The Design of Artificial Intelligence Multimedia Courseware and Its Application in Contemporary Art Teaching

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Keywords: artificial intelligence multimedia courseware; contemporary art teaching; multimedia audio and video technology; contemporary art teaching courseware; aesthetic imagination

Abstract: Artificial intelligence as a multi-disciplinary interdisciplinary frontier scientific field, it is more and more important in modern society, at the same time, countries around the world also regard it as a key development strategy. The teaching of AI course benefits from the production and design of multimedia courseware and the collection and editing of various teaching materials. Contemporary art, as one of the important factors close to our life and reflecting our life, understanding aesthetics, learning to appreciate and understand contemporary art are increasingly becoming an important part of national education. However, the traditional contemporary art is often too single and boring in courseware design to arouse students' love and desire for aesthetics. This paper will take the design experience of the artificial intelligence multimedia courseware as the reference template, combine the technology of multimedia audio and video to design the contemporary art courseware, stimulate the students' independent initiative to the contemporary art learning through the multimedia technology, and cultivate the students' thinking ability and aesthetic imagination.

1. Introduction

As a diversified concept, contemporary art depends on many factors such as creative ideas, artistic expression and corresponding media transmission technology [1-4]. Contemporary art is not only a living art, but also an expression of self. As an important means to spread the connotation of contemporary art, the teaching of contemporary art undertakes the important responsibility of spreading aesthetics and enriching daily life [5-7]. To some extent, contemporary art teaching depends on the richness and diversity of its corresponding courseware, while traditional contemporary art courseware often ignores the role of multimedia technology in courseware making [8-9]. Therefore, based on the above analysis and discussion, how to improve and enrich the technical means of contemporary art teaching courseware is very important and meaningful.

In view of the teaching and courseware making of contemporary art, a large number of scholars and research institutions have analyzed and studied it. At the theoretical level of contemporary art teaching, scholars of relevant universities in China [10-11] once proposed to combine contemporary art teaching with cultural and artistic environment for discussion, so as to cultivate students' generous aesthetic psychology and open cultural mentality; at the practical level of contemporary art teaching, relevant scholars of Capital Normal University [12] believed that contemporary art or modern art should be associated with school art. At the same time, it puts forward three models of contemporary art teaching. However, this study does not give how to carry out diversified design in the practice of contemporary art courseware design.

Based on the above analysis, this paper will enrich and optimize the design of contemporary art courseware with the design steps and experience of artificial intelligence multimedia courseware as reference template. As a frontier scientific field formed by interdisciplinary, artificial intelligence is becoming more and more important in modern society. At the same time, countries around the world also regard it as a key development strategy [13-15]. The teaching of AI course benefits from the production and design of multimedia courseware and the collection and editing of various teaching materials. Based on the design advantages of artificial intelligence multimedia courseware, combined with the technology of multimedia audio and video, the contemporary art courseware is

DOI: 10.25236/acaelt.2019.051

designed. Through the multimedia technology, the students' independent initiative in the study of contemporary art is stimulated, and their thinking ability and aesthetic imagination are cultivated.

The structure of this paper is as follows:

The second section of this paper will analyze the advantages and experience of the design of artificial intelligence multimedia courseware, and analyze the existing problems in the contemporary art teaching courseware.

The third section of this paper will analyze and study the design steps of contemporary art courseware based on the design experience of artificial intelligence multimedia courseware.

Finally, a summary of this paper.

2. The advantages of the design of artificial intelligence multimedia courseware and the problems in the design of contemporary art teaching courseware

This section will focus on the analysis of the advantages and experience of the design of artificial intelligence multimedia courseware, as well as the problems existing in the contemporary art teaching courseware.

2.1 Advantages of artificial intelligence multimedia courseware design

Artificial intelligence multimedia courseware is mainly applied to some professional course design and production software, which is designed by related multimedia courseware production software (such as Authorware). Through the production of multimedia disc, courseware, education and teaching software, and the design and production of multimedia demonstration system, students can acquire the knowledge of audio-visual two levels, and then create an image, concrete and efficient teaching atmosphere, fully show the formation of knowledge and the related reasoning process, and then improve students' interest and learning efficiency. The non-linear structure of multimedia courseware also makes the teaching content of artificial intelligence change from Abstract.to concrete and intuitive, which is convenient for students to observe and recognize the courseware, and then makes students better master and understand the textbook, makes the teaching more vivid and improves the efficiency of learning and teaching. In the design process of artificial intelligence multimedia courseware, it mainly follows the design system of "demand analysis Courseware Script Design build production programming realization course evaluation".

2.2 Problems in the design of contemporary art teaching courseware

At present, the problems in the design of traditional and contemporary art courseware are as follows:

(1) Courseware making is not careful enough

In the courseware design of contemporary art, the corresponding content and form are too single and rough, and the content is basically based on the copy of textbook content, while the corresponding courseware is lack of targeted content. In the presentation form of courseware, it is mainly based on words, lacking diversity and interest.

(2) The focus of courseware is not prominent

The amount of knowledge in the contemporary art courseware is too large and complicated, which does not highlight the key point of teaching. In addition, because of the dryness of the courseware and other factors, students can not grasp the key points in the actual class, which makes students have no impression of the teaching content and reduces the learning effect of students.

3. The design steps of contemporary art courseware based on the design experience of artificial intelligence multimedia courseware

Based on the design of artificial intelligence courseware, this section analyzes and studies the design of contemporary art courseware based on the design process of "demand analysis - courseware content determination - construction and production - Programming and Implementation - curriculum evaluation", in order to solve the problems existing in the design of

contemporary art courseware. The corresponding design flow chart framework is shown in Figure 1:

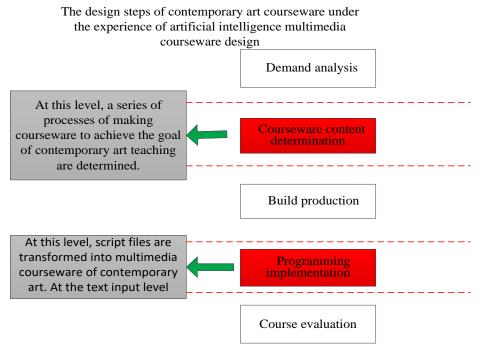


Figure 1 Flow chart of contemporary art courseware design

The relevant design details are as follows:

(1) Demand analysis

In the process of courseware design, we first analyze the needs of contemporary art courses. The relevant knowledge of contemporary art is listed and the appropriate presentation form is selected according to its knowledge points. In the practice part of contemporary art courseware, aesthetic appreciation is added, and appropriate presentation forms (such as digital 3D form, graphic form, physical display form) are selected according to the relevant appreciation contents. Analyze the effect needed to achieve after class and choose the appropriate course evaluation means, so that students can have a certain understanding and mastery of the basic content, basic principles, basic methods and development direction of contemporary art.

(2) Courseware content determination

At this level, a series of processes of making courseware to achieve the goal of contemporary art teaching are determined. In the actual courseware development process, determine the basic content, basic requirements and key and difficult points of different chapters of the contemporary art course, and select appropriate teaching methods for different chapters, such as the introduction of a large number of pictures in the art education of contemporary art. In these pictures, appropriate 3D projection technology can be added to make students get a more intuitive appreciation and learning experience. In the process of courseware making, in order to highlight the key and difficult points of related courseware, we can appropriately add pictures and sounds, and at the same time add audio-visual tests in the classroom, which is conducive to the teachers to obtain feedback information at the first time.

(3) Build production

Text, sound, picture and animation are the most important parts of the courseware. In the actual production of contemporary art course courseware, we need to choose appropriate and reliable production software. WPS, word, freehand and other software can be used to edit and design the text collection and editing level. At the level of image and graph collection and editing, you can choose the production software such as photodraw and Photoshop for processing. Creative technology can be selected as sound acquisition and production software at sound acquisition and editing level. In the animation material acquisition and production level, cool 3D can be selected as 3D or 2D animation production software. At the level of video material production and editing,

Ulead mediastudio Pro can be selected as video editing and production software. The corresponding detail drawing of component fabrication is shown in Figure 2:

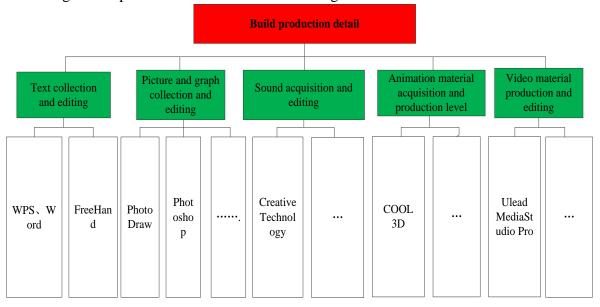


Figure 2 Design details of contemporary art course courseware

(4) Programming implementation

At this level, script files are transformed into multimedia courseware of contemporary art. At the text input level, the text tool in display toolbox of Authorware software is used to input and format the text; at the animation production level, the finished animation is moved to the program flow line to run the program and set the movement type; at the interaction function realization level, the interaction icon in Authorware software is mainly used for design; at the sound digital loading In the implementation level of navigation and hyperlink, we mainly use the navigation icon, frame icon and hypertext icon in Authorware software to achieve.

(5) Course evaluation

In the last part of the courseware design, multimedia technology is used to set up related interactive exercises to fully mobilize the enthusiasm of students' thinking, so as to further deepen students' understanding of the basic concepts related to contemporary art.

4. Conclusion

This paper mainly analyzes the advantages of the design of artificial intelligence multimedia courseware, as well as the existing problems and research status in contemporary art teaching courseware. In order to improve the problems existing in the design of the current art teaching courseware, this paper takes the design experience of the artificial intelligence multimedia courseware as the reference template, and combines the technology of multimedia audio and video to design the contemporary art courseware. Through the multimedia technology, it stimulates the students' independent initiative in the study of the contemporary art, and cultivates the students' thinking ability and aesthetic imagination.

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