

USING COLLABORATIVE LEARNING IN A MULTI-CLASS, MULTI-DISCIPLINARY SETTING

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INTRODUCTION TO COLLABORATIVE LEARNING

Recently there has been a renewed interest in using alternative teaching techniques to stimulate and enhance student learning and retention levels. One alternative teaching technique showing considerable promise is collaborative learning. Collaboration is a broad term including innovative approaches involving joint intellectual effort by students, or students and teachers together (Smith and MacGregor 1992).

The focus of these types of approaches is on encouraging active student participation in the learning process. Several common features exist that qualify a technique to be collaborative learning. Past research (Cuseo 1994) identifies six key principles necessary for the development of successful collaborative learning exercises. These 6 principles are introduced and briefly discussed next.

The first, and perhaps most critical component of collaborative learning is face-to-face peer interaction. Students must discuss relevant material with each other and learn from interactive experiences with other students and the instructor. Simply forming groups or teams and assigning tasks external to the classroom may not be sufficient in many cases. The dedication of class time to the collaborative learning exercise is preferred and may be necessary. First this allows the instructor to provide an appropriate setting for guided discussion focusing on the project assignment. Furthermore, the instructor is present during the discussions to answer questions and address group concerns about the project. Last, some type of continuity of group interaction is necessary to facilitate effective learning. This is usually best accomplished by dedicating consistent class time to the face-to-face peer interaction.

Another common component of a collaborative learning exercise is intentional group formation. Most experts agree that in most circumstances instructor-assigned groups are far superior to allowing students form their own groups. One key reason for this is the increased ability of the instructor to form heterogeneous groups. For example, the instructor may decide students pursuing different college majors need to be grouped together. Another common

criteria for group formation may be to include someone with past work experience in each group.

Third, promotion of positive interdependence by assigning complementary roles to different group members is a key component of establishing an effective collaborative learning exercise. Each team member must feel they are an integral part of the group. Therefore, each group member must be assigned a key task relevant to the final group objective. Furthermore, if multiple groups are involved in the assigned task, each group must have a key function. This encourages interaction both within groups and between groups, enhancing collaboration and allowing for project continuity.

The design of an active learning task for students to perform is another key attribute. The learning exercise should require the application of knowledge as opposed to the acquisition of knowledge. Experts suggest developing an exercise that: 1) includes an issue that can actively be debated or discussed, 2) a task requiring decision-making based on selection of one alternative from a choice of several equally appealing alternatives, or 3) a poorly structured problem with an issue that may not be successfully solved to the satisfaction of all parties.

Fifth, the instructor must serve as the facilitator of the learning exercise. The instructor does not simply convey knowledge in a traditional lecture format but rather serves as facilitator or coach throughout the process. The instructor merely provides guidance to the process and interjects expertise when necessary.

Last, an in-depth analysis of the group learning exercise is warranted. The instructor can accomplish this in a variety of ways but it is critical that some form of learning assessment or measurement technique be applied at the conclusion of the project to determine effectiveness. Furthermore, a class de-briefing session at the conclusion can help the instructor by providing suggestions of ways to improve future collaborative learning exercises.

Panel Discussion: How to most achieve each of the six components of collaborative learning in a college classroom setting will be explored and discussed.