
Chapter XIV

Supporting Informal Interaction in Online Courses

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ABSTRACT

Informal interaction has proven to be useful in supporting collaboration in office and educational environments. Online courses, however, provide limited opportunities for informal interaction, which might put them at a disadvantage when compared with traditional courses. This lack of opportunities could obstruct collaboration among students, a key aspect for successful instruction. To provide students with opportunities for informal interaction, we designed and developed a system named CENTERS. It is an instant messaging and presence awareness system that supports lightweight communications within the group. CENTERS provides awareness of the presence of members of the distributed community and allows them to interact easily and navigate together through the course's materials, share insights, resolve doubts, and collaborate in course related activities. To evaluate the use of CENTERS in an online learning environment, a study was designed to assess interaction from a socio-academic perspective. Results showed that CENTERS helped reduce the students' feelings of isolation and facilitated a greater degree of interpersonal interaction within the course participants.

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INTRODUCTION

Distance students and teachers, particularly during online courses, face many interaction difficulties. One of the aggravating factors is that students do not have well defined schedules nor specific places to access course materials and engage in learning activities.

Among others, Blanchard (1989) states that the lack of direct interaction between students and teachers is a severe limitation of distance courses, even if compensated by other benefits. There is ample evidence from studies on traditional learning environments showing that interaction among students and teachers can have an important influence on student performance (Pascarella et al., 1978; Lampion, 1993). The opportunities for interaction during online learning activities are scarce even though their importance has been highlighted (Barnes & Lowery, 1998). This lack of interaction creates important challenges for distance education; one of the points that has to be particularly addressed is the need to alleviate the feelings of isolation experienced by students (Hara & Kling, 1999).

Partial solutions that have been proposed in the literature to address this problem include scheduling face-to-face encounters and telephone calls to maintain personal communication among participants (Harasim et al., 1995). These solutions, however, require additional resources and might be difficult to implement in large distributed groups. Asynchronous and synchronous electronic communication tools play an important role in distance education, allowing interactions among classmates and between students and their teacher without resources external to their learning environment. The main advantages of asynchronous communication tools are flexibility in the continuous communication of the group, and freedom from restrictions of space and time; however, the same asynchrony presents a serious disadvantage in terms of the response time required by the teacher or student to answer the messages (Sherry, 2000). Students' interest might decrease because of these delays while fostering feelings of frustration and loneliness.

In order to alleviate this, we designed, developed and tested a software tool, named CENTERS, meant to encourage and support informal interactions during online courses. The objective of this chapter is to describe this tool and present some preliminary results of its use in four online higher education courses.

BACKGROUND

The affective and social needs of students are of primary importance in both traditional and distance education. According to Yacci (2000) instructional interactivity can be viewed as having two distinct classes of outputs: content learning and affective benefits, although the latter are less well understood. Different authors have stated that the formation and consolidation of online groups — learning communities — apparently transit through the same various stages experienced by traditional students (McDonald & Campbell Gibson, 1998), where the crucial point is to minimize the bridge between feeling themselves outsiders to becoming part of the group (Wegerif, 1998). Establishing rapport and collaboration among students and between students and teacher is thus a key aspect for successful instruction. The first variable in the grid for assessing course

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