Research on the Application of Network Resources in Business English Class based on MVC Architecture

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Abstract
Multimedia class and cloud technology has become the creative tool of expanding human ability, network cloud technology is changing people’s work, learning and the way of thinking and way of communication at an alarming rate, which makes our education is facing a severe the challenge. Business English teaching is an important part of quality education, it pays great attention to the student ability, multiple intelligences can help enrich the activities to arouse students’ interest and improve the teaching effect. This paper analyzes the application of network resources in business English class. On the basis of the overall optimization, using network resources optimize the traditional teaching method, that is, to change the teacher centered teaching structure and teaching mode, so as to achieve the goal of cultivating students' innovative spirit and practical ability.

Keywords: Network Resources, Business English, MVC Architecture, Information technology

1. INTRODUCTION

Information is the world trend and the development of society, with the network technology and multimedia technology as the core technology, cloud technology has become the creative tool of expanding human ability, network cloud technology is changing at an alarming rate of people's work, learning and the way of thinking and way of communication, which makes our education is facing a severe the challenge (Anna, 2009; Fatima, 2013). The essence of technology and curriculum integration is under the guidance of advanced educational ideas and theories, especially under the guidance of "leading subject" teaching theory. And these tools are comprehensive application in the teaching process, as a combination and integration of teaching resources and the teaching elements and teaching arrangement (Hu, 2012; Alfiya, 2015). On the basis of the overall optimization of the aggregation effect, so as to promote the traditional teaching methods of fundamental change, that is, to promote the teacher centered teaching structure and teaching mode of change, so as to achieve the goal of cultivating students' innovative spirit and practical ability. In short, cloud technology and curriculum integration, not simply to cloud technology as a demonstration tool to help teachers teaching, but to achieve the integration of cloud technology and discipline teaching (Kim, 2014). It requires to be highlighted as the integration of the active factors of the status, and in order to achieve the information between man and material, the network between the virtual world and the real world of integration.

College business Englishis a compulsory course for all universities in our country, many teachers and students put in more hours, but the effect is difficult as people would like, dumb English phenomenon is still very prominent (Krstev, 2014; Oscar, 2015). This shows that there are many problems in College business EnglishTeaching in China, which has lagged behind the development of economy and society, and must be reformed. Gardner (1983) proposed Intelligences Multiple, referred to a new theoretical perspective for the reform of College business English teaching. The multi-intelligence has characteristics as integrity, situation, development, diversity; this is consistent with the purpose of College business English teaching (Susan, 2012). Multi intelligence development process is the quality of the training process. English teaching is an important part of quality education, it pays great attention to the student ability, it can help enrich the activities of multiple intelligences to arouse students’ interest and improve the teaching effect, thus in the process of teaching English, cultivating students' intelligence.

2. RELATED TECHNOLOGY

2.1. Spring MVC

MVC Spring belongs to the spring framework of a follow-up products, is a lightweight framework in J2EE. Frame design fully reflects the MVC mode of thinking, to achieve the various levels of decoupling and provides a full function of the MVC module. MVC Spring greatly simplifies the developer development, reducing the amount of code. MVC Spring development process, the main application of the contract is greater than the configuration programming, greatly reducing the number of code in the configuration file. Spring MVC front controller using Dispatcher Servlet; application controller by processing mapping and view resolver; page control and action processor by the Controller interface method, Controller instance requires developers to automatically according to the application demand.
MVC Spring allows us to design a very simple and clear, functional, clear and simple Web layer. Compared to other frameworks, MVC Spring has the following advantages:

1) MVC Spring is Framework Spring follow-up project, the design is the initial spring framework and integration (such as including IoC containers, AOP, etc.), which can be seamlessly connected with the Spring.

2) MVC Spring role is clear, clear division of labor and the expansion is quite flexible, can be very easy to achieve the program code and functional extensions. Spring MVC will be divided into the role: Dispatcher Servlet, HandlerMapping, Handler adapter, controller, View resolver, Validator, Command, form object provided to the form and submit the display object.

3) MVC Spring provides a strong agreement greater than the configuration of contractual programming support, reduces the configuration, you can use the annotation alternative configuration, greatly reducing the number of configuration files.

4) MVC Spring without third party plug-ins can be simple to carry out unit testing; the use of Spring test class can achieve a simple Mockiet test.

5) MVC Spring provides a powerful JSP tag library to simplify the development of JSP; tag library supports flexible localization, theme resolution, etc.

2.2. Authority management framework Apache Shiro

Apache Shiro is an open source Java security framework for Apache. At present, more and more people use Apache Shiro, because it is relatively simple and practical, compared with the common Spring Security Spring Security, although not powerful, but in actual use of many complex functions is not necessary, so in the realization of the system using a small and simple Shiro is enough.

1) Subject
The subject, from which we can know that the subject can be any entity that interacts with the application, is an abstract concept. Specific as long as the main body can meet the requirements of the interface to achieve the language and form constraints.

2) Manager Security
Security manager, equivalent to MVC Dispatcher in the Servlet Spring or Struts2 in the Dispatcher Filter, is the core of Shiro. All specific rights and privileges will be controlled through the Manager Security, it is responsible for authentication and authorization, session management, cache management and other operations.

3) Authenticator
Is responsible for the authentication, Subject authentication, and can be extended, if Shiro provides the default authentication is not appropriate, you can customize the implementation; if need to achieve their own custom authentication strategy (Authentication Strategy), by means of strategy.

4) Authorizer
Authorization is user access control, also known as access controller, license is mainly used to determine whether the subject has the right to conduct the appropriate operation, through the authorized users to verify the user will get the appropriate account permissions, access to the specific functions of the application.

5) Realm
Realm is an abstraction of the security entity data source, which can be used to obtain a secure entity source. One or more entities can exist in the application. Realm scalable and adaptive, you can use JDBC to achieve, you can also use LDAP to achieve, can also be implemented in memory, and so on. It should be noted that although Shiro provides the default Realm implementation, but generally does not conform to the application of user / privilege storage format storage, so we need to implement their own Realm.

![Figure 2. Apache Shiro architecture](image)

**2.3. System requirement analysis**

According to the survey, the system needs to meet the following requirements:

1) To meet the needs of different levels of students and teachers in the curriculum system. The main users of the curriculum system are divided into two kinds, one is the release of curriculum information, the provision of teaching resources; the other is to obtain knowledge, to learn and to share the learning experience of the majority of students. System needs to provide accurate, comprehensive and valuable course information for students; teachers can input information on the curriculum, and showing the course page key contents of the curriculum, to share valuable information in the course.

2) Need to classify and store the information of the course and students, to realize the persistence of information, to realize the data sharing, and requires the system to be able to take advantage of the existing data for students to recommend courses.

3) In order to attract more students to participate in the course of learning, and to meet the needs of learners, the platform not only needs to support the copy of the file mode, also need to support video playback and other multimedia files.

4) For different users need to use different strategies to manage, for students and teachers to assign different permissions, each role can be operated by different modules.

![Figure 3. Online course system](image)
The course information module mainly deals with the course related information, which is the most basic module of the system. The curriculum information module includes four main modules, including curriculum arrangement, curriculum concern, curriculum recommendation and curriculum. The following is a description of the functional requirements of each sub module.

Course scheduling system: for the user to search function: users can provide courses in the search box enter the search keyword search results after the course, click to enter the list of courses, also can through the system filter function course screening results list. The curriculum system provides courses to sort the list of courses are sorted, sorting a variety of courses, including some way: sorted by start time, end time to sort, according to the duration of the course scheduling, scoring and ranking according to the curriculum. There are four ways of ascending and descending is two, the default sort system based on user input keywords, consistent with the keyword ranking, under the same circumstances on the high score.

Course details: the course of the teacher editing page to other users to present detailed information, other users through detailed information to understand the course, and then make a choice. Course details page information mainly includes course name, course category, course description (teacher edit), and user comments, etc.

Course attention: in order to enhance the user experience, the user can browse the course details page when you can add interest to the course of interest. Over the course of the process details page, if the user is interested in the course, but not sure whether it will join the course or the contents of the course has not been released, at this time, the user can add to the course curriculum pays attention to sustained attention. Added attention to the course will be in the student user's personal page to list form to show, to avoid the user to search for the redundant operation.

Course recommendation: course recommendation is the use of user information to recommend the use of course selection. The information of this system mainly comes from the students and teachers. Students after the login will be evaluated on the course, these data and the recommended curriculum related, you can use the decomposition model to model, and then calculate the prediction score, according to the high score ranking to recommend.

3. THE APPLICATION OF MULTIPLE THEORY IN ENGLISH TEACHING

3.1. Multiple intelligence

Multi intelligence development processes the quality of the training process. English teaching is an important part of quality education, it pays great attention to the student ability as listening, speaking, reading and writing translation, it can help enrich the activities of multiple intelligences to arouse students’ interest and improve the teaching effect, thus in the process of teaching English, cultivating students’ intelligence. Intelligence is the ability to solve a particular problem or to create a product that is valuable for a particular culture or society. The traditional view of intelligence is too narrow, and the intelligence is limited to the language and mathematical logic, the neglect of human development has the same important role in other aspects.

1) Linguistic intelligence: Refers to the ability to use language to express and appreciate the deep meaning of the language, that is, the ability to use oral and written language creatively. A strong language and intelligence of the students with words to think, they are very good at reading, writing and discussion to learn. They generally have a large vocabulary of words that can be used in both verbal and written communication.
2) Logical-mathematical intelligence: It is the ability to use numbers and reasoning to calculate, to think about propositions and assumptions, and to perform complex mathematical calculations. The students' logical-mathematical intelligence strongly love mathematics and abstract patterns of thinking, they often consider the problem clearly, with the help of logic and abstract symbols of learning, has a strong desire to explore, dare to accept the challenge of solving problems.

3) Musical intelligence: it refers to the ability of people keen sense of pitch, melody, rhythm and tone, and the ability to express thoughts and feelings through music. Music melody intelligent students are very sensitive to the rhythm and melody, they are good at learning through music and lyrics.

4) Visual-spatial intelligence: It refers to the ability of people to feel and express the color, shape and space position, including the ability to express emotions and thoughts by means of visual and spatial concepts. Spatial intelligence enables people to sensation and perception to the internal and external image, love graphic thinking, imaginative, able to reproduce, change or modification of mental image, not only can make their own free space in the space, can effectively adjust the object, but also create graphic information or explanation.

5) Interpersonal intelligence: it refers to the ability to effectively understand and interact with others. Interpersonal intelligence strong people understanding, understanding of others' mind, move quickly, can stand in someone else's position on the thinking and understanding, to suggest that distinguish different interpersonal relationships.

6) Intrapersonal intelligence: Is about to understand themselves, their constraints and ability to identify the differences and similarities between ourselves and others, can be aware of your inner emotions, intentions, motivations, temper and desire, is good at using this knowledge to guide their own life. Self aware intelligent students are most effective when they are given sufficient time to allow their quiet and independent work.

3.2. Multiple teaching

The students know the importance of learning English, in the learning process, most of the students are very interested in learning English, but they are confused on how to learn English, English autonomous learning consciousness is poor, I do not know where to start, not to mention according to their own actual conditions to determine learning goals, make learning plans, choose suitable learning strategies and method, their self-monitoring learning process and project progress, self-assessment of learning effect and goal attainment. It can be seen that most of the students' subjective desire to learn English is good, but the actual action is often negative. From the perspective of learning efficiency, students from middle school to university has been putting a lot of time and effort to learn English, but it seems to pay the price and the results of a disproportionate. From the learning method, most of the students only know by rote, not mastery learning methods, dull, only the use of intelligence and other intelligence did not play a role. If things go on like this lead to low learning efficiency, lose interest in learning. In listening class, for example, because English is not the mother tongue, it is very difficult to understand the English language, and caused the difficulty of hearing and understanding of the reasons are many, both the reasons for students, but also the teacher's question. As far as students are concerned, the basic knowledge of language is not complete, and the quality of their own language is not high, and the interference of mother tongue influences the speed of listening.

The theory of multiple intelligences that everyone has their own way of learning, everyone has different degrees of eight kinds of intelligent relatively independent, each student has their own advantages of intelligence, have their own learning styles and methods, the school does not exist poor students, all students with their learning characteristics, learning styles and the development direction of talents. The question of whether the student is not clever or not, but the question of what is clever and how to be clever. Therefore,
education should be based on a variety of intelligent comprehensive development of each person on the show, creating a variety of intelligent scenarios for students, give everyone the choice of diversification, make its advantages, so as to stimulate the intellectual potential of each person, the full development of each person's personality.

4. COLLEGE BUSINESS ENGLISH MULTIPLE TEACHING MODE INNOVATION

4.1. The necessity of multiple business English teaching

The impact of China's education has long been influenced by Spielman's intelligence theory of two factors, only pay attention to the cultivation of linguistic intelligence and logical mathematical intelligence of students, ignoring the development of other intelligence, teaching evaluation also focuses on the two intelligent. Such educational theory is not conducive to the all-round development of students. Specific to the college business English teaching, because of the lack of the theory of multiple intelligences to master, most teachers still use English teaching mode and a single strategy, only pay attention to imparting language knowledge and neglect the cultivation of comprehensive ability of using language, but neglect the training of multiple intelligence. The teaching evaluation form is unitary, has not paid attention to its integrity, the situation, the development, the multiplicity and the development. Multi intelligence development process is the quality of the training process. English teaching is a main field of quality education, it pays great attention to the student five ability, it can help enrich the activities of multiple intelligences to arouse students' interest and improve the teaching effect, thus in the process of teaching business English, cultivating students' intelligence. Therefore, the integration of multiple intelligences theory and business English teaching is possible. In the current practice of quality education, there are often the misunderstanding of "additional" "quality education", that is, the gap between classroom teaching and quality education. Teachers in the classroom are still in the traditional exam oriented teaching methods to impart knowledge, and the provision of "active class" to cultivate the quality of students. This method itself is a misunderstanding of the "quality", and it is impossible to achieve the purpose of cultivating students' ability in all aspects. In fact, the quality of students is reflected in all aspects, Chinese class should cultivate quality, math class should cultivate the quality, and business English class should also cultivate the quality. The key lies in the teacher to what kind of theory as the guide, how to carry on the teaching design. The rational integration of multiple intelligences theory and business English teaching will not only improve the activities of English teaching and learning, but also will be one of the effective means to promote the quality education. Therefore, it is necessary to instruct business English teaching by multiple intelligence theory.

4.2. Principles of multi-English teaching

First of all, the theory of multiple intelligences is a complete set of theoretical system. At present, the research works about the theory of multi-intelligence so far more than 40 of them, from various perspectives and angles to build the theory of multiple intelligences. From another level, a relatively complete theoretical system can guarantee the teaching research from the beginning to stand in a relatively high starting point, making it more practical value and significance. Secondly, the theory of multi-intelligence is consistent with the concept of quality education in our country. Quality education advocates the cultivation of students' comprehensive quality, and the theory of multiple intelligences advocates developing students' multiple intelligences. At the same time, the theory of multiple intelligences provides a theoretical basis for the quality education in our country. To this end, we need to explore a new classroom teaching mode and strategy which can be used in the actual teaching situation, and the combination of multiple intelligences and College business English teaching.

Figure 6. Video English teaching
• **Human oriented principle:** Multiple intelligence theory pointed out that each student has its own advantages in the field of intelligence, but its combination and play a different degree, everyone in the school is fertile. What we should be concerned about is not which one is more intelligent, but which one is more intelligent. The traditional intelligence theory is based on the human's language intelligence and mathematics logic intelligence, and the multiple intelligences are different. Our education must really do for all students, efforts to develop the advantage of every student's intelligence, enhance the weak intelligence of each student, intelligent scene, for students to create various weaknesses, stimulate individual potential, the full development of each individual, and for each student to succeed to lay a good foundation.

• **Teach students in accordance with their aptitude:** The theory of multiple intelligences is the pursuit of the "individual centered", the development of effective curriculum programs to adapt to different smart structures, and create opportunities for the development of each student's personality. In the range of possible, teachers should carry out teaching according to the characteristics of students' intelligence. The theory of multiple intelligences to overthrow the ability of language and mathematical logic ability as the core of the traditional view of intelligence, that "everyone has their own advantages in areas of intelligence, have their own learning styles and methods, there is no difference in the school, all students had their own intellectual characteristics, types and development direction of the learning talents.

• **Coordinated development:** First of all, teachers should find the differences between the students in the teaching, to understand the intelligence structure of the students, and treat all kinds of intelligence should be treated equally, to coordinate the development, not favour one more than another. Actively found strong intelligence of students and to guide. Because each student has a number of intelligent, real teaching objectives should be comprehensive, coordinated, and should also highlight the advantages of each person on the basis of intelligence, in-depth creative learning.

• **Multidimensional and multidimensional evaluation:** Evaluation is an important link in education and teaching activities, which plays an important role in promoting and improving students' learning motivation and effectiveness. The development of the theory of multiple intelligences requires a new evaluation system in the meaning of cultural activities. It inspires us in the evaluation of students, focus on the evaluation of each student has good intelligence, from multiple angles, intelligent students, adopt proper evaluation, strengthen the student's strengths, and promote the coordinated development of the intelligent.

4.3. Multiple teaching methods in college business English

The teaching method is used to complete the task of teaching, including teachers and students method of learning, is established in the guidance of teaching thought and theory, structure and activities of relatively stable teaching activities of the program, it is the use of teaching theory, and teaching practice summary. According to the differences of students' basic differences, each student has a strong and weak intelligence, college business English teachers should adopt flexible teaching methods to meet the needs of different students in the course of teaching.

• **Communicative teaching approach:** Communicative teaching method is to use language as a communicative tool to teaching, focusing on cultivating students' communicative ability. Communicative approach advocates communication and cooperative learning strategies, communicative activities or activities to emphasize role-playing, group or cooperative learning activities, these activities provide English language environment for students. In the College business English teaching, teachers can design various teaching activities according to the specific situation of teaching content and students, should consciously cultivate students' communicative competence in an important position, to create a method of real language environment, not only stay in the understanding of the material, the more fully using the related text, sentence, scene, guide students in communicative activities in English, in class or after class, the role, retelling texts, dialogue, discussion and other forms of teaching

• **Autonomous learning:** Autonomous learning includes five aspects, the determination of learning goals, the determination of learning content and learning progress, the choice of learning methods, monitoring the learning process and evaluation of learning effects. The learners voluntarily assume responsibility for their own learning, to manage their own learning behavior, according to their own actual conditions to determine learning goals, make learning plans, choose suitable learning strategies and methods, monitoring the learning process and project progress, self-assessment of learning effect and goal attainment. It can be seen that the process of autonomous learning is the process of learner self-management and self-responsibility.

• **Task based Teaching:** TBLT represents the modern language teaching language learning real context, and it agree without prior without previous consultation of college business English reform direction, it is emphasized that students should be in the real situation of the task driven, in the process of completing the task or solve the problem, in the environment of autonomous and cooperative learning activities, and in the discussion session the atmosphere. This method is catalyzed by students meaningful language use, to create a conducive learning environment to support language acquisition, internalization, but also cultivate their
communication, management, coordination, innovation ability and consciousness and solidarity spirit of cooperation

5. CONCLUSIONS

The advantages of multiple intelligences theory reflect the possibility and superiority of the guidance of college business English teaching. People-oriented, individualized, coordinated development, multi-dimensional evaluation principle is the theory of multiple intelligences in college business English teaching. College business English teaching is also the guiding principle. The multiple intelligences teaching also put forward the corresponding request to the teacher. Teachers should set up "individualized" teaching concept, adopt flexible teaching methods. Teachers should set up the view of professional development, the professional development is a lifelong learning process, is the process of teachers' ability and emotional maturity, and constantly improve the process of teachers self-confidence and improve teaching ability. Teachers should also make good use of media teaching multiple intelligences, give full play to all kinds of intelligent students, and improve the teaching effect. At the same time, teachers should set up multi-dimensional and multi-dimensional evaluation of students, and evaluate the students'. Under the guidance of multiple intelligences theory, scientific and reasonable design of College business English teaching, multiple intelligence development of them, arouse their learning motivation for active learning and cooperative learning, so that students will receive information transformed by a kind of intelligence to intelligence, and ultimately improve the efficiency of their learning purpose.

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REFERENCES