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Tell me when to look: improving coordination in educational forums using mobile devices

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Abstract

The conference or forum is an asynchronous communications tool used to delve deeper into a course subject. To ensure that the conference reaches its objective, the coordination of learner activities must be supported. A difficulty that mediators and learners face to coordinate their tasks is the fact that the moment that a message is sent is unpredictable and varies considerably. This requires frequent action of mediators to connect to the environment to verify the course of the discussion, analyze learner's activity, prevent problems and intervene when necessary. Learners, in order to meet the deadlines and receive a good grade, also need to follow up the conference frequently to self regulate their activities: they must send and read messages, selecting those that will be answered, and decide when they will accomplish these tasks. In a scenario in which mobile devices and wireless networks are bringing about a new range of possibilities for teaching and learning, this study aims at investigating coordination tools for educational forums.

Case studies are being carried out with participants of the Information Technology Applied to Education (ITAE) Course. It is regularly offered by the Computer Science Department of the Catholic University of Rio de Janeiro and is given totally at distance through the AulaNet, a web-based teaching and learning environment developed since 1997 at this university. In the first phase of this course, eight topics are discussed, one each week. During each week, the learners must study a proposed topic, participate in a conference and in a chat. The forum is used to run the "Seminar" learning activity, in which one of the learners is chosen to initiate the discussion, sending a message about an aspect of the week's subject (the seminar) and three questions to be discussed. In each new course, new functionalities are evaluated by learners and mediators during their participation in the 'Seminar'. The introduction of these new functionalities is made

only in half of the conferences, allowing a comparison with the participation in the conference without these new resources. A record of the participants' navigation and when the alerts were sent is kept, and at the end of the course, qualitative research is carried out to evaluate the hypotheses adopted and to orient future work.

This study presents the extension of the AulaNet Conference service to PDAs and the use of coordination tools in PDAs and cell phones. The first results demonstrate that visual information about the conference tree structure, coupled with the wider connectivity of PDAs, is a valuable coordination tool for mediators. The offering of different alerts and statistical information through SMS and PDAs clarified the kind of alerts that helped mediators in the first semester of 2006. Finally, the use of SMS as a way of fostering the self-organization of the learners and their participation in asynchronous conferences is being investigated this semester.