Exploring Blended Teaching Mode Based on Blackboard Platform

Qiao LUAN[*], Wei JIA, Chunping ZHENG
Beijing University of Posts and Telecommunications, China
*luanq@bupt.edu.cn

Abstract: Teaching social science courses in traditional mode in the higher education settings has encountered various problems, and the teaching effectiveness needs to be improved. The utilization of information technology in education has become a general trend for promoting educational reforms. In order to improve learner autonomy and increase learners' internal interest in subjects they learn, this study conducted a 16-week experiment in a social science course at a university in northern China, utilizing blended teaching mode with the support of the Blackboard platform. 30 college students majoring in public administration took part in the teaching experiment. The feedback of questionnaires showed that Blackboard platform has created favorable conditions for carrying out blended teaching. It has positive effect on fostering learner motivation, improving their interest in learning, and reinforcing their understanding of the course.

Keywords: Blackboard platforms, social science courses, blended teaching

1. Introduction

The work guide of the Ministry of Education of the People's Republic of China instructs for the promotion of deep integration of education with information technology in order to realize the rapid improvement of education quality. Introducing modern information technology into traditional classroom teaching will promote the transformation of traditional classroom teaching strategies, methods and evaluation methods.

The Blackboard platform is a course management and delivery system (Moeller, 2013). It can achieve the functions of course creation and management, resource construction and management, interaction between the teacher and students, statistical analysis, assessment, evaluation, and mobile learning. Currently, the Blackboard platform has been widely used in many universities in China, including our university - Beijing University of Posts and Telecommunications. A number of previous studies have discussed applications of the Blackboard platform. Examples include the effects on EFL students of using Blackboard technology (Mekheimer, 2012), students' perceptions of Blackboard (Carvalho, Areal, & Silva, 2011), collect learning data for discussion (Abrams, 2013), the use of Blackboard platform for teaching mode reforms such as blended-learning project (Chan, 2014), and collaborative learning based on the Blackboard platform (Wand, Shi, & Yang, 2011). However, there are still few studies on the application of this platform in social science disciplines.

The teaching objectives of a social science curriculum should be cultivation of students' ability of applying knowledge to solve practical problems. The curriculums should emphasize the combination of theory and practice, encourage students to carry out autonomous and collaborative learning.

This study uses the course "National Civil Service System" as an example. After the teacher completed teaching this course, questionnaires are collected to learn the students' acceptance and learning effectiveness when carrying out blended teaching with the support of the Blackboard platform.

2. Research Method

2.1 Participants

The subjects of this study are 30 undergraduate students (12 boys and 18 girls) majoring in the Public Administration at our university. This course, "National Civil Service System", is an elective course for these students. It introduces the content of the National Civil Service System in a comprehensive and systematic way. It also introduces relevant material for national civil service system examination. Students who have completed this course are expected to not only understand the basic concepts behind civil servants and the civil service system, but also be able to apply theory in practice. This study collected research data through questionnaires in order to investigate students' learning results and learning experience when utilizing Blackboard platform to carry out blended teaching.

2.2 Research context

In the first week of the semester, the teacher gave a tutorial about how to operate on Blackboard to make sure that the learning results won't be affected by lack of information. Furthermore, the teacher encouraged the students to use the platform for effective self-study. Then a 15-week blended teaching experiment with the support of platform was conducted. The course content was designed as three modules: course key knowledge points' explanation, course practice simulations and flipped classroom. Finally, the teacher received feedback on learning results and effectiveness through questionnaires.

2.3 Course design

2.3.1 Course design with functional modules.

The course mainly utilizes the five functional modules of the Blackboard platform (see Figure 1).
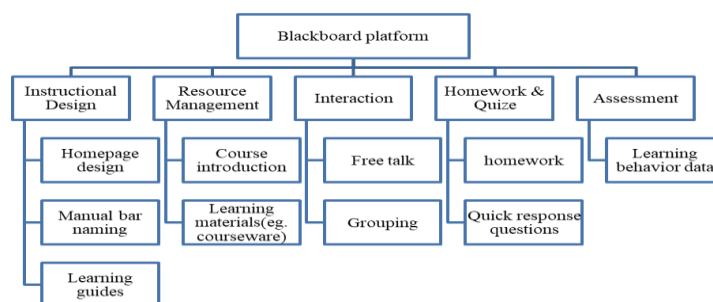

Figure 1. Functional modules of the Blackboard platform

The "Instructional design" module includes homepage designation, menu bar naming and learning guides. The teacher names the labels on the menu bar with vivid and interesting names, and the learning guides are clear and simple. For example, the "discussion" module is named "Free talk" aimed at encouraging students' learning autonomy and internal interest.

The "Resource Management" module is used to upload course syllabus, courseware, other documents and video materials. It creates an environment for students to learn independently. In addition to documents, video materials create a lively and colorful learning atmosphere for students. It helps to improve students' internal interest in learning.

The "Interaction" module is used to establish forums and for group works. The teacher and students can interact on the forum with rich topics including current events. It is an effective extension of classroom communications. The teacher's attention to student arguments can provide positive feedback to students. This kind of attention can encourage students to work harder, think more and promote the interaction between students. The collaboration function allows students to

build their own group according to their personal wishes. Team members can share documents, make schedules, and establish group discussion forums. The teacher can also view the contents and process of group interaction on the platform.

The "Homework & Quiz" module is used for homework and quiz management. The assignments are divided into group assignments and individual assignments. This enables students to develop not only the ability to complete tasks independently, but also teamwork skills and promote mutual learning and assistance.

The "Assessment" module can extract student learning data. Teacher can analyze students' online learning behavior and achieve process evaluation via these data. For example, the teacher uses the statistical data of the students' participation in the forum to learn the students' degree of participation, thus giving corresponding evaluations and scores.

2.3.2 Course design based on the blackboard platform

The teacher sets up the course content as three modules to implement a blended teaching mode experiment based on the blackboard platform. First is the explanation of course key knowledge points. Second is the simulation of course practice. Third is the flipped classroom (see Figure 2).
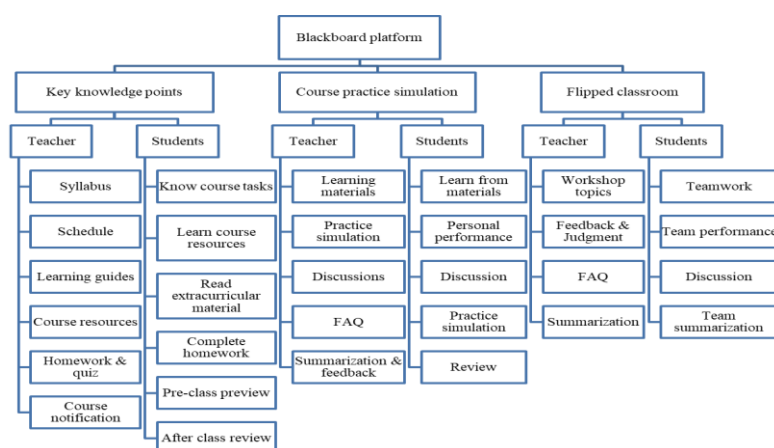

Figure 2. Three modules under blended teaching mode

(1) **Key knowledge points explanation.** In the first six weeks of this semester, the course key points were taught by the teacher in the classroom. Before class, the teacher uploaded learning materials in the order of chapters on the Blackboard platform for students to preview and download. After class, the teacher published homework assignments and discussion topics on the platform.

In order to improve students' interest in the material, the teacher introduces the game concept in this class. For example, the assignment named "Terminology Quick Response" is a game where the group which submits a correct answer on the platform first gets the scores. The correct answers will be marked on the names of the groups to encourage competition among students.

In order to improve students' learning initiative, problem-oriented learning was introduced. For example, the teacher provides videos for case studies with relevant questions. Students publish their answers and discussion freely under the discussion board. Students will learn to identify problems, solve them, and finally share their insights with their peers.

(2) **Course practice simulation.** From the seventh week to the eleventh week of this semester, course practice simulations were done as mock interviews. It is divided into three parts: randomized interview, structured interview and group interview. Before practice, students learn the relevant material regarding of different kinds of interviews on the platform. Teacher will make some comments, suggestions and summaries after watching these mock interviews in class. The teacher and students can discuss online by watching the class recording videos posted on the platform.

(3) **Flipped classroom.** In the last five weeks of this semester, the course implemented the flipped classroom by taking advantage of the Blackboard platform. The teacher posts materials of various topics related to the course on the platform. Each group choose one from these topics, learn

the materials, collaborate and share in class to realize flipped classroom. The initiative and collaborative learning mode encourages the students to share and assists them in developing advanced understanding of the course key points. The teacher uploads the class recording videos to the platform for students to watch and review after class.

3. Results and Discussions

This is the first time that "National Civil Service System" course utilizing blended teaching mode with support of Blackboard platform at the authors' university. In this study, questionnaires were sent to students to get feedback on the learning results and effectiveness under such teaching mode. A total of 30 questionnaires were distributed in this study, and 30 valid questionnaires were collected to draw the following conclusions:

Course practice simulation is the favorite part for students of all three modules in this blended teaching mode experiment. 80% of students believe that the mock interview is relatively useful - including directly understanding various forms of interviews, improving interview skills, and the interview skills taught are very practical. More than half of the students agree that the flipped classroom encourages the students' learning autonomy. Students also report that they use the function modules of Blackboard platform, such as resource management, assignments and quiz. More than 80% of the students believe that the Blackboard platform is helpful for knowledge learning, including easy access to the course materials, the interesting tasks, the convenient forum function for the teacher and students to communicate and share ideas. Finally, more than 80% of students agree when compared with other courses, this course utilizing blended teaching mode provides a richer teaching session with more variety, which improves the students' initiative and interest in learning.

In summary, Blackboard platform has created favorable conditions for carrying out blended teaching for this course. The three modules gradually implement the process from understanding of the course content to practice and finally the exploration. The teacher acts as a guiding role in the whole teaching and learning process. The blended teaching mode with support of Blackboard platform helps increase students' internal learning interest, improving the ability to learn independently and the collaborative learning ability.

4. Conclusion

The modernization of education cannot be separated from the strong support of modern science and technology. Information technology has a revolutionary impact on the development of education. This research has explored the possibility of blended teaching mode reform with the support of Blackboard platform. The feedback from the questionnaires shows that, for university social science curriculums, blended teaching mode with support of Blackboard platform has positive effect on enhancing students' motivation, improving the interest in learning, and reinforcing students' understanding in the course. It is a useful attempt to "cultivate new people in the new era that can adapt to and lead the country's development and national rejuvenation".

Acknowledgements

References

http://www.moe.gov.cn/srcsite/A02/s7049/201802/t20180206_326950.html.

Bustamante, C., & Moeller, A. J. (2013). The convergence of content, pedagogy, and technology in online professional development for teachers of German: An intrinsic case study. *CALICO Journal*, *30*(1), 82-104.

Mekheimer, M. (2012). Assessing aptitude and attitude development in a translation skills course. *CALICO Journal*, *29*(2), 321-340.

Carvalho, A., Areal, N., & Silva, J. (2011). Students' perceptions of Blackboard and Moodle in a Portuguese university. *British Journal of Educational Technology*, *42*(5), 824-841.

Abrams, Z. (2013). Say what?! L2 sociopragmatic competence in CMC: Skill transfer and development. *CALICO Journal*, *30*(3), 423-445.

Chan, C. H. Y. (2014). Building an online library for interpretation training: explorations into an effective blended-learning mode. *Computer Assisted Language Learning*, *27*(5), 454-479.

WANG, R., SHI, Y., & YANG, Y. (2011). Exploration on the blackboard platform-based collaborative learning. *Agriculture Network Information*, *3*, 032.