Design and Implementation of Online College English Course System

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Abstract: With the advancement of science and technology, the transformation of educational concepts, and the deepening of educational reforms, the process of educational informationization in China has been unprecedentedly accelerated. As one of the important resources to promote education informatization, multimedia teaching software has achieved rapid development and has become more and more integrated with the teaching process. This paper starts from the current situation of college English course study and locates the course teaching software of college English. In the process of implementing this example, the general principles and methods of course teaching software design and development are put forward. These principles and methods are applied to the course teaching of college English. The design and development of software has general guiding significance. The development and implementation of the course teaching software examples are used in teaching practice, and the preliminary evaluation is made through the evaluation information to better guide the design and development of the course teaching software.

1. Introduction

With the popularization of computer and Internet technologies in recent years, more and more college courses are taught in the Internet, and the collection of teaching feedback information is more convenient. The timely mastery and processing of teaching feedback information is an important part of teaching management, which is very important for improving the quality of teaching [1]. As the de facto international social language in the world today, English as a skill, together with professional skills and computer skills, is the concept of three skills necessary for personal survival in the 21st century. Chinese universities are also continually strengthening English teaching, and some universities even advocate teaching in English. In the actual teaching of college English courses, the teaching content is very much, the teaching method is single, the teachers generally reflect that the class time is not enough, the teaching is more difficult, the teaching efficiency is not high, the students' learning enthusiasm is contused, the learning interest is not high, and the teaching effect is not good. Therefore, using a specific management information system and software development platform to scientifically manage college English teaching and realize network management of teaching feedback is the most effective way to solve problems, and it is also an ineviTable trend of teaching feedback and teaching quality evaluation. . Through the problems existing in the traditional curriculum teaching, the analysis of the existing English teaching software, combined with the development examples, the general principles and methods of designing and developing college English teaching software are proposed to meet the actual teaching needs.

2. An Overview of the Current Situation of College English Teaching

2.1 The current situation of college English teaching

Since the 1990s, the teaching philosophy of English majors in colleges and universities has undergone a major transformation, from the previous teacher-centered to student-centered shift: from the previous cramming-based teaching to learning methods and learning abilities. Transformation; from the previous heavy book to the ability to practice, etc., the teaching practice under the guidance of the new teaching concept has also achieved good results, more and more teachers in the teaching methods, teaching organization and other aspects of the beneficial Try and

explore. In the current curriculum teaching, there are still many problems and deficiencies [2]. Most teachers still focus on books and their own teaching environment. They do not pay special attention to strengthening students' independent and independent learning ability, exploring and discovering creative ability, mutual cooperation and learning ability. The ability to solve practical problems, some teachers focus on imparting knowledge, neglecting the cultivation of students' social adaptability, leading most students to be dissatisfied with the teaching results, and even some students can not even achieve the basic teaching objectives. There is little confidence in learning and lack of enthusiasm and motivation for further study. With the continuous development and deepening of college English education reform, teaching software is gradually applied to college English teaching. By applying multimedia teaching software to solve the problems encountered in the current English course teaching, multimedia teaching software assisted course teaching has its unparalleled advantages compared with the traditional "one book, one chalk, one blackboard" teaching method.

2.2 Proposing the significance of designing and developing college English teaching course software

2.2.1 Embodies the requirements of educational informationization

The teaching software carries, supports and embodies certain teaching concepts. It displays the historical background and formation process of knowledge through various forms of expression, helping students master the methods of applying knowledge to solve problems, enhancing students' awareness of using knowledge and self-confidence of learning [3]. Fully develop students' emotional attitudes and values, and support self-exploration and other learning methods to help students develop harmonious personality, help to cultivate students' innovative spirit, and to meet the needs of talents in the information society. Therefore, the design and development of English course teaching software fully reflects the requirements of educational informationization, is the renewal of English teaching concepts, and is also the ineviTable development of modern English education.

2.2.2 Put forward the general principles of design and development of course English teaching software for college English

With the development of computer technology, network technology and multimedia technology, the teaching software has achieved rapid development. At present, the theoretical research on the design and development of teaching software in China is still in the preliminary stage. English teaching software occupies a large part of the market share in China's teaching software market, but it is mostly concentrated in the fields of children's English, university public English, vocabulary learning, listening practice and other user groups, teaching software for college English, especially with textbooks. There are few supporting teaching software for the course. Starting from the design and development of the course teaching software for college English, the general principles and methods of designing and developing the course teaching software for college English majors are proposed. The design and development theory of English teaching software is enriched and developed to a certain extent.

2.2.3 Meet the needs of college English teaching reform

The English subject is a discipline that is very practical and closely related to life. The efficiency of English learning depends on the quality and quantity of the learner's language input and output [4]. However, relying solely on the limited language input and language practice exercises provided by the classroom and teaching materials, it is unrealistic to truly accomplish all the teaching objectives and improve the students' English proficiency. Develop curriculum teaching software, provide a variety of curriculum resources to ensure the quality and quantity of students' language input, and create a variety of English application scenarios through multimedia technology, virtual reality technology, etc., to provide a dynamic source of English teaching, so that English teaching "live" "Get up, meet the needs of English teaching reform.

2.2.4 Basically solved the actual teaching problems and met the actual teaching needs

The starting point of this paper is to solve the practical teaching problems of the college English course, and through the many exchanges with the English teachers and students, to clarify the problems in the actual teaching process. On the basis of profound analysis of the problem, combined with the relevant theoretical basis and technical basis, the curriculum teaching software supporting the teaching materials was designed and developed [5]. The teaching software of this course is used to assist teachers in classroom teaching on the one hand, and can be used for self-study on the other hand. In the process of implementing this software instance, we always keep close contact with the instructors and students, and listen carefully to their opinions and suggestions, so that the final development results basically meet the needs of users, and to some extent, the actual teaching is solved. The problem satisfies the actual teaching needs.

3. The theoretical basis of the design and development of college English teaching software

3.1 Input hypothesis theory

The input hypothesis theory in the course teaching software is the core part of design and development. The input hypothesis emphasizes that the input must be understandable; the input must be interesting, closely related, and the input must be large. When students absorb and process a large amount of understandable input, it will naturally appear as a language output. The selected language materials should be interesting and relevant. They should be as real, natural, practical, close to life, lively and novel, keep up with the pulse of the times, and meet the needs of the learners themselves, so as to arouse students' interest in learning. The enlightenment of input hypothesis theory to the design and development of course teaching software lies in: attaching importance to the quantity of language materials in the course teaching software; paying attention to the quality of language materials in the course teaching software.

3.2 Learning theory

Learning theory is a psychological theory that explores the nature of human learning and its formation mechanism. The ultimate goal of designing and developing curriculum teaching software is to assist curriculum teaching, promote students' learning, and achieve curriculum development goals. Including behaviorism learning theory and constructivist learning theory, these principles are the theoretical basis of curriculum teaching software design, and have important reference value for the design and development of curriculum teaching software. Therefore, the design and development of course teaching software must widely understand learning and human behavior. Learning theory is the theoretical basis. In the course of course teaching software design and development, it is necessary to pay attention to creating situations and construct certain scenarios and even virtual reality world according to the teaching content. By learning the situation, or playing a role to complete a specific task, the learner can promote the students to actively participate in the study.

4. Design and Development of College English Course Teaching Software

4.1 General process of course teaching software implementation

According to the content and role, the course teaching software includes the following forms:

1) Classroom presentation. This form is mainly used for classroom demonstration teaching, focusing on the students' inspiration, prompts, and reflecting the whole process of problem solving. Generally speaking, it is developed to solve the difficult teaching points of course teaching.

2) Students learn independently. This form of course teaching software has a complete knowledge structure, can reflect certain teaching processes and teaching strategies, and provides corresponding formative exercises for students to conduct learning evaluation. Students can conduct independent learning in an individualized teaching environment.

3) Training test. This form of course teaching software is mainly used to train and test students'

knowledge and ability in a certain form, and to ensure a certain proportion of knowledge point coverage, so as to comprehensively train and evaluate students.

4) Simulation experiment. This form of course teaching software provides computer-based simulation technology to provide index items that can change parameters. When students input different parameters, they can realistically simulate the state and characteristics of the object for students to conduct simulation experiments or explore and discover.

5) Teaching games. This form of course teaching software is different from general game software [6]. It is based on the knowledge content of the course, and is fun and entertaining. Through the form of the game, the students acquire the knowledge and ability required by the course teaching objectives, and trigger the students to learn. interest. It requires a lot of fun and simple rules of the game.

6) Information, tools. This form of course teaching software only provides teaching resources for a certain course, including various electronic reference books, graphic libraries, animation libraries, sound libraries, etc., and does not reflect the specific teaching process. It can be used for students to read and use materials outside the classroom. It can also select relevant pieces in advance according to the teaching needs, and cooperate with teachers to explain and assist in teaching in the classroom.

4.2 Design of college English course software

4.2.1 General principles

The design of college English course software includes instructional design, structural design, functional design, interface design and navigation design [7]. In the specific analysis, we must follow the modern educational concept and reflect certain learning theories, and at the same time conform to the human form of thinking.

4.2.2 Instructional design

The design of college English course software is first of all instructional design. The research object of instructional design is different levels of teaching systems, such as syllabus, classroom teaching process, and teaching products. Teaching software is a kind of teaching product. As a system planning process, instructional design is an application system method to study the essential links between various elements in teaching software, and through a set of specific operational procedures to coordinate and configure, so that each element can be organically combined to complete the function of teaching software. Optimize the teaching effect for the purpose.
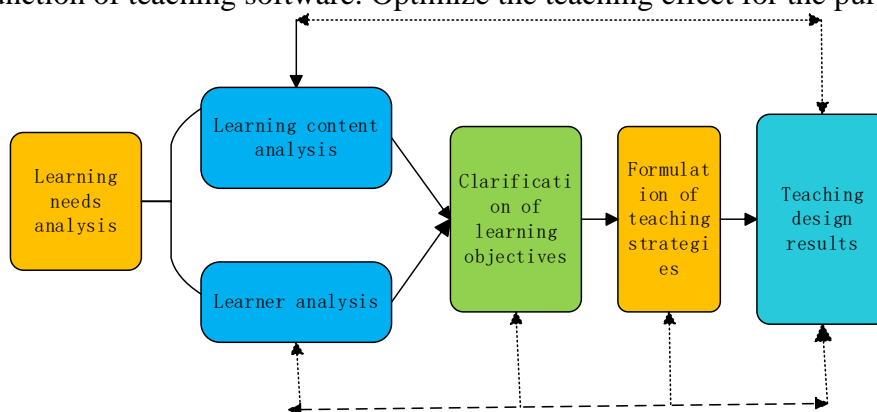

Figure 1 The general pattern of the design process of college English course software teaching

4.2.3 Structure and function design

Through the teaching design, the teaching objectives, learning content, learning objects and teaching strategies of the course teaching software are clarified, but this does not solve the specific design problems of the teaching software, such as its structure and function, interface and navigation. In order to determine the structure and function of the teaching software examples of this course, through interviews with the instructors, to understand the process of their classroom teaching, the key points and difficulties, and then interview some students to understand their

general process and methods of learning English courses. . On this basis, the whole tutorial is divided into 15 units according to the teaching material. Each unit includes 5 modules, which are Warm up Exercises module, Detailed Analysis module, Interactive Activities module, Exercises module, and Summary ofThis Unit module [8]. Combined with the teaching practice, the first 10 units are mainly used to assist classroom teaching, and the next 5 units are used for student self-learning, so the focus and information expression will be different. The first 10 units combined with teacher classroom teaching need to focus on Warm up. The Exercises module and the Interactive Activities module use text and animation in a variety of information representations. The last five units focus on the Detailed Analysis module and the Summary of This Unit module. In addition to text and animation, the information representation needs to add a lot of video and audio, so that students can learn like a classroom when they are learning independently. Listen to the recording while watching the video and text content. Whether in the classroom teaching environment or in the self-learning environment, the teaching environment should provide learners with a variety of information expression forms. Different learners can choose the information expression form that suits their strong intelligence to achieve better learning results.
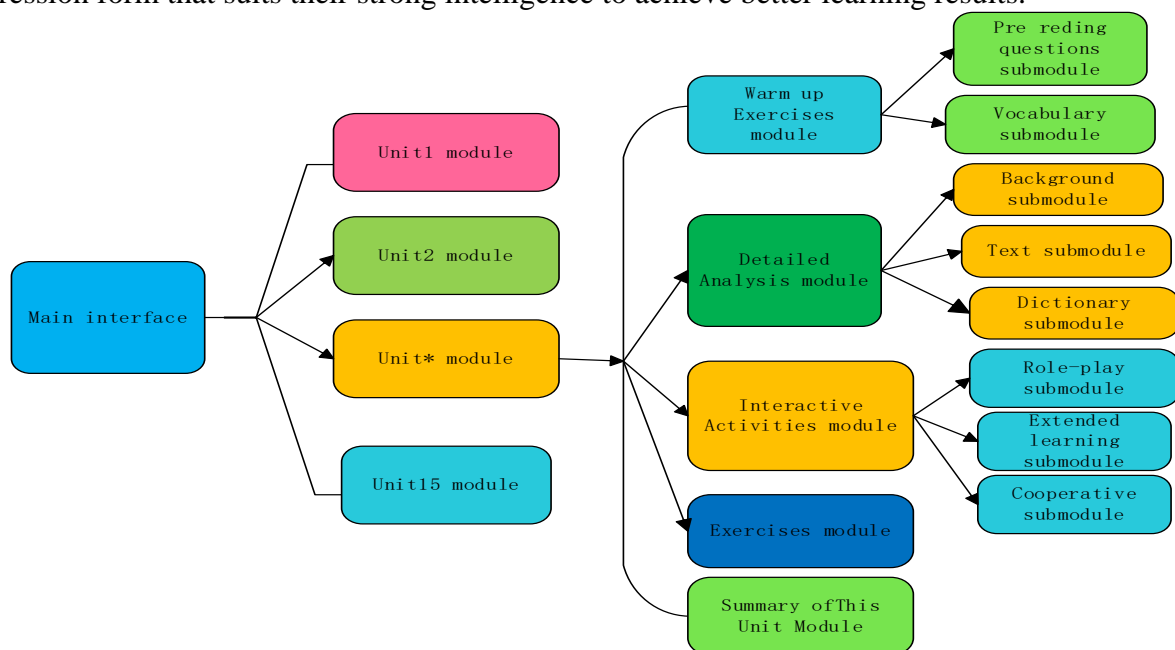
Figure 2 University English course software system structure

4.2.4 Interface design

The interface is an intermediary for learners to interact with the course teaching software, and is an area where human and machine influence each other. In the teaching software, the structure and interface are closely related. The design of the interface depends on the structure of the software, and the user can clearly understand the structure of the whole software through the interface, thus controlling the running software [9]. The interface design is the design of the arrangement format and display characteristics of various information in each screen of the software running, such as the font size, color and other font settings displayed on each screen, the specific position attributes of images and graphics on the screen, and Overall background selection, unified style of software, etc. The multimedia information such as text, graphics, sound, and image appearing on the screen have their own characteristics, position, presentation order, and presentation time. When designing the interface, detailed descriptions should be made for the display requirements of various information.

4.2.5 Navigation design

The navigation in the course teaching software is generally used to realize the jump between knowledge points. A good navigation is to guide the user to a specific destination point with the least amount of actions and the shortest waiting. Navigation is a guiding measure provided to users

in multimedia teaching software. Through navigation, learners can quickly locate the knowledge points they are looking for, improve learning efficiency, and effectively achieve teaching goals.

4.3 Development of college English course software

The development process of college English course teaching software is a process of combining multimedia materials and interactively controlling and controlling multimedia information. The development of teaching software will mainly use the tool software Authorwarc based on the icon event type and the tool software Flash based on the timing type. Start the Authorware application, enter the development platform, you can see the blank main flow line. Execute the menu command "Insert"-"Media"-"Flash Movie" to add the first icon for linking the title flash animation. Then add the wait icon wait, which is used to set the title animation, respond to the mouse event, or automaticall. transition to the main interface when the title animation is finished. In Authorware, this is the case, by adding icons in turn to implement the program design, the main flowchart in the production, erase erase icon for the erasure of the title animation, then add the calculation icon MidiLocation, double-click the calculation icon, enter it :MidiLocation:=FileLocation^"\\sound source\\bgsound\\98.mid"LoopMidi(MidiLocation).A link to implement background music. After calculating the icon, a display icon background is added to the main flow line for displaying the main interface. Then add the frame icon main content, mainly for the main worldThe realization of the face. Double-click to open the main content frame icon, the display icon background is used to display the main interface, and the interactive icon button is used to set the button response on the main interface, including buttons, sound control buttons, and exit buttons respectively linked to 15 units. When the mouse slides over the buttons on the main interface, the corresponding prompt will appear, click to enter Unitl, you can enter the interface. The Unitl subcontent framework icon spear lconcrete content of unitl group icon together implements the structure and function of the unitl unit module. Double-click to open the Unitl subcontent frame icon and the concrete content ofunitl group icon. Since the structure and function of each unit module are basically the same, the author directly copies and pastes the Unitl subcontent frame icon fflconcretecontent of unitl group icon to realize the structure and function of the subsequent unit module. On this basis, only the name and icon of each icon need to be modified. Learning content. We can see that in the concrete content of Unitl, the unit module, according to the previous design, divided into five modules: Warm. Up Exercises module, Detailed Analysis module, InteractiveActivities module, Exercises module, Summary ofThis Unit module. After the completion of each unit module, it is the processing of the end of the course teaching software, including confirmation of exit, display of information related to the software, and normal exit of the program. After the programming is completed, program debugging is performed. During the debugging process, some problems will be found, such as the interaction is not responding, the link is wrong, etc., and these problems are corrected one by one. After confirming the error, the file is packaged as an execuTable program. It should be noted that when the settings are released, in addition to the packaged program, all the files required for the program to run without the package together with the program are released along with the program. And set the search path for these files. Finally, the published files are burned on the CD and delivered for use.

5. Applied Research on College English Curriculum System Design

The ultimate goal of designing and developing college English course software is to apply it to teaching practice and promote the teaching of college English courses. Through the application of effect analysis, a preliminary evaluation of the teaching software examples of the course can be made. On the one hand, it is beneficial to the improvement of the software instance, on the other hand, it is beneficial to improve the general design and development of the college English course software proposed in the process of implementing the software instance. Principles and methods. While affirming that the college English course software is conducive to the teaching of the course, the instructors and students also put forward their own opinions and suggestions on the inadequacy of the interface design and function of the course teaching software examples, pointing out that the

software still needs further improvement. It should be noted that in the application process of the course teaching software, whether it is the instructor or the student must have his own teaching or learning ideas, can not follow the software, but to become the master of the software, to learn to think, how to be more effective Use the course teaching software to develop the course teaching and learning, and complete the course teaching objectives. In the classroom teaching, teaching software as a means of computer-assisted teaching is always in the second place in classroom teaching. The teacher who plays a leading role is not only skilled in teaching software, but also good. Control the teaching procedures and teaching progress, and give full play to the advantages of multimedia course teaching software to assist English teaching.

6. Conclusion

Based on the current situation of college English teaching in China, especially the extensive research on the application of teaching software, this paper analyzes and summarizes the existing problems and proposes to solve the practical teaching problems by designing and developing college English course software. Under the guidance of relevant theories, following the general process of teaching software design and development, from the requirements analysis, teaching analysis, teaching strategy formulation, to structural design, interface design, navigation design, to specific development, the implementation of teaching software examples, And applied to teaching practice. Based on the preliminary evaluation of the software, based on the design and development of the course teaching software and the application practice, the general principles and methods of the design and development of the college English course software are proposed. From the height of the methodology, the design and development of the relevant teaching software will be provided. A series of experiences for reference and reference.

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