The Formative Evaluation's Impact on Online Learning

Mei Pu and Lu Wang
Capital Normal University, Educational Technology, Beijing, China
pumei7@gmail.com, wlcnu@263.net

Abstract. Formative evaluation has so much impact on learning, especially the online learning. There are many researches on the formative evaluation of online learning, but most of them focus on the theory or the system development, and the empirical researches on this aspect are still very limited. We proved the formative evaluation’s impact on the online learning by studying on the attention of the formative evaluation got from the learners, the course participation, the learner autonomy, and so on. We used the case study method, chose the education master's professional required course “Learning science and technology” and one of the learners to be the cases. In this paper, we will introduce the course, the formative evaluation, the study method and the relationship between the formative evaluation and online learning.

Keywords: Online learning, Formative evaluation, Case study, Learner autonomy, Course participation.

1 Introduction

Evaluation has sufficiently powerful effects on learning to be the course [1]. The formative evaluation became an integral part of learning evaluation since it had been proposed by Scriven in the "evaluation methodology" in 1967. Formative evaluations are designed for the purpose of giving feedback on performance and suggestions for improvement, and are intended to promote students' learning [2][3]. Formative evaluations that provide timely, relevant and supportive feedback (not just grades) can contribute to improved learning outcomes [4]. With the rapid development of information technology, the education which is based on the internet is the new direction of the distance education development [5]. Because of the characteristics of the environment, technology, and mode, online learning depends much more on formative evaluation than traditional learning. From the review, we can know that more focus on learning platforms and resources’ building, the attention of learning evaluation is not enough attention [6]. In the online learning, the teaching organization structure of the students, teachers and administrators are loose, learning is not limited by time and place. Obviously, the traditional formative evaluation has been difficult to adapt to the needs of online learning [7]. Computers have done much to the online learning formative evaluation. The research about the computer support formative evaluation become more and more [8]. In fact, it's facility to conduct formative evaluation in the online learning than the traditional learning. The computer and network can keep the study
record, make the formative evaluation feedback more quick, and make place facility, and so on [9]. The formative evaluation means a lot to the online learning.

The experience of the online learning let me know the importance of the formative evaluation. Many scholars and experts have done many researches on the formative evaluation of online learning, but most concentrated in the theoretical study and the development of evaluation system, the empirical studies of formative evaluation on online learning are still small. To verify the formative evaluation's impact on online learning, and also to provide more evidence to the study of formative evaluation, we choose a course and one learner to conducted the case study.

2 Background

In March 2009, the author participated in two courses offered by Professor Wang in the Virtual Learning Community of Capital Normal University, and served as a teaching assistants for one of them from March to July.

2.1 Virtual Learning Community of Capital Normal University

Virtual Learning Community of Capital Normal University (VLCCNU) was developed by the team of professor Wang in 2000. The VLCCNU provides different tools for teachers and students [10]. The tools for learners such as my classroom, learning forums, virtual chat, personal space, scheduling, bookmarks management, and related downloads. And there are also a variety of support tools for teachers' teaching, management, and counseling organizations, such as the management of students, understanding the students, resource management, log management, operations management and course management, etc. The VLCCNU has been used for more than a decade, and more than 1,000 students had the experiences of learning through the VLCCNU. The students include primary, secondary, university and graduate. Even now, there are at least 2 courses to be conducted on the VLCCNU each term. At the beginning of the term, the learners should choose the course in the VLCCNU, and wait for the permission of the teachers. If the teachers had give the permission, then the students can participate in the course, learning through the resources, posting, finishing the task, having group meetings, and so on.

2.2 The Study of Science and Technology

"The study of science and technology" is an education master's professional required course of the Education Technology Department. All the learners of the education master are teachers or administrators from the school, they are not full-time students. This course began from March 2009 to July 2009. Eighteen students had participated in the course, including nine education masters, eight graduate students, and one undergraduate student. The learners came from different provinces, they can't learn together in the class because of the work, the family, and so on. So they all learned, discussed and communicated through the VLCCNU.

The forms of the courses activities include debates, seminars, group learning, role-playing and so on. At the beginning of the activities, teacher will give the tasks at the forum, and upload some materials about the activities. Learners read the materialson