Teaching reform and innovation of computer course under the "hybrid" teaching mode

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Abstract: with the gradual deepening of vocational education reform, school education informatization has become an important development direction of education reform. In this context of development, the "hybrid" teaching mode has been widely used in society, and has shown vigorous vitality in improving teaching effectiveness and talent quality training. This paper aims to explore the reform and Innovation Countermeasures of computer course teaching under the "hybrid" teaching mode, in order to provide reference for relevant people.

Key words: higher vocational colleges; Computer course teaching; "Blended" teaching; Innovative countermeasures

"Blending Learning" refers to a new teaching mode that integrates offline and online teaching supported by information means. Its emergence directly promotes the transformation of Higher Vocational Computer Teaching from "traditional" to "modern", which not only innovates the teaching form and increases the classroom interest, but also promotes students' learning and practice through rich practical resources, which is of great significance to the improvement of students' comprehensive computer ability. Therefore, under the new situation, it is necessary to build a new situation of computer course teaching based on the "hybrid" teaching mode, and it is at the right time.

1. Advantages of "hybrid" teaching mode

"Hybrid" teaching mode is a new teaching mode derived mainly from information technology, which is mainly composed of online and offline parts. Through the integration of educational resources, the teaching quality can be greatly improved. The traditional computer course teaching is mainly based on Teachers' blackboard writing, and the teaching method is relatively simple; At this time, if teachers can flexibly apply the "hybrid" teaching mode, it is conducive to fundamentally breaking through the shortcomings of traditional teaching methods and truly laying a solid foundation for the cultivation of computer application-oriented talents in higher vocational colleges. Compared with the traditional teaching mode, the "hybrid" teaching mode can fully reflect the leading role of students and attach importance to differentiated and personalized teaching, which is conducive to each student to acquire knowledge and exercise computer skills in the "zone of proximal development". Specifically, the advantages of the "hybrid" teaching mode are mainly manifested in the following three aspects:
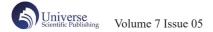
First, break the restrictions of conventional teaching. The "hybrid" teaching mode mainly relies on advanced information technology. It focuses on computer course resources and shares them with students through the network platform on the basis of effective analysis and integration. At the same time, it assists offline teaching to reconstruct the learning form, support students to carry out autonomous learning anytime and anywhere, and more importantly, students can scientifically and reasonably arrange the learning content and progress according to their own conditions, so as to maximize the satisfaction of students' individual needs. Compared with the traditional teaching mode, the "hybrid" teaching mode has given greater possibilities to the teaching reform of computer courses, and the related classes have become colorful, which is more conducive to the deep excavation of students' potential, the full mobilization of students' learning enthusiasm, and the effective improvement of learning quality and efficiency.

Second, integrate high-quality curriculum resources. The "hybrid" teaching mode builds an efficient learning platform for teachers and students, and also provides them with a variety of learning resources. Teachers can learn from the efficient classroom of other famous teachers from the specific teaching objectives in lesson preparation, teaching and consolidation, and can also introduce all kinds of excellent teaching resources to build online courses. The "hybrid" teaching mode has fundamentally broken through the limitations and constraints of traditional teaching modes and teaching methods, and is conducive to achieving the goal of co construction and sharing of diversified excellent courses through the network, which not only greatly reduces the cost of course resource construction, but also promotes the fundamental reform of offline teaching mode, killing two birds with one stone.

Third, strengthen the dominant position of students in the classroom. In traditional computer classroom teaching, teachers usually use teaching to occupy the dominant position. Most of the time, students complete their learning tasks according to the tasks and teaching ideas assigned by teachers, and the characteristics of students' passive learning are highlighted. This kind of "command" teaching mode seriously restricts the development of students' potential and learning initiative, which is not conducive to the improvement and development of students' autonomous learning ability. Sometimes, once separated from the guidance and intervention of teachers, many students may be deeply confused and unable to find the direction of learning. Therefore, in order to effectively promote students' real transformation from passive learning to active learning, teachers should fully recognize the advantages of the "hybrid" teaching mode, strive to create more independent learning and thinking space for students, guide students to form a correct learning attitude, maintain the durability of efficient learning, and then lay a solid foundation for future in-depth learning.

2. Analysis of the current situation of computer course teaching in Higher Vocational Colleges

As far as the computer course is concerned, it has distinct basic characteristics. In addition to imparting the basic theoretical knowledge

to students, the teaching goal of this course should also focus on training students' practical operation and practical ability, so as to achieve the teaching purpose of applying what they have learned and improving students' comprehensive quality. However, from the current situation of computer course teaching, there are still a series of problems to be solved, such as students' long-term passive learning position, it is difficult to understand the computer course knowledge. The teaching environment of the course is mainly computer classroom or traditional classroom, and students only carry out practical exercises step by step according to the teaching materials. In the classroom, the number of interactions between students and teachers is less, and students' problems accumulate more; In the long run, students' desire for learning may be lower and lower. In this case, how to effectively guide students to correctly use mobile phones, tablets, computers and other tools to assist learning has become an important direction of the future teaching reform of computer courses.

3. Innovative countermeasures of computer course teaching reform under the "hybrid" teaching mode

3.1 Pre class mixing, efficient Preview

Under the "hybrid" teaching mode, the preview efficiency of computer teaching in higher vocational colleges can be greatly improved. For computer teaching, guiding students to prepare well before class can accelerate the pace of teaching. Its significance is not only to make students familiar with the course content in advance, but also to cultivate their good ability of independent thinking and problem solving, which plays an important role in promoting students' learning and growth. In the previous preview session, teachers mostly assigned some oral assignments, lacking feedback and analysis, resulting in poor preview effect. However, in the "hybrid" teaching mode, teachers can combine the teaching content and use the relevant software platform to issue digital preview assignments, so that students can preview efficiently under the guidance of rich preview materials. At the same time, they can analyze the preview effect of students through software, grasp the learning difficulties of students, and then pave the way for the improvement of the follow-up teaching effect.

3.2 Mixed in class, flipped practice

Computer teaching in Higher Vocational Colleges requires teachers to combine theory with practice. Therefore, in classroom teaching, teachers can rely on the "hybrid" mode to promote students' flipped practice, so that students can learn by doing and do by learning, so as to improve the quality of teachers' teaching. For example, when teaching the knowledge points of "word graphic composition", teachers can rely on network resources to design a chapter micro lecture, which not only includes the explanation of relevant knowledge points, but also includes some practical tasks, such as "designing word graphic resume". Then the class is divided into 4-6 learning groups, which are grouped according to the abilities or achievements of the group members to ensure the balance of their strength, guide the members of each group to observe the micro lecture, discuss and communicate, think together and complete the practical task. Finally, the teacher can guide each group to show and introduce their task results, or talk about their skills, and then explain the highlights and shortcomings, so that students can obtain the experience of thinking ability and practical ability in the "hybrid" flipped learning, and the learning effect will be twice the result with half the effort.

In the "hybrid" teaching practice, teachers should adjust the teaching structure of computer courses and pay attention to the cultivation of students' operating ability. At the same time, we should change the previous teaching problem of paying too much attention to students' theoretical achievements, reasonably arrange the class hours of practice teaching and theoretical knowledge teaching, and pay attention to the accumulation of students' computer application skills. At the same time, teachers should also flexibly apply Internet information technology to teaching practice to promote the advantages of online and offline mixed teaching. Through the application of online cloud storage, big data and other teaching aids in offline classroom teaching, the computer course design and teaching structure of higher vocational colleges can be optimized, online and offline courses complement each other, and the teaching effect can also be improved.

3.3 Mix after class to consolidate ability

Many educational and teaching practices have proved that it is far from enough for computer teachers to rely on Teachers' classroom teaching if they want to improve teaching effectiveness. It is more necessary to carry out effective after-school consolidation, leading students to review and practice effectively, so as to achieve the purpose of consolidating knowledge and ability. In this regard, teachers can change the previous design mode of after-school consolidation. From a "hybrid" perspective, they can use relevant platforms to distribute micro lecture materials, digital test questions or assign some offline practical tasks, and then guide students to review materials and complete homework. During this period, teachers can use the Internet platform to guide and communicate with students in time, Help solve problems and further consolidate students' learning effect. In addition, teachers can also guide students to record relevant after-school practice videos, carry out competitions such as "computer homework competition", innovate after-school consolidation links, so that students can gain more experience and accumulate computer practice skills.

"Blended" learning focuses on training students' autonomous learning ability. Students need to internalize their professional knowledge in the process of online and offline teaching. By applying what they have learned to practice after class, teachers can also conduct tests and open elective courses in the consolidation stage after class. The test results can be transmitted to teachers in real time, and students' doubts about elective courses can be solved in time. It improves the overall after-school consolidation and improvement of teaching rhythm, and improves the effectiveness of education.

3.4 Building online classroom and extending Teaching

In the "hybrid" teaching of computer in higher vocational colleges, teachers should maximize the extension of teaching content, introduce rich teaching resources, promote students' learning ability, make students obtain better teaching experience, and improve students'

professional competitiveness. With the increasing development of computer science, new technologies and resources are being updated in real time. Teachers should combine the characteristics of "hybrid" teaching, grasp the advancement of teaching, and combine online and online teaching resources; Supplement and extend the contents of teaching materials for students, appropriately add some teaching contents of elective courses, and transfer the latest teaching materials through the online teaching platform. For example, on the wechat platform, teachers can assign learning tasks for students, share high-quality video teaching materials, and improve students' autonomous learning ability, so as to adapt to the mode and rhythm of online and offline "hybrid" learning. At the same time, wechat platform can help teachers and students carry out real-time interactive communication, give full play to the advantages of information technology teaching, and realize the extension of classroom teaching. Students can have enough time to review basic courses and expand professional knowledge, so as to promote the consolidation of students' basic knowledge and further extension of professional knowledge.

In short, it is necessary to apply the "hybrid" teaching mode to computer teaching in higher vocational colleges. The majority of teachers should correctly grasp the connotation and practical significance of this mode, and constantly use this mode to innovate computer teaching, enhance the interest and initiative in course teaching, so as to provide effective help for the cultivation of students' computer ability and literacy while improving the quality of education and teaching!

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References:

[1] Fengnian Liu Research on Hybrid Teaching Mode of computer application foundation course in Higher Vocational Colleges from the perspective of "Internet +" [j]Neijiang science and technology, 2020, 41 (1): 3

[2] Yan Han Research on Hybrid Teaching Mode of computer application foundation course in Higher Vocational Colleges [j]Computer knowledge and technology: Academic Edition, 2022,18 (1): 150-151

[3] Chengqin Wu Research on Hybrid Teaching Mode of computer education in Higher Vocational Colleges under information technology [j]Digital world, 2021, 000 (003): 110-111

[4] Yiping Yao Teaching reform of computer application foundation course based on Hybrid Teaching Mode [j]Shanxi youth, 2021, 000 (008): 159-160

[5] Xinyan Gao Reflections on the integration of information technology and curriculum in Higher Vocational Colleges [j]Information and computer (theoretical Edition), 2016, No.355 (09): 209-210

[6] Weigang Yan Research on higher vocational information technology curriculum reform from the perspective of collaborative learning [j]Intelligence, 2022 (29): 62-65

[7] Xiaolin Wang Practice and exploration of hierarchical teaching mode of computer application foundation course in Higher Vocational Colleges [j]Industry and Technology Forum, 2021,20 (20): 123-124

[8] Fenghua Wang Innovative application of "MOOC + SPOC" hybrid teaching mode in college computer teaching [j]Digital design (I), 2021,010 (001): 213-214

[9] Xiaofeng Zhang,Na Zhu,Quan Liu, etc "Online + offline" hybrid teaching reform of computer course guided by ability training [j]Computer education, 2022 (7): 5

[10] Guo Chen Research on the teaching reform of diversified mixed teaching of computer basic courses in Higher Vocational Colleges under the background of new engineering construction [j]Computer knowledge and technology, 2021, 017 (025): 189-190

[11] Chunming Wang,Yizhuo Guo Analysis of online and offline integrated teaching mode based on Internet + education under Open Education Computer Application [j]Science and technology information, 2021, 019 (013): 19-21

[12] Lingling Qiang Practice of hybrid teaching mode based on educational big data -- Taking "computer application foundation" course in Higher Vocational Colleges as an example [j]China new communications, 2022,24 (20): 164-166

[13] Yiping Yao Teaching reform of computer application foundation course based on Hybrid Teaching Mode [j]Shanxi youth, 2021, 000 (008): 159-160

[14] Linlin Chang Research on the "Internet +" hybrid teaching mode -- Taking the basic computer course as an example [j]Modernization of education, 2019, v.6 (98): 147-148

[15] Wei Wang Research on the cultivation of professional teachers' innovation and entrepreneurship education ability in Higher Vocational Colleges [j] JOURNAL OF HUNAN TAX COLLEGE, 2017 (5): 3