

Article title:

Multi-Agent Virtual Seminar system (MAVIS) for Collaborative Learning

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Abstract

Computer-supported collaborative distance learning (CSCL) is a new trend for today's education; participants exchange information and obtain their learning experience through computer networks technologies. The use of Computer-Mediated Communication (CMC) has become the most convenient way to allow spatially separated participants to share knowledge in a synchronous or asynchronous mode. From pedagogical point view, Virtual Seminar is a mechanism which can support new trend of learning and teaching. Virtual seminars can be defined as a smallish group of participant focus on some topics or tasks learning and interacting via CMC tools instead of face-to-face communication. Several CMC applications are able to support virtual seminar, but few software among them can meet the expected features of collaborative distance learning in order to increase the effects of learning. This paper describes the model of Multi-Agent Virtual Seminar System (MAVIS) which provides advance features for virtual seminar such as automatically retrieving useful information for participants, organizing discussion content and tracking participants' learning activities etc. MAVIS integrates agents not only overcome the disadvantage of virtual seminar but maximizes collaborative learning. Following brief

introduction the role of computer technology in collaborative learning, section 2 presents the overview of virtual seminar which includes the comparison of virtual seminar and computer conference, and advantage and disadvantages of virtual seminar. In section 3, we introduce the potentials of agents and multi-agent in pedagogical application. Section 4 we describe initial design model of MAVIS system. Finally, section 5 illustrates the architecture and implementation of the system. General conclusions are presented in final section.

Keywords: Virtual seminar, CMC, Multi-agent, Computer Conference,
Computer-Support Collaborative Learning