Research on the Teaching Design of Learning Situations in Information Technology Course in Middle Schools

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Abstract: The research on Information Technology in middle schools is a very important course. The arrangement and explanation of the course and the application of some teaching methods to promote the research of Information Technology are an integral part of education. Based on this, this article mainly explains the meaning and importance of learning situations, and how to create learning situations in the teaching of Information Technology in middle schools for related staff.

Keywords: Information Technology in Middle School; Course teaching; design of learning situations

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1 Introduction

As a part of classroom teaching, good learning situations can effectively enhance students’ learning interest. In the design of classroom teaching, learning situations are an important part in the course. A good learning situation can effectively stimulate students’ learning interest, encourage students’ thinking quality and improve their learning ability. Compared with other courses, Information Technology is an emerging course, whose teaching plan and teaching system are constantly being improved and updated. It is an important teaching task to apply scientific and reasonable teaching plans to learn the Information Technology Course.

2 The meaning and importance of learning situations

2.1 The learning situation provides a platform for students to realize “Meaning construction”

Individual learning is undergone in a certain historical, social and cultural context. Society plays an important role in supporting and promoting individual learning and development. The theory of contextual learning emphasizes that learning is a process of meaning construction. Meaning is not separated from the context, but synthesized through practice and context. Students are the active creators of cognitive subjects and meanings, and students’ meaning construction of knowledge is the ultimate goal of learning. In fact, in a teaching environment based on students, if an effective learning context is provided, learners will have greater learning interest and expect for knowledge, and it will be easier to understand, reorganize and construct the knowledge [1].

2.2 Learning situation supports students’ learning

Through the analysis of Situational Learning, it can be concluded that the main purpose of creating learning situations is to provide students with a learning platform. A good learning platform can enhance students’ learning interest. Under effective learning situations, students' thinking will be opener, that is to say, the emergence of learning situations provides a platform for students to learn and supports students. In the situation, students are enthusiastic to learn
and communicate. To improve the construction of the knowledge system and to consciously digest new knowledge, the creation of learning situations is a very important part of teaching, which is worthy of attention.

2.3 The creation of learning situations provides a platform for information teaching

Teaching activities are undergone in certain places and certain prerequisites. During the teaching process of information technology, creating learning situations not only provides corresponding platform for teaching activities, but also provides students with learning space, which is a relative concept. Students and teachers exchange knowledge and communicate in this space. Teachers impart knowledge to students when students receive knowledge, and by receiving knowledge, teachers receive feedback. The entire process requires the teachers and students to work together to form a learning context, which is a very pleasant teaching experience.

3 Strategies for creating learning situations in the teaching of information technology in middle schools

3.1 Expand curriculum resources and record the life

Interest is the best teacher. The improvement of learning situations requires not only the supplement of knowledge from textbook, but also the filling of details in life. Teachers should be good at integrating some details in life into information technology teaching. Teachers must inform students of common sense from time to time to stimulate students’ interest in learning, so that students can also learn about the information technology in life, work harder in the classroom and make the classroom learning complement the life, so as to better learn about it.

3.2 Stimulate students’ creative thinking based on the characteristics of the course

The creation of learning situations can be based on the characteristics of information technology courses, thereby creating a learning environment that can follow information technology courses. The characteristics of information technology course can be divided from three aspects. First, information technology and our life is closely connected. Information technology can be applied to products everywhere. Teachers can promote students’ learning interest, expand students’ learning thinking and stimulate students’ creative thinking by teachers’ real examples, such as the big screen in life; The nature of information technology belongs to a highly practical discipline, which requires students to have strong hands-on skills. Practice is the only criterion for testing truth. Through practice, it can better confirm the accuracy of knowledge. Through practice, it stimulates students’ willingness to learn actively, actively motivates the brain, and increase the interest in learning. Finally, information technology is knowledgeable. Learner not only needs to have good hands-on ability, but also needs a certain knowledge to be flexible. By combining the knowledge of applied information technology with hands-on practice, teachers give praise and encouragement to students, thereby stimulating the students’ interest and opening their brains.

3.3 Apply the teaching content flexibly based on students’ psychology

Different students have different levels of interest and content of learning, and each student has his unique learning interest. Therefore, in this process, the teacher can understand the students’ learning interest, as well as their living conditions and psychological states. When designing the teaching situation, teachers appropriately adjust the teaching plan according to the dynamics of the students’ thinking, which greatly attracts the students’ attention, and facilitates the teacher to better impart the knowledge of information technology. Individual differences between students can be achieved through the teaching plan. To make up for the changes, different types of students can come to the state of learning well, and more actively learn the knowledge.

3.4 Cultivate students’ creative thinking and diversify designs of teaching programs

The design of diversified teaching plans is an important method and strategy that makes the learning situation more attractive, and it is also an important source to promote students’ learning. The design of diversified teaching plans helps students develop their thinking and innovation, better stimulate students’ thinking, promote students’ initiative and actively digest knowledge. The content of information technology course updates constantly. In the face of developing teaching content, it is necessary to support it from a diversified perspective when creating learning situations, so that students will like it more and gain more knowledge.
3.5 Pay attention to the details in the classroom and offer help in real time

Teachers should be good at focusing on the details in the classroom, intervene in time, and build a suitable scaffolding for students’ learning, so as to promote the students’ original cognitive level. Teachers should pay attention to students’ differences, learning styles and difficulties encountered in the learning, and provide timely help and guidance. Teachers should also pay attention to generative resources in classroom teaching, and timely motivate students’ thinking ability.[4].

3.6 Apply information technology to enrich learning situations

Information technology has its unique advantages in education. As an information technology teacher, it is better to make full use of information technology to enrich the learning environment. For example, we can use the Internet to provide students with rich learning resources required for research-based learning, audio-visual materials for experts’ lectures, display various multimedia information, create realistic virtual situations to stimulate learners’ original cognitive reserves and induce their learning motivation.

4 Conclusion

In conclusion, the creation of learning situations in information teaching will help students develop their thinking ability, promote students’ interest in learning and motivate them to effectively learn the information technology, make use of the characteristics of information technology to increase students’ interest in learning; Through classroom teaching, diversified classroom content should be designed to cultivate students’ creative thinking; The details of information technology in classroom should be noted; The classroom atmosphere should be activated to promote students to better learn information technology.

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