Perspective on Creating Problem Situation in High School Information Technology Teaching

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Abstract: In order to improve the quality of information technology classroom teaching in senior high school and promote the development of students, according to the situational teaching theory, combined with the teaching practice of information technology curriculum in senior high school, the creation of problem situations in information technology classroom teaching in senior high school was studied. On the basis of reflection and induction, how to improve the teaching efficiency has been the focus of information technology curriculum teachers in senior high school. Based on the current situation of information technology teaching in senior high school, this paper puts forward some reasonable suggestions on the contextualized teaching strategy of information technology curriculum in senior high school from the significance and strategy of creating situation.

Keywords: Creating problem situation; information technology teaching

1. INTRODUCTION

The teaching form of organizing teaching and imparting knowledge has a long history from raising and analyzing problems. Socrates once claimed to be "ignorant". He did not directly impart knowledge to students in his teaching, but showed them all kinds of questions about society, life and life, and talked and discussed with them, so that students could gain knowledge. The main teaching objective of the information technology course is to strengthen the interaction between teachers and students and explore new ways of interaction between teachers and students.

Adopting the teaching method of creating problem situations can make students feel immersive. With the guidance of teachers, students can effectively start from the problem situations and complete tasks by themselves. From a psychological point of view, people will have a more profound impression on the process of answering questions in the process of exploring questions. At the same time, it can also guide students to better use information technology to solve relevant problems in life, which is of great help to improve students' practical ability. When creating lifeoriented problem situations, high school information technology must conduct a comprehensive survey of students' interests and interests, and take students' life as an opportunity to introduce topics of interest to students, so as to guide students to participate more actively in the problem situations.

The creation of problem situations is one of the means to cultivate students' interest in learning. By creating a story that is related to the reality of life as a problem situation, it is conducive to cultivating students' courage and confidence to explore life, discover life and love life. In the face of simple and boring topics, the author designed a story close to life so that students can not only get knowledge in a relaxed and happy environment. To sum up, the so-called problem situation is a psychological state when students are trying to figure out the problem, but also facing realistic difficulties, and need to reach the goal subjectively, but also encounter thinking obstacles. Creating problem situations is to provide learning materials, cause students' cognitive conflicts, make students feel that the existing knowledge is not enough, break the balance in students' cognitive structure, and stimulate students' doubts and surprises. In the teaching process, teachers can introduce curriculum content through some life examples. The existence of information technology is intended to guide life practice.

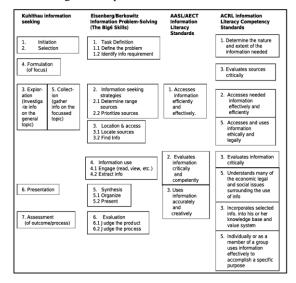


Figure. 1 Comparison of information skills process models.

THE PROPOSED METHODOLOGY The Importance of Developing Problem Situations in Information Technology Teaching in Senior High School

In the school, some activities such as essay contests can be held. The content of contributions can be published through the campus website, and the voting can be conducted through WeChat, SMS, microblog and other forms, so that students can think about how to show these star pictures? How can these star pictures be played automatically? Through such question guidance, students will have questions about what to do, and then the teacher will guide students into the "PPT" production, which can fully stimulate the learning initiative and guide students to explore this part of knowledge more actively."

Starting with these two specific algorithmic problems can stimulate students' interest in learning and enthusiasm for autonomous learning, and eliminate students' anxiety in learning. More importantly, it can also build a knowledge bridge between multiple disciplines by guiding students to link algorithm knowledge in mathematics with solving problems with computers. In this way, students have a more in-depth and intuitive understanding of algorithms while mastering the "process of computer problem solving". The psychological significance of problem situation is to stimulate students' motivation and desire for learning. Properly creating problem situations can not only stimulate students' interest in learning, trigger their desire to explore knowledge, but also enable students to have a pleasant and happy emotional experience in the learning of problem situations. Improper problem situations not only fail to achieve the above objectives, but also waste students' learning time.

2.2 Strategies for creating problem situations in high school information technology teaching

For example, we can set up some reward mechanisms in the process of teaching students the office software. If students complete the operation of the corresponding link, they can get the corresponding game link. At the end of the game, the operation method of the next command will be generated. This kind of game situation creation can fully attract students' attention. When teaching information technology in senior high school, the problem situation created by teachers should focus on the problem, guide students to ask questions, and discover the relationship between new and old knowledge in the exploration, so as to promote students' growth.

For example, when guiding students to learn the knowledge of "video information processing", teachers should not only focus on guiding students to carry out corresponding skill training, but also guide students to be good at discovering the correlation between video and animation. That is, according to the teaching content and teaching objectives at a certain stage, teachers set learning tasks one by one through the combination of knowledge and social community life, and then guide students to achieve the teaching objectives through exploration and autonomous learning in the actual or virtual problem situation. Psychological theory tells us that if students have strong interest in learning, they can make their brain and sense organs in an active state, which is easy to produce feelings of anger or insight, and make students' learning in a situation of eager to stop and try. This shows that students' interest in learning comes from challenging and specific problem situations.

The information technology course itself has advantages in information collection. In the process of creating problem situations, we can also expand resources. For example, in the PPT teaching process, teachers can attract students' attention, arouse students' curiosity and stimulate students' thirst for knowledge by showing sports stars, movie stars and animated characters.

3. CONCLUSION

To sum up, in information technology teaching in senior high school, the creation of problem situations can fully stimulate students' enthusiasm for learning and encourage students to explore knowledge more actively. At the same time, the creation of problem situations can also help students apply theoretical knowledge into practice, which is of great help to improve students' information literacy. Therefore, in practice, high school information technology teachers must combine the actual level of students to help students learn independently; It should be conducive to the promotion of students' interest in learning and emotional values; It should help students experience and feel the whole process of learning and inquiry, and let students experience the happiness of success in the whole process of learning and inquiry.

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