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Data Fusion Analysis of Computer Culture Basic Course under the Background of Information Mining

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Abstract:This paper analyzes the problems and causes of the teaching of basic computer courses in colleges and universities under the background of information technology. From the dimensions of teaching concepts, teaching resources, teaching methods and models, and teaching methods, combined with the current mainstream information technology methods, it proposes feasible information technology and courses. The teaching integration plan discusses the reform ideas of computer basic teaching in ethnic colleges and universities, and puts forward on this basis. The path of national curriculum project-based reconstruction", and expounded its goals, specific processes and methods, and provided a new way of thinking for the implementation of the deep integration of information technology and curriculum in primary and secondary schools.

Keywords: Data Fusion, Computer Culture, Basic Course, Basic Course

1. INTRODUCTION

The proposition that "information technology has a revolutionary impact on educational development" has been agreed by the educational community, and promoting educational modernization [1] with educational informatization has also become an important strategy for educational development in my country [2]. The core connotation of "revolutionary influence" is integration and innovation. Its important feature is the integration of information technology and education [3]. This concept is reflected in many documents: the "Ten-Year Development Plan for Educational Informatization" promulgated in 2012 (2012020)" for the first time proposed the concept of deep integration of information technology [4] and education, and pointed out that "informatization leads the innovation of educational concepts and educational models [5], and gives full play to the supporting and leading role of educational informatization in educational reform and development" [6].

The "Thirteenth Five-Year Plan" for Educational Informatization promulgated in June 2016 further proposed to "deepen the integrated development of information [7] technology and education and teaching. The source of students in colleges and universities in ethnic areas basically comes from ethnic minority areas, and many of them come [8] from underdeveloped economies. Because of the low level of local economic development, students receive less basic computer education in middle school and lack basic [9] information knowledge and skills. Many students have not experienced systematic computer enlightenment education [10], although they have been exposed to computers. And the network, but not a system, not deep enough. Ethnic institutions [11] of higher learning have experienced more than 60 years of development in our country, and shoulder the dual responsibility of solving ethnic problems and promoting [12] the stability and development of ethnic areas. Currently in the information society, the construction of informatization is in Various fields in ethnic minority areas are also fully developed, which strongly promotes the continuous development of the regional economy, and these development [13] cannot be separated from a large number of information-based talents. The development of ethnic areas cannot be separated from ethnic college students, and ethnic college [14] students must master it at the stage of education. It is good to adapt to the information skills of the information age, and have certain information awareness, information knowledge and information ethics, so as to better serve the economic development of ethnic areas [15].

At present, in the field of higher vocational education, the reform of "Internet +" teaching of vocational education courses is being vigorously [16] carried out. Through the investigation of the curriculum construction work of major higher vocational colleges, it is found that at present, major domestic higher vocational colleges have basically completed the preparatory [17] work for the transformation of curriculum network, and excellent curriculum groups with distinctive professional characteristics and outstanding skills training have been formed [18]. The online version of the excellent course website has also been launched. However, there are still many problems in the process of implementing network education in higher [19] vocational education. Through a large number of literature research, this researcher found that the current situation of general technology course teaching since the new curriculum [20] reform mainly consists of outdated curriculum ideas, lack of hardware facilities, lack of teachers, poor basic professionalism of teachers, teachers re-learning and improving their [21] own general technology subject knowledge There are few opportunities, as well as backward teaching methods, solidified teaching models, scarcity of curriculum resources and [22] imperfect teaching evaluation systems. All of the above aspects lead to the lack of in-depth teaching of this course, which is superficial and inefficient, and it is difficult to meet [23] the current needs of cultivating comprehensive and innovative talents with information technology literacy. Curriculum value, hardware facilities, curriculum resources, teachers [24], teaching mode and teaching evaluation all affect and to some extent restrict the curriculum implementation effect of general technology teaching in senior high schools.

It is urgent to seek better ways to cultivate students' basic ability, innovation ability and comprehensive ability in general technical course teaching, so as to meet the needs and goals of national talent training. The integration of information technology and curriculum is a new proposition put forward on the basis of the integration of information technology and curriculum, and it is a new stage of the development of information technology education application.

From the perspective of the development process of the application of information technology in education.

2. THE PROPOSED METHODOLOGY

2.1 Teaching Courses in the Context of Information Technology

The information technology and curriculum integration stage emphasizes the use of information technology to build a new teaching and learning environment, change traditional teaching concepts and methods, and improve the effect of teaching and learning. The goal is to change the traditional teaching structure; It is a higher stage of the application of information technology in education. Its core connotation is integration and innovation. The biggest difference from the previous two stages is "reforming the traditional classroom teaching structure". It is no longer a "tinkering" application of information technology. Rather, it is necessary to achieve a full range of structural changes. From these stages, the fusion stage is the key process from quantitative change to qualitative change.

University computer public basic education is the basis of information literacy for college students in the future development process. In addition to the core theme of technical ability training in curriculum setting and teaching process, there should also be attention and teaching of ethical culture and moral cultivation. It is one of the specific measures and footholds that fully reflect humanistic care. As an ethnic university, it needs to pay more attention to this. In order to fully and correctly implement and implement the ethnic policies of the party and the state, maintain the unity of students of all ethnic groups, and ensure the prosperity and stability of ethnic areas, it is necessary to strengthen information ethics and moral education from the university campus. Guide students Correctly, rationally and rationally develop, disseminate, protect and utilize information resources, so that information resources can truly become a driving force for economic and social development, rather than a carrier for propagating irrational views.

The knowledge of basic computer courses in colleges and universities is updated quickly. It is not difficult to analyze the characteristics of the "University Computer Application Fundamentals" course: the chapters are relatively independent, composed of various modules, and the knowledge points within the chapters are basically complementary to each other. These characteristics need to be considered in the teaching process. In the current information society, basic computer knowledge is closely related to society. Therefore, in addition to theoretical knowledge and practical operation on computers.

2.2 The Computer Culture Fundamentals Course

Teaching resources are an important product of information technology, an objective carrier of knowledge and skills in course teaching, as well as tools and means. The integration of teaching resources provides an important premise and foundation for the integration of information technology and curriculum teaching. Some teachers of basic computer courses in ethnic colleges and universities have relatively limited understanding of modern teaching theories, and they are not comprehensive enough in the principles, methods, and characteristics of information-based teaching design, and their grasp is not accurate enough. They are often accustomed to taking their own teaching experience as the main reference in the process of designing learning activities. Factors such as information-based teaching platforms and resources have also become the biggest bottleneck in the process of designing information-based teaching for most teachers. The basic situation of students' information literacy is analyzed through interviews, dialogues, questionnaire reports, etc., and on the basis of mastering the basic situation, students' information awareness, information knowledge, information skills and information ethics are considered comprehensively.

The investigation shows that the course "University Computer Application Fundamentals" is of great help to the cultivation of students' innovative consciousness and innovative ability. Some students expect to improve their innovative ability through the study of this course. Most of the students who are offered information technology courses in senior high school have a good grasp of basic information knowledge, which also reflects the obvious role of senior high school information technology courses in popularizing information knowledge. General Technology is a curriculum based on life practice, focusing on innovation and creativity, and combining technology with the humanities. According to the subject orientation of general technology in the new curriculum standard, in the process of teaching practice, teachers should help students build tacit knowledge and procedural knowledge through technical practice activities based on the cultivation of students' core technical literacy.

Strengthen students' brains, use them to combine with knowledge and practice, strengthen the study and application of technical ideas and methods, develop engineering thinking and creativity; cultivate students' ability to express and reflect design, and improve their comprehensive ability to solve technical problems. The introduction of core literacy can just change the teaching status of this fragmented understanding, and make the teaching in classroom teaching show the characteristics of teaching with theory as the guide and practice as the goal. In view of the above teaching characteristics and student characteristics, this research requires teachers to actively implement the specific requirements of the general technology curriculum concept.

2.3 The Data Fusion for Computer Courses

The so-called teaching resources generally refer to the teaching resources produced and prepared by teachers in the course of classroom teaching, while the process resources are the resources generated by students in the practice link (computer operation). Both of these resources should be shared with students, so that they can explore and differentiate among different resource types. Process resources can be evaluated with reference to teaching resources. Excellent or representative errors can even be used as new process resources. Teaching resources. This process of students' participation in inquiry and analysis is precisely the key link in cultivating students' ability to discover and solve problems. Most students are unfamiliar with how to accurately and quickly obtain information and data about their majors in online resources through advanced search and Boolean operators, which reflects that some students are less efficient in obtaining information, and it is easier for them to learn online. "Network anomie" behavior occurs.

We must correctly guide the issues of browsing violence, pornography and other related websites and personal attacks on others in various ways through the Internet, and guide them in a positive and positive direction. Most students are not familiar with intellectual property protection issues such as citation rules for references, and are prone to “plagiarism”

of information. Online teaching requires students to have a high learning initiative, and teaching projects should be designed with emphasis The practicality of the project, the content of the project should be aimed at the actual work of students, and students can solve practical problems through learning. In addition, the content of the teaching project should not be too difficult, the content is short and complete, easy to learn, and the learning effect is remarkable, which can ensure the continuous attraction of students' interest in learning and is conducive to stimulating students' intrinsic learning motivation. After the optimization of the course teaching project, the teaching content of the basic computer course is updated, and the problem that the content of the teaching material lags behind the development of the basic computer course and teaching has been solved.

The new three-dimensional textbook "Computer Application Fundamentals" (2017 edition) redesigns the project-based textbook, which increases the difficulty of the project teaching content, makes the teaching content better reflect the characteristics of integration with the major, and at the same time increases the interest of the project.

3. CONCLUSIONS

Ethnic colleges and universities have played an irreplaceable role in cultivating high-quality talents for ethnic minorities, promoting economic and social development in ethnic areas, enhancing ethnic unity, and maintaining national unity. The deep integration of information technology and curriculum is an important topic in the current development of basic education informatization. In practice, teachers are still confused about how to carry out deep integration, and there are many problems. From the perspective of curriculum, this paper proposes a fusion concept and strategy based on the reconstruction of national curriculum projects, which provides a new way of thinking and method for the field of practice. Of course, follow-up research needs to further improve and test the model.

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