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Analysis on the Application of Multimedia Teaching in Secondary Vocational Chemistry Course

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Abstract: Multimedia technology has opened a door of scientific information exchange and dissemination for modern education classrooms in my country with an efficient and intelligent human-computer interaction mode. Elements have broadened the dissemination path of my country's teaching classrooms, thus establishing the goal of my country's modern education, and to a certain extent, it is also in line with my country's new curriculum reform education concept to cultivate modern education talents with all-round development of morality, intelligence, physique, beauty and labor. coincides with each other." And chemistry, as a basic natural subject in the educational subject system of modern vocational colleges, itself originates from people's social practice and life, and is a modern subject that "emerges" based on the development and progress of human society. However, from the observation and interviews carried out by the author on the chemistry classrooms of many secondary vocational colleges, we know that the chemistry classrooms of modern secondary vocational colleges in our country have various system drawbacks and the teaching dilemma of multimedia teaching. Therefore, this article is based on this to carry out some basic analysis, aiming to improve the integration and development of chemistry classrooms and multimedia in my country's secondary vocational colleges, in order to seek high-quality, high-level, high-level chemistry teaching goals and strategies.

Keywords: Multimedia technology; Secondary vocational colleges; Chemistry; Application strategy; Analysis

As we all know, with the advent of the digital economy era, a new generation of information technologies such as big data, computer-aided systems, multimedia technology, blockchain, cloud computing, etc., centered on "Internet" technology, has gradually entered various fields in my country, and has been widely used in my country. Sectors such as social services, industry, education, infrastructure, etc. have provided great assistance. Multimedia technology is a high-tech model derived from modern computer technology. In modern teaching classrooms, computers can be used to orderly integrate and coordinate elements such as words, images, animations, sounds and other elements that teachers have made in advance for teaching activities, so as to project them on interactive On the interface, the computer can have the skills to display different media forms. The teaching content of chemistry in secondary vocational colleges mainly aims to study the atomic and molecular composition of chemical substances, and takes the chemical elements listed on the periodic table of chemical elements as the main research objects, and guides students to understand the common chemical elements in life. To understand the material structure, composition, properties, changes, etc., so as to lead students to explore and seek knowledge towards the teaching goal of deep learning. Modern chemistry education is divided into inorganic chemistry, organic chemistry, physical chemistry, analytical chemistry and polymer chemistry according to different teaching focuses. ability and logical ability. However, in this teaching process, multimedia technology, as a communication bridge connecting textbook knowledge and dynamic information, can not only guide students to have a basic understanding of the value connotation and research strategies of chemistry, but also guide students to recognize chemistry in the learning process. The importance of the discipline, and understand that the chemistry discipline is an important symbol of the origin of modern social civilization.

1. Analysis of the significance of multimedia technology in secondary vocational chemistry teaching

The wide application of multimedia technology in the field of education in our country has greatly broadened the teaching path of teachers for professional knowledge, and at the same time, it has changed the traditional way of students' acquisition of scientific knowledge, and used "information, automation and intelligence" to integrate extracurricular knowledge. Expansion information and the key points and difficulties of the course are presented through the computer, which to a certain extent also makes it easier for students to accept knowledge with academic characteristics. At the same time, teachers' course planning and courseware design based on multimedia technology can also fully organize and coordinate multimedia elements, and through the effective integration of text, images, sounds and animations, give full play to their subjective initiative and formulate "teaching according to their aptitude" for students of different levels. "-style teaching, highlighting the effective application of multimedia technology in classroom teaching, which also makes a certain positive reference for other educational disciplines. The following are some studies conducted by the author based on the benefits of multimedia technology in the chemistry classroom of secondary vocational colleges:

1.1 Mobilize the classroom atmosphere and stimulate students' interest

Zhang Zai Zeng Yun: "If people's interests are not far away and their minds are absent, they will not succeed in learning." It can be seen that the basic premise of effective learning is to fully mobilize students' enthusiasm and interest in learning content, and interest-based teaching strategies should be in the middle. It is an important element for chemistry teachers in vocational colleges to formulate overall teaching plans and programs. At the same time, the teaching strategy of interest is also an important teaching method in the subject of chemistry. As we all know, chemistry, as an important subject system under the natural sciences, has strong contents

on various electrochemical analysis methods, mass spectrometry analysis, electron microscopy, imaging methods, etc. Because of its academic nature, students are very likely to feel difficulties subjectively in the learning process, and thus have the idea of "holding back" for chemistry. At the same time, teachers blindly use traditional teaching strategies such as book teaching and oral narration, and cannot make the chemical language truly "vivid, lively, and concrete." The boring teaching method often makes students regard chemistry as a " The subject of "rote memorization" has seriously hindered students' exploration and knowledge-seeking psychology of chemical knowledge.

1.2 Guarantee effective teaching and develop teaching plans in an orderly manner

In our country's traditional subject teaching classroom, the traditional teaching concept of teachers believes that blackboard writing is a simplified display of book knowledge, which can deepen students' memory and understanding of knowledge to a certain extent. Due to the needs of basic teaching, teachers usually spend one-third of the class time on blackboard writing, resulting in less effective teaching time in classroom teaching, thus occupying valuable time in the classroom, and the introduction of multimedia technology teaching strategies , which has fundamentally improved the teaching situation. Based on the multimedia teaching method, teachers can formulate the lesson preparation time of teaching content and strategies, and integrate and formulate the content of the blackboard writing through multimedia, so as to show the chemical knowledge in an orderly manner through multimedia technology. In this way, it not only greatly saves the effective teaching time of the classroom, but also enhances the efficiency of the chemistry teaching classroom, concentrates the students' attention, and enables the students' thinking activities to keep up with the content presented by the multimedia projections, so as to actively cooperate with them. The teaching content formulated by the teacher cultivates the basic ability of in-depth learning and in-depth learning.

2. Analysis of the predicament of multimedia technology in secondary vocational chemistry teaching

2.1 The construction level of teachers in secondary vocational colleges is limited

Multimedia technology, as an emerging technology based on the "Internet", takes the computer as the main realization path, and can also be displayed through external devices such as smart phones and laptops. Multimedia is characterized by its "integration, interactivity, "Intelligent, easy to expand" has created a "new century of application in the field of modern computers." However, due to the late introduction of this intelligent technology in China, the vocational learning time of chemistry teachers in some secondary vocational colleges in China is different from that of the new generation. The birth time of information technology "passed by." Therefore, some chemistry teachers have a low level of awareness of advanced information dissemination methods such as multimedia technology, computer technology, and network communication technology, and their ability to master such information technology is also relatively low. It is difficult to "teaching" multimedia technology in the actual chemistry teaching classroom. At the same time, due to the "defensive mentality" of some chemistry teachers to traditional teaching strategies, the stagnation of teaching strategies and teaching methods in modern chemistry teaching classrooms has caused serious problems. It hinders efficient and orderly classroom teaching. In such backward and stagnant teaching activities, it is not only difficult for students to have a correct and scientific cognition of the chemistry subject, but also teachers will find it difficult to timely and rationally carry out their own professional skills and professional quality. Therefore, it is difficult to keep up with the "trend of modern multimedia teaching", and the lack of certain understanding and application of computer technology and multimedia technology has seriously hindered the orderly progress of chemistry education in secondary vocational colleges in China. It can be seen from this that some secondary vocational colleges in our country have not been able to fully understand and cultivate the professional construction level of chemistry teachers. In the long run, teachers have gradually lowered their own basic requirements, thus hindering the development of chemistry education in secondary vocational colleges. road.[1]

2.2 The popularity of multimedia teaching technology is low

As a modern information technology, multimedia technology mainly relies on computer technology, communication technology and audio-visual technology to process information according to the computer instructions made by users, and integrate stereotyped text through multimedia technology. , making it concrete and vivid, thereby enhancing the acceptance ability of service objects. However, in the actual visit and observation of the author, it is found that although some modern vocational colleges are very "active" in the introduction of multimedia teaching equipment, and actively equipped with a series of computer hardware and computer software, which has laid a solid foundation for the application of multimedia technology. However, in the actual chemistry classroom, the participation of multimedia teaching methods is not high. Some teachers still adopt the traditional "writing on the blackboard" teaching form even though the multimedia hardware equipment and infrastructure are very complete, and because some secondary vocational colleges do not have mandatory strict requirements for the application of multimedia technology, some teachers Knowledge telling in chemistry classrooms is often highly "subjective", so it is difficult to guarantee the quality of chemistry teaching.[2]

3. Research on the strategy of multimedia technology in secondary vocational chemistry teaching

3.1 Develop scientific and efficient multimedia courseware

The main application method of multimedia teaching strategies is to formulate efficient, scientific and reasonable professional courseware, and play and explain in the teaching classroom, so that students can acquire professional knowledge and teaching directly and quickly through such concise and efficient teaching methods. Focus, formulate your own learning strategies, carry out in-depth further learning according to the focus shown by the multimedia courseware, continuously expand your own knowledge level, and enrich your own knowledge experience, so as to lay a solid foundation for higher-level learning. The basics. Therefore, when teachers use multimedia technology to formulate courseware, they should pay special attention to the unity and coordination of the external

image and content of the courseware, so as to attract students' attention. When teachers formulate multimedia courseware based on the content of the textbook and the knowledge framework, they should first scientifically select and connect the connection nodes of professional knowledge, so as to form their own teaching strategies, and formulate the content of each page of PPT in the courseware from the shallower to the deeper. Guide students to follow the progress of the courseware to learn effectively, so as to ensure the overall development of the chemistry classroom. Secondly, teachers should arrange and explain the explanation of chemistry knowledge in an orderly, scientific and reasonable manner according to the class environment and students' mastery. Its own guiding role is not only to be a "transporter" of chemical knowledge, but also to be a "guide" and "enlighter" for students in the chemistry classroom, fully arousing students' interest and enthusiasm in chemical knowledge, with advanced nature. , information, intelligent multimedia technology to achieve efficient chemistry teaching classroom, thus creating a relaxed and pleasant chemistry classroom, so that students actively participate in the study of chemistry.[3]

3.2 Introduce dynamic media elements such as sound, text, and pictures

The content of chemistry education in secondary vocational colleges covers a wide range, including the characteristics and chemical composition of chemical substances, chemical reactions, chemical equations, dissolution phenomena, organic compounds, etc. Such specific chemical knowledge is usually presented in pictures or texts. In textbooks, however, students often experience chaotic memory when they are studying. As we all know, the periodic table of chemical elements proposed and formulated by Mendeleev is an important part of the modern discipline, so it is affectionately called the "central scientific periodic table" by many modern chemical researchers and scholars, thus laying the foundation for the discipline of chemistry. As the "central position of materials science, nanotechnology, biochemistry and other fields in the natural science system."

4. Conclusion

To sum up, with the rapid progress of the informatization level of my country's modern society, multimedia technology already has a broad application background and application strategy in the field of education in our country. Therefore, it contributes the "professional wisdom" exclusive to professional teachers for the development of the teaching path of my country's chemistry education discipline.

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