Innovation of Web-based Courseware: Web-based Movie and Television Courseware

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Keywords: Web-based Movie and Television Courseware; Game Technology; Teaching Director; Virtual Reality

Abstract. Web-based movie and television courseware is an innovation in web-based courseware, which is committed to realize the optimization of teaching resources' construction and enhance the network teaching effect in a small cost within the framework of educational technology by utilizing movie and television technology, game technology, virtual technology, etc.[1]. In this article, we will systematically elaborate the web-based movie and television courseware from four parts of theoretical framework, innovation, teaching director and production process.

Introduction

Web-based courseware is an important part of learning resource in distance education, and the main carrier of instructional information too, so its quality is directly related to the quality of distance education[2]. Web-based movie and television courseware is proposed based on the network courseware, which tries to show interesting cartoons, vivid images and strong interactivity to learners by perfectly combining educational technology, movie and television technology, virtual reality and game together.

Theoretical Support for Movie and Television Courseware

The appearance of any new technology will have certain theories as the support, so is the web-based movie and television courseware. Due to interdisciplinary, the web-based movie and television courseware has a wealth of theories as support, such as psychology, learning theory, teaching theory, educational movie and television directing and producing theory, movie and television dissemination theory and so on.

The psychological theory mainly analyzes the audiences' psychology of movie and television courseware and emphasizes the importance of "image perceptual thinking" and "psychological distance" in the courseware design.

Learning theory, from the learners' perspective, states the necessity and timeliness of web-based movie and television courseware. Autonomous learning theory, collaborative learning theory and learning community theory provide theoretical basis for learners to use movie and television courseware for learning.

Teaching theory, from the designers' perspective, illustrates the feasibility of web-based movie and television courseware and provides a theoretical basis for designers to deliver knowledge and skills to learners by web-based movie and television courseware.

Educational movie and television directing and producing theory provides inspiration and guidance for movie and television courseware how to chose topics, how to plan, how to change the instructional content into visual content, how to conduct post-edit and so on.

Movie and television dissemination theory, as one branch discipline of mass communication, inherits and carries forward many features of the mass communication, which provides a theoretical guidance for web-based movie and television courseware how to determine transmission channels, objects, purposes, etc.

The Innovations in Web-based Movie and Television Courseware

Compared with the traditional web-based courseware, web-based movie and television courseware has many innovations in design, development, utilization, management and evaluation[3]. As shown in figure 1.
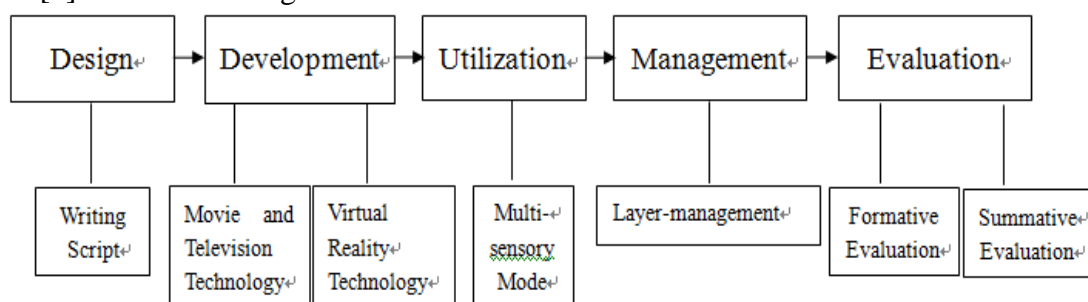

Fig.1. The innovations in web-based movie and television courseware

When design the web-based movie and television courseware, we should not only conduct instructional design as usual, but also we need to write script. In fact, the process of design is the process of changing learning content into the script. In this stage, we should not only consider the scripts' rules, but also consider the knowledge structure of the content itself, and then make the both organically combined together.

During the development phase, we should not only use the technologies of network and computer, but also use shooting technology, virtual interactive technology, etc., only in this way, can we create an educational, entertaining and interactive movie and television courseware.

During the utilization phase, due to the vivid movie and television images and lively VR animations, students has broke the traditional audio-visual mode and adopted the multi-sensory mode to learn. For example, the students can solve all sorts of difficulties and problems encountered in the learning process by roles playing in a web-based movie and television courseware with dramatic conflicts, which, in fact, has achieved the multi-sensory interaction with content.

In the management phase, the application platform of web-based movie and television courseware uses a layered architecture which respectively is web layer, communication layer, resource layer, strategy layer, classified layer, application layer and user layer[4]. We need to take different management rules for each floor, to enable them to cooperate with each other and jointly support the operation of movie and television courseware.

In the evaluation phase, we use the process and result evaluation model, which not only evaluate the results, but also evaluate the students' learning process by its own operating records, to bring learners the most objective and accurate evaluation.

Teaching Director

A good movie and television courseware needs a central figure to co-ordinate the overall situation, in fact, the central figure is the teaching director. Teaching director is the soul of web-based movie and television courseware, who plays an important role in directing. A web-based courseware from conception to publication, the teaching director runs throughout the whole process.

The early stage of creation

In the early stage of creation, the teaching director needs to be involved to finalize the content, conceive the story and write the script. Therefore, a good teaching director not only has a director's all basic qualities, but also has some knowledge about instructional design. Only having these abilities, can they reasonably arrange the story plots to match with the knowledge to meet students' cognitive structure.

The period of movie and television

The period of movie and television is the actual production period, which includes determining the scenes, selecting the roles, controlling the occasions and conducting the post-edit.

As is known to all, scenes include interior and exterior, so when the teaching director chooses the scenes, he should follow the principles of large benefit from small investment, and not choose the flashy scenes for grandstand[5].

When choose the roles, we should follow the appropriate and nearby principles. Due to lacking investment, we should make every penny to its' maximum benefit, so we can choose actors from faculties and students who love playing roles and their life too.

The scene-control here represents the operation between teaching director and other staff during the shooting. Because each person is a separate entity with their own ideas, thus teaching director should fully respect everyone's opinions and convey his willingness to them, to achieve a good cooperative effect.

Last but not least, the post-edit is the second creation for movie and television courseware. Because of lacking funds, teaching director should have a good cooperation with post-edit staff to make up the shortages of shooting. For example, we can add special effect to emphasize knowledge points' conversion without switching the lens. Another example, we can create different shooting backgrounds by image matting technology instead of changing real scenes[6]. In short, the teaching director must participate in post-edit and express his views to others correctly.

The production process of web-based movie and television courseware

The production process of web-based movie and television courseware is the combination of educational technology and movie and television technology.
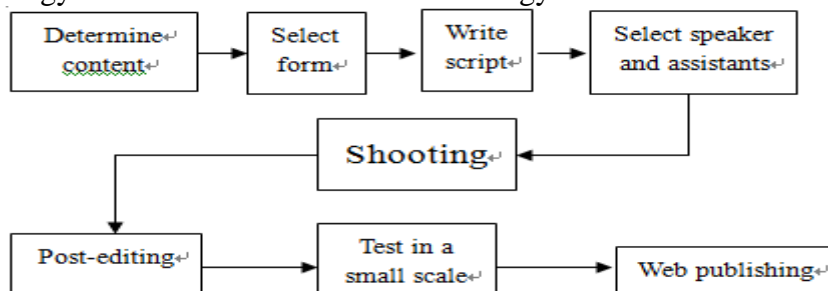

Fig.2. The production process of web-based movie and television courseware

In the early stage, we need to determine the appropriate teaching content according to the syllabus and then choose the appropriate video format according to teaching content. Next, we need to write the script which has to meet the writing rules and the instructional design ideas as well. After finishing the script, we have to select the main speaker (or protagonist) and assistant staff (or costars). When we choose the main speaker, we should select the one who has a wealth of knowledge and a superior teaching ability. Only having these abilities, can they always attract learners' attention when they impart knowledge.

The medium period of movie and television is shooting, which is the key step of the whole courseware. During this period, the teaching director should command the overall situation and has a good communication with other staff.

In the last period of making movie and television courseware, we should conduct post-edit to the formed courseware, such as adding special effects, adding montage, dubbing, adding subtitle, adding background music, etc.

After finishing the web-based movie and television courseware, we have to test it in a small scale, and then post it online.

The web-based movie and television courseware has boarded the educational arena with overwhelming superiority and become the most promising distance education media.

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