

# Application and Research of Computer Big Data in Internet Learning

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**Abstract:** With the continuous development of the times, the science and technology is developing rapidly. The fast development of the Internet has provided a more solid foundation for the development of various fields in our country. Now all walks of life are focusing on the application of big data, and committed to the full application of big data in the development process of the industry, so as to continuously improve their professional skills. From the development, big data is widely used in the education industry, and online learning can be better carried out through big data. The application of big data in the education industry can break the traditional teaching model, and enables people to learn more efficiently at anytime and anywhere.

## 1. Introduction

Education has always been the most important part in China. Through scientific and effective education, people can get better chances. The traditional education restricts students to the classroom. They do not have effective learning time and learning space which will have a certain impact on students' study efficiency. However, the full use of big data in the process of education can break the bondage of traditional education model, thus promoting students to learn more efficiently, and big data can make learning resources more abundant. When teaching, it can fully reflect the humanized teaching concept, and students can learn from the platform conveniently and concisely, which can bring a better learning experience for the students.

## 2. Application of Computer Big Data in Internet Learning

### 2.1. Advantages of big data in internet learning

In the traditional teaching classes, teachers can only teach the students in class for about 40 minutes, and due to time limit, it is difficult for students to effectively learn in a short period of time. This will have a certain impact on students' learning efficiency, but it can quickly accumulate a large amount of learning resources by big data in a short period of time, which enables students to complete learning tasks more efficiently and improve their efficiency. The use of advanced big data technology on the Internet can effectively develop and utilize learning resources, and accumulate corresponding learning resources through automatic recommendation, which can improve students' effectiveness and foundation by Internet learning, thus allowing students to master more theoretical knowledge.

It can deeply explore and analyze the teaching content by making full use of big data technology, and record the key points of students when learning, and formulate corresponding learning strategies according to learning needs of students. It can improve students' learning effects from multiple levels and multiple dimensions. When teaching, it can effectively record the student's learning progress by making full use of big data technology. If the student is interrupted during the learning process, big data can record the interruption at the first time. In this way, the student can follow up with the related contents next time, which guarantees the learning efficiency of the students, and also effectively strengthens the current course content.

### 2.2. Internet learning methodology in the age of big data

With the continuous development of the times, the science and technology is developing rapidly. It is in the era of Internet +, and it breaks the traditional teaching mode constantly. At present,

online learning has become a mainstream learning mode. Through online learning, people can efficiently obtain the knowledge they want to learn. There are many channels for online teaching, which can be learned through online audio courses and video courses, as well as face-to-face live teaching. A variety of learning modes can meet the learning needs of different people. People can even conduct simultaneous video and voice learning online with multiple teachers. The era of Internet plus enables online learning methods to be varied. People can search their knowledge more quickly when learning. It can invite friends to study together. Through this way, it can effectively stimulate students' enthusiasm for learning, and can promote the sharing of data information on the Internet. It may result in good psychological comfort in the process of learning, which can promote people to learn more effectively.

### **2.3. Popular learning methods for big data in Internet learning**

Under the background of the Internet age, online teaching is developing rapidly. At present, there are several very popular learning methods for big data in Internet learning. First of all, the most popular method of learning is online live teaching. Online live teaching means that the Internet learning platform can conduct live teaching to users online. Students can learn by making appointments every day. It effectively breaks the bondage of traditional classroom teaching mode, so that students can learn efficiently at anytime and anywhere. In the teaching process, the online live teaching simulates the real classroom interaction. The students are not blindly listening to the teacher during the learning process, but can fully participate in the classroom learning and interact effectively with the teacher. When students complete a class, they need to complete homework in a timely manner. It also requires students to complete homework online. After the students complete, the system will automatically rate the students' homework assignments, which will enable students to discover their not mastered knowledge in class, so as to make up for their own weakness, and improve their learning efficiency.

Online interactive teaching is simply an online Internet + learning platform that supports all kinds of interactive software and ports through big data. A large-scale social platform can be formed. Students can set up discussion groups on this platform, and conduct in-depth exchanges and discussions on some academic questions. In this way, students can not only improve their learning efficiency, but also find some like-minded learning partners. In the process of online interactive teaching, a good learning environment and scientific and reasonable social tools can make students to learn efficiently without the limitation of time and place. Through the online interactive teaching mode, students can have a deeper understanding of the knowledge they want to master. The whole learning process is targeted, so that it not only improves the learning efficiency, but also creates an efficient learning atmosphere for students.

When online learning, the search engine is very advantageous for online learning. Through the search engine, students only need to input keywords in the system to find the corresponding learning content. In this way, not only can we quickly search for the required learning resources, but also can effectively improve the learning efficiency of students, and the students can realize the advantages of online learning, so that they can actively participate in it.

### **3. The Application Process of Computer Big Data in Internet Learning**

From the current development, computer big data has undergone constant changes. At present, there are more mature technologies. The storage of knowledge is becoming more and more intelligent. Students can search the knowledge they need instantly through search engines. The knowledge distribution is also larger, and online learning platforms can explore potential value through online data and guide students correctly. With the continuous development of science and technology, the innovative big data online learning platform can classify knowledge information more scientifically and reasonably, and use different sorting methods for different types of knowledge information to automatically filter out some outdated ones. It continuous updates and improves some learning contents, which can not only ensure the richness of the database, but also

the knowledge is up to date. Through the effective integration of data, online education can be better developed.

#### **4. The Advantage of Big Data and Its Disadvantage in Online Learning**

##### **4.1. The advantage of big data**

Big data has a very obvious advantage that it can store a large amount of data. The data referred to here is not a simple digital text, but an unprecedentedly quantifiable dimension created by human life, and it can effectively change the data of people's daily life. With the continuous development of the times, it is currently in the era of rapid development of information. In the process of development, traditional industries need to continuously change their development model and focus on the Internet. Only in this way can enterprises get better development. The arrival of the big data era has brought unprecedented opportunities to the development of all walks of life. The core of big data is data, and it needs a comprehensive understanding of the data before adopting big data technology.

In the teaching process, it can achieve more humanized teaching by making full use of computer big data, and its rapid development can lead to better development of the education industry. Big data can also process information data in a variety of ways. Even the most complex data can be analyzed and dissected clearly, and some key and difficult problems can be extracted effectively. The new structure of data is analyzed and processed scientifically and reasonably. It is precisely because big data has these advantages that it can be widely used in all walks of life. It is an inevitable trend of social development to make full use of big data in Internet learning. This will not only effectively improve the learning efficiency of students, but also promote the better development of China's education industry.

##### **4.2. Disadvantages and loopholes of big data in online learning**

Although big data has many advantages in the development process, there are certain shortcomings and loopholes in the actual application process. The big data structure is more complicated and will be limited by various information data. Therefore, there will be many framework thinking modes in the process of development. Such a development model will seriously limit the role of big data in online learning process. It may even affect the timely updating of big data information. At present, this is one of the most serious disadvantage of big data in online learning.

With the continuous development of the times, there are more and more online educational institutions in the society. Some online educational institutions have developed very rapidly. Many well-known online educational institutions have developed into the chain model. In the process of development, these educational institutions will be more willing to adopt some of their own development concepts and teaching methods. If the institutions keep traditional and are reluctant to adopt a new approach to education, it will affect the effectiveness of online education, leading to the obsolete knowledge of students in the learning process, which will cause more serious problems for students' individual learning ability. In the process of teaching, some educational enterprises or institutions blindly carry out big data analysis, and regard big data analysis as a highlight of managing schools. The teaching effect is all based on big data analysis, which will lead to deviations in the development focus of educational enterprises, which leads education companies to face various problems in the development process.

#### **5. Conclusion**

In summary, with the continuous development of the times and the rapid development of Internet technology, it greatly facilitates people's daily life. By making full use of computer big data in Internet learning, it can not only promote the education industry in China, but also improve students' learning ability effectively, enrich current education and promote better development for students.

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