



A practical study on boosting classroom teaching with information technology

Qing Wang¹, Shaozhong Hu^{2*}, Jun Qiu³

¹ School of Zte Information, Xinyu University, teacher, Xinyu, China

² School of Continuing Education, Xinyu University, teacher, Xinyu, China

³ School of Zte Information, Xinyu University, student, Xinyu, China

¹Email address: xywqing@163.com

^{2*}Corresponding author. Email address: shaozhonghu@163.com

³Email address: 903957072@qq.com

Abstract. With the deepening of educational reform, the influence of information technology on educational reform is increasingly concerned by the society. How to effectively apply information technology to education and teaching, and constantly promote the development of education and teaching, has become a research topic in many schools. The author tries to start with the analysis of the problems existing in the integration of information technology in classroom teaching and puts forward some personal views and views on the integration path.

Keywords: Key words: Information technology; Classroom teaching; Deep fusion

1 Introduction

Traditional teaching has been unable to fully adapt to the needs of modern education. The application of modern educational technology in education and teaching has shown its superiority more and more. Information technology is becoming the basis of modern educational technology and an important means to develop education, improve national quality and cultivate innovation ability [1]. The development of modern educational technology provides a good environment and space for promoting the transformation of educational concepts and the reform of teaching mode, teaching process, teaching means and methods. The effective integration of information technology and curriculum is of great significance for the deepening reform of classroom teaching process. It is a close partner of education and teaching. By using information technology to present abstract knowledge to students, students can effectively learn and absorb knowledge points, complete teaching objectives, and bring more comprehensive and three-dimensional feelings to teachers and students in the teaching process.

As a front-line teacher, I deeply realize that the effective integration of information technology and teaching is an effective way to cultivate students' innovative spirit and

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practical ability. Its implementation aims to explore the laws, approaches, strategies and methods of the effective integration of information technology and subject courses under the background of the overall promotion of information technology by the school, to build a new teaching model under the information technology environment. Promote the further deepening of quality education, driving the overall improvement of the level of school running. Let our teachers establish a new concept of talent and teaching in the research process, and let our students learn independently on the platform of integrating information technology and subject teaching, have the courage to explore and make bold innovation, to lay a solid foundation for becoming a comprehensive talent suitable for information technology in the future [2].

With the deepening of educational reform, the influence of information technology on educational reform is increasingly concerned by the society. How to effectively apply information technology to education and teaching, and constantly promote the development of education and teaching, has become a research topic in many schools. The author tries to start with the analysis of the problems existing in the integration of information technology in classroom teaching and puts forward some personal views and views on the integration path.

2 Main problems affecting the deep integration of information technology and classroom teaching.

2.1 Educational management concepts lag development.

With the rapid advancement of education information, the school's infrastructure and technology equipment have been developed rapidly, and many high, new and top information technology facilities have been gradually introduced into the campus construction. However, the scientific information management concept and industrial overall layout concept have not been effectively developed and applied due to the existence of urban and rural, regional education gap for a long time in our education development. The contradiction between rapid information development and backward educational management concepts will still exist for some time, becoming one of the main obstacles to the integration of information technology and classroom teaching.

2.2 IT application ability of teachers needs to be improved.

Although many teachers have been trained in the school education team every year, the "demand for talents" in the process of rapid information development in our country cannot be alleviated [3]. This is due to the lag of training mechanism of educational personnel cannot quickly adapt to the rapid development of personnel training demand market. As a result, many teachers cannot keep up with the changes in social demands due to the improvement in the level of information application technology in the process of informatization and cannot effectively integrate information and innovate technology to serve classroom teaching.

2.3 Isolate key factors such as technology, environment and people

Deep integration is the dynamic result of effective integration of information technology and curriculum, integration is the starting point of integration, and integration is the advanced stage of integration [4]. From the analysis of the elements of educational informatization, technology, environment and people constitute a trinity relationship, the lack of any factor will become the restriction factor of deep integration. For example, if the teacher is not skilled in technology, he will attend to one thing and lose another in the classroom. Environment does not have, cannot make bricks without straw; Teachers' ideas are not in place, and technology either becomes a decoration or a tool for show.

2.4 Evaluation orientation deviation affects teachers' enthusiasm.

Some educational administrators have a bias in the application concept of technology. First, some educational administrators tend to link teachers' use of information technology with teaching results and use results to evaluate the effect of the use of technology, and technology is a long-term infiltrating process to improve students' results, and the greatest value of technology is not to improve scores such a utilitarian dimension. Secondly, educational managers lack a clear understanding of the trend towards promoting curriculum integration in cultivating talents with 21st century core competencies in the information age. For the subject based teaching that has been carried out for a long time, there may be a preference or a fixed mindset, an excessive emphasis on subject literacy, and too picky about the effect of the use of technology, which make teachers hesitant to use technology freely, thus affecting their enthusiasm for using technology. Without technical proficiency, there will be no deep integration with classroom teaching [5].

2.5 The understanding of the value and connotation of information technology needs to be improved.

First, the understanding of the value of information technology is relatively shallow, excessive attention to the impact of information technology on academic performance, but not enough attention to the cultivation of students' learning ability, creative thinking, personality, etc., the use of information technology to strengthen the traditional teaching traces are still obvious. Secondly, no consensus has been reached on the understanding of the connotation of information technology. One view is that information technology refers to a certain kind of technology, and it is OK to make good use of this kind of technology. Another view is that there are many means of information technology. Modern media are called information technology, which makes teachers at a loss and don't know where to start.

3 Measures to promote the deep integration of information technology and classroom teaching.

3.1 Establish the concept of scientific integrated management.

Throughout the current problems in our educational Informatization process, many of the main crux is on the "concept". Thought determines action. To establish the concept of scientific integration, first of all, we need to abandon the traditional integration management concept of "fast", "new" and "many", based on the reality, evaluate the situation, make overall arrangements, use information technology to integrate and revitalize existing resources, combine the information construction with the actual situation of the school, the condition of teachers and the direction of talent training, and give full play to the efficiency of resources and talents. Promote sustainable development of schools and education. Secondly, we should abandon the concept of "management function" as the focus and establish the integration concept of "service" as the core, so that education and teaching can return to the classroom, and information technology can add luster to its color. Finally, we need to abandon the past integration concept of "introduction and imitation", emphasize independent innovation and management, actively introduce key talents and technologies, constantly increase independent research and development efforts, and constantly improve our ability and level of information construction [6].

3.2 Find the correct path and guide practice with ideas.

Fully understand the value of educational informatization and find out the path of deep integration of information technology and classroom teaching [7]. First, expand quality educational resources through the Internet to narrow the digital divide; The second is to improve teaching terminal, optimize traditional teaching, improve teaching quality and efficiency; Third, through the Internet, teaching and learning platforms, digital terminals, change teaching and learning methods, cultivate students' learning ability; Fourth, through information technology tools and platforms, cultivate children's innovation awareness and innovation ability.

3.3 Construct a sound information environment guarantee system.

We should consider the three major factors of technology, environment and people to make them "interconnected". In terms of technology and environment, efforts should be made to create an information environment with advanced facilities, interconnectivity and rich resources, so that teachers can use whatever they want.

People are the key to education informatization [8]. Teachers vary in age and cultural background. We first grasp the teachers to come to the new unit are required to progress psychology, constantly introduce new technology, new scenes, to give them a strong impact, stimulate their desire for knowledge. Secondly, follow up different technical training, has carried out the electronic whiteboard at the beginning, middle and advanced training, mobile tablet (mobile phone) teaching and e-book production

training, "network learning space for everyone" training, digital story training, AR, VR training, "one to one" digital teaching mode training and a series of training, while carrying out the corresponding teaching practice activities. Thirdly, build a platform for teachers to show their growth.

3.4 Correctly understand the role of information technology, and always adhere to the humanistic thought.

Three ideas should be overcome in the use of technology: one is the theory of the uselessness of technology, which holds that education has its own laws, and can still be taught and learned by traditional means and methods and cannot see the profound impact of technology on education, resulting in the goal of education lagging behind this era. Second, over-reliance on technology, believing that all problems can be solved easily if technology enters the classroom, leads to excessive and inappropriate use of technology, which dissolves the essence of technology and teaching. Third, the tendency to rush for quick success and instant benefits is obvious, once the application of new technology immediately wants to improve productivity. Education is different from other industries. Education is a slow and elegant process and the optimization of it by information technology is a process from quantitative change to qualitative change, which is a silent process.

Technology can amplify great education, but great technology cannot replace mediocre teaching. The perfect combination of people and technology can produce a great education. Therefore, only by adhering to the humanistic thought can we correctly understand and give full play to the role of information technology.

3.5 Establish and improve the integrated employment and service mechanism with "people" as the core.

In the past, we emphasized the importance of teaching based on the equipment available, but the quality and structure of teachers could not meet the new requirements of improving quality and promoting fairness and could not meet the growing demands of students' information-based education. The development of talents has become the bottleneck in the process of the mechanism construction of the integration of information technology and classroom teaching. Therefore, we call for the establishment of "people" as the core of the integration of employment and service mechanism, improve the past mechanism, on the one hand, in respect of the law of education and the characteristics of the education object, the establishment of "humanistic" management concept as the core of the human resources management system, give full play to the initiative, innovation and drive of people; On the other hand, we should establish and improve the personnel recruitment and promotion system, build a good selection and employment platform, give full play to everyone's talents, and make full use of their talents. Thirdly, we should establish a practical and effective talent incentive system and salary system, so that every teacher can benefit from information construction, stimulate their interest in participation and innovation consciousness,

and be willing to participate in this great reform, to provide powerful intelligence, experience and technical support for the core and key technologies of the school.

3.6 Establish and improve the three-dimensional information service mechanism of information technology and classroom teaching.

With the popularization of information and networking, lagging education and teaching cannot keep up with the rapid development of the people's needs. Therefore, we need to establish and improve the three-dimensional information service mechanism of information technology and classroom teaching, to rapidly improve the service level and quality of teachers [9]. On the one hand, schools should pay attention to the overall planning and management of school information resources and software resources. Second, it is necessary to constantly supplement and improve information resource status data, unify information standards, actively upload teachers and course resources, and actively carry out exchanges and interactions; Third, the state, local governments and schools should actively introduce and build exploration engines and platforms, and make use of advanced and convenient information service technologies and platforms such as big data, cloud computing and even satellite positioning technology, so as to realize all-round, multi-level and multi-structure 24-hour service network.

3.7 Establish and improve the production-university-research mechanism, build numerous "incubators" for teaching and scientific research achievements, and expand the display platform and participation opportunities for teachers.

The promotion of educational information construction requires our teaching to step out of the classroom and into the society [10]. The establishment and improvement of the production-university-research mechanism, the establishment of numerous "incubators" of teaching and research achievements, the construction of the production-university-research mechanism, on the one hand, helps to expand the display platform and participation opportunities of teachers; On the other hand, our educational and teaching achievements can be promoted and applied through numerous information service platforms. We have moved faster to extend quality education resources to rural, remote, poverty-stricken, and ethnic minority areas and to all social groups, and expanded the scope of services provided by quality education resources so that more people and enterprises can share in the fruits of education reform.

4 Conclusion

To sum up, in the face of the educational environment in the Internet era, in view of the existing problems in the application of information technology, schools should adhere to the high starting point of equipment, high starting point of application, concept innovation to drive technology innovation, technology innovation to drive teach-

ing innovation, need to break through the traditional teaching thinking, student-centered design of teaching mode, and form a deep interactive relationship between teachers and students. It constantly cultivates students' ability to independently construct knowledge system and improves the production-university-research mechanism to gradually realize the goal of information-based teaching. Transforming all information methods that are conducive to teaching into learning tools, enabling information technology to provide beneficial uses for teaching and education, effectively integrating teaching and information technology to improve teaching efficiency and quality, and providing a solid foundation for future reform, development, and technological innovation.

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