Exploration of Blended Learning Model Based on Moodle Art Learning Platform—Taking "Photography Foundation" Course for Example

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ABSTRACT

In this paper, we combined with face-to-face teaching and online learning supported by the Moodle art learning platform from the concept of blended learning, and constructed a blended learning model based on Moodle platform, which was contained three stages: the preliminary needs analysis, blended learning design and blended learning evaluation. Taking “Photography Foundation” course for example, we further improved blended learning activity process based on the blended learning model. Finally, this paper adopted the questionnaire and interview method to analyze the effectiveness of blended learning model, it showed that blended learning model based on Moodle art learning platform could improve the teaching effectiveness of the course.

INTRODUCTION

With the wide application of information technology in the field of higher education, more and more teachers of colleges and universities realized that information technology was changing the way of teaching and students' learning styles. We found that great changes had taken place in the learning environment more than in the past, which was included the traditional face-to-face learning and

non-face to face network learning that was usually called blended learning (BL) now [1]. In recent years, colleges and universities and primary and secondary schools in China were actively creating teaching environment of blended learning, and encouraging teachers to apply the blended learning to the design, development and implementation of the course[2]. Lots of research results at home and abroad showed that blended learning could significantly improve the learning effectiveness for students [3].

After the promulgation and implementation of the National School Art Education Development Plan (2001-2010), more and more science and engineering colleges set up the school elective courses and organized various art activities and lectures to improve college students' art literacy. Nevertheless, the teaching efficiency of the art education curriculum in science and engineering colleges was not very ideal now; there were still some problems to solve. For example: the kinds of courses were set single, most of the elective courses of art were dominated by teachers in class[4], and the communication between teachers and students was not timely. Therefore, this research applied blended learning model to the elective course of art in the science and engineering colleges. Taking “Photography Foundation” course for example, the effective combination of Moodle art learning platform of Northeast Petroleum University that we built through the free open source software and face-to-face teaching, we did it for developing the teaching and exploring the structure of blended learning model based on Moodle platform, the design and implementation of learning activity, and the analysis of effectiveness so that we could improve the teaching effectiveness of art education course in science and engineering colleges.

DEFINING THE KEY CONCEPTS

Moodle Art Learning Platform

Moodle was the abbreviation of Modular Object-Oriented Dynamic Learning Environment that was a set of free used course management system. At present, Moodle had always been leading position in the course management system and it was also widely popular among educators all over the world. Because the Moodle platform was easy to use and the source codes of Moodle were open, so that people could conduct secondary development according to their own requirements. There were many modules in the Moodle platform, such as: assignment module, chat module, vote module, BBS module, test module, resource module, questionnaire survey module, etc.

In this study, Moodle art learning platform was oriented to the teachers and students in school from Northeast Petroleum University. It was a major course management platform of college students' art literacy elective course that was based on open source software-Moodle, and was used parts of modules of Moodle to open
“Photography Foundation”, “Chinese Traditional Culture”, "Art Appreciation" courses, etc.

Blended Learning

Research data at home and abroad showed that the concept of Blended Learning had been appeared more than ten years, which had a wide range of applications in the field of school teaching, teacher training and enterprise training. But the academics had not a unified definition about the definition of blended learning at present, and researchers explained the concept of blended learning from different angles as follows. Kekang He started from the perspective of learning style, he thought that blended learning was defined as “the so-called Blended Learning, it combined of the advantages of traditional way of learning and ELearning, that was to say, which made the teachers play a leading role of guidance, enlightenment and monitoring in the teaching process and fully embody students’ initiatives, enthusiasm and creativity as the main body of the learning process” [5]. While Kedong Li started from the learning mode, he thought “blended learning was the integration of two learning modes of face-to-face teaching and online learning and a kind of teaching mode of reducing the cost and improving the efficiency” [6]. Thus it could be seen that many researchers had a common view of the definition of blended learning “the integration of traditional face-to-face teaching and online learning”, “the teaching efficiency optimization”, etc.

Blended learning involved in this study was a new way about learning and teaching that combined traditional face to face teaching with online learning, and it was dominated by teachers’ classroom teaching, while students could learn independently in Moodle art learning platform in order to achieve the optimization of the teaching efficiency.

CONSTRUCTION OF BLENDED LEARNING MODEL BASED ON MOODLE ART LEARNING PLATFORM

According to the previous definitions of the two key concepts of “Moodle art learning platform” and “blended learning”, blended learning model’s design and development in this study was to promote the elective courses of art of Northeast Petroleum University. The students’ self-regulation and control ability were played fully in the learning process by means of the organization, feedback and guidance[7]. As shown in figure 1, the model mainly contained three phases: preliminary requirements analysis; blended learning design and blended learning evaluation.
THE IMPLEMENTATION PLAN AND EFFECTIVENESS ANALYSIS OF BLENDED LEARNING ACTIVITIES BASED ON MOODLE ART LEARNING PLATFORM

Under the guidance of blended learning model in Moodle art learning platform, taking elective courses of arts of Northeast Petroleum University “Photography Foundation” for example in this study, the author studied it for the implementation of blended learning activities and effectiveness analysis. “Photography Foundation” was a course that combined theory with practice, for eight weeks of teaching, and the total period was 48 hours. The people that participated in the blended learning activity mainly included the teacher, assistant who were responsible for learning activities of the platform and 18 sophomores majoring in science and engineering, and the total amount was 20. In order to carry out the blended learning activities, the author used the questionnaire survey to know the characteristics of students, such as: prerequisite courses, common social interactive software, and whether or not students were familiar with blended learning model etc. In addition, the author found that most of the students all learned the two courses: art foundation and graphic image processing, students often communicated with QQ, but they were not familiar with the blended learning model. Therefore, it was necessary for students to be trained the blended learning model before the start of blended learning activities.

The Overall Implementation Plan of Blended Learning Activity

Based on the needs analysis of the “Photography Foundation” course, we further upgraded the process of blended learning activities, and sorted out the relationship of learning objectives, curriculum content, the types of activities, activity behavior, the way of evaluation and scores (max), which were corresponding to each phase of blended learning activities [8].

The Effectiveness Analysis of The Blended Learning Based on Moodle Art Learning Platform

In order to verify whether the blended learning model could improve the teaching efficiency of the “Photography Foundation” course based on Moodle art learning platform, after the end of the course, the author adopted the method of questionnaire and interview to survey, summarized the collected data and analyzed the effect.

CONCLUSIONS AND REFLECTIONS

In this paper, blended learning model based on Moodle art learning platform was discussed, and correspondingly teaching practice activities were implemented in the art elective course of Photography Foundation. Based on the effectiveness analysis,
it can be found that blended learning model by Moodle was helpful for students of universities of science and engineering, and there were some personal reflections in the blended learning activities.

**Enhancing Emotional Communication Between The Assistant and Students**

In general, there were fewer chances for the assistant and students to meet face to face. The assistant was always the “invisible” of online learning so that emotional communication between the assistant and students was not good. Therefore, the students were known the role "assistant" in class so that they had chance to know who the assistant was in the online learning platform. Meanwhile, the students enhanced the emotional communication in the virtual learning which lay a solid communication foundation for the further online learning.

**Cultivating the Students’ Consciousness to Learn Actively Online**

Since most of the students had not learnt on the Moodle platform before, it could be the case that they would not login the platform to learn in time. In order to avoid the occurrence of the above, there were two actions to remind the students to login the platform: one was that the teacher forecasted the online learning contents during classroom teaching; the other was the assistant to remind the students to login via instant messaging, such as discussion group of QQ. With the blended learning activity process, the students would develop online learning habits.

**ACKNOWLEDGEMENT**

In this paper, the research was sponsored by Beijing Education Science "Twelfth Five-Year Plan" 2014 key project" the training of normal students’ teaching practical ability based on flipped classroom model" (Project No.AJA14182) and Beijing Municipal Education Commission science and technology plan general project "the design and implementation of flipped classroom teaching model in college" (Project No. KM201610028017).

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