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CLASSROOM TEACHING AND THE NEEDS OF ONLINE
MEDIA TEACHING IN HIGHER VOCATIONAL COLLEGES IN
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This work is licensed under [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/)**Abstract:**

Classroom teaching is an important way of practical teaching. In today's diversified education, classroom teaching is still the basic form of teaching. The purpose of this study is to investigate the current situation of classroom teaching methods in China's higher vocational colleges, and to analyze students' satisfaction with the existing teaching methods and the feasibility of reform. A questionnaire was used to collect data. The analysis results show that the current classroom teaching in China's higher vocational colleges is mainly based on traditional teaching methods, but the students are generally dissatisfied with it, thinking that the teaching method is single, lacks interaction and diversity. However, students have a certain understanding of online media pedagogy and have the foundation of using online media for learning, which provides a good prerequisite for teaching reform. The conclusion of the study is that it is inevitable to reform the traditional classroom teaching method, and the introduction of online media teaching method can effectively improve the classroom interaction and students' enthusiasm, so as to improve the teaching effect and meet the needs of modern education development.

Keywords:

Vocational Colleges; Current Situation Of Classroom Teaching; Student Satisfaction; Online Media Teaching; Teaching Reform

Introduction

In order to promote the development of higher vocational education, The State Council issued the Implementation Plan for the Reform of National Vocational Education, which pointed out that vocational education is a type of education and has the same important status as general education. Therefore, it is a major strategic deployment of the country to run higher vocational education well, provide high-quality technical and composite talents, and meet the needs of the construction of modern society. It is of great significance to carry out the national development strategy driven by innovation and realize industrial upgrading (Xu & Guo, 2020).

In today's diversified education, classroom teaching is still the basic form of vocational education in China (Yang, 2024). Classroom teaching is an important way to achieve vocational education and occupies a central position in the entire talent training system. The quality of classroom teaching is the main basis and symbol of the quality of talent training, and classroom transformation is an important measure to improve the quality of talent training (Li & Fu, 2020).

In the 10-year Development Plan for Education Informatization (2011-2020) formulated by the Ministry of Education, it is proposed to build an intelligent teaching environment, provide high-quality digital education and software tools, and use information technology and online media to carry out classroom teaching (Zhai & Shi, 2020).

If students do not accept online media as a way to teach in the classroom, the effectiveness of online media as a teaching tool may be hampered. In this paper, we investigate students' general perceptions of online media by conducting a survey of students using online media in classroom instruction. Understanding student needs, as well as any related student concerns, will enable teachers to consider integrating online media to do this more effectively.

Literature Review

Classroom instruction is a multifaceted social interaction that involves various simultaneous occurrences. Both students and teachers must quickly interpret and respond to these events. The teaching process is not merely a transmission of knowledge from teacher to student; rather, students actively shape the learning experience just as much as educators do. Teachers are crucial in fostering meaningful environments within the classroom for their students (Smelser & Baltes, 2001).

Online media serve as essential tools in the teaching and learning process, encompassing any resources that can engage students' thoughts, emotions, focus, and skills to facilitate their educational journey. These tools also enable educators to enhance their teaching effectiveness by improving their understanding of media when delivering content, thereby making it easier for learners to grasp concepts and achieve objectives within educational settings (Prabawati, St Asriati & St Asmayanti, 2021). The online media teaching approach involves utilizing digital platforms to offer timely assistance and guidance to students. Educators can utilize support sections to aid learners in overcoming various challenges they face during their studies while fostering a supportive online learning environment that provides prompt, precise, and comprehensive guidance for independent study efforts. This ultimately aids students in navigating obstacles effectively and achieving desired learning outcomes (Sauli-Karim, Bali & Rached, 2023). In this context of online media instruction, teachers assume the role of leaders;

students are active participants; and network resources function as supplementary aids (Dai, 2021).

Online media teaching tools are widely used in China's education, mainly including XueXiTong(XXT), YuKeTang(YKT), KeTangPai(KTP), etc. They have their own characteristics and serve different teaching needs. In terms of main functions, XXT, YKT, KTP 3 tools can assist teaching very well and facilitate the construction of smart classrooms. In addition to some common features, the three tools also have features. XXT has comprehensive functions as a whole, has a large number of high-quality course resources, can support the demonstration teaching package construction of courses, classroom interactive activities in many categories, can collect teaching process data in time, and the whole teaching process management is convenient. With the help of PPT plug-in and wechat, YKT can realize its own lightweight and relatively comprehensive functions. It can realize the functions of PPT teachers and students on the same screen, students marking questions, and can set up bullets and classroom red envelopes, but it has weak functions in course material management and interaction richness inside and outside the classroom. KTP is also a lightweight tool, the web version of the interface design is clear, logical, can realize the PPT teacher and student on the same screen, students mark the question function; The design of "star card" applicable to the offline reward scene is practical and convenient. The printed star card is sent to the students who need to be rewarded. The students can scan the QR code on the star card on wechat and receive the rewarded star; Having the course achievement analysis module is also one of the features of KTP, but it is weak in terms of high-quality course resources, and necessary functions such as course data download need to be used by members (Sun, 2023).

In terms of tool popularity, XXT is higher than YKT and KTP. At the same time, XXT is also an online media platform mainly promoted by major higher vocational colleges, so XXT is chosen as the research object for online media tools in this study (Sun, 2023).

Methodology

This research relies on the analysis of questionnaires. Questionnaire analysis is a widely utilized method in social science research that gathers data by creating and distributing surveys, followed by statistical examination of the collected information to comprehend and elucidate the behaviors, attitudes, opinions, characteristics, and other aspects of the study participants (Aithal & Aithal, 2020).

To guarantee the representativeness and broad applicability of the findings, this research employed a stratified random sampling technique to select participants from various types of higher vocational institutions across different regions (Kanaki & Kalogiannakis, 2023). In total, the study involved 500 students enrolled in diverse vocational colleges. By utilizing stratified random sampling, it ensured that individuals from all categories of schools had an equal chance to take part in the survey, thereby minimizing sample bias and enhancing both the reliability and dissemination potential of the research outcomes (Akka & Meydan, 2024). The stratification was based on school type and geographical area (East, Central, West). In each floor, students were randomly selected to participate in the questionnaire survey by random sampling method. Distribute the questionnaire through a combination of online and offline methods and ensure the validity and recovery rate of the sample. 500 questionnaires were issued, 492 were recovered, and 489 were valid.

Results

Present Situation Of Classroom Teaching In Higher Vocational Colleges

Classroom Teaching Mainly Adopts Traditional Teaching Methods

As shown in Figure 1, classroom teaching in China's higher vocational colleges mainly adopts traditional teaching methods, and most teachers rely on tools such as textbooks, PPT and blackboard for auxiliary teaching. Only 5.83% of teachers use online media as an aid in the classroom.

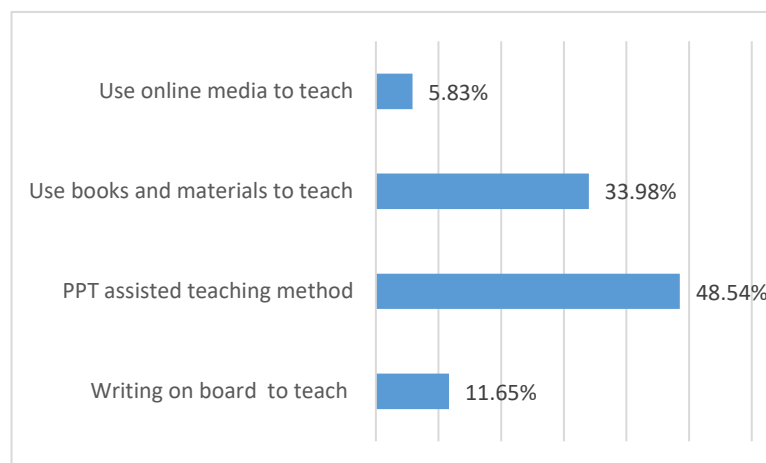


Figure 1: Present Situation Of Classroom Teaching Method In Higher Vocational Colleges

Students' Satisfaction With The Way They Are Taught

According to the survey results, students are not satisfied with the current boring classroom teaching methods. As shown in Figure 2, only 12% of people are very satisfied with the current teaching method, while 65% think it needs to be improved, and 23% are dissatisfied with it. It can be seen that the traditional teaching mode has been unable to meet the students' expectations of classroom learning, so it is urgent to improve the teaching method.

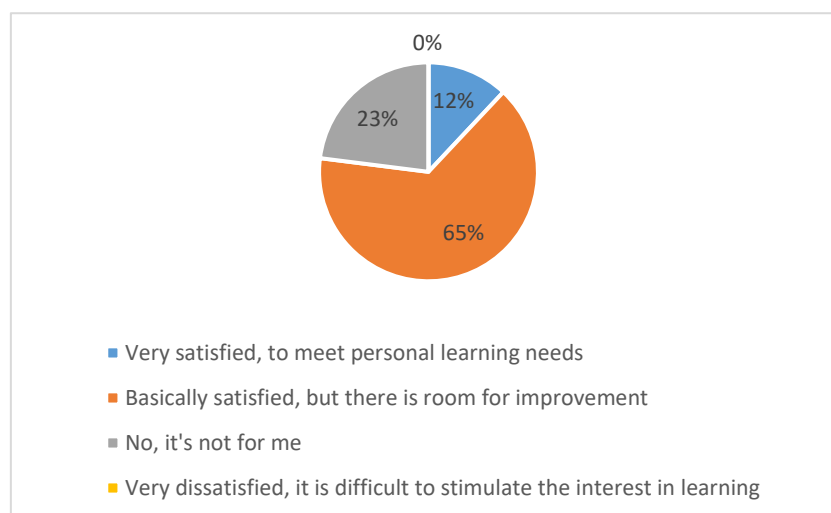


Figure 2: Students' Satisfaction With Current Classroom Teaching Methods

Analysis Of The causes Of Dissatisfaction With Classroom Teaching

One of the main reasons why students are not satisfied with classroom teaching is that the teaching method is single, which can not effectively stimulate their learning enthusiasm. Traditional teaching is often teacher-centered and mainly relies on lecturing and blackboard writing, which lacks interaction and diversity, making students feel dull and passive in class and difficult to actively participate in the learning process. The lack of opportunities for interactive discussion, hands-on practice, or access to information through multiple senses makes it difficult for students to maintain focus and interest, which affects their learning experience and effectiveness. Therefore, it is particularly important to improve teaching methods. As shown in Figure 3:

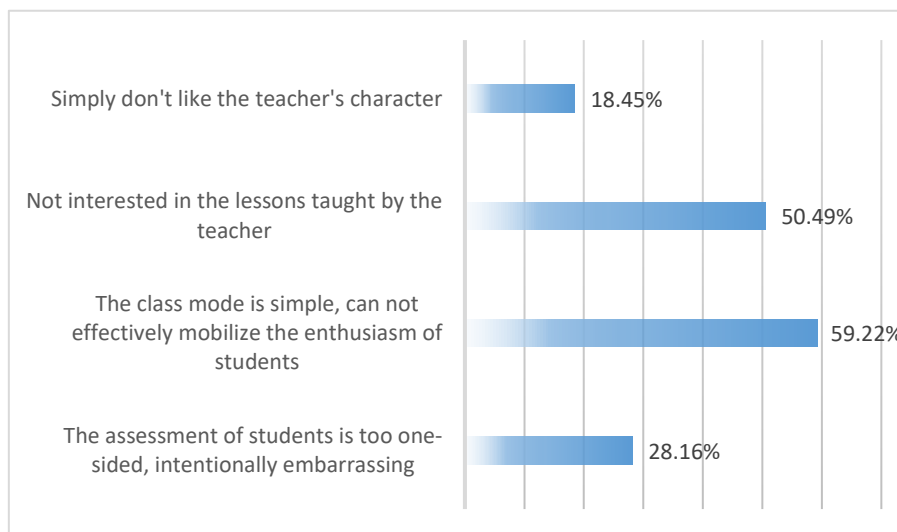


Figure 3: Reasons Why Students Are Not Satisfied With Classroom Teaching

Students Expect Teachers To Have Skills In The Classroom

By analyzing students' views on the teaching skills that teachers should possess in the course of teaching, as shown in Figure 4, students expect teachers to stimulate their enthusiasm to explore problems in various ways, so as to make flexible use of knowledge. Modern education is not only about imparting knowledge, but also about cultivating students' independent learning ability and innovative thinking. Therefore, teachers need to constantly explore and apply diversified teaching methods in teaching in order to better mobilize students' enthusiasm and sense of participation.

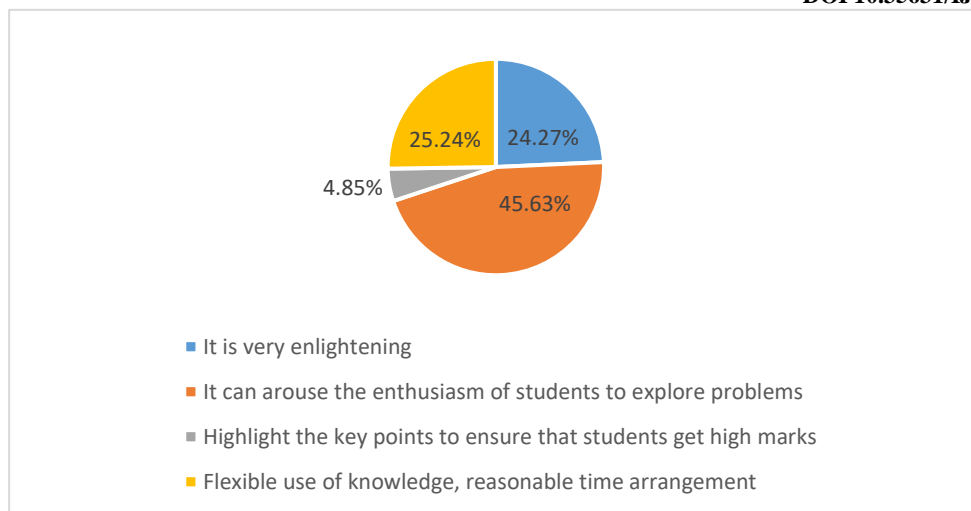


Figure 4: Students Expect Teachers To Have The Skills To Teach In The Classroom

Lack Of Learning Resources

Through the survey, it is found that most teachers only use the supporting materials and courseware of textbooks, and these courseware is actually just a simple copy of the textbook content, and the materials used are not enough to match. On the whole, although there are many kinds of teaching resources, its form is single, its applicability is low, and the actual use effect is not satisfactory. From the perspective of students, these resources are mainly for display and are not convenient to access. If you need additional learning resources, ask your teacher separately. In the questionnaire survey, as shown in Figure 5, the biggest problem encountered in the course is the monotonous and boring teaching method, which is chosen by 45% of the respondents, followed by the lack of rich forms of learning resources and inconvenient access, accounting for 34%. It can be seen that optimizing teaching resources is particularly important to improve teaching quality. The web disk function provided by online media allows teachers to upload various types of course materials, and classify folders, so that students can quickly find the required information and materials according to the classification, and realize the download and use anytime, anywhere, without restrictions, very convenient.

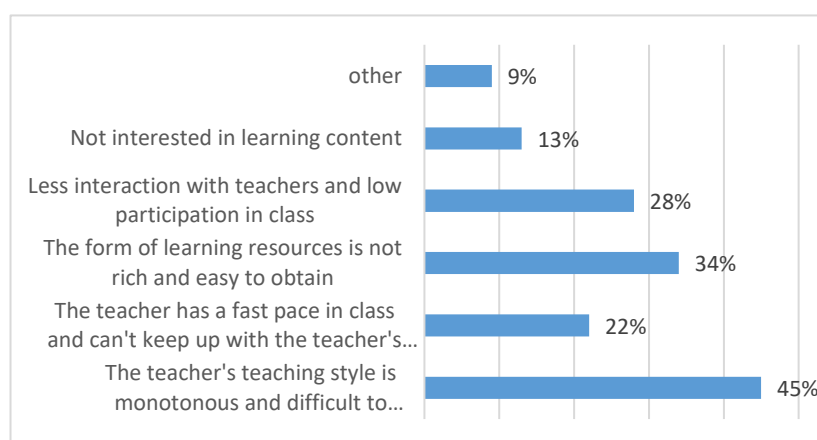


Figure 5: Present Situation Of Classroom Learning Resources

To sum up, from the current situation of classroom teaching methods in higher vocational colleges, it is very necessary to transform traditional teaching mode to online media teaching mode. Through a variety of online media interaction, students' enthusiasm can be effectively mobilized and the classroom atmosphere can be active. In the process of application, when encountering difficulties, online media resources can provide useful reference, while offline tutoring can explain the important and difficult points in detail, and summarize the whole lesson content, which will make students have a deep impression on the knowledge and better digest the learning content.

Learner Characteristics And Needs Analysis

The process of learning is a process in which learners internalize "others' knowledge" into "own knowledge" on the basis of existing knowledge and skills. Different students have different cognitive ability and understanding level, and the speed and mastery of learning content are also different. Therefore, in pre-class teaching preparation, it is necessary to have a comprehensive understanding of learners and analyze their characteristics according to their growth rules in order to find a suitable teaching method for them (Akbar, 2003). Learner analysis includes the assessment of the general characteristics, initial ability and learning style of the teaching object, which will help to determine the teaching arrangement and serve as an important reference for subsequent design and practice (Tobias, 2013). Therefore, the learner analysis in this study mainly covers the following six parts: initial ability analysis, learning motivation analysis, learning consciousness analysis, learning attitude analysis, learning needs analysis and general characteristics analysis.

Learner Initial Ability Analysis

Figure 6 and Figure 7 show that according to students' use and familiarity with online media, 65% of students have used online media (XXT), and most students are familiar with the interface and functions of online media (XXT). These factors provide a good foundation for us to use online media (XXT) in our subsequent classroom teaching.

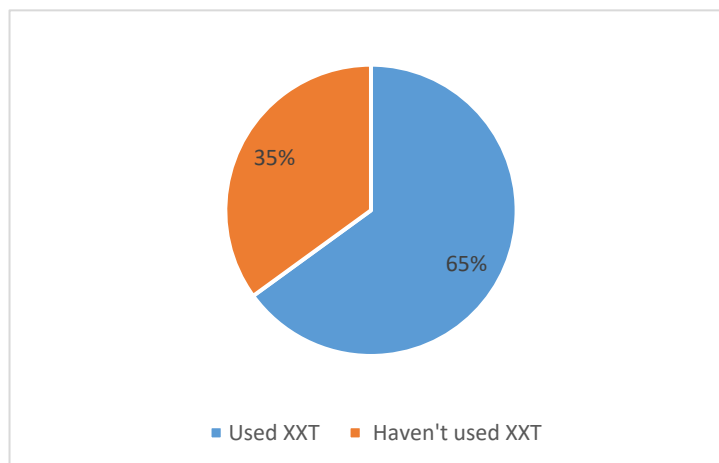


Figure 6: Online Media (XXT) Usage

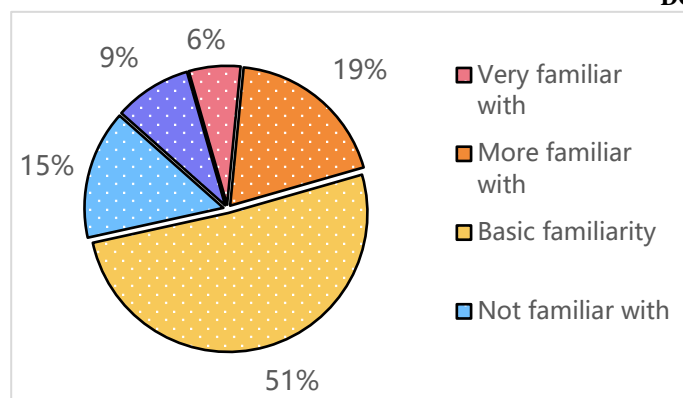


Figure 7: Familiarity With Online Media

Learner Motivation Analysis

According to the survey, as shown in Figure 8, only 5% of students have the habit of preview and review. College courses are difficult to a certain extent. Without teachers' supervision and guidance after class, students will find it more difficult to re-learn the course content or go further. It should also be considered that the use of mobile phones in class will also have an impact on students' study, which may shake students and distract their attention. To this end, online media can not only publish preview content before class and discuss and recall important and difficult points after class, but also enable real-time interaction such as answering questions, rushing answers and voting. At the same time, using the data statistics function of online media, teachers can also grasp students' online learning performance at any time, remind and urge students to focus on classroom learning, and adjust teachers' teaching progress at any time.

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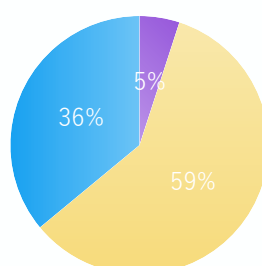


Figure 8: Students Review And Preview Habits

Learner Consciousness Analysis

According to the survey, as is shown in Figure 9, only 5% of students have the habit of preview and review. Higher vocational courses are difficult, and without teachers' supervision and guidance, students will find it difficult to re-learn the course content or understand it deeply. In addition, using mobile phones in class may also have a negative impact on students' study and distract their attention. Therefore, through online media, we can not only publish preview materials before class, discuss and review key and difficult points after class, but also carry out interactive activities such as answering questions, rushing answers and voting in real time. At the same time, using the statistical function of online media, teachers can grasp the online

learning performance of students at any time, so as to remind and urge them to focus on classroom learning and adjust the teaching progress.

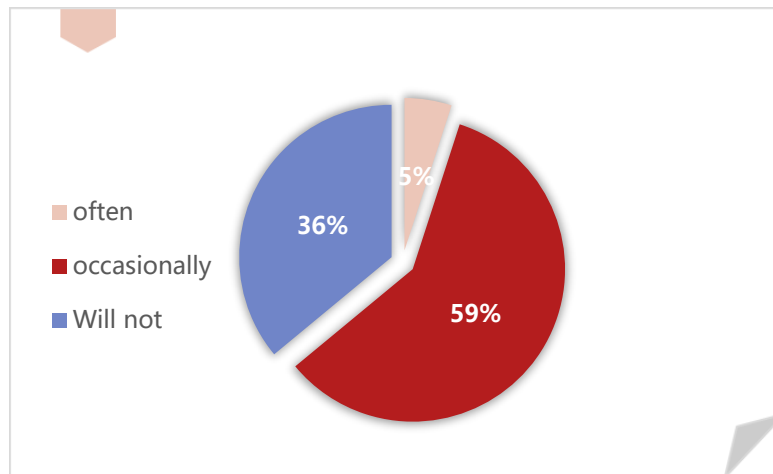


Figure 9: Students' Habit Of Preparing Before Class

Learner Attitude Analysis

In the classroom, teaching with online media, as shown in Figure 10, 35% of students said they were very willing to try it. Most students are happy to accept the rich teaching content through online media, and only a few students want to continue to use traditional teaching methods. This shows that students have expectations for new things and new learning attempts, rather than rejection.

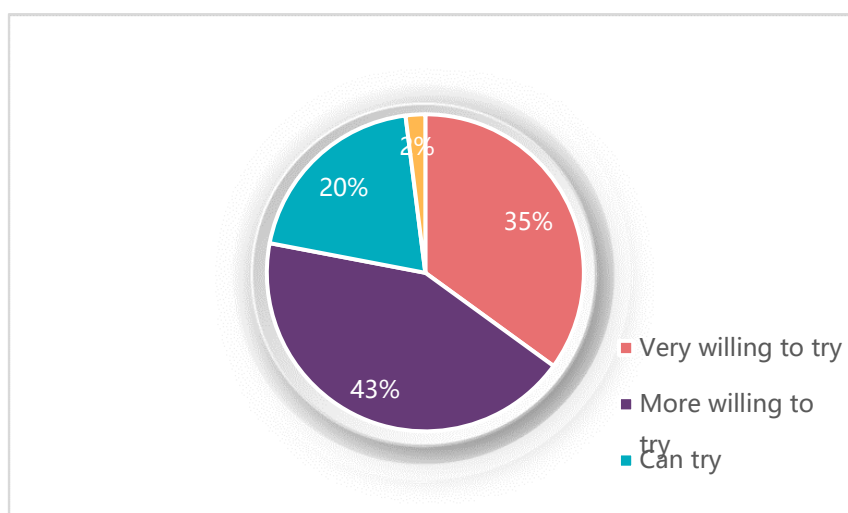


Figure 10: Students Are Willing To Use The Demands of Online Media Pedagogy

Due to the difficulty of higher vocational courses and the relatively limited foundation of students, some students cannot solve problems independently when they encounter difficulties in the learning process. According to the data in Figure 11, 69.7% of the students choose to consult their teachers or classmates, and most of the students adopt a variety of methods to deal

with the problems, which shows that learners can maintain a positive attitude when facing the challenges in learning and the process.

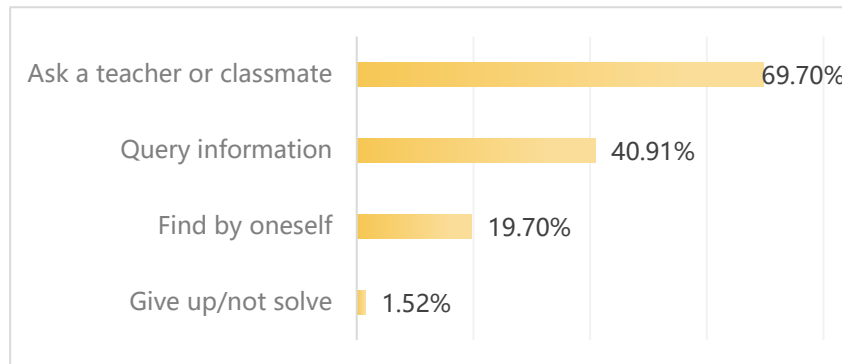


Figure 11: How Students Solve Problems

Learner Needs Analysis

As can be seen from Figure 12, through online media teaching, 54.55% of students hope to improve the ability of practical application of knowledge, 42.42% of students expect to enhance the ability of independent learning, 40.91% of students hope to strengthen the ability of collaborative learning, and 36.36% of students are eager to strengthen the ability of logical thinking. It can be seen that most students are more inclined to improve their own knowledge application ability in the course, which is very beneficial for vocational courses that focus on knowledge application and help stimulate their initiative. Therefore, in the process of classroom teaching, emphasis should be placed on the selection and guidance of classroom resources according to the needs of students, and at the same time, the interest of teaching activities should be increased to influence and encourage students to actively learn and work together in a team, and appropriate teaching activities and strategies should be flexibly selected, so as to help them expand their thinking in collaboration and realize independent learning.

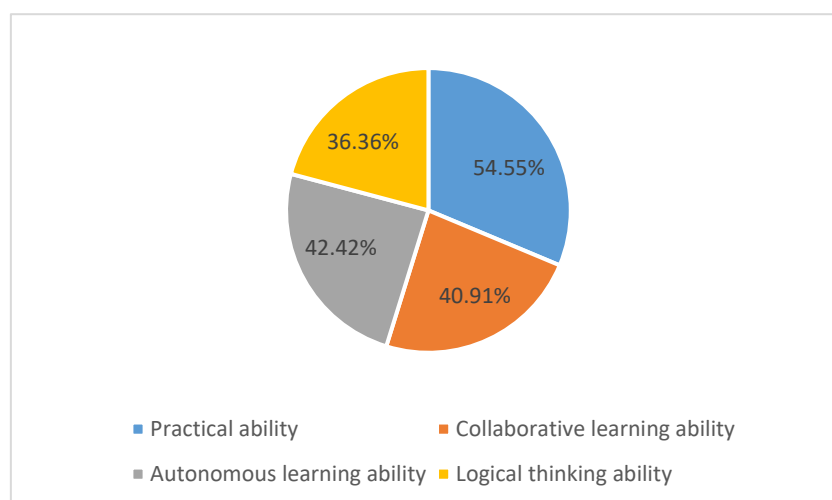


Figure 12: Students' Learning Ability Raises Expectations

In terms of students' preference for learning resources, as shown in Figure 13, students prefer teachers to provide PPT courseware, micro-lesson explanation videos and illustrated explanations to assist learning. PPT courseware contains all the course content. According to the impression of class explanation, students can find knowledge points more conveniently when they have this resource in preview or review. Micro-lesson explanation video and graphics are intuitive and easy to understand, which is a practical learning resource for students. This also shows that students have demand for learning resources provided by teachers and are willing to take the initiative to obtain learning resources for learning.

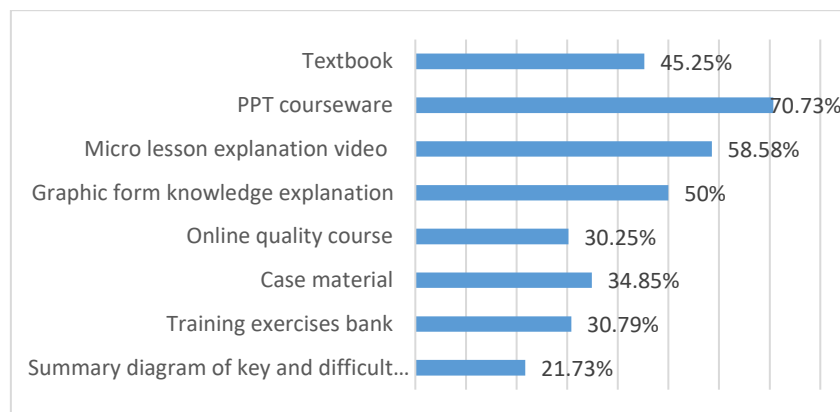


Figure 13: Learning Resource Demand

Finally, as shown in Figure 14, through the survey, it is found that students have the highest expectations for classroom interaction, question-and-answer sessions, fun teaching activities and timely feedback from students. Especially in terms of active classroom atmosphere, active interaction and timely solution of questions, the proportion of relevant expectation is as high as 79.45%; The expectation for the richness of teaching resources also accounted for 70.23%. Therefore, in the subsequent blended teaching design, special attention should be paid to improving the interaction and interest of teaching activities to stimulate students' enthusiasm for participation, and to ensure that teaching resources are sufficient and convenient.

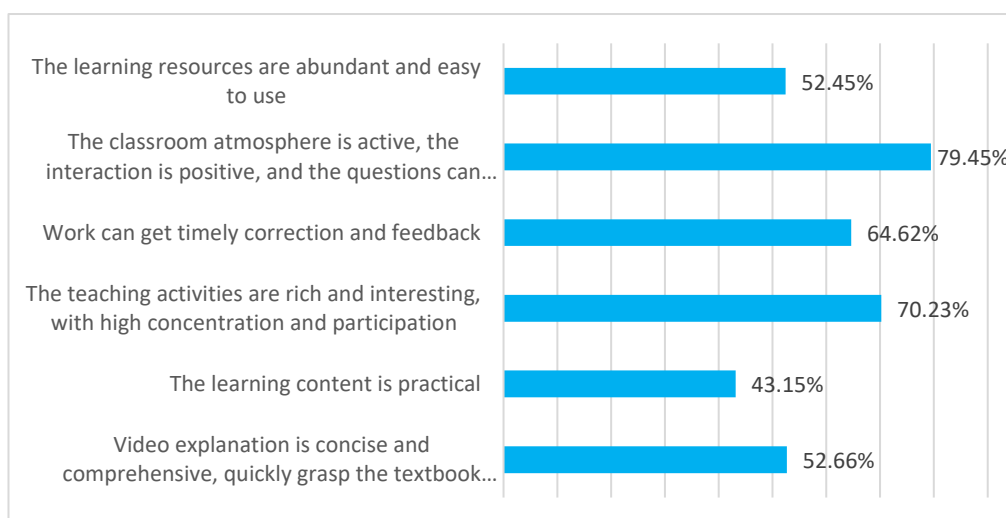


Figure 14: Online Media Classroom Teaching Expectations

Learner Characteristic Analysis

The teaching objects of this study are students in higher vocational colleges, who are about 19 years old and most of them are just adults, with relatively mature physical and mental development and the ability to think independently. At this stage, students' thinking has not been completely fixed, and they are in the process of developing from abstract logical thinking to dialectical logical thinking. Through questionnaire analysis, we found that most of the students were curious about new things, systematic and purposeful in observing things, and able to grasp some essential attributes of things through detailed features. In terms of emotion, these college students have formed relatively clear values, their learning motivation is more inclined to drive, and they also show a certain degree of self-control ability. They can pay attention, but the duration is limited, the patience is insufficient, the participation in class is relatively passive, and the self-control ability needs to be improved. Therefore, independent thinking and group discussion are encouraged in learning, and teachers are required to provide supervision and guidance. To sum up, we can summarize the general characteristics of learners, as shown in Figure 15.

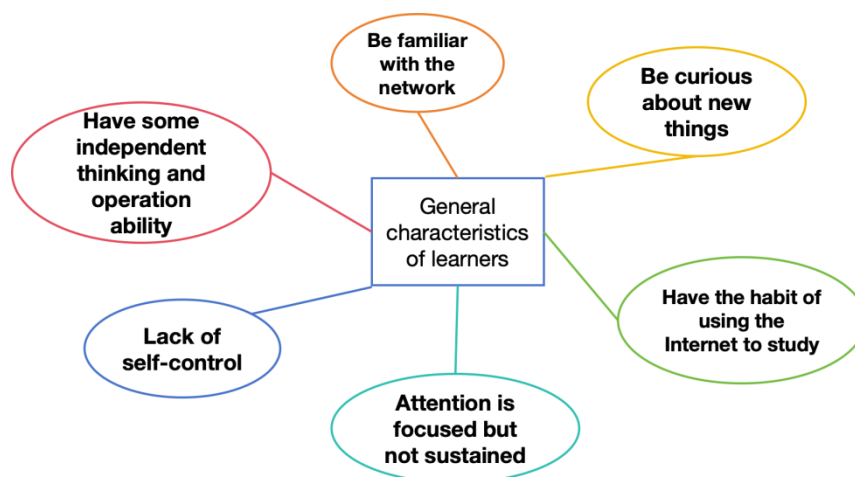


Figure 15: General Characteristics Of Learners

Conclusion

As modern information technology, particularly network and communication technologies, continues to deeply influence the education sector, there is an increasing focus on integrating traditional classroom teaching methods with online media. This trend has led to a rise in related research studies, such as those by Matthew, Kazaure & Okafor (2021), Cheng (July 2020), and Simsek (2024), which explore the synergy between online media and educational practices. The approach of utilizing online media for teaching merges both digital and physical resources, facilitating interactive classroom experiences that not only enhance students' engagement but also broaden their learning opportunities. Additionally, this method can provide supplementary explanations for students and support their practical training efforts, ultimately leading to a high-quality understanding of course material. These findings were reported by Xie & Tsai (2021), Dakhi et al. (2020), and Saragih et al. (June 2020).

Currently, traditional teaching methods still dominate classroom instruction in China's higher vocational colleges. These methods tend to be quite simplistic, with teachers primarily delivering lectures and minimal interaction occurring between them and the students.

Consequently, the classroom environment often feels lifeless, neglecting the active role of students in their learning process. Even when educators recognize the significance of fostering student engagement and a vibrant classroom atmosphere, they may face challenges stemming from their own limitations—such as inadequate teaching skills or pressures related to curriculum pacing—which compel them to resort to a more didactic approach. This situation aligns with findings by Guo & Jia (2022) and Zhang et al. (2023). As a result, students frequently find this lecture-based style tedious, leading to diminished interest in their studies and low levels of participation; thus, overall teaching quality suffers significantly. Similar conclusions were drawn by Li et al. (2023) and Wang (2024). Therefore, reform is essential moving forward.

The analysis of the questionnaire indicates that students are generally well-acquainted with the Internet and regularly utilize online media for their learning. They also possess a good understanding of various online learning platforms. This finding aligns with previous research (Prayudha, 2022; Liu, 2022; Simatupang, Murniarti & Peter, 2020). While students exhibit relatively low levels of subjective initiative, they maintain a positive outlook when encountering learning challenges and express a desire to enhance their skills through innovative teaching approaches. Their eagerness to experiment with new classroom methods lays a strong groundwork for reform in teaching practices. This observation is consistent with findings from Hirsh-Pasek et al. (2020).

In conclusion, the adoption of innovative teaching methods through online media in higher vocational institutions is both practical and holds significant potential benefits. This educational approach not only leverages modern information technology effectively but also offers students a more flexible and varied learning experience. By utilizing online media, educators can deliver course materials via videos, audio clips, interactive presentations, and other formats, making the transfer of knowledge more engaging and intuitive. Additionally, this method allows students to learn at their own pace, enhancing overall learning efficiency while fostering a sense of active participation among them. Unlike traditional classrooms where teachers primarily convey knowledge, these new instructional strategies encourage students to investigate issues and tackle real-world problems independently, thereby honing their practical skills. This aspect is crucial for vocational colleges aiming to cultivate talent that meets societal demands since such professionals require robust comprehensive qualities alongside hands-on abilities. The integration of online media with innovative teaching techniques aligns with contemporary trends and contributes significantly to elevating the quality of higher vocational education while establishing a strong foundation for students' future growth.

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