Research on the realization path of educational informatization under the background of Internet +

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Abstract. Based on "Internet +", this paper combines information technology with education industry to study the realization of education informatization. The realization of educational informatization will have a series of impacts, which also means that educational informatization will face more challenges. Therefore, the realization of educational informatization should be explored from the aspects of educational thought, teaching philosophy, teachers' informatization quality, information application skills, and information resource mining. The future development trend of education informatization under the background of Internet + is worth looking forward to.

Keywords: Internet+; Educational Informatization; Innovation 2.0.

1. Introduction

Internet+ is a new operation mode of Internet development under Innovation 2.0, and a new form of Internet form evolution and economic and social development driven by Knowledge Society Innovation 2.0. In July 2015, China defined "Internet +" as the deep integration of Internet innovation achievements and various economic and social fields to promote technological progress, efficiency improvement and organizational change, thereby enhancing the innovation and productivity of the real economy, and finally forming an Internet-based system new form combined with economic and social development. In general, "Internet +" refers to the combination of the Internet and various traditional industries while utilizing modern information technology and an Internet platform with fast communication speed. The purpose is to apply the Internet to traditional industries and form a new ecosystem.

Education is also affected by the Internet. The Internet promotes equity in education. The Internet not only makes the allocation of educational resources more balanced, but also allows the individual needs of students to be met, while breaking the limitations of learning time and space for teachers and students. Supported by national policies, universities, teachers and users have responded positively. Internet + has the advantages of comprehensive, timely and effective educational resources. It not only provides more differentiated and personalized educational knowledge for students and teachers, but also helps to achieve educational equity. At the same time, the advent of the Internet + era has brought convenience to the realization of educational equity, but it will inevitably face a series of challenges.

In the Internet environment, information technology has had a profound impact on education and penetrated into all aspects of education. It is essential to improve the quality of education is to study the impact of information technology on education. Education informatization refers to the development of educational resources by teachers in the process of applying modern educational technology in the process of education and teaching. Its ultimate purpose is to achieve the effect of comprehensively improving students' information literacy and promote the development of education modernization in a micro way. As the center of education field, teaching informatization is to make educational means technological, informatized and modernized.

Education informatization makes information one of the basic components of the education system. Educational informatization applies network computers and modern information technology to the field of education to adapt to the new requirements of contemporary society for educational development, and ultimately promote the modernization of the educational process.

Information-based education has two different attributes, namely "technology" and "education". From the perspective of technical attributes, educational informatization has the following basic
characteristics: networking, intelligence, digitization and multimedia. The equipment of modern educational information technology systems has the characteristics of reliability and uniformity, which is due to digitization. At the same time, the feature of networking makes information resources no longer belong to individuals, but become sharable. Networking also reduces the time and space constraints for teachers and students' activities, making interpersonal collaboration no longer a problem. Modern system management realizes the humanization of teaching behavior and simplifies human-computer communication. In addition, multimedia realizes the integration of information media equipment, virtualizes information expression, and complicates phenomena. From the perspective of educational attributes, educational informatization has four basic characteristics: openness, sharing, interaction, and collaboration. Education informatization applies modern information technology and education to the teaching process, so as to realize the modernization of education based on information technology and promote the development of the existing education and teaching level to a higher direction. Of course, the emergence of new technologies will have a certain impact on the existing methods of traditional industries. The new way of educational informatization also has a huge impact on educational ideas, concepts, models, and learning methods.

This paper firstly analyzes the impact of the informatization process on education and teaching through the elaboration of Internet + and modern technology. Secondly, this paper clearly points out the advantages and disadvantages of educational informatization for teachers and students. Finally, based on the problem that information-based education is not in place, we propose ways and means to improve education information-based education under the background of Internet+ — through the use of modern Internet technology, the teaching level and quality of teachers can be improved, and ultimately it can promote the overall development of talents. developmental effect.

2. **Problems existing in education informatization under the background of Internet +**

2.1 **Teachers' awareness of informatization is weak**

In the process of education informatization, most teachers have formed awareness of informatization, but they are weak in action and low in sensitivity, resulting in weak awareness of informatization. Weak mobility means that modern technical means are not used in teaching classrooms, or the degree of informatization is low. Low sensitivity means that teachers do not learn independently and do not pay attention to the corresponding latest technical means in time. Teachers with low mobility and acuity are unable to apply the latest technological achievements to classroom teaching. This will lead to outdated teaching methods and outdated teaching concepts, and ultimately lead to weak awareness and ability of informatization in education and teaching. The informatization of education and teaching is not a static and intermittent process. If teachers do not take the initiative and learn new teaching concepts and modern information technology, they will not be able to realize the real informatization of education and teaching, and they will not be able to improve the level of teaching development. It is even more difficult for teachers to be accepted by the vigorous young generation, so that students cannot find joy in learning.

2.2 **Teaching activities are developed in a single way**

In teaching activities, the ability of informatization teaching is not a simple ability. It must be nurtured and improved through self-education, self-improvement, and training. Although self-improvement methods such as active learning and frequent reflection are important paths for teachers to improve their own abilities, this method has not been valued and applied due to the lack of policy documents and integrity measures.
2.3 The degree of implementation of informatization teaching is shallow

Information technology software has become an indispensable auxiliary tool for teachers in the classroom, but different teachers master the technology and use it differently. Information-based education is on the surface. For example, some teachers only use the online teaching platform as a tool for checking in, checking out, and counting attendance, or passing teaching materials to students through the platform. This kind of method does not cure the symptoms but not the root cause, and does not really apply information technology to teaching, and it is even more difficult to improve the core literacy of students.

2.4 Mixed training objects of different abilities

With the deepening of the informatization of education and teaching, the confusion of training objects began to surface. Due to the different opportunities and content of teachers' participation in training, these objective differences will lead to greater differences when teachers receive information teaching ability training. However, in fact, these teachers with vast differences are often lumped together, which is highlighted in the following aspects. First, teachers with different levels of information teaching ability are treated differently. Second, teachers with different information teaching abilities and different specialties are treated in a mixed manner. In addition, teachers from different information environments and teaching different grades were treated interchangeably. Finally, teacher training content for different teaching ages and stages of professional development is interchanged.

2.5 Teacher participation in training content convergence

In the multiple training programs that teachers participate in, there are some problems such as overlapping training contents, resulting in waste of training resources and increased time cost of teachers. This seriously hinders the process of educational informatization. With the rapid development of information technology, education has put forward new requirements for teachers' informatization teaching ability. Teachers need to constantly update content and technology. However, the training materials of training institutions have not been updated with the development of technology. Because training institutions do not update course resources in a timely manner and still use old technology and old materials to train teachers on informatization teaching ability, this seriously affects the realization of training goals.

3. The main reasons for the existence of educational informatization teaching problems under the background of Internet +

3.1 Teacher's perspective

As society develops, education transforms with it. If the teacher's work still stays at the level of teaching book knowledge, it will not meet the requirements of modern education. Teachers need to have professional skills and professional knowledge and many other qualities. Among them, professional skills and professional knowledge are not only the most important components of teachers' ability, but also important indicators of teachers' assessment. Therefore, with the opportunities and challenges arising from the development of society and technology, teachers should not be satisfied with only imparting basic knowledge of textbooks, but should become a street lamp that illuminates the life of students. Teachers should be a guide to cultivate students' correct outlook on life and values.

Teachers still have shortcomings such as single professional knowledge and weak professional ability in the process of educational informatization. Although teachers have strong textbook knowledge reserves, modern technology requires teachers to update their knowledge in a timely manner and master the cutting-edge knowledge to understand the profession. In addition, even though some teachers have a comprehensive and detailed grasp of theoretical knowledge, their lack of
experience and lack of theoretical research leads to problems in classroom progress. There are also some teachers who have little understanding of modern technology and are unable to apply it proficiently. Finally, teachers are confined to themselves. They do not discuss and communicate with the outside world and only design information-based teaching according to their own understanding. In addition, some teachers prepare lessons and discuss less collectively. These problems will lead to in-depth information teaching. In short, although teachers will use information technology in teaching design, their understanding of the concept of information-based teaching is insufficient. Therefore, in teaching activities, the depth of autonomous learning, thinking and cooperative learning is lacking. As a result, the teaching work cannot fully meet the actual learning ability of students, nor can it mobilize students' enthusiasm for learning.

3.2 Student's perspective

Students' self-discipline and enthusiasm for learning are weak. Updating teaching methods may have certain impacts on students, such as maladaptation and psychological frustration.

3.2.1 Inadaptability.

Students' inadaptability means that when students face changes in the environment, they cannot adjust their emotions in time, cannot tap the positive and beneficial effects of the environment, and cannot change the environment, which leads to psychological obstacles for students themselves. For example, students may not be able to adapt to the new environment when they transfer schools, change teachers or change their teaching methods in the learning process. These problems will affect mental health, such as anxiety, restlessness, inability to concentrate, depression, increased troubles and so on. These situations seriously interfere with students' learning and often lead to students' inability to concentrate on listening in the teaching process.

3.2.2 Psychological frustration.

Students' behavior problems in the teaching process are often caused by psychological frustration. In learning, students will inevitably encounter some setbacks. Different students have different reactions to setbacks. Some students can respond with a positive attitude. In addition, they can accurately analyze the factors that lead to frustration, and finally eliminate all kinds of adverse factors and defeat frustration. However, some students are unable to digest their bad emotions which leads to incorrect behavior. If students fail to correctly analyze setbacks, they will vent their bad emotions to others, complain about others, and even have aggressive behaviors. In addition, students may feel inferior. The final result is that students lose interest in learning, no longer pay attention to textbook knowledge, do not cooperate with teachers in teaching and produce evasive behavior.

4. Research on the realization path of educational informatization under the background of Internet +

4.1 Learning core qualities

If we want to make an in-depth study on the informatization of education and teaching, it involves the issue of improving core qualities. First of all, we should increase the training and training of teachers' informatization ability. Secondly, we should deepen discussions and exchanges with other excellent professional colleges to enhance teachers' autonomous learning ability. In addition, we should increase the number of teachers' collective discussion and communication activities according to the standard of specialization as the core, and create realistic virtual teaching situations. Finally, we should establish a perfect curriculum evaluation standard. Teachers should conduct in-depth research on the information application mode suitable for students' future development, and improve students' ability from the four aspects of learning core literacy.
4.1.1 Teachers should integrate the teaching process with the students' future direction

For example, teachers can carry out simulation exercises to enhance students' self-confidence. Teachers can also create a three-dimensional virtual simulation environment to make students practice. This method can not only stimulate students' learning initiative, but also fit students' curiosity and expand students' participation.

4.1.2 Teachers should cultivate the ability to perceive differences in thinking

Now there are many learning platforms. Teachers should guide students to use the existing platform to broaden their horizons, increase their knowledge, supplement learning loopholes, and cultivate students' self-help learning ability. Letting students choose to study independently can improve students' critical and speculative ability, so as to cultivate students' perception of thinking differences.

4.1.3 Diversified learning methods

Teachers provide students with multi-channel contact opportunities that are not limited to the classroom. Students' learning field extends from classroom to extracurricular. In this case, students can use the space and resources inside and outside the school and learn in a real and natural situation. For example, after the school has reached cooperation with relevant enterprises, the school can organize students to visit and participate in the real work process. Practical experience can enhance students' interest. Students can also use high-quality learning software to learn and enhance their professional ability, and finally gradually grow into versatile talents.

4.1.4 Enhance teachers' and students' autonomous learning ability

Teachers should make good use of the online platform to give students more time and space to independently arrange their studies. Before class, teachers can upload high-quality micro videos and other teaching resources or assign students to participate in open thinking. This method can give students enough preview time and cultivate their autonomous learning ability. In the classroom, vivid, interesting and humorous teaching situations can create experiential teaching for students. After class, teachers can set up an immersive experience process through the combination of online and offline, so as to cultivate students to use professional knowledge in their daily life.

4.2 Reflect the professionalism, reflect the times, pay attention to the foundation and highlight the ideological nature

4.2.1 Information-based teaching highlights the information resources in teaching, which can enable students to understand real-time national events

Through the application of modern information technology, this way can highlight the ideological nature of teaching and help students form correct values.

4.2.2 First of all, education informatization requires students to learn and master basic knowledge

Then, the boring and traditional teaching mode can add interest in the process of informatization. For example, modern technical means can be flexibly used to achieve classroom teaching and after-class discussions, so as to achieve the effect of consolidating students' knowledge.

4.2.3 One of the characteristics of educational informatization is specialization

Modern technical means can realize the simulation of real situations, so that students can apply theory to practice. Schools can connect with businesses. Under the guidance of the classroom, students record the operation process of the enterprise factory. This enables students to truly feel the importance of learning and the value of knowledge. Secondly, in the process of discussing the teaching situation together with school-enterprise cooperation units and experts, teachers can develop teaching ideas to broaden students' learning and knowledge.
4.2.4 A problem is reflected in the process of educational informatization, that is, most teachers are not young teachers, while students are always teenagers

This requires teachers to break the fixed thinking, no longer limited to textbooks. Only teachers who keep pace with the times and present the effects with the characteristics of the times in the classroom can fully cultivate the literacy of contemporary students and cultivate students as all-round talents.

4.3 The settings are outcome-oriented with real tasks or practical tasks

Through teacher-student cooperation and student-student cooperation, complete enough results-oriented real tasks or practical tasks. Specifically, the teacher assigns the tasks, and the students complete the tasks in groups. Each group must have clear specific tasks, such as access to materials, communication and discussion, role-playing, and presentation of results, etc. Finally, students will display or upload the division of labor and final results to the platform. Make sure that every student is involved and feels real. When students see their research results, they will have a sense of pride and interest in learning.

4.4 Achieving diversified evaluations

Teachers can set up a variety of assessment methods, such as student self-assessment and mutual assessment, teacher assessment and so on. After everyone makes a reasonable evaluation of himself and others, he also supervises the fairness of the evaluation of others. In the final comprehensive teaching evaluation, teachers should not only focus on the results, but should increase the proportion of process evaluation. This method can reduce the possibility of students not focusing on the classroom, improve students' attention, and form a benign information classroom.

4.5 In the classroom, teachers also need to work hard, and teachers should improve the innovative ability of information-based teaching

Schools can hold teaching ability competitions. This can motivate teachers to continuously learn new information technologies and tools from a competitive point of view. Through competition, teachers can be encouraged to learn and update contemporary teaching concepts to innovate new information-based teaching models suitable for learning.

4.6 Enhance students' self-discipline

Strengthen students' ideological education through online classes or other offline classes to cultivate students' self-discipline ability of in-depth research. At the same time, schools should organize more students to carry out practical activities to exercise their perseverance in the face of difficulties.

5. Conclusion

This paper focuses on analyzing the advantages and disadvantages of education informatization under the background of Internet. We discussed the value and realization path of education informatization under Internet technology, and finally expounded a good development direction. Throughout the development of education, the original form of pure educational theoretical knowledge has been eliminated. Improving literacy and strengthening cultural exchanges have become the mainstream of education. Under the blessing of technological development, if we want students to actively and happily participate in learning and build efficient classrooms, we need to maintain innovative quality and pragmatic spirit, and constantly meet new challenges.
References


