

Research on the Application of Computer Photoshop Software in University Network Courses

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Abstract. The design and construction of online courses is the beginning of online course teaching. The course content must follow the development trend of the industry, and constantly improve and update. This course can maintain the attractiveness and vitality of the online course platform and fully mobilize the enthusiasm of students. Using online courses platform for self-learning. Based on the development practice of Photoshop network course, this paper introduces the teaching design link in the network course, and studies and discusses the functional modules and development technology of the network course.

Keywords: Computer photoshop software; university teaching; online courses.

1. Introduction

Online courses are vivid and interactive. The use of photoshop software to assist teaching in the teaching process is conducive to improving learning efficiency and improving students' practical ability. The design and development of online courses have promoted the progress of teaching ideas, teaching methods and teaching methods, thus promoting the reform of teaching mode in the network teaching environment.

2. Progress in the construction of university online courses

University online courses are mainly for learners with a certain knowledge base or strong self-learning ability. And for learners, the content design of online courses should reflect a certain degree of autonomy and collaboration. Web-based courses are the main direction of university network course construction, that is to say, network courses are realized through the Web as the transmission channel, which is beneficial to the sharing of educational resources.

At present, great progress has been made in the construction of university online courses. From the overall design point of view, online courses combine the characteristics of various disciplines, closely follow the forefront of academic development, and refer to excellent textbooks. Whether it is modules, content, or technologies used, they are more in line with teaching needs, and the course content covers a range of Very broad, scientific, rigorous and pedagogical. In terms of teaching resources, online courses include a wealth of materials and information, and effectively integrate a large number of reference materials such as literature and learning resource websites, so that the course text can be up to millions of words, and the course production can include hundreds of thousands of videos. Animation. In terms of teaching technology, online courses can mobilize learners' multiple senses, usually in forms, pictures, PPT, 3D animation, video and other forms, to intuitively and vividly present teaching information, so as to deepen learners' understanding of knowledge content impression. Photoshop online course, it can be used as a beneficial supplement to traditional classroom teaching, and can be combined with traditional classroom teaching, and most of the teaching and operation exercises can be achieved through online courses. The use of online courses to assist traditional course teaching has achieved good teaching results.

3. The advantages of optimizing university online course teaching through photoshop

The introduction of network-assisted teaching in teaching is a requirement of resource-based learning mode. Constructivist learning theory believes that students are the main body of information processing. Only by providing students with multi-faceted and rich autonomous learning resources can it be beneficial for learners to construct their own knowledge system. As a huge resource library, the Internet provides massive new resources every day. In this case, the traditional classroom teaching mode is not enough, and resource-based learning has become a useful supplement to the traditional teaching mode.

A very important role in the network-assisted education system is to build a resource-based learning environment for students. There are many Photoshop resources on the Internet, which is unmatched by traditional teaching materials. The rich resources can better provide the information needed to solve the problem. Therefore, teachers must browse some Photoshop related websites.

Although the Internet provides a large number of resources, resource-based learning is not a blind and aimless wandering in the sea of information. How to use network information resources efficiently has become an important issue of resource-based learning. Therefore, universities should sort, choose and classify related resources such as classic and excellent tutorials and skills on the Internet, and include them in online courses, and accumulate the most direct and profound experience from them, so as to be targeted in the teaching process. See Figure 1.

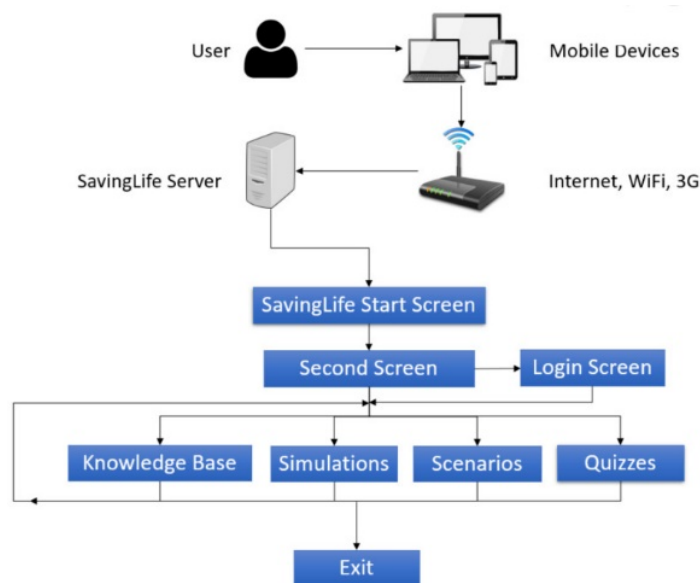


Fig.1 Photoshop optimizes the teaching of university network courses

Students obtain excellent Photoshop resources through online courses. Such online courses can not only fully reflect the "navigation" role of teachers, but also reduce students' blindness in searching for resources online and improve learning efficiency. At the same time, these excellent resources are sorted, selected and classified by teachers, which not only integrates teachers' grasp of teaching material design, but also penetrates the rich information of network resources. Excellent resources revolve around textbooks. In the process of classroom analysis and guidance, teachers share and show the excellent resources they need to students, attracting students' attention and increasing their interest. The excellent resources provided on the website can not only strengthen the operation methods and skills of students to learn Photoshop software, consolidate the learning results, but also improve their practical ability. In this way, the classroom effect is undoubtedly much improved than that of traditional teaching, so as to realize the optimization of traditional classroom teaching.

4. Application measures of photoshop software in university online courses

A. Construction goals of the Photoshop online course

The main purpose of the Photoshop course is to cultivate students' ability to draw, process and comprehensively create graphic images, and to improve their aesthetic ability, innovation ability, design ability and teamwork ability. The construction of online courses mainly relies on the Deshi network teaching platform of the college to meet the teaching needs of Photoshop courses, facilitate students to learn and practice independently, and assist and promote the reform and experiment of teaching modes such as blended teaching and flipped classroom. Unique shared online courses. Therefore, the following principles need to be followed in the process of online course construction: First, build a learning website with a beautiful interface and clear navigation with the learner as the center; second, the online teaching resources are rich and colorful, and must be optimized to meet the needs of students at different levels Third, the online teaching tasks must be clearly specified; fourth, an effective interactive communication platform must be built.

5. Design and development of photoshop online courses

At present, many online courses have the same disadvantages: abundant resources but lack of design of online teaching activities, and the quality of teaching design directly determines whether the function of online teaching is realized or not. The teaching system design includes: the design of teaching objectives, the analysis of students' characteristics, the design of teaching strategies, the design of teaching content, and the implementation of teaching process evaluation. Based on the principles of constructivism teaching design, the university has carried out the teaching system design of the Photoshop online course.

Analysis of student characteristics. The users of this online course are aimed at students majoring in computer science in the first year of higher vocational education. Aged over 18 years, it exhibits a series of characteristics that further mature in its intellectual development. The students have basically possessed the ability of self-learning, know that there is Photoshop, but they are basically not able to use it, and are basically familiar with the use and general operation of common computer tools. See Figure 2.

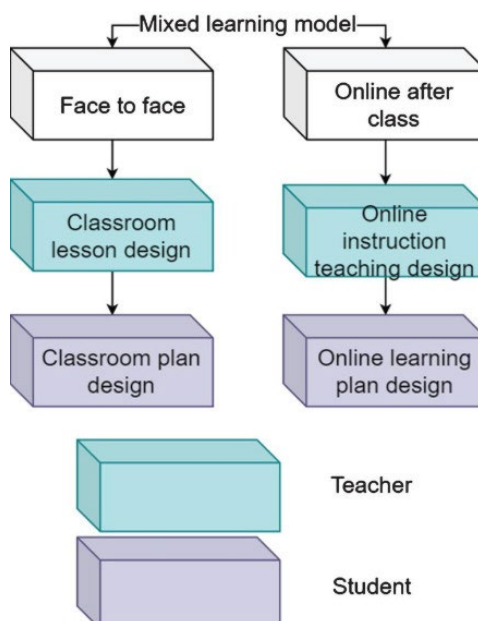


Fig.2 Research on Photoshop Software Teaching Course

Analysis of teaching objectives. The Photoshop online course is expected to be combined with traditional classroom teaching to complete the learning of this course, so that students can finally complete the following learning objectives: familiar with the process and methods of digital image

processing, and cultivate students' basic knowledge and basic skills of digital image processing. Basic operation and application of Photoshop image processing software, dig deep into the hidden skills behind these tools, and help students form unique thinking concepts in the process of learning to make graphics. Knowledge of relevant image processing, able to skillfully use software for standardized design and deal with problems actually encountered in life.

The design of teaching content. According to the teaching objectives, the following online course teaching contents are determined: Photoshop basic theory, selection and editing of selection area; Photoshop image editing, image tools and drawing; Photoshop image color and tone adjustment, layer application and editing; path; channel and masks; filter effects. Build a knowledge point system according to the teaching objectives, refine the teaching content of the first chapter, and organize the teaching content.

Design of teaching strategies. In the teaching process, it is necessary to play the leading role of teachers and emphasize the main role of students. Therefore, in the design of teaching strategies, universities mainly use case teaching method and task-driven method to organize teaching activities. Case teaching method is a kind of teaching method. The method of using cases to teach. In the teaching process, it is required to take the actual case as the object to be analyzed according to the requirements of the syllabus. Under the leadership of the teacher, the teacher and the student should jointly participate in the case analysis, discussion and finding ways to achieve it. Work. The case teaching method is extremely beneficial for stimulating students' interest in learning, cultivating students' creativity, hands-on ability, and analysis and problem-solving abilities. See Figure 3.

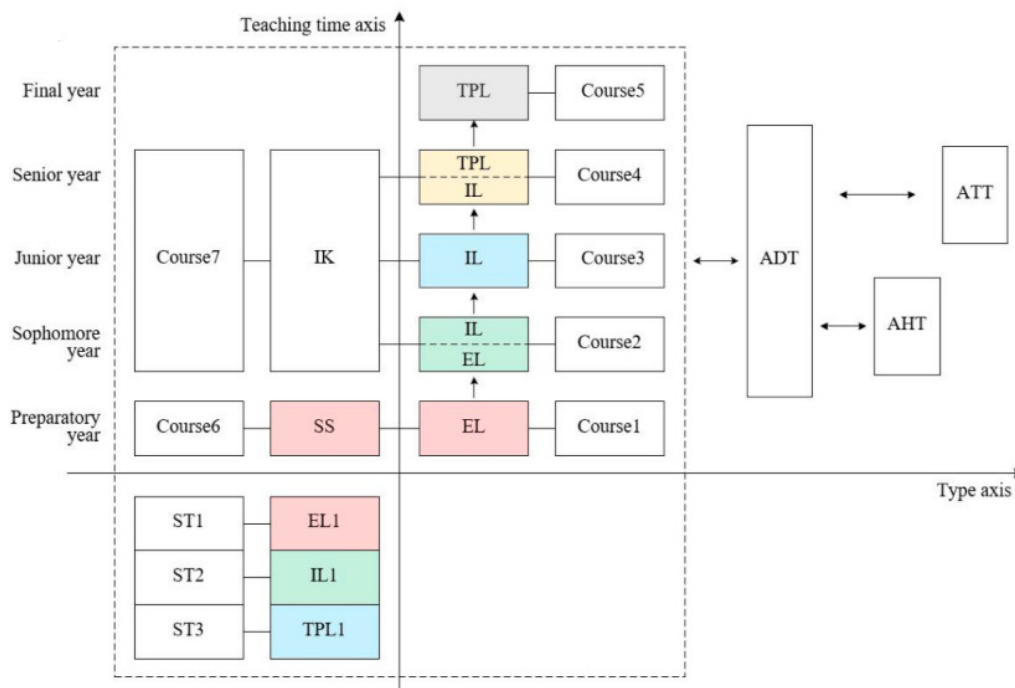


Fig.3 Design of teaching strategies

6. Structure design of photoshop online course

A. Course teaching module

This module consists of 3 parts: course introduction; teaching staff; teaching plan. The course introduction mainly introduces the main course content of Photoshop, the modules of this online course, the requirements for students, etc.; the teaching team mainly introduces the name, research direction and brief introduction of the teachers who teach Photoshop; the teaching plan mainly provides the PPT used by teachers in class documents for review or download by teachers and students.

B. Work Display Module

This module consists of three parts: excellent works, creative works, and excellent works of student operating system. It mainly shows the excellent works created by previous students in the process of learning Photoshop and some excellent works of current students. The main source of creative work resources is Photoshop creative works on the Internet. The student homework system is an online homework system based on browser mode independently designed and developed. This system can provide teachers with online assignment, browsing and evaluation of homework, and students' online submission, browsing and mutual evaluation of homework. Using this system can minimize the time difference from assignment to correction, and there is no trouble of submitting and correcting assignments in e-mail mode. Browsing assignments online provides an online communication platform for students, allowing students to participate in the evaluation of assignments. Through this system, the traditional learning process becomes more convenient and flexible.

C. Teaching Q&A module

This module includes guestbooks and teacher blogs, mainly to provide a place for communication between teachers and students and between students. In today's society, the speed of informatization is accelerating, and the society emphasizes efficiency and cooperation. Collaborative learning is an important learning method strongly advocated by modern educational theory. It is crucial to emphasize collaborative learning in online courses. Collaborative learning is mainly completed through the teaching and answering module. In the message book, both students and teachers can speak or reply to the speech. Each speech record and the reply of the speech are displayed at the same time. Each speech has the number of views and the number of replies as the popularity parameters of the speech record. Automatically increase students' points according to the number of speeches and replies of students in teaching Q&A. At the same time, students can also publish their own learning diary in the teacher's blog.

D. Resource library module

This module includes three parts: example tutorials, friendly links, and site announcements. The university sorts, chooses, and categorizes these classic and excellent tutorials and skills on the Internet, and includes them in the online courses, providing students with a rich, orderly and reasonable learning resource library. Instance tutorials and some friendly links to related Photoshop learning websites save teachers and students the time and trouble of finding information. Photoshop involves a very wide range and is highly operable. Only by applying the theory to practice can you learn Photoshop well. The excellent example tutorials provided on the website can not only deepen students' learning of Photoshop software's operation methods and skills, consolidate their learning achievements, but also improve their practical ability.

E. Resource retrieval module

This module mainly provides tutorial retrieval and assignment retrieval. In the tutorial retrieval module, students can conduct fuzzy retrieval through the title, author and knowledge point of the tutorial. The assignment retrieval module provides class-based retrieval, and students can also perform fuzzy retrieval by the assignment name, the assignment author and the class to which the assignment belongs. The retrieved content can be displayed in pagination, and each record can be browsed based on the Web or downloaded to the local browser. See Figure 4.

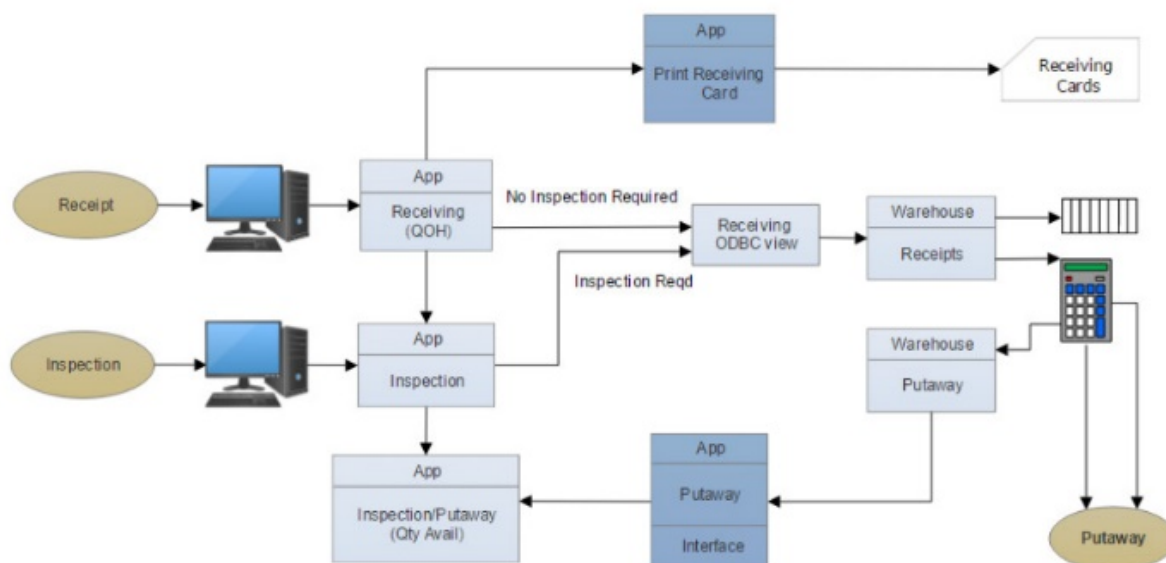


Fig.4 Photoshop software design application system flow chart

7. Technical realization of online courses

This online course is based on the Windows 2000 server system platform, and is mainly realized by using Dreamweaver, ASP+Access, JavaScript, etc. technically.

A. Dreamweaver

Dreamweaver is a professional web page creation tool with very powerful functions, which can create dynamic web pages with strong interactivity and high quality, and almost all frequently used and representative JavaScript functions are included in the behavior panel of Dreamweaver. The structure and interface of this online course are all made by Dreamweaver.

B. ASP+Access

This online course uses the technology of ASP+Access to realize the interaction and data management of web pages. On the network platform based on Microsoft's IIS, accessing the background database through the ASP program running on the server is the most common dynamic web page publishing mode. Dynamic server page ASP has the characteristics of development, easy operation, separation of program and appearance, non-manual compilation, browser independence, etc. It fully supports VBScript and JavaScript. This online course uses the connection technology of ASP+Access, which promotes the interactivity of the network, makes the network teaching become an open system, and realizes two-way teaching. There are many uses of ASP+Access database technology in online courses, such as resource retrieval, student homework system, guestbook, example tutorial, background management, etc.

C. JavaScript

JavaScript is an object-based and event-driven scripting language with security features. Its scripts are embedded in the HTML source code, and the programs written do not have to be compiled before running, but can be directly written into Web pages and invoked their browsers to interpret and execute. Using JavaScript is a major feature of this online course. For example, the "in-site announcement" on the home page displays the latest information of the online course in the form of a scrolling title bar, allowing students to quickly discover the latest information of this online course.

D. Teaching effect and feedback

The Photoshop online course in a university computer major realizes the network and multimedia teaching process, which effectively cooperates with the Photoshop classroom teaching. Through the survey, most of the students think that the online courses are featured with rich pictures and texts, which are conducive to improving the learning efficiency, especially the examples in the example tutorials, which stimulate their interest in learning and learn Photoshop technology in depth.

8. Conclusion

With the rapid development of design teaching online courses, the functions and forms of design are constantly changing and enriching. Therefore, we break the stagnant teaching content and structure mode, and build the modernization and characteristics of modern art design in the diversification of design education. Only through a personalized and personalized curriculum structure system and a theoretical system of teaching methods can the university's design teaching theory and teaching practice truly be in line with social development. The use of online courses to assist traditional Photoshop classroom teaching is conducive to the development of personalized learning and collaborative learning activities, and improves the initiative of students to learn; Learning interest. Therefore, it is necessary and a development trend to import design teaching network courses into Photoshop software.

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