ACT: Asynchronous Collaboration Tool

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ACT (Asynchronous Collaboration Tool) is a WWW-based asynchronous conferencing tool designed to support the small-group problem-solving process. Created to be used as a research tool in the study of asynchronous communication in an online (potentially distributed) environment, ACT's design reflects an attempt to (a) appropriately support the real-world communication needs of small groups in volved in critical inquiry, and (b) encourage deep thinking about the structure and validity of a growing discussion/argument through various forms of reflection and organization.

Our observations of groups involved in Problem-Based Learning (PBL) scenarios suggest a need to support two separate organizations of information. First is the conversation, a temporally-organized interaction which closely resembles unmoderated face-to-face interaction. Conversations place a value on speed, a sense of moving the conversation forward, relevant anecdotes, and a holistic assessment of the problem and serve as an appropriate forum for brainstorming, problem definition, socializing/synergy-building, and exploratory interactions. Lengthy focus on a specific issue, though, is difficult. Issue-based discussion takes place in conferences organized hierarchically (in an outline form). This provides not only the structures necessary to conduct topic-by-topic exploration, but affords students the opportunity to easily track the history of discussion on an individual issue.

Besides offering two separate "types" of conference organization, ACT encourages reflective activities in several ways. First, the hierarchical structure itself forces a user to ask herself, "Where, if anywhere, does this post most appropriately fit?" Second, all posts in the hierarchical conferences are given labels indicating the nature of the message, such as Question, Hypothesis, Data, Opinion, etc. Even posts in a conversation can be flagged as a summary.

By exploiting the separate structures and encouraging reflection and periodic re-assessment of the ongoing discussion, we hope to provide opportunities for better communication between team members, better archiving of peer interaction for assessment purposes, and a more pedagogically-sound communication medium for students.