An Analysis of the Application of Flipped Class Teaching Mode in Photoshop Courses in Higher Vocational Colleges

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Abstract: Flipped class is a new teaching method, which changes the traditional teacher-centered teaching mode, and improves the class participation of higher vocational students, helps students to think actively and understand the relevant knowledge deeply. In the process of teaching Photoshop course in higher vocational colleges, improve students’ interest in learning and promote the quality of teaching.

1. Introduction
The continuous development of the times has promoted the comprehensive innovation in the field of technology. Various advanced technologies have been widely used in the field of teaching and the teaching methods have been gradually updated. The traditional teaching mode has been unable to meet the current students’ learning needs. Therefore, teachers need to strengthen research and formulate reasonable teaching strategies to stimulate students’ interest in learning and improve the quality of teaching. Flipped class is a brand new teaching mode, widely praised by students, and its application in Photoshop teaching in higher vocational colleges is still in the research stage, which also requires teachers to combine specific teaching content, continuous exploration and their own teaching experience, and rationally apply the flipped class mode, so that students can learn more knowledge.

2. The necessity of applying flipped class teaching mode in Photoshop teaching in higher vocational colleges
Higher vocational colleges generally have problems, such as poor learning foundation and low interest in learning. Most students don't pay attention to the class. Students are not interested in pure theoretical knowledge, but interested in teaching links and teaching modes. Teachers should actively adjust teaching methods and improve teaching quality.

2.1 Basic definition of flipped class
The teaching idea of flipped class originated from the United States. In 2000, Miami University in the United States adopted the teaching mode of flipped class for the first time in explaining the relevant contents of economics, and achieved good teaching quality. Some schools in China adopted this teaching mode around 2010, which was limited by teachers, teaching conditions, teaching system and other factors, and has not been widely used. With the development of information Internet technology, flipped class has been widely recognized by more and more teachers. Flipped classroom can take students as the core of classroom teaching. Teachers assign preview tasks to students before class. Students complete their learning through video materials provided by teachers(1).
2.2 The necessity of applying flipped class in Photoshop teaching in higher vocational colleges
Photoshop is an image processing software with strong processing function, which plays an important role in publishing and printing, web page production, photography, advertising design and other industries with a wide range of applications. In order to meet the needs of the society for relevant talents, many higher vocational colleges have offered Photoshop courses, in which the focus of teaching is the basic skills of dealing with pictures. The traditional teaching mode pays attention to explaining the software operation method for students, but neglects the cultivation of students’ innovation and design ability. Many students do not know how to use theory knowledge flexibly to guide practical work after learning, and can not meet the needs of society[2].

3. Key points of application of flipped class teaching mode in Photoshop course teaching in higher vocational colleges

3.1 Taking students as the core of class
The focus of flipped class teaching mode is to change the role of teachers. Students become the core of classroom teaching, and teachers mainly play a guiding role, so as to improve students’ learning initiative. The core of flipped class teaching mode is to promote the improvement of students’ comprehensive ability and lay a good foundation for their future development. Using the flipped class teaching mode, teachers need to make courseware, video and other teaching contents for students. Students should preview before class and make targeted explanations on difficult points in class[3].

3.2 Making reasonable teaching target
To adopt the flipped class teaching mode, teachers need to study the teaching content in depth and establish clear teaching objectives, deeply understand the differences among students, set different teaching objectives, and help students at different levels to achieve common improvement. At the same time, in order to ensure the teaching quality of Photoshop course in higher vocational colleges, teachers need to make courseware suitable for students’ learning, adopt the mode of video courseware, integrate sound and image, so that students can fully grasp the teaching content in the shortest time, and improve their enthusiasm for participating in learning in an all-round way[4]. In the process of making courseware, teachers need to properly supplement the content of teaching materials, put forward some targeted questions for students, stimulate students to think deeply and analyze, so as to promote the comprehensive improvement of students’ independent problem-solving ability and innovation ability.
3.3 Strengthening the interaction in class teaching  

The interaction between teachers and students is an important link in the flipped class teaching mode. Reasonable interaction can activate the classroom atmosphere and establish an equal relationship between teachers and students. Because the students have watched the teaching video before class, the teachers mainly answer all kinds of problems for the students in class, so the teachers need to encourage the students to actively ask questions and speak. In view of the different understandings of the same problems, the teachers can organize the students to have in-depth discussions, so as to cultivate the students’ ability to analyze problems\(^6\). In view of the problems not mentioned by students in the classroom, teachers need to make appropriate supplements, guide students to reflect, and ensure the effective penetration of various knowledge points.

4. Analysis of teaching cases  

The theoretical basis of flipped class teaching mode is to take students as the core of classroom teaching, to use the existing knowledge structure of students to complete the learning of new knowledge, and to pay attention to cooperation in the learning process. This paper takes Photoshop image and graphics processing as an example to study the specific application strategies of flipped class.

4.1 Analysis of teaching contents  

Photoshop image and graphics processing has strong applicability, which requires students to solve new problems and improve their innovative ability by using the knowledge they have mastered. There are many new concepts in this course, including layers, masks, filters and so on. These new concepts require students to improve their application ability through their own understanding. At present, the main contents of Photoshop image graphics processing in various textbooks include image editing and drawing, basic software operation, color adjustment, layer, mask, path, comprehensive application, filter, etc. Different contents contain subdivided knowledge points. The teaching process belongs to the process of guiding students to discover and solve problems continuously. For this reason, the teaching mode of flipping classroom is adopted. During this period, teachers should carry out teaching step by step to ensure that students grasp solid basic knowledge and achieve simultaneous improvement of innovation ability\(^6\).

![Basic operation command](image)

Figure 2. Basics of Photoshop image processing

4.2 Analysis of students  

Vocational college students who study Photoshop image and graphics processing are mainly about 20 years old. They have strong innovative and learning ability, self-awareness and personality, and strong ability of cooperation and communication. Before learning the relevant content, students generally...
have a certain computer foundation. According to the actual characteristics of students, teachers need to innovate on the basis of conventional teaching mode, encourage students to actively participate in various teaching links, and pay close attention to students’ classroom performance, so as to achieve the improvement of students’ comprehensive ability. In order to ensure the quality of teaching, teachers need to equip each student with a computer equipped with Photoshop software and video player. All computers are connected to the Internet to facilitate timely communication between students and teachers. The teaching goal is to grasp the basic operation of image and graphics processing method and Photoshop software, and to cultivate students’ communication and cooperation ability.

4.3 Specific teaching links
Before class, teachers need to record detailed teaching videos combined with teaching content. Photoshop image graphics processing involves the main tools including magnetic lasso, magic wand tool, gradient tool, brush tool and so on. The key teaching content is the layer. For this reason, teachers need to record the content of the teaching video before class. The video time should not be too long, which can be controlled in about 10 minutes. Video mainly explains some teaching examples, so that students can deeply grasp the basis of knowledge [7]. While students are familiar with basic concepts, teachers can gradually increase the difficulty of teaching, guide students to think actively and improve their innovative ability. Teachers can organize students to cooperate in the process of assigning tasks to students, and arrange the content of team cooperation to explore, so as to improve students’ interpersonal communication and cooperation ability. In the classroom, teachers organize students to ask questions and conduct in-depth discussions. At the same time, they explain in detail the problems that students have difficulty in understanding, so as to achieve the overall improvement of students’ comprehensive ability.

4.4 Analysis of teaching effect
By flipped class teaching mode, students are highly focused in the classroom. Through pre-class research, students can understand the difficulties of learning. Listening with specific problems in class, then learning efficiency is significantly improved. At the same time, in the process of teamwork, students can actively participate and the classroom atmosphere is active. After a period of teaching practice, students’ academic performance and application ability are gradually enhanced, and the effect of improving teaching quality is obvious.

5.Conclusion
Photoshop is a software with strong application. The traditional teaching mode neglects the cultivation of students’ innovative ability and can not meet the needs of the society for relevant talents. Therefore, higher vocational teachers need to actively change teaching strategies, and flipped class teaching mode takes students as the core of teaching, and pay attention to cultivating students’ innovative ability, so that students can continuously improve themselves while mastering basic knowledge. Its own ability is worth popularizing and applying in an all-round way.

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