Chapter 14

Utilizing Question and Answer Discussion Forums to Enhance Learning in University Health Courses: Q&A Online Discussion Forums for Efficient E-Learning

Niyi Awofeso
Hamdan Bin Mohammed Smart University, UAE

ABSTRACT

This chapter examines the contributions of Moodle’s Q&A discussion forum platforms to optimizing cooperative and collaborative learning, validity of assessment of discussion forum posts, and achievement of course outcomes. The author studied: (1) How appropriate is the Q&A variant of online discussion forums in facilitating individual and collaborative learning? (2) How may course facilitators equitably grade online learning individual and collaborative learning activities using Q&A discussion forums? (3) Do learners’ performance in Q&A category of online discussion forums predict performance in other assignments in online courses? (4) How well do learning activities in Q&A forums achieve courses’ learning outcomes compared with other learning approaches? Survey and data analysis conducted by the author at HBMSU, UAE revealed that Moodle’s Q&A discussion forum compares favorably with other teaching approaches in facilitating cooperative and collaborative learning, predicting overall learning achievement as well as improving validity of assessments.

DOI: 10.4018/978-1-5225-5255-0.ch014
INTRODUCTION

The expansion of technology mediated learning is one of the most significant trends in higher education over the past decade. While most traditional universities have enhanced conventional classroom learning with electronic contents using technology platforms accessible to enrolled learners – i.e. non-networked computer based learning -, others have gone further to introduce blended teaching approaches whereby text-based and discussion forum based asynchronous internet technology is integrated into significant proportion of face-to-face learning. The furthest on this continuum is fully online e-learning, with no physical, face-to-face sessions (Garrison & Kanuka, 2004). An appropriate way to maintain the connection and quality standards between the several strands of e-learning and the values of traditional face-to-face tertiary education is through ensuring that online learning is facilitated by teachers, fully qualified and interested in teaching online in a web-based environment and versed with the appropriate use of high quality online synchronous and asynchronous learning tools.

Synchronous learning is instruction and collaboration in “real time” via the Internet. It typically involves the utilization of instructional tools such as live chats/instant messaging; audio and video conferencing; data and application sharing; shared whiteboard, and; joint viewing of multimedia presentations and online slide shows. Synchronous learning has the advantages of being closer to “natural” communication, requiring immediate feedback - which may be either motivational or increase peer pressure -, quicker collaboration, “snowballing”, and structured time. Asynchronous learning methods use the time-delayed capabilities of the Internet, involving tools, such as: e-mail; online discussion forums; online study groups and bulletin boards; file attachments. These two approaches offer varying degrees of individual and collaborative learning opportunities for students. The advantages of asynchronous communication include flexibility of place and time, time for reflection and composition of responses, as well as generally user-friendly learning technology. Synchronous learning approaches have the advantages of immediate feedback from peers and subject matter experts, and are easier to evaluate for learner participation. Conversely, synchronous learning approaches have the disadvantages of being more complex to facilitate and participate in given interoperability constraints, with less flexible time, while asynchronous learning approaches have the disadvantages of low probability of immediate feedback, and very limited non-text verbal cues to information (Oye, Salleh & Iahad, 2012). Online discourse management identifies the exchange of ideas and viewpoints mediated by a computer mediated communication medium via a discussion board, a learning management system or any other synchronous and asynchronous collaboration tool (Putnik & Cruz-Cunha, 2008).

Historically, technology mediated asynchronous learning using online discussion has its origins in listserv discussion groups initiated by academic scholars just prior to the dissemination of Internet technology (Hert, 1997). Online discussion forums initially served to enrich discussions among specific communities, opinion polls, facilitate acquisition information, skills, and other resources relevant to user’s work interest. In adapting the forums to academic learning, it important to restructure them to be concurrently learner centred, knowledge centred and assessment centred. Learner centered online environments to learning platforms that pay careful attention to the knowledge, skills, attitudes, and beliefs that learners bring to the educational setting, including culturally relevant teaching practices (Ladson-Billings, 1995). Knowledge-centered environments help learners become knowledgeable by learning in ways that lead to understanding and subsequent application of acquired knowledge when required. Such environments focus on the kinds of information and activities that help learners develop transdisciplinary understanding and develop metacognitive skills (Millis, 2016). Assessment centred