Research on Effectiveness of Digital Multimedia Technology to the Improving of Artistic Design Teaching

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Keywords: digital multimedia technology; artistic design; teaching

Abstract. The artistic design teaching does not only have the affective thinking, but is also creative, with quite a high requirement for the vision and consciousness of human beings. The digital multimedia technology has a great effect to improve the effectiveness of artistic design, which can stimulate various sensory function of the learners and mobilize the learners’ incentives to a great extent, so as to activate the teaching atmosphere of the artistic design class and greatly improve the class efficiency of artistic design. This paper is aimed to explore the law of effectively improving the effectiveness of artistic design class teaching through information technology under the environment of digitalized campus and solve the problems existing in the application of artistic design multimedia teaching, so as to achieve the purpose of achieving the students’ learning and application abilities, improving the students’ incentives and innovation abilities.

Introduction

With the rapid development of science and technology in the modern society, the high and new technologies have been applied in various fields of the society more widely, and the development of higher education is inseparable from the high-teach means, so the application of digital multimedia technology has become the inevitable requirements for the development of higher education. Specifically in the teaching of artistic design, the introduction of digital multimedia technology brings the new change in teaching methods and contents to the teaching. It can be said that the application of digital multimedia technology has become a magic tool to improve the teaching effectiveness of artistic design.

Disadvantages of traditional artistic design teaching means

In the traditional artistic design teaching, teaches usually impart knowledge into the learners in such teaching forms as teaching materials, blackboard and chalk. Such traditional teaching means will be limited in teaching condition, so some disadvantages will appear in teaching, specifically in the following: one is the disadvantages in space. In relative to other disciplines, artistic design relatively concerns the visual feeling, and a lot of pictures and video information etc. will be used in teaching for auxiliary teaching, so as to improve the teaching quality. However, the traditional teaching means are usually difficult to meet the demand of rapid teaching development. Generally, it is not more likely for the teachers to present a lot of real pictures or videos for the students majored in artistic design. Even if they want to collect the pictures, there will be a great pressure, and even a log of time and money will be consumed, especially today, the pictures are updated very rapidly, and there is a lack of technical means to present videos in the traditional class. The second is the disadvantage in practical teaching. Compared with other teaching methods, the most advantage for the digital multimedia teaching is that its practicabiliy is quite strong, while in the teaching, implementing the practical operation and interpretation is one of the very important links. It is quite difficult for the teachers to copy the practice in class in the traditional teaching, and the practice in the traditional class can only depend on the models. For example, in the furniture design teaching, special models will be used for practice by students, but the guarantee effect cannot be guaranteed. In this case, applying the digital multimedia technology to assist the practical teaching of artistic design can obtain an ideal effect.
Effect of digital multimedia technology to the effectiveness of improving of artistic design teaching

(I) Improving the traditional teaching means

The artistic design teaching have higher requirements for the assistance of the teaching means. Although multimedia technology teaching is a new method, it has been widely used in the artistic design fields. Due to uniqueness of the artistic design teaching, it has quite high requirements for the vision, consciousness and hearing and requires the information data to be updated newly and rapidly. Applying multimedia technology in the artistic design technology can solve many limitations in the traditional teaching and conveys the knowledge and information to the students through the characteristics of wideness, rapidness, intuitiveness and interaction, so as to increase the information volume in class, improve the learners’ cognition degree and break through the design concept with the help of multimedia teaching. The perceptual cognizance of artistic design teaching generally surpasses the rationality, and needs to enter the multi-dimension space for thinking, so as to solve the problems that cannot be soled in the traditional artistic design teaching. Since generation, the multimedia technical means have played a very great role in the class teaching of artistic design, making the teaching more vivid and imagery and easier to be understood, so as to make up the shortcomings of a lot of traditional teaching methods, especially, the information that cannot be expressed clearly in the traditional teaching can become clearer if expressed with a log of images, animations or videos, so that the class contents will be rich and imagery.

(II) Stimulating the learners’ artistic thinking ability

Using multimedia technology for teaching can convey the learners with quite rich image information, so as to bring people with all-round imagery thinking modes. Applying the multimedia technology in the class teaching of artistic design can improve the work efficiency through multimedia teaching, and introduce a lot of new information and data to the class of artistic design in the form of videos and pictures etc. Teachers can both interpret the historical data to students, and can also present them the current new trend in domestic and foreign artistic design fields, achieving the purpose of expanding the learners’ horizon, so as to be beneficial to present the connotations of the education information more intuitively. Transmitting the information to the students’ brain can often achieve the qualitative leap, playing a quite a positive role to stimulate the learners’ artistic design thinking.

(III) Improving learners’ learning incentives

By applying the multimedia teaching means, the artistic design education can realize the comprehensive application of various teaching modes, for example the intuitive teaching method, heuristic teaching method and audio-visual teaching method. As long as these teaching methods are combined organically, the purpose of enlightening the learners’ creative thinking ability and attracting the students to learn more actively and positively. In the teaching mode, it is required to make full use of the distinctive characteristics of flexibility and changing of the multimedia teaching and practically change the disadvantages that teachers can only carry out the traditional lecturing previously. The traditional teaching mode seem to be quite dull, boring and stuffy, and students often cannot understand the contents that the teachers strive to impart, while after using PPT and projector, the teaching contents and forms are limited, and a lot of data cannot be found. Because of the influence of lights etc., the result is often bad. For a long time, there has formed such pattern that there is too much rational knowledge in the artistic design teaching, with fewer perpetual materials, and the students will feel quite boring, so that their learning incentives are restricted, while in the artistic design teaching process, through the multimedia courseware, the data beyond the courseware and even the data on the internet can be applied in the class, so as to enrich the teaching contents and enlighten the learners’ cognitive ability. Of course, the advantages of multimedia can also be applied to continuously improve the students’ learning ability, make the students’ psychological activity always in the active state, generate the students’ learning passion, together with the designers’ careful teaching and enlightenment and in combination with the challenges proposed by the students, full discussion is made, so that the students will have the feeling of being personally on the scene and will get the actual conclusion, so as to practically
stimulate the students’ learning incentives and activate the teaching atmosphere of the artistic design class.

(IV) Improving teachers’ self-quality
The multimedia teaching of artistic design course can effectively improve the students’ self-quality. During class, the teachers should attempt to explore the learning methods with the change of the learners’ learning mode. First, in the artistic design teaching, teachers are not only the organizers, but should also become the main participant of the class activity. Second, in the artistic design teaching, teachers should use multimedia teaching while reducing the time of blackboard teaching and carry out information communication with the students. Third, after the modern multimedia teaching means enter the artistic design class, teachers should strive to learn the modern education technology, so as to better improve the ability of using the multimedia technology and greatly improve the quality of artistic design teaching on this basis.

Problems existing in artistic design multimedia teaching and their improving strategies

A lot of problems are generated in the process of applying the multimedia technology because the nature of multimedia technology is not realized. Actually, multimedia technology is the process that teachers effectively convey the reasonable teaching contents to the learners according to the appropriate rhythm and by selecting the corresponding media, making them master the knowledge points and skills to be learnt, so as to recognize the essence of the things and improve the teaching effectiveness. So it can be seen that only by scientifically and reasonably applying the multimedia technology can the quality of the class teaching of artistic design be improved practically.

(I) Problems existing in the courseware and their improving strategies
First, before making the courseware, it is required to control the total volume of the courseware, and it is better that each PPT conveys three concepts, with texts and pictures complementing each other. For example, there is the content of “variance” in Graphic Creation, there should be the concept, creative works and posters of “variance” in the courseware. It is required to return to the key words in the concept “variance” through the discussion and analysis of the learners, i.e. gradual change and evolution. During analysis, the teachers should be the leaders and actively participate in the students’ group discussion. In case of key points and difficulties, it is possible to put efforts into the courseware and select the corresponding media to increase the information strength, and make the learners deepen their understanding to the contents through the visual impression, so as to avoid the confusion with other concepts. Second, in the process of layout design, it is required to arrange the texts and pictures as the points, lines and planes. It is required to pay attention to the density relation in the pictures, reserve effective blanks according to the contents, but the blank area should not exceed 30% of the whole page, while the decoration and pattern color of the blank area should be approximate to the transparency and purity of the background color. Third, in the selection of color, the background color should form a strong contrast with the text and picture color in the transparency and purity. The color contract relation of the computer display will convert into a soft contrast in the large screen. Therefore, the background colors are better to be black and dark blue etc., so as to set off the texts or pictures of bright tones, without generating significant visual disturbance.

(II) Problems existing in teaching process and their improving strategies
A high-quality multimedia courseware is only a necessary condition to carry out the multimedia technology education, to make the students succeed in learning, it is require to combine with other traditional teaching models. First, in the teaching design, the artistic design teachers should consider the effect of teaching and the possible emergencies. Teachers must control the teaching time of the multimedia technology and preset the time for discussion and lecturing, and it is required to avoid the adverse disturbance of multimedia technology as far as possible. Second, in the class teaching of artistic design, not all classes are appropriate to be carried out in classroom, and it is possible to allocate whiteboard, color card paler, projector and other equipment in classroom, and use all teaching tools comprehensively in each class. For example, when completing the simulative design project in the professional course of the artistic design, the stage of discussion creation is generally
in the ordinary classroom, and in this stage, it will be quite significant to use group cooperative teaching and project teaching method. The group cooperative teaching highlights the leading status of the learners, not only the lecturing contents should be changed, but the lecturing form, for example the placing of seats should also be different, so as to draw the attention of learners and mobilize their incentives.

**Conclusion**

In a word, the wide application of digital multimedia technology in the class teaching of artistic design has played quite an important role to improve the effectiveness of the artistic design teaching. But it should also be noted that most of the multimedia teachings of artistic design are limited to the PPT demonstration. In order to make better use of the role of digital multimedia technology, it is required to further research the application of multimedia technology and make students in a lifelike design environment, so as to promote the rapider and better development of the artistic design education.

**Acknowledgments**

This paper is the project of school-level teaching reform topic of Qingdao Seaside Institute in 2013, 2013.3-2014.3, Topic name: Research on Effectiveness of Digital Multimedia Technology to the Improving of Artistic Design Teaching; project number: 2013J05; presenter: Ma Yingying.

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