ABSTRACT

Attendance at classical lectures usually leads to rather poor learning success. A wide variety of studies show that while lectures are as effective as any other method for transmitting information, they are inferior in many other dimensions. Lectures are not as effective as discussion methods in promoting thought and they are ineffective at teaching behavioral skills and subject-related values as well as at awakening interest in a subject. Still ex-cathedra teaching is a favored way to cope with a high student-to-teacher ratio. To solve this conflict between organizational and pedagogical requirements, a group of researchers at the Institute of Teacher Education at the University of Zurich has developed a hybrid course setting using an online learning platform. Their setting incorporates a dialog among students within a large lecture class. Furthermore a feedback loop enables the lecturer to continuously adjust the content of the lecture to the learning process of the students. In this article, the authors first present the structure of this setting and then illustrate how to implement it by the web-based open source learning management system OLAT (Online Learning and Training). Based on their research, they focus on key components for the success of their hybrid dialog. They show how individual and group learning can be fostered with corresponding assignments, assessments, and assigned roles such as moderators. Thus, the authors will define their position that the challenge of a large lecture class can be met while successfully implementing social learning and process-oriented assessments of academic achievement.

DOI: 10.4018/978-1-4666-0011-9.ch3.12
INTRODUCTION

Lecturing still is the most common teaching method in colleges and universities globally (Bligh, 2001, p. 3). The vital role of lectures in academic teaching originates in the ancient Greek academy. Throughout the Middle Ages, the lecture remained the most important academic teaching method until today (McLeish, 1976, pp. 252–254), although it has repeatedly been criticized for being just an oral reproduction of written text (Apel, 1999, pp. 22–30).

Since the 1950s, not only the written word can be reproduced easily, but also the spoken one: In less than hundred years, radio, television, video, as well as computerized multimedia technology (on stationary as well as mobile terminals) became widely available. These developments have lead to traditional lecture being criticized as never before—and with good reason. Today, many faculty and educational researchers are experimenting with streaming lectures, with replacing or supplementing lectures by online tutorials, and so on (e.g. c.f. Brecht & Ogilby, 2008; Glass & Sue, 2008; Guertin, Bodek, Zappe, & Heeyoung, 2007; Spickard, Alrajeh, Cordray, & Gigante, 2002). We are observing these experiments and their outcomes with great interest.

Our research, however, focuses primarily on another aspect. We find that academic teaching often relies too much on the transmittal of information. While transmitting information to students is absolutely necessary for their acquiring knowledge, there is also a range of other learning dimensions which are equally important. For example, we would like students to think independently about subject matter, to acquire values associated with it, and to solve subject related problems. In other words, just knowing facts is not enough to be an expert in a specific subject. And while lectures are good for transmitting information, they are not appropriate for aiming at learning dimensions like independent thinking, value acquisition or problem solving (see section “Background”).

Hence, we have developed a hybrid didactic scenario, which aims at learning dimensions beyond acquiring knowledge—without renouncing the benefits of lectures in transmitting information. In the following, we are delivering some empirical background to corroborate our approach (section “Background”) and explain the didactic scenario, based on a short introduction to the theory of dialogic learning (“Part I: Hybrid Dialog—a didactic setting to implement a feedback loop in large lecture classes”). Then we explain how to implement our didactic scenario using the LMS OLAT (“Part II: Implementing a dialogical setting using the LMS OLAT”). The last part of our chapter focuses on fostering dialogic online learning (“Part III: “Practical Implications”).

BACKGROUND

During the 20th century, a lot of comparisons between different academic teaching methods have been undertaken. While more than a few of them didn’t show any significant results, some trends still can be discerned. They can be summed up to the following three basic propositions (cf. the meta-analyses in Bligh, 2001, pp. 3–20):

1. Lectures appear as effective in transmitting information as other methods.
2. Lectures are less appropriate than discussions when aiming at promoting student thought and the acquisition of procedural knowledge.
3. Lectures are not qualified to change student attitudes and value systems.

Concerning 1): In 298 studies, no significant differences showed up between the declarative knowledge students acquired through the following teaching methods: Lectures, discussions, reading and independent study, inquiry (e.g. projects), and others, mostly audio, TV, computer-assisted