COLLABORATIVE LEARNING AND COMPUTERS

DARRELL FIKE, INSTRUCTOR, DIVISION OF ARTS & SCIENCES, BAINBRIDGE COLLEGE

ROB GINGRAS, INSTRUCTOR, DIVISION OF ARTS & SCIENCES, BAINBRIDGE COLLEGE

Collaborative learning prepares students for today's workplace, an increasingly competitive environment in which many companies employ teams or work groups to develop effective solutions for the challenges and problems they face. Companies actively recruit individuals who have good communication skills, who can relate well with others, and who are comfortable with proposing and evaluating ideas in a group setting. Learning to work collaboratively facilitates the development of these skills and makes our students more attractive and productive job candidates. Collaborative learning functions effectively in the college classroom as a sound pedagogical tool which may be adapted to suit a variety of disciplines and skill levels.

The computer lab is the ideal site for instituting collaborative learning practices into the classroom. Networked directories, word-processing programs, and Internet and e-mail facilities provide ready and able tools for student-to-student interaction. This student-to-student interaction enables collaborative projects that not only mirror the functions of the work-place but which also provide students with a sense of purpose, focus, and audience. Collaborative learning thus makes interesting and efficient use of new technology while creating a dynamic learning environment centered on student interaction.

Collaborative learning provides students an increased sense of purpose. Students are empowered to shape the outcome of their projects, and thus feel more in control and connected to the work they are doing. Students view their efforts as not merely "busy" work assigned by a teacher but as a vital component of the overall project as determined by a group of their peers. Students must report to other group members first, providing a sense of purpose with more immediate consequences and relevance than a distant grade or conference with the teacher. Teachers should take care to ensure that the collaborative assignments they create--while specific and goal-directed--are assignments that allow for more than one outcome or manifestation; thus, groups create projects which reflect their own understanding, knowledge, and viewpoints.

Collaborative learning provides students an increased sense of focus. Students can divide their projects into manageable tasks which seem less daunting and easier to accomplish than tackling a whole project own their own. Students are able to select tasks which are suited to their individual interests, experiences, and expertise. Thus, students work from a position of strength, and can share their abilities and know-how with students less prepared or knowledgeable.Individual tasks, since they are part of the group's overall goal and have been determined or assigned collaboratively, are viewed as integral to the whole project, providing individual students with a sense of focus and motivation.

Collaborative learning provides students with an increased sense of audience. Students in the collaborative group are the first and most important audience for an individual's work, and are a concrete and clearly defined presence. The group creates the standards by which individual tasks are measured and provides ample and immediate feedback. The group members, in determining the quality and completeness of individual tasks, learn to negotiate and compromise, not only in the planning stages of the project but also in the critical give-and-take of assessing individual performance and integrating these separate tasks into the completed project.

Technology aids collaborative learning by providing a medium of interaction and sophisticated tools for project development. Networked directories in a computer lab enable easy file sharing. Students may save their individual work into a shared file, and that work may then be reviewed and commented upon by other students at different times and from different points of access. This ease of accesses facilitates and allows for increased peer-to-peer interaction. E-mail, available to students on many campuses free of charge, provides students with a ready and easy means of communicating with each other or the teacher about collaborative projects. E-mail offers a means of sharing and sending graphics or files prepared by an individual to the whole group. E-mail may work also to encourage less talkative members who may be shy in face-to-face situations to express themselves, and e-mail, as a written form of communication, may encourage all members to reflect on the issue at hand as they compose their messages. Easy-to-use and inexpensive software programs provide word-processing and multi-media tools which allow students to create interesting and up-to-date projects. These tools encourage creativity and exploration, and may foster an increased sense of collaboration as students learn from each other or explore the possibilities together. Internet sources available in many computer labs offer an avenue to information and material which students might draw from in creating their projects. In processing this information, students must learn to apply criteria of selection and assessment as determined by the group, and learn to limit and focus their research and information gathering.

In conclusion, collaborative learning provides greater opportunities for learning in at least two very important ways: the quantity of ideas increases and the quality of ideas increases. With multiple thinkers available to think creatively, more ideas are expressed and considered. In considering these ideas and options, groups often must negotiate and synthesize, taking incomplete or vague notions and refining them to fit the group's overall goals. As individuals, group members learn from each other and are challenged to become more specific and articulate in expressing and formulating ideas. Technology, ever only a tool which reflects the creativity and commitment of the user, coupled with the dynamic learning environment of a well-designed group project, can work wonders to facilitate effective collaboration among students. *