

Intentional Learning: A Process for Learning to Learn in the Accounting Curriculum

4.3.4 Group Learning

Another way to engage students in learning is to get them to work together. A group learning experience can be distinguished from discussion by its more structured nature and results. Generally a group will be given quite explicit instructions and will be expected to produce something—a solution to a problem, a project or report, a presentation on a specific topic. In group learning, the teacher's role becomes planner, facilitator, and occasionally participant. There are many terms for group learning: peer teaching, cooperative learning, and collaborative learning are some of these. All deemphasize competition and require that students take responsibility for group results as well as their own learning. Successful group learning requires that both faculty and students reject individualism in favor of a team approach. While this may be difficult, it is useful preparation for future accountants.

A helpful introduction to group learning is Johnson, Johnson, and Smith, *Cooperative Learning: Increasing College Faculty Instructional Productivity* (1991). The authors stress the importance of planning and preparation for effective group learning. Good results are not achieved automatically just by forming groups and assigning tasks. Specifically, there are five elements essential to effective cooperative learning: (1) positive interdependence (students sink or swim together), (2) face-to-face promotive interaction, (3) individual accountability, (4) social skills (such as leadership, trust, communication, conflict management), and (5) group processing (reflecting on the group experience and how it could be improved). Johnson, Johnson, and Smith offer specific suggestions for incorporating these elements into group learning activities.

Student groups may be formed for a number of different purposes. Students may be asked to discuss key points of reading or lectures in order to reinforce their understanding of facts and principles. A group may be formed to apply new knowledge to solving problems or to analyzing case studies. Group may research topics or key questions and prepare a report or present two or three possible solutions to an issue. Some groups may be formed as mutual study support, in which students encourage and motivate one another to work through the material of the course or program. Group learning may be used to reinforce any aspect of the learning process.

For purposes of discussion here, we will divide group learning into three types: learning in pairs, learning in informal groups, learning in formal groups. All three types could serve a variety of purposes and all can be useful in even very large accounting classes.

Learning in pairs is perhaps the easiest type of group learning for both faculty and students to manage. At its simplest, this approach means asking each student to turn to another person and ask a question or discuss a topic. The groups can be easily varied (find a new partner and ask a different question), and most kinds of group assignments can be handled by two people. Working in pairs has a long history of success, in such settings as lab instruction and shared computer terminals.

THE LEARNING CELL

Marcel Goldschmid of the Switzerland Federal Institute of Technology formalized the process of learning in pairs as the "learning cell." In this process, students first study an assignment and write questions about it. In class they divide into pairs and student A asks student B a question. After B answers (and is perhaps corrected and instructed by A), then B asks A a question. The process repeats as long as appropriate while the instructor circulates, asks or answers questions, and oversees the process. Another use of the learning cell would have each student study a different topic and then teach it to his partner.

Described in McKeachie, *Teaching Tips*, 1994

Learning in pairs could be useful to accounting students at any level. Students in the beginning course could quiz each other on the principles and theories they are learning, and bring their most difficult questions to the instructor for clarification (some faculty ask that questions be submitted on cards). Or they could share answers to assigned problems and talk about how they reached their solutions. Students in more advanced classes could teach each other certain tax laws or share analysis of a case study. Student A could propose a change in accounting practice for the company in the case and Student B would then be asked to analyze the effect on the company's profitability and risk. Students at this stage will be practicing reflecting and adapting abilities. Any number of topics and problems can be adapted to learning in pairs at any point in the accounting curriculum.

Learning in informal groups extends the concept of group learning. Informal groups are those formed on an ad hoc basis for a relatively short-term assignment (one class, one project, one week). The group need not be formally structured; three-four-five students sitting near one another could form a convenient group. They could be asked to do many of the kinds of things a pair of students might do, although obviously the larger the group the more structure is needed and the greater the possibility that someone might be left out of the interaction. It might be best to start a term with pairs and then move to groups of three or four as students learn to work together.

Introducing informal groups is a relatively low risk way to involve students in group learning. The project or assignment can be short and probably will not be formally graded. The time commitment can be limited and need not all be class time. Assignments should be very specific, well structured, and clear in purpose. Some examples of informal group projects might be: Answer specific questions about a company's balance sheet and share your group's answers with the class; Using a structured interview protocol provided by the instructor, interview a local business manager about his company's accounting practices; Read, discuss, and jointly prepare a critique of a journal article; Follow a business news story and report to the class on the story and how it is handled in the media.

Learning in formal groups requires carefully structured, long-term groups and projects. These groups might include 5-7 students, probably assigned by the instructor with some attention to a mix of talents, interests, and perspective. They will probably need to meet outside of class. Generally these groups will be graded, as a group and perhaps also individually. They may be expected to reflect on group process and critique one another's participation, as well as to produce a report or presentation or solution to a problem.

Formal group learning is probably best suited to advanced students who have had enough experience in groups to be comfortable with commitment to a formal group project. Faculty might assign them to groups based on their strengths and interests. Students might also self select by interest in an industry (health care, hospitality, automobiles), or in a career path (finance or tax oriented projects or problems). Some examples of formal group learning projects are:

- At Brigham Young University, students in the new accounting core work in formal groups of five to complete several assignments during each 7 week block, some in class, some outside. Groups change every 7 weeks, so that students can work with a variety of people. The first 3 groupings are assigned, the first to attain a mix of gender, ability, etc., others randomly. For the last block students select their own groups. Assignments may include projects, presentations of cases or problems, sometimes even taking a quiz together. Both faculty and students have been pleased with the group experience.

- At the University of Southern California, an accounting professor has a group of students actually run a business, for example, a local pizza franchise, or the college bookstore, for a day.
- In the AECC curriculum project at the University of Illinois/Notre Dame, students in the first accounting course work in groups of four as promoters of a hypothetical rock concert. Their job is to make a deal with the arena manager (the course instructor) to put on a concert. To do this they need to come up with numbers and contract terms that make sense to both parties. This involves the student groups in developing and accounting information in a business decision situation.
- Arizona State University uses cooperative learning in its Accounting 230/240 (Uses of Accounting Information) course. Students meet in one 350-member megasection and two 44-member "breakout" section each week. During the breakout sections, students work in groups on assignments such as a structured controversy debate on historical cost versus current cost as a generally accepted accounting practice, or an analysis of a company's financial statements from the perspective of a potential investor. Teaching assistants who lead the breakout sections get thorough preparation in the skills of facilitating group learning. Their training includes a three-day pre-semester workshop, weekly meetings together to preview class activities, and periodic meetings with senior faculty.
- At the University of Alabama, students in Financial Accounting I are randomly assigned to semester-long groups that are involved in two types of activities; (1) accounting, financial, and operating analyses of two sample companies' annual reports, (2) analysis and preparation of cases. These activities are designed to develop group analytical and decision-making skills.

As every teacher knows, the best way to learn anything is to teach it to someone else. Group work often involves "peer teaching" which encourages students to practice many of the attributes of intentional learning. They will be forced to ask questions, and answer them; they will have to organize their knowledge in meaningful ways; they will need to make connections with their own and another's previous knowledge. They can also be asked to reflect on their experience as teachers and learners and they may also then adapt that experience to other learning tasks. [For more on peer teaching, see Whitman, 1988.]

Some students and faculty object to group learning. Some students say they want to listen to the professor, not to their peers. Some faculty fear that group learning will be inefficient and confusing. Groups can't cover as much material in working together as a professor can in lecturing. These are serious concerns. They can be mitigated by carefully structuring the group work for maximum effectiveness. Group learning will not cover as much material as lecturing, but it will have compensating benefits. When successful, students actively engaged in group learning will be practicing the attributes of questioning, organizing, and connecting knowledge. They will be learning to work in teams, to communicate clearly and to listen to others. They will be learning to learn and to teach others, and they will be developing interpersonal skills they will need for successful careers in accounting. Finally, their learning is likely to be remembered longer and reinforced by their group interactions.