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The Research of Modern Educational Technology on the Training of Mathematics Learning Ability in Middle School

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Abstract **– In this paper, the present situation of the application of modern education technology to China to do, this paper analyzed the modern education technology to the classroom teaching and the important role of students, comprehensive treatment of modern education technology influence on student's mathematics learning ability, in the modern teaching school and teacher equipped with and the application of modern education technology and the causes of the problems in the training strategies and rationalization proposal is given.**

Keywords **– Modern Educational Technology, Mathematical Learning Ability, Training Strategy.**

With the rapid development of information technology, the world has entered the information age, and a variety of education methods have entered schools, which promotes the high integration of modern education technology and classroom teaching. People regard this combination as modern education technology[1]. Along with the further implementation of the new curriculum reform, the background of the modern education technology has become teachers' work culture, the progress of the society and the popularization of the computer to the society as a whole has entered a new stage, the education on a path to the informationization has become a inevitable trend, with multimedia technology and network as the center of modern education technology has become the students' creative tool. In high school mathematics education plays an increasingly important role, more profound promoted the reform and innovation of education system, at the same time provides a rich resource for mathematics teaching the emergence of modern education to change the dull traditional mathematics classroom, rigid geometry becomes rich and vivid, greatly improves the students' interest in active learning mathematics, to cultivate the students' ability of various aspects, therefore, change of modern education technology in the process of use to the student ability deficiency will greatly help to student's mathematics learning.

I. Modern Educational Technology Plays an Important Role in the Cultivation of Mathematical Learning Ability

A. *Cultivation of Students' Self-learning Ability by Modern Educational Technology*

Students' autonomous learning ability is one of the most important kind of learning ability, students only after the passive learning into active learning to master the art of learning in the true sense, comprehension of mathematics learning bring us happy[2] autonomous learning not only refers to the student active learning in the classroom teacher to teach knowledge, but also can active learning in the classroom can't involves knowledge, students in the inadequate understanding of the knowledge in time can with the help of online platforms such as super star for class, don't understand the knowledge point of learning, again repeated viewing, strengthen students' understanding of knowledge and master the situation. Such as students in learning the Pythagorean theorem can be based on the geometric sketchpad to simulate the hypotenuse tree vivid display changes with the change square edge of bevel edge, their hands-on demonstration process change, feel the graphics changes bring us visual

experience, lets the student in the independent after understanding can experience the fun of the mathematics brings to us, in order to do further mining on the basis of love.

B. *The Cultivation of Students' Innovation Ability by Modern Educational Technology*

In previous teaching process, teachers and students due to the effect of the mind-set, easy to make the brain to form a kind of curing model[3] . Although mind-set has certain advantages, can help students to solve mathematical problems quickly, but also to some extent hindered the students' thinking and innovation ability, therefore, the learning of mathematics is applied to life from life at the same time, high school students should break through their own mindset, have the courage to put forward the new way to solve the teaching steps and thinking process of mistakes, brave and clearly expressed their views fully use modern education technology, effectively play In when I speak of normal distribution curve, for example, teachers use multimedia technology to display galton board experiment, students can through the flash animation to deepen the understanding of the normal curve and memory, and enhance students' interest in this part of knowledge in addition, this part of normal distribution is dependent on the function of image, the teacher may according to the multimedia simulation function image enables students to intuitive perception function and its change process, realize the function of image change trend of tall and thin short and fat, in a lively classroom to understand and learn knowledge, so the modern education technology to the cultivation of students' creative thinking ability, is the experience of domestic and foreign high school practice innovation[4].

C. *The Cultivation of Students' Inquiry Ability by Modern Educational Technology*

Encourage students to explore the cultivation of the ability to help students explore and hands-on ability, mathematics is a kind of activity, is the real life model of mathematical learning is a process of constant practice, at the theoretical knowledge is not enough, the students only can be solid grasp after practice the truth such as students in the study of geometry three view drawing, teachers can in show of geometry, lets the student himself, moving small cubes and its combination, watching the three view drawing geometry, can let students intuitive feelings change process and to comprehend and on this basis, the geometry can be split and reorganized to cultivate students' geometric intuitive ability and experience the process of modeling[5]. Effective inquiry process can stimulate students' potential. Teachers must actively mobilize students' ability to explore, so that the classroom is truly alive.

II. ANALYSIS OF CURRENT SITUATION

A. *Modern Educational Technology and the meaning of Mathematics Learning Ability*

In information science technology of modern education technology is the basic principle and method of extension under the guidance of human information function of information technology is the study of information transmission and processing technology, sometimes called [6]. That is modern information technology, information technology is the use of computers for information processing, the use of modern electronic communication technology in information acquisition and storage, processing and utilizing related products manufacturing technology development of information service of the new discipline of the network technology increasingly global could improve the teaching level, through the network learning enables people to exchange and learning anytime and anywhere Modern education technology mainly in mathematics classroom of multimedia networking China now, most of them adopt the method of the multimedia teaching, whiteboard projection projector slides and

EN when walter teaching software, greatly improving the students' mathematics learning effect in extracurricular time, students can through a variety of online learning platform, such as learning through super star for class platform provides plenty of learning resources for students to learn[7].

Mathematics learning ability is a person in the process of mathematics study have or the strength of the ability of mathematics learning, a direct impact on students' mathematics learning activity in general, the effect of the students' ability of mathematical learning ability and cognitive ability to participate in thinking ability and memory ability generalizations ability is closely related to the mathematics thinking ability of symbolization, etc., to cultivate the students' ability of mathematics learning, we should cultivate the ability to [8].

B. *Problems in the Application of Modern Educational Technology*

(1) *Excessive Multimedia Teaching is Difficult to Improve the Ability to Summarize*

Traditional mathematics teaching high school students may be constrained by the level of thinking, students in the difficult to understand at will and classmates to solve the problem as well as the discussion and communication between teachers and students, to share their point of view, and to discuss after summarizes the conclusion and the application of modern education technology, students do not understand or can't solve the problems when directly by means of modern education technology can directly for answers, eliminating the students communicate with each other to discuss between inductive conclusion this link, won't have too much communication between students to share their experience of the process Because the console of multimedia teaching is fixed on the platform, it also greatly limits the full play of teachers' teaching ability and cannot interact with students under the stage. As a result, the communication between students and between teachers and students is limited and the ability to summarize is not strong.

(2) *The Rapid Change of Slides Hinders the Development of Students' Cognitive Ability*

Previous mathematics teaching process, a class only speak one or two big problem is frequent, in this case, in order to solve this big problem can covered by all kinds of knowledge between teachers and students together to learn the knowledge in series with the internal relation between make students form the new cognitive system, better use of knowledge, but after using the modern education technology, teachers will often just past to present on the blackboard or blackboard writing content directly on the teaching equipment, the knowledge of stacked together, the important content of handguns, quick learning process causes students don't have the time to absorb In this way, the proper connection between knowledge points is ignored, thus hindering the development of students' cognitive ability.

(3) *The Intermittency of Multimedia Teaching Leads to Students' Incoherent Learning and Thinking*

The teaching methods presented by multimedia are mostly intermittent display, and the links between teaching contents are always intermittent and disjointed. Students' thinking jumps greatly, which cannot generate continuous thinking activities. Therefore, it is easy for students' thinking to jump sharply in the learning process and fall behind the teaching progress, thus affecting the learning process. Pages such as slide show to present the process of teaching content, the previous blackboard writing theorem defines directly jump to the page, the process of the derivation process of the lack of formula and theorem, without the derivation process will lead to a giant leap students' mathematical thinking, understanding of knowledge is not deep, also don't know how to use this part of knowledge, greatly affect the efficiency of students in mathematics learning.

III. Training Strategies for the Application of Modern Educational Technology

A. *The Development Mathematics Teaching Software, Raises the Student Mathematics Induction Summary Ability*

Develop the students' ability to sum up, help students to sum up key points of learning in the process of learning, help students to do less subject should be also can achieve the effect with the deepening of curriculum reform, the thesis forms the great changes have taken place, from the traditional closed to open traditional topic has fixed teaching method and the fixed answer, has made the induction and summary, students is difficult to improve their ability to do this kind of problem so teaching, the teachers can use the modern education technology to set up more because of the traditional teaching way under the limit cannot open questions, because the answer to this problem has no fixed, there is no limit on the students' thinking, can make full use of their own thinking to learn more, comparing analysis and synthesis, summarizes the solutions and answer law of open questions, to cultivate students' ability of mathematical knowledge induction and summary.

B. *Correct the Attitude to the use of Modern Educational Technology and Cultivate Students' Cognitive Ability in Mathematics Learning*

In the teaching, the teacher should first teach the student how carries on the elaboration to the useful knowledge, the teacher wants to observe the student in the learning process mood change. In the process of teaching, teachers should tell students: what to learn? Why? How to learn? How to use? Teacher can not with: do not ask me why, do this kind of psychological activities. For students can see at a glance to understand about, it is difficult to understand for the students are not familiar with the knowledge to stop teaching equipment, and analyzing the specific problems don't understand where instant explanation and teachers to understand students, understand students need what strategies can master this knowledge, according to their aptitude, causes the student to develop an open independent way of thinking, break through the original ideas and the framework of happy learning.

C. *Establish Modern Educational Technology Evaluation System and Train Students' Logical Thinking Ability in Mathematics Learning*

Students in the process of application of modern education technology should be add to the student to observe, to find out the student what are the advantages and disadvantages in the process of learning, good at discovering the number and the relationship between the number of graphics and graphics and can fast accurate calculation, and find out the relation between knowledge, and further explore analysis of student learning, for students to understand the formula of the theorem is deduced to make the necessary process In the learning process of students, teachers do not have to use too much language to guide students interactively, but can timely guide students to explore according to the problems in the learning process, so that students can strengthen the understanding and mastery of knowledge, and cultivate students' active learning ability and exploration ability.

IV. Conclusion

Application modern education technology can effective fast improving education efficiency, enhance interpersonal relationship so, teachers in the use of modern education technology at the same time, also should constantly improve their level of education technology to prepare for teaching, for students, timely understanding

of students timely and continuous focus on students' ability of independent exploring, fully arouse the enthusiasm of students learning process, to create a good atmosphere of classroom teaching, imparting knowledge in the process of the teacher's teaching process can make students more love of learning, improve the ability of self-learning ability, cultivate the students' mathematical learning ability.

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