

The development of English autonomous learning system under the network multimedia environment

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Keywords: Network multimedia, autonomous learning, J2EE technology, database technology, curriculum development.

Abstract. With the rapid development of information technology, information assisted teaching has been widely popular, society on the individual learning ability requirements more and more high, for individual autonomous learning and team assist cooperation learning to enhance the capacity. In the network, abundant learning resources, convenient interactive, timeliness of information greatly changed people's learning concepts and methods, and based on the network of autonomous learning has become important means in real teaching and an important way of learning. But universities nowadays in the field of foreign language education has been the foreign language network teaching system, foreign language autonomous learning system still exist many problems and shortcomings, mainly reflected in the following aspects: first, the foreign language teaching in network education based on lack of theoretical guidance. Second, the foreign language teaching based on the network lacks the overall goal. Third, the foreign language teaching based on the network is out of the need of the development of the campus itself. Fourth, the design of network foreign language teaching software can not fully reflect the requirements of foreign language teaching. Fifth, the operation of the network foreign language teaching is lack of effective evaluation standard and evaluation system and so on. For the implementation of the Ministry of education on College English curriculum requirements, to promote the pace of the reform of College English teaching and to improve students' foreign language autonomous learning ability and collaborative learning ability to provide better technical environment, this paper aiming at the problems mentioned above and design for the solutions. First of all, this paper theoretically analysis the current common network autonomous learning, collaborative learning, network teaching etc., and in the independent learning, collaborative learning, "double main teaching model, construct doctrine study theory etc. based on the proposed riscpa model to the guiding ideology, make it become established the guiding theory of system platform, and provide a theoretical foundation for the design and development of platform system model building, system. Secondly, architecture design a riscpa model based language learning platform, the platform has five roles and corresponding to the five subsystems, system relates to the resource center, curriculum development, exchanges and cooperation with the Q & A, bi directional evaluation system. Finally, the system based on the current mainstream J2EE+Oracle technology developed a set of autonomous learning platform for foreign language.

Introduction

Network education is a new form of education using network technology and environment, and it is a new achievement of modern information technology applied in education. Network education can be classified as modern distance education, which is the third generation of distance education since the first generation of correspondence teaching, the second generation of satellite TV broadcasting. In any case, it is certain that online education is a new form of education with its own characteristics. Network education technology with its advanced digital audio and video technology, can effectively achieve the synchronous transmission of text images and sound, can effectively realize the interactive teaching. Therefore, application of the network education technology to the education development have important significance, especially in the education of our country

investment insufficient under, and the development of the network education to vigorously promote informatization of education in our country, the cause of education development by leaps and bounds a role can not be ignored. At present, the network distance education in our country is mainly in two ways: one is the establishment of the network school[1]. The characteristics of this type of education are basically to provide education, that is, after reading the course, the students can obtain the national recognition of qualifications. The allure of a formal diploma is great. The other is a professional network education management company. Provide this kind of service website with Chinese education online, the Chinese learning network, etc.. Network based foreign language teaching lacks overall goal orientation. Based on network of foreign language education goal should be use informationization to bring along the modernization of higher education, foreign language teaching and foreign language teaching system network design should to the overall design are based on the concept of information, otherwise, will not be able to play the advantages of web-based foreign language teaching. At present there are still some people do not agree with the informatization and modernization of foreign language teaching, even though they have established their own foreign language teaching software system of the school is not willing to share their resources with other colleges and universities, and therefore can not play the overall advantages of the network teaching.

Key technologies involved in the system

The ultimate goal of establishing a foreign language autonomous learning platform is to serve the students, teachers and educational administration management, and the development of learning activities and teaching activities should be based on the learning theory and teaching theory. In this chapter, I will of autonomous learning, collaborative learning, constructivist learning theory, teaching theory and riscpa model is discussed and analyzed, and thus seek the theoretical basis of teaching platform system model building, system design and development. The author thinks that the network resource based autonomic learning refers to learners based on a wealth of learning resources, according to their ability and formulated corresponding learning goals[2], using a suitable for their own learning methods, use of learning resources, paced a self-directed learning or under certain collaboration of teachers. According to the goal of teachers teaching guidance and complete specific learning objectives learning mode according to their own abilities and qualifications. Autonomy mainly refers to the independence of students as the main body of independent learning. It is the right and ability to control and control their learning activities under certain conditions. Students' autonomy is mainly manifested in the student with independent subject consciousness, clear learning objective and perceived positive learning attitude, able to self-control, self adjustment and control of learning activities, give full play to their subjective initiative will learn resources science knowledge into their spiritual wealth. The autonomy of the students also requires teachers in the educational activities in-depth understanding and research students and master their cognitive level, learning attitude and way of thinking, the appropriate ways and means, give full play to students' initiative and creativity[3].

Introduction of RISCPA model

Foreign language collaborative learning is not only conducive to create a good environment of emotion and conducive to learning in meaningful tasks in the production and comprehension of language, improve their foreign language learning effect, more important is that it encourages high-level thinking skills training, such as analysis, interpretation and induction and elaborate skills. In this study, a riscpa model of foreign language autonomous learning platform with particular emphasis on the students' cooperative learning and riscpa model is based on the theory of collaborative learning based on the established model, in the model Corporative learning is one of the model of system design on the. Foreign language learning platform, is a on the Learning Resource Centre for autonomous learning platform system, the system formed a collaborative learning to optimize the structure, it fully reflects the teacher-student relationship between assistance cooperation can not only to the cultivation of students reading ability, information ability to, can better training students' cooperative learning ability, the practical application of language

ability, research ability and creative ability, so as to improve the teaching effect and teaching efficiency, to achieve the purpose of the teaching as a whole. RISCPA model based on the foreign language autonomous learning platform, its advantage is reflected in it can effectively play the existing resources, students through autonomous exploration, autonomous learning to build their own original knowledge. Students can be on the basis of personal autonomy, through the group discussion and assistance, to further improve and deepen the understanding of the course content. The whole collaborative learning process can be guided by the teachers, and the problems discussed in this article can also be raised by the teachers. In the foreign language autonomous learning platform system model design, we give full consideration to the guiding ideology of "double main teaching model", give full play to the guiding role of teachers to students, can let the students get good growth in a good learning environment.

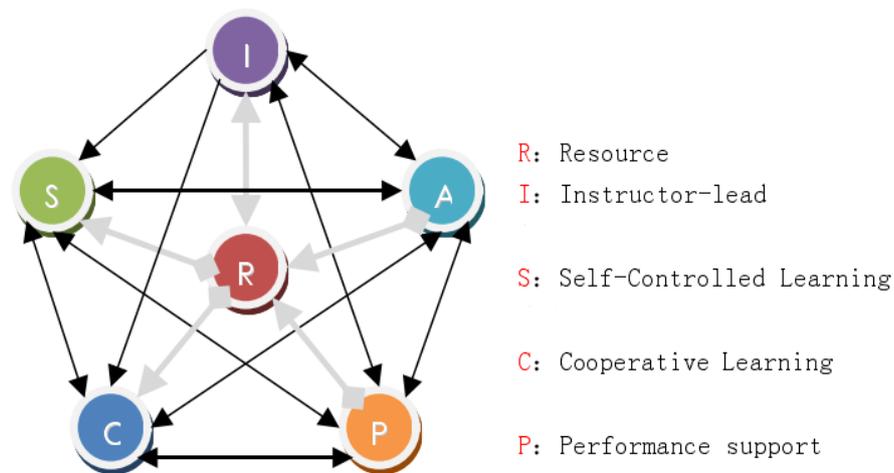


Figure1. Schematic diagram of RISCPA model

J2EE Technology

J2EE is a completely different from the traditional application development technology architecture, including many components, mainly to simplify and standardize the development and deployment of application system, and then improve the portability, security and reuse value. At present, there are three versions of the Java 2 platform, which is applicable to small devices and smart cards of the Java 2 platform, Micro Edition (Java 2 platform Micro Edition, J2ME), applicable in desktop Java 2 platform, Standard Edition (Java 2 Platform Standard Edition, J2SE), applicable to create server applications and services of the Java 2 platform, Enterprise Edition (Java 2 Platform Enterprise Edition, J2EE). J2EE is a system architecture that uses Java 2 platform to simplify the complex issues related to the development, deployment and management of enterprise solutions. J2EE technology foundation is the core of the Java platform or Java 2 Platform Standard Edition, J2EE not only consolidate the standard edition has many advantages, such as "write once, run anywhere" the characteristics, convenient access to a database JDBC API, CORBA technology and can protect data security model in the application of Internet and so on, and also provide the full support of XML technology and the EJB (Enterprise JavaBeans), Java servlets API, JSP (Java Server Pages). Its ultimate goal is to become a business developer can significantly shorten the market time of the system structure. J2EE technology has won the media attention is one of the reasons EJB. They provide a framework for the development and implementation of distributed business logic, which significantly simplifies the development of enterprise class applications with scalable and highly complex. The EJB specification defines when and how EJB components interact with their containers. The container is responsible for providing public services such as directory services, transaction management, security, resource buffer pools[4], and fault tolerance. But it is worth noting here is that EJB is not the only way to achieve J2EE. It is due to the openness of J2EE, so that some vendors can be a way to achieve the same purpose in parallel with the EJB.

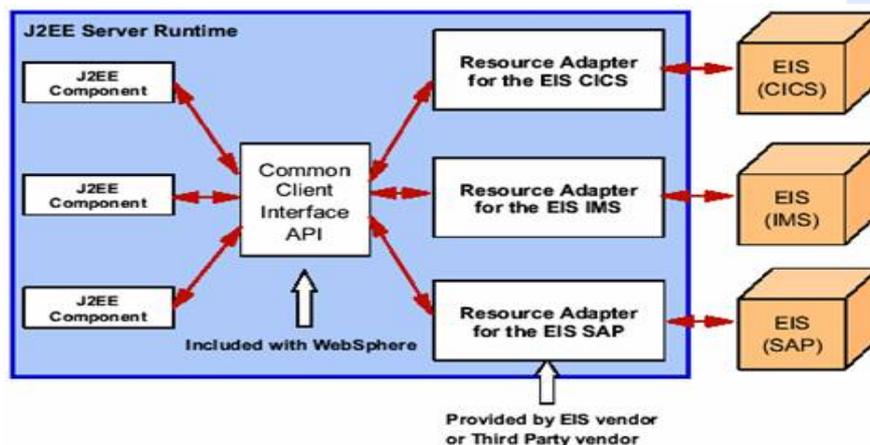


Figure2. J2EE technology structure diagram

System design principles

The overall design of the Web system should be carried out before the start of the design, and then under the guidance of the overall design step by step development. Based on J2EE technology of foreign language autonomous learning platform is a fusion of multi information integrated system, the system uses hierarchical development: the presentation layer, control layer, business logic layer, model layer, data access layer etc., in adapting to the criterion of system requirements, design the hierarchical structure of the low coupling, conducive to team members of the division of labor and cooperation, improve the development efficiency, to reduce the risk to the project, design and Realization of each module function, to complete the development of the whole system. Now the computer virus almost all come from the network, Web application should try to use the five layer security system, that is, network layer security, system security, user security, user program security and data security. System must have high reliability, strict access to the use of information management, technology, should adopt strict security and confidentiality measures to ensure the reliability of the system, confidentiality and data consistency.

System design and Implementation

In foreign language autonomous learning platform processing multilingual, diversity in the types of client we mainly use ajax, CSS and JS technology to achieve various combinations of item, the business logic layer mainly adopts the struts access items in the combination of form information and filling topic the corresponding object, then according to the types of questions forwarded to the interface control layer corresponding questions. The questions in combination of business logic processing, and use Java serialization is mainly realize multi item combination pressure to list and then forwarded to hibernate persistence layer to long operation. Interactive system module is one of the key modules of the system, and it is the key point of the system development. In the students' autonomous learning behavior, the whole process of learning should not be independent, isolated, and should be on the basis of autonomous learning is the interaction between teachers and students, discuss, so as to achieve good learning results. At present most platform of exchange is to provide students with a forum or message board form for exchange student, but this would be such a problem: students of communication is not strong, communication without restraint, also communicate no leader and teacher's guidance[5].

Conclusion

Riscpa model of foreign language learning platform system based on, as a foreign language university (College) provides a supporting multi language and multi subject of network learning platform, not only to support the independent learning of students under the network environment, based on collaborative group discussion learning, but also support online teachers guide, and the commencement of the dynamic interaction and evaluation, and for the integrated development of

other network teaching system to provide design ideas and implementation methods.

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