Chapter 11

Employing Collaborative Learning Strategies and Tools for Engaging University Students in Collaborative Study and Writing

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ABSTRACT

This chapter addresses several issues and challenges that one faces when carrying out a real collaborative learning experience following a blended learning design that includes a mixture of face-to-face and online collaborative learning processes. The chapter presents an experience based on a blended course on “Collaborative Educational Systems”. This scenario employed a variety of collaborative strategies, methods and tools to support and enhance debate and information exchange among peers in order to complete a specific task: writing an essay collaboratively. Carrying out this task entails a preliminary study and analysis of the subject matter, which are also performed in a collaborative manner. The authors describe the educational scenario in detail, including the structure of the activities, the rules the groups were asked to apply and the procedures the students had to follow to accomplish the task. They finally analyze and evaluate this learning experience with a critical point of view as regards the collaboration strategies adopted, the way students built their own strategies combining the ones presented in the course, and the collaborative learning process and product.

INTRODUCTION

Computer-Supported Collaborative Learning (CSCL) is one of the most influencing research paradigms dedicated to improve teaching and learning with the help of modern information and communication technology (Dillenbourg, 1999). Collaborative or group learning refers to instructional methods where students are encouraged to work together on learning tasks. Collaborating in small groups may constitute a powerful means for promoting and enhancing learning and social interaction. Recent studies of e-learning have pointed out that involving learners in collaborative learning activities could positively contribute to extending and deepening their learning experiences, test out new ideas, improve learning outcomes and increase learner satisfaction, at the same time decreasing the isolation that can occur in an e-learning setting (Palloff & Pratt, 2004). Furthermore, collaborative learning situations can provide a natural setting for demanding cognitive activities which can also trigger collaborative learning mechanisms such as knowledge articulation as well as sharing and distributing the cognitive load (Dillenbourg, 1999).

However, many teachers remain unsure of why, when, and how to integrate collaboration into their teaching practices in general as well as into their online classes (Panitz, 1997; Brufee, 1999). In addition, the effectiveness and success of a group of learners depends on a variety of issues during its lifecycle (Pipek & Wulf, 1999). Furthermore, during task realization, students learning via CSCL technology and methods need guidance and support in order to collaborate effectively and achieve their learning goals successfully. This fact is especially critical when it has to do with collaborative learning practices that are carried out over a long period of time, employing a blended learning approach (a traditional classroom with face-to-face interaction supplemented by online resources), and engaging students to work together to solve a complex real problem and participate in a variety of activities (Kiesler & Sproull, 1987; Dobson & McCracken, 1997; Cameron, Barrows, & Crooks, 1999; Thomas, 2000).

The essential role of appropriate tools to help teachers and students with their mindful and appropriate learning has been acknowledged by many researchers (Lloyd & Wilson, 2001; Babiuk, 2005). Such tools are essential in all types of education. Essentially, in web-based education and blended education, the existence of this kind of tools is crucial for the teachers’ and students’ more effective involvement (Koper & Tattersall, 2005).

This chapter reports a real collaborative learning experience that has been carried out following a blended learning design approach that includes a mixture of face-to-face and online collaborative learning processes employing a variety of collaborative strategies, methods and tools to support and enhance debate and information exchange among peers in order to complete a specific task. The task consisted in writing an essay collaboratively, which includes a preliminary study of the subject matter which is also performed in a collaborative manner.

In particular we present an educational scenario which is implemented in a real classroom of a fourth year undergraduate university course, called “Collaborative Educational Systems”, which lasts a term (13 weeks). The scenario specifies a structure for the activities to be carried out, dictates the rules that learning groups should apply in order to collaborate and indicates the procedures to be followed by students to accomplish the task at hand. Given a pool of collaboration strategies, techniques and tools, students are encouraged to build their own strategy that fits better the dynamics and idiosyncrasy of their group. This results in developing self-regulated methods which foster collaboration and tackle the task more effectively. However, it also presents some risks and problems that we had to face during the collaborative process. We provide an extensive