Analysis of the Problems in the Application of Educational Technology in Underdeveloped Areas

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Abstract: In underdeveloped areas, the teaching environment of educational technology has been initially established, which has laid a solid foundation for further enhancing teaching efficiency and improving teaching quality. But only when it is used effectively and reasonably can its function be maximized. If educational technology is turned into a stunt, it is undoubtedly a waste of the country's precious educational resources. Based on this idea, this paper discusses how to better promote the development of applied technology from the current teaching practice of primary and secondary schools in underdeveloped areas.

Keywords: Educational Technology, Teaching Application, Education.

1. Introduction

In the process of implementing quality education in China, the state has carried out a series of educational and teaching reforms in primary and secondary schools in underdeveloped areas, combining educational technology with primary and secondary education in underdeveloped areas, speeding up the process of information-based education and teaching in primary and secondary schools and making information-based teaching in primary and secondary schools more efficient. Teachers can apply it to advanced teaching such as classroom teaching, MOOC course and micro-teaching. This new teaching mode not only adapts to the study habits of contemporary college students, but also adapts to their lifestyles, which is of great significance to improving the learning efficiency of different subjects. Multimedia and network technology are gradually applied in teaching, which can not only enrich teachers' teaching resources, but also visualize abstract knowledge and sounds, so that students can deepen their understanding of abstract knowledge, thus improving teachers' teaching efficiency to some extent. Using multimedia to carry out a variety of teaching activities and present the teaching content can catch students’ eyes. The interesting Chinese characters and bright pictures can arouse students' interest and let them get a deeper understanding in classroom interaction. In easy-to-understand terms, it is to convey what you have learned to students in the most concise way by using words, animations, sounds, pictures and other forms, so that they can better understand and learn. At the same time, various teaching resources on the network can also provide students with an effective and creative learning environment, thus continuously improving the teaching quality. Judging from the current situation, the application of educational technology in underdeveloped areas in China still faces the following problems: ① teachers lack the ability to use information technology; ② The use level of educational technology is generally not high; ③ Teachers don't know the concept of "educational technology".

2. Talk about the Problems of Educational Technology in Primary and Secondary Schools in Underdeveloped Areas

1) Teachers do not make full use of information technology.

In the teaching process, whether teachers can effectively use information technology to teach is an important factor related to the teaching effect. Therefore, it is necessary to retrain the senior staff of primary and secondary schools to make them know something about educational technology, existing educational conditions, level and teaching conditions. Some primary and secondary education materials can be multimedia, while others can be consulted on bulletin boards. Therefore, teachers should carefully study the contents of the materials and present them according to the contents of the teaching materials.

2) Insufficient application level of information technology.

Although China's educational informatization has developed for decades, its application in primary and secondary schools is still in its infancy. At present, they are still in the stage of "teaching", and most of them are assisted by educational technology. Many teachers simply use slides to show the information in textbooks, rather than the real educational technology, which is also a good cover-up. Although our classroom teaching already has a high scientific and technological environment, teachers can't effectively use media resources for education and teaching because of their lack of information-based teaching design and information technology application ability. Instead, they only use PPT to assist teachers in class and regard multimedia as the electronic blackboard of the past. Some slides lack proper design and clever layout, and the screen is full of dense words.

3) Lack of technological application concepts

In today's era of information explosion, the rapid development of educational technology has brought unprecedented changes to the field of teaching. However, in order to truly achieve the effective application of educational technology in teaching, we first need a solid theoretical basis as support. Although significant progress has been made in educational informatization, theoretical research in the field of educational technology is relatively lagging behind, which to some extent restricts the in-depth application and
development of educational technology. Firstly, we must face the reality that the application of educational technology in teaching lacks profound theoretical support. With the rise of the theory of "effective teaching" in the field of teaching, this theory has had a profound impact in the education sector. Unfortunately, this theory has not been fully digested and understood by experts in the field of educational technology. Therefore, in the application of educational technology in teaching, we often feel a lack of direction, unclear about how to effectively use educational technology, and do not know how to evaluate the effectiveness of a technology in teaching. This theoretical deficiency undoubtedly poses great difficulties for the application of educational technology in teaching. To solve this problem, we need to strengthen theoretical research in the field of educational technology and explore the effective application of educational technology in teaching from a multidisciplinary perspective. At the same time, we should actively learn from and absorb the theoretical achievements of other disciplines, providing more solid theoretical support for the teaching application of educational technology. In addition to insufficient theoretical support, we also face another important problem, which is the lack of effective strategies for the deep integration of modern technology and education with universal adaptability. In recent years, research on the effective integration of educational technology and teaching has become a hot topic and focus of basic education reform research. This type of research attempts to provide guidance for frontline teachers by exploring the models, principles, strategies, and other aspects of educational technology application from various disciplines and even lesson examples. However, these studies are often limited to a certain discipline or lesson, and their adaptability and portability are not strong. To address this issue, we need to strengthen interdisciplinary research and explore the effective application of educational technology in different disciplines and types of classroom teaching from a broader perspective. At the same time, we should also focus on empirical research to test and revise our theoretical hypotheses through practice. Only in this way can we truly find effective strategies for the deep integration of modern technology and education with universal adaptability, and provide more practical guidance for frontline teachers. In the specific research process, we can start from the following aspects: first, strengthen the basic theoretical research of educational technology, explore the essence and laws of educational technology in teaching; Secondly, strengthen interdisciplinary research and explore the effective application of educational technology in different disciplines and types of classroom teaching from a multidisciplinary perspective; Thirdly, we need to strengthen empirical research and test and revise our theoretical hypotheses through practice; The fourth is to strengthen communication and cooperation with international peers, and learn from their successful experiences and practices. In short, the effective application of educational technology in teaching requires a profound theoretical basis and effective strategies with universal adaptability as support. Only by strengthening theoretical and empirical research can we find a truly suitable path for the application of educational technology teaching in China, and make greater contributions to promoting the development of China's education industry.

3. The Solution to the Problem

1) The teaching process and teaching situation are further optimized.

Classroom teaching tools have been greatly improved, but our teaching methods are still based on traditional courses. The training of modern information technology is flexible and diversified, which enables the teaching content to be flexibly adjusted and managed and improves the teaching efficiency [1]. The most effective teaching method is that teachers should first fully understand the real situation of students, then design courses suitable for each student's needs and prepare relevant learning materials.

Improve teachers' educational technology literacy

Educational technology literacy, as an important component of the comprehensive quality of teachers, is an indispensable part of their professional development. It covers the ability of teachers to master, apply, and evaluate educational principles and methods, and is a concentrated reflection of their professional competence. In the vast field of educational technology, we can divide educational technology literacy into three aspects: educational technology theoretical literacy, educational technology knowledge literacy, and educational technology emotional literacy. These three aspects are intertwined and mutually supportive, together forming a complete system of teacher educational technology literacy. Firstly, the theoretical literacy of educational technology is the cornerstone of teachers' educational technology literacy. It covers the basic theories, principles, and methods of educational technology, and is the understanding and grasp of educational technology concepts by teachers. A teacher with profound theoretical literacy in educational technology can clearly recognize the importance and role of educational technology in teaching, consciously integrate educational technology concepts into daily teaching, and thus improve teaching effectiveness. Secondly, educational technology knowledge literacy is the core of teacher's educational technology literacy. It includes the total amount of teaching skills and basic theoretical knowledge mastered by teachers in the teaching process. These knowledge not only include professional knowledge of educational technology, such as teaching design, teaching resource development, teaching evaluation, etc., but also include knowledge of other disciplines related to education and teaching. A teacher with rich educational technology knowledge and literacy can flexibly apply various teaching skills, design teaching plans that meet the characteristics of students, and provide students with a richer and more diverse learning experience. Again, emotional literacy in educational technology is the soul of a teacher's educational technology literacy. It refers to the interest, enthusiasm, attitude, and moral level exhibited by teachers when using educational technology. A teacher with positive emotional literacy in educational technology can actively explore new methods and applications of educational technology, actively face the challenges and changes brought by educational technology, and always maintain a love and interest in educational technology. At the same time, they are also able to consciously abide by the moral standards of educational technology, ensuring the healthy and orderly development of educational technology. In the educational technology literacy of teachers, the level of information literacy is directly related to the scientificity of its application. With the rapid development of information technology, educational informatization has become an important feature of modern education. A teacher with high-level information literacy can proficiently master various information technology tools,
effectively utilize information technology for the development and utilization of teaching resources, and provide students with richer and more diverse learning resources and environments. At the same time, they can also scientifically evaluate the application effect of information technology in teaching, providing strong support for the further development of educational technology. Therefore, enhancing the educational technology literacy of teachers is of great significance for promoting the reform and development of education and teaching. We should strengthen the cultivation and training of teachers' educational technology literacy, improve their theoretical, knowledge, and emotional literacy in educational technology, and lay a solid foundation for cultivating more high-quality talents with innovative spirit and practical ability.

3) Increase government investment
The government's investment in the field of education undoubtedly has a profound impact on improving teaching quality and promoting educational informatization. With the rapid development of information technology, the demand for high-tech equipment in the field of education is also increasing. In order to ensure that schools and educational institutions can keep up with this development pace and fully utilize information technology for teaching innovation, the government should further increase investment in educational equipment. Firstly, the government needs to invest funds to purchase new teaching equipment. These devices not only include high-performance computers that enable students to learn and interact efficiently in the classroom, but also cutting-edge technology products such as intelligent teaching platforms and virtual reality devices. These new devices can provide students with a more intuitive and vivid learning experience, helping them better understand and master knowledge. Secondly, the government also needs to invest funds to regularly maintain and update existing equipment. Over time, teaching equipment will gradually age and its functionality will become outdated. In order to ensure the normal operation of equipment and improve teaching efficiency, the government needs to regularly provide maintenance and updating services for schools and educational institutions. This can not only extend the service life of the equipment, but also ensure the smooth progress of teaching work. By increasing investment in educational equipment, the government can help schools and educational institutions solve the problems of insufficient and aging equipment, and create a more advanced and convenient teaching environment for teachers and students. In such an environment, teachers can utilize advanced teaching tools for teaching innovation and improve teaching quality; Students can enjoy richer and more diverse learning resources, stimulate their interest in learning, and promote comprehensive development. Therefore, government investment is an important way to ensure the updating and maintenance of educational equipment, which is of great significance for promoting educational informatization and improving educational quality.

4) Promotion of school enterprise cooperation
Schools and educational institutions often face limitations in their pursuit of improving teaching quality due to insufficient funding and lagging technology. To overcome these difficulties, actively cooperating with enterprises and introducing advanced educational equipment has become an effective way. This collaborative model not only enables the rapid introduction of new technologies and devices, but also promotes the development of educational informatization, bringing students a richer and more efficient learning experience. Firstly, cooperation between schools, educational institutions, and enterprises allows for direct access to the most cutting-edge educational equipment and technology in the market. As the main body of the market, enterprises often possess strong research and development capabilities and sharp market insights, which can quickly capture the latest trends and demands in the education field. By collaborating with schools and educational institutions, enterprises can introduce these new technologies and equipment into the field of education, providing strong support for teaching. Secondly, enterprises usually have a professional technical support and after-sales service system. After introducing equipment, schools and educational institutions often face a series of problems such as how to operate and maintain it. Enterprises can provide professional technical support and after-sales service to ensure the normal operation of equipment and timely solve any problems that may arise during use. This not only reduces the burden on schools and educational institutions, but also ensures the smooth progress of teaching. In addition, cooperation between schools and educational institutions and enterprises can also achieve resource sharing and complementary advantages. Schools and educational institutions have abundant educational resources and teaching experience, while enterprises have advanced technology and equipment. Through cooperation, both parties can jointly develop teaching resources, formulate teaching plans, and achieve resource sharing and complementary advantages. This can not only improve the quality of teaching, but also promote the in-depth development of educational informatization. In specific practice, schools and educational institutions can establish cooperative relationships with enterprises and introduce various advanced educational equipment. For example, high-performance computers, intelligent teaching platforms, virtual reality devices, etc., these devices can provide students with a more intuitive and vivid learning experience. Meanwhile, schools and educational institutions can also utilize the professional technical support and after-sales service provided by enterprises to ensure the normal operation of equipment and the smooth progress of teaching. In short, cooperation between schools, educational institutions, and enterprises to introduce advanced educational equipment is of great significance for improving teaching quality and promoting educational informatization. This collaborative model not only enables the rapid introduction of new technologies and devices, but also enables resource sharing and complementary advantages, bringing students a richer and more efficient learning experience. Therefore, schools and educational institutions should actively seek opportunities to cooperate with enterprises and jointly promote the development of education.

4. Summary and Thinking
Digital tools are an effective auxiliary to the information technology course teaching in junior middle school in the era of education informatization 2.0 [2]. In a word, the future educational technology will become a very good learning tool. With the support of the current technology, it will expand the teaching space and broaden the educational and learning fields of students with free, open, rich network information and rich functions. Information interaction and unique teaching technology provide students with more free reading.
space [3]. Using information technology in the teaching process can effectively improve students’ autonomous learning ability, strengthen their innovative consciousness and promote knowledge accumulation. When children can skillfully use educational technology, it is a tool for children to learn. Of course, this requires us teachers to combine science and technology with education in advance to create a comfortable learning environment for students. Only in this way can students use educational technology more closely, instead of resisting it as before.

References

