

Ict-Based Teaching Strategies in Fashion Design in Shaanxi Province, China

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Abstract: With the rapid development of modern technology, clothing design teaching is facing more and more challenges and opportunities, which have also become more diverse and intelligent. In the context of the modern teaching era, traditional teaching models are no longer able to meet the needs of students and the market. Therefore, teachers must seek new teaching strategies to adapt to this era. How to adopt correct teaching strategies to improve students' learning effectiveness and practical ability has become an important issue that teachers need to consider. This project will study ICT-based teaching strategies in fashion design to help teachers better teach students.

Keywords: ICT-based Teaching Strategies; Fashion Design.

1. Background of the Study

The 21st century is the era of knowledge economy. The knowledge economy based on the production, dissemination and application of knowledge and information will dominate the world economic development. The rapid development of information technology has laid a solid technical foundation for the development of knowledge economy. The comprehensive national strength and international competitiveness of a country increasingly depend on the development of education, scientific and technological progress and knowledge innovation, and education will play an increasingly prominent role in the process of economic and social development. The traditional education is more and more unadaptable to the development of society. The fundamental way out of education lies in reform, and one of the important ways of education reform is education modernization.

The so-called education informatization refers to the full integration and application of information and communication technology (ICT) in the education system, to achieve a certain level of education teaching, organization and management, campus life services and other activities of digitization, networking, virtualization, so as to improve the quality and efficiency of education, and ultimately form a new education model to meet the requirements of the information society.

In the information age, the fashion design major adopts a variety of teaching methods and means, including traditional face-to-face courses and online learning, etc. The use of a variety of teaching methods provides students with more choices. In the teaching, from the explanation of textbooks to the play of multiple angles, the application of various scene experience, interactive courseware, beautiful PPT and other diversified tools, not only make up for the single defect of traditional teaching methods, but also more effectively stimulate students' interest in learning and improve the teaching effect.

In the field of fashion design, more information teaching methods will be added to education, such as virtual classrooms, online education, artificial intelligence and so on. Virtual classroom can create a new interactive learning

environment, so that learners can get a more comprehensive experience and exploration in the virtual world; Online education enables learners to adapt to their own learning pace, choose courses and content independently, and acquire the required knowledge and skills in time; The application of artificial intelligence technology can enable the machine to track and analyze the learning process of students in an all-round way, so as to provide students with personalized learning programs and help.

2. Research Design and Methodology

This paper will use the exploratory-sequential mixed method. It follows a phased approach to research, with each stage building on the previous one until sufficient data is collected.

The Quantitative research method will be used to determine the level of effectiveness of ICT-based Teaching Strategies in fashion design while the qualitative research method will be used to identify the factors and challenges of ICT-based teaching strategies in fashion design.

3. Theoretical/Conceptual Framework

(1) Theory of Teacher Professional Development

The professional development of teachers in this paper is reflected in the process of information-based teaching in which teachers of fashion design majors constantly adapt to the requirements of information-based reform on teachers' teaching ability. In order to continuously improve their teaching ability and teaching effect, teachers take the initiative to learn and apply information-based teaching ability. In the process of fashion design teaching, I constantly improve my knowledge and ability to deeply integrate information technology and subject teaching.

(2) Constructivist learning theory

Constructivism is an important branch of cognitive learning theory. The rise of constructivism is generally associated with multimedia. The development of information technology is relevant, because information technology can create an ideal learning environment for learners. Constructivism learning theory provides an important theoretical basis for the deep integration of information

technology and subject curriculum, and is also the theoretical basis of this paper base. Constructivism theory emphasizes that the development of individual cognition is the process of actively constructing meaningful knowledge under the ideal situation and with the help of others. It emphasizes that learners are the center of learning and teachers are the supporters, guides and mentors of students' learning a partner. Teachers should create meaningful situations for students' learning and guide students to construct meaningful knowledge independently. This provides guidance for the informatization teaching and ability improvement of the garment design teachers in this study.

(3) Information Technology and Curriculum In-Depth Integration Theory

The theory of deep integration of information technology and curriculum has gone through the stage from paying attention to extracurricular integration to paying attention to in-class integration. This theory holds that currently information technology has been deeply integrated with teachers' daily teaching activities, requiring teachers to understand relevant integrated theories and proficiently master and apply them in teaching. It is proposed that the process of teachers' acceptance, learning and application of such knowledge will be affected by many factors, such as social environment, students' level and confidence in the competence of technology. Therefore, when formulating training strategies, we should not only pay attention to the development of teachers' subject knowledge of integrated technology, but also pay attention to the external influencing factors that affect teachers' use of such knowledge. When formulating training strategies, we should take into account the situations faced by different teachers, provide them with corresponding support, and promote teachers to better apply the subject knowledge of integrated technology and promote the development of students. This theory provides a reference for this study to analyze the current situation of information-based teaching ability of clothing design teachers and its improvement strategies.

(4) ICT-Based Teaching Strategies

An ICT pedagogical strategy is a pedagogical approach that applies information and communication technologies (ICT) to improve teaching and learning. This teaching method enables students to better understand and master knowledge, and also enables teachers to better manage and control the classroom. ICT teaching strategies include the use of electronic devices, networks, multimedia and other resources in the classroom to convey knowledge, stimulate students' interest, and promote interaction and communication among students. In the process of developing ICT teaching strategies, teachers should give full play to the advantages of ICT education in classroom teaching, flexibly use various tools, software and resources, and create an efficient, creative and interesting learning experience for students. At the same time, teachers should also pay attention to the design of teaching objectives, determine the teaching content and progress, and ensure that students can get real benefits in learning.

The advantage of ICT teaching strategy is that it can enhance students' participation, stimulate students' curiosity and desire to explore, and let students find fun and motivation in the process of feeling knowledge. Ordinary teaching methods may lead to students' inattention, but ICT teaching strategies can attract students' eyes and stimulate students' interest through multimedia, interaction and other means, thus improving students' learning effect.

(5) Fashion Design

The concept of fashion design refers to the design of clothing according to the popular trend, human body aesthetics, cultural background and other aspects. Clothing design involves material selection, line design, color matching, texture and other aspects of clothing. Its design purpose is to show the beauty of clothing, but also need to consider the practicality and functionality of clothing.

In the process of fashion design, designers first need to determine the positioning and target market of clothing, conduct in-depth understanding and research on market demand and fashion trends, and express their design concepts and styles through continuous innovation and attempts. Designers also need to take into account different cultural backgrounds and aesthetic concepts, according to their own creative inspiration to design suitable for different groups of people, suitable for different scenes and other different types of clothing.

In the selection of materials for clothing design, designers need to consider factors such as material, cost, feel, color and texture comprehensively to determine the clothing production materials suitable for their own design. At the same time, the designer also needs to consider the wearability and convenience of the clothing, ensuring that the overall effect of the clothing meets the aesthetic standards of fashion.

In the process of fashion design, color matching is an important consideration. Designers need to consider the beauty and coordination of the overall color of the clothing, but also need to consider the impact of the color of the clothing on people's emotions and emotions. The quality of color collocation directly affects the beauty and expression of clothing.

Texture is another important aspect of fashion design. Through the use of different materials and textures to design clothing, clothing can be more visual and tactile effects, showing a more colorful sense of layers and three-dimensional effects.

In short, the concept of fashion design covers all aspects of knowledge and experience, only through continuous learning and trying, designers can create more brand influence and market value in the design of clothing works, but also for the traditional culture and contemporary aesthetic give a new connotation and vitality.

4. Population and Locale of the Study

The study will be conducted at three schools in Shaanxi province, namely Shaanxi Vocational and Technical College, Xi 'an Technological University and Shaanxi Garment Engineering College. The fashion design majors of these three schools enjoy a first-class reputation in the province, including 232 graduates of Shaanxi Vocational and Technical College of Fashion design, 174 graduates of Xi 'an Technological University of fashion design, and 110 graduates of Shaanxi College of Fashion Engineering.

In this paper, Slovin sampling formula is adopted, namely: $n = n / (1 + n * e^2)$, where n is the sample size, n is the population size, and e is the expected error.

According to the formula, 81 students from Shaanxi Vocational and Technical College, 72 students from Xi 'an Technological University, 58 students from Shaanxi Fashion Engineering College, a total of 211 students.

The interviewees were 5 fashion design teachers from Shaanxi Vocational and Technical College, Xi 'an Technological University and Shaanxi Fashion Engineering

College. A total of 15 teachers were selected as interview subjects in this survey. They have over 10 years of teaching experience and use ICT-based teaching strategies.

5. Data Gathering Instrument

The researchers will design a questionnaire for this purpose research. The questionnaire consists of 16 questions and aims to evaluate the effectiveness of ICT teaching strategies fashion design.

The questionnaire consists of two parts.

The first part is the teaching strategy of ICT theory course. A total of 8 questions were asked to determine the effectiveness of teaching strategies for ICT theory courses.

The second part is the teaching strategy of ICT for practical courses. Eight questions were asked to determine the effective level of ICT teaching strategies for practical courses.

In addition, the researchers will design interview guidelines that are consistent with the purpose of the study. To ensure their effectiveness, these tools will be validated by research experts, consultants and panel members.

With the consent of the school, 211 will answer the questionnaire in the school's classroom during students' free time from 4 to 6 p.m. After communicating with the 15 teachers to be interviewed, the time is set on the weekend, because it is a rest day. Teachers have plenty of spare time.

6. Conclusion

The advent of the era of education modernization leads the development of many industries, among which education is inevitably affected and changed. Education in the information age is no longer simply imparted knowledge, but through advanced technology and educational concepts, all-round educational activities are carried out, and more attention is paid to the cultivation of students' learning habits, thinking modes and practical abilities. With the rapid development of modern technology, fashion design teaching is facing more and more challenges and opportunities, and also becomes more diversified and intelligent. Under the background of modern teaching era, the traditional teaching mode has been unable to meet the needs of students and the market. Therefore, teachers must seek new teaching strategies to adapt to this era. How to adopt correct teaching strategies to improve students' learning effect and practical ability has become an important issue for teachers to think about. This topic will study modern teaching strategies of fashion design to help teachers teach students better.

In the information age, the fashion design major adopts a variety of teaching methods and means, including traditional

face-to-face courses and online learning, etc. The use of a variety of teaching methods provides students with more choices. In the teaching, from the explanation of textbooks to the play of multiple angles, the application of various scene experience, interactive courseware, beautiful PPT and other diversified tools, not only make up for the single defect of traditional teaching methods, but also more effectively stimulate students' interest in learning and improve the teaching effect.

For the future, there are also endless possibilities in the field of education. In the field of information technology, the application of emerging technologies such as artificial intelligence, big data and cloud computing will further change the face of education, optimize teaching management, improve the quality of education, and make education more in line with modern requirements. At the same time, education will also pay more attention to cultivating all-round qualities of people, including the spirit of innovation, leadership, teamwork, etc., in order to better adapt to the rapidly changing social and market needs.

Overall, the information-based teaching of fashion design is facing great opportunities and challenges. The future of education will pay more attention to students' initiative, cooperation, and diversified learning styles, and it requires teachers to have more educational elements and innovative ideas. In the new educational environment, to cultivate students' innovative thinking and practical ability, so that they have better professional quality and career planning ability, not only can adapt to the future social development, but also can become the elite in the future society.

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