research to adapt to the educational changes in the digital age.

5. Conclusion

With the rapid development of intelligence and digital technology, blended learning is increasingly receiving high attention from the education community, key research from teachers, and widespread popularity among students. In the context of blended learning, it is of great significance to conduct in-depth research on the learning characteristics of vocational college students and continuously adjust and improve teaching strategies based on their learning characteristics, in order to improve the quality of education and teaching. Teaching Strategies should be as following: 1) Teachers should enhance their ability to build information technology for professional course content; 2) Teachers should enhance their ability to understand students' psychological and behavioral dynamics; 3) Teachers should pay attention to the transformation of their roles. Online and offline blended teaching has become an irreversible trend in classroom teaching.

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References

- [1] Wen Yali. "Research on the Academic Behavior Characteristics of Vocational College Students", *Henan Social Sciences*, October 2012.
- [2] Yao Changjia. "Research on the Characteristics of Social Media Usage Behavior among Vocational College Students", *China Vocational and Technical Education*, Issue 34, 2018.
- [3] Zhao Aimei. "Investigation and Research on the Current Situation of Hybrid Teaching in Vocational Colleges", *Vocational & Technical Education Forum*, June 2020.
- [4] Yang Yang. "A Study on the Learning Situation and Learning Behavior Characteristics of Vocational College Students", *Innovation Education*, September, 2018.
- [5] Wang Wenxuan. "An Empirical Study on the Cultivation of Autonomous Learning Ability of Vocational College Students under the Blending Teaching Mode", *Chinese Vocational and Technical Education*, Issue 35, 2018.