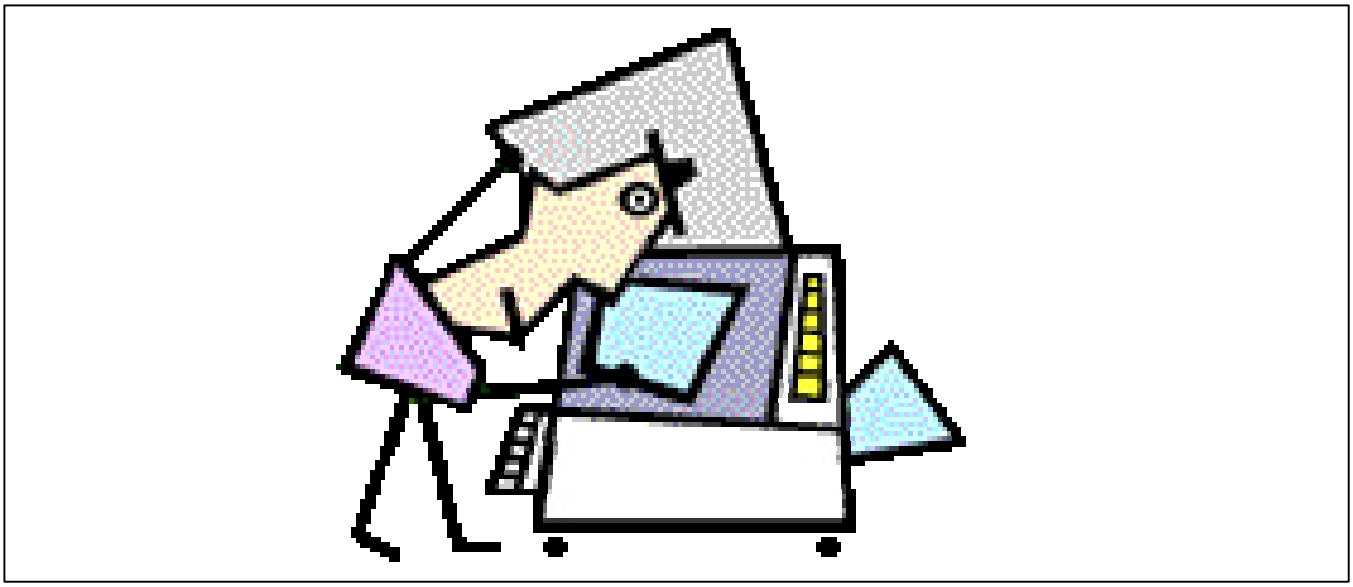
Project Title: The Use of Computer Supported Cooperative Work Applications in Student Engineering Design Teams: Matching Tools to Tasks



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Project Abstract:

There are a number of methods that are employed to facilitate communication within distributed teams. Sometimes a team can be brought together at a single location for a meeting. Although this is probably the most effective means for communication, this approach is often too expensive, too time consuming, or both. So alternative approaches have been developed. One is the use of computers and "groupware" to support cooperation. Such activities are referred to as Computer Supported Cooperative Work (CSCW).

The purpose of this investigation was to identify whether existing, readily available CSCW tools are useful and usable for completing three design-related tasks often performed by student engineering design teams: brainstorming of solutions, co-editing of reports, and negotiating of agreements. Four groupware-supported team meetings, using various combinations of audio, video, file-sharing, and application-sharing support, were compared against each other, as well as against a conventional face-to-face meeting, for performance of three design-related tasks, in terms of speed of performance, quality of performance, and subjective user satisfaction.

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