Creating a Participatory Classroom for All Levels of Undergraduate Students:  
A Co-operative Learning Workshop

Abstract

This workshop is based on the idea that participatory learning must be experienced, discussed, and reflected upon to be implemented to full effect in the classroom. As the facilitator, I guided those present in an active examination of some of the issues surrounding how best to create a participatory classroom (using “think-pair-share” and co-operative learning groups). The forty participants, after introductory comments, were posed four questions: 1) Why was participatory learning important? 2) What participatory learning techniques have you used in your classes? 3) How effective have these initiatives been? and 4) How were these initiatives subsequently modified to take into account differing abilities and backgrounds of students? Participants discussed these questions in small groups and then reported on their deliberations encompassing both the potential for and the problems encountered in trying to create a participatory classroom. The workshop provided a working example of participatory learning in action and an opportunity for focused peer discussion on the topic, which no doubt served as some inspiration to those considering the transition to implementing a more participatory style of teaching and learning in their own classrooms.

Introduction

At a recent conference on innovative teaching strategies, I noticed that all of the presenters that I heard used the same pedagogy: a lecture followed by a few minutes for questions (if there was time). There was little structured opportunity for conference participants to share their expertise and experiences with each other. It occurred to me that it would be useful to have a session at a teaching conference whereby someone facilitates a collective examination of how to create a participatory classroom—a session where particularly faculty who were relatively new to the notion of using participatory learning could experience such an environment among their peers before making the transition to implementing such techniques in their own classrooms.

Accordingly, I proposed a session for the 2004 Teaching Showcase at Dalhousie University—“Creating a Participatory Classroom for All Levels of Undergraduate Students: A Co-operative Learning Workshop.” The focus was to be fourfold: 1) Why was participatory learning important? 2) What participatory learning techniques have you used in your classes? 3) How effective have these initiatives been? and 4) How were these initiatives subsequently modified to take into account differing abilities and backgrounds of students?

Approximately 40 teachers showed up for this session at the 2004 Teaching Showcase. Despite the somewhat limiting physical geography in the classroom (two u-shaped lines of desks), the two co-operative learning techniques I had planned to use to help facilitate the exploration of the above issues—“think-pair-share” and co-operative working groups—proved fairly easy to
implement. For the latter, worksheets were provided to each group for recording their deliberations; these subsequently proved invaluable as a means of accessing the richness of the group discussions.

**Question 1: Why is Participatory Learning Important?**

After beginning the workshop by briefly introducing myself and relating the initial impetus for the session, I shared a recent experience that had demonstrated, at least to me, the importance of participatory learning. I related how the previous fall I had attended a lecture where the instructor, although he was a bit too self-deprecating and read from his notes extensively, did a reasonable job in covering his material in a 72-minute lecture. As I sat with the students and listened, it was apparent how quickly students became bored with being talked at, the amount of fidgeting and talking that take place among students, and the general inattentiveness that can occur in a classroom when a lecture is not particularly inspiring. The instructor did occasionally ask if there were any questions, but when someone at last did raise their hand he rather quickly responded “We’re getting to that!” and that was the end of the questions during the class.

After relating this story to those present at the workshop, I asked each of them to take one minute and write down why they thought participatory learning was important. I then asked them to take three minutes and get together with one or two other participants and to introduce themselves and share their thoughts on the matter. This exercise generated a significant amount of loud and enthusiastic discussion. Although everyone did not have the opportunity to listen to each person’s thoughts, several themes or answers emerged during the general discussion which followed as to why participatory learning was important: participatory learning was student-centred, it gave the students some ownership of their own learning, it was digressive learning which was also challenging to the professors, it encouraged interdependent learning amongst students and, generally, “active learning” was seen as superior to “passive learning.”

Once these points had been made and noted on the whiteboard, I related some additional reasons why I felt participatory learning was so important. Studies have demonstrated, for instance, that while lecturing is a fairly “efficient” way of covering a significant amount of material, student retention is another matter; in fact, after 24 hours, students retain 5% of lecture material, 15% of reading material, 25% of visual materials, 50% from demonstrations, 70% from discussions, and 90% from having to teach the material to others (Gair, 1994). The use of participatory pedagogies also helps provide more variety in learning environments, and this is especially important for learners who do not respond well to the “reflective observation” inherent in the lecture methodology (Kolb, 1984). The high efficacy of “discussions” and particularly “teaching others” suggests that some instructors might want to change their role from that of the “expert” who pours knowledge into essentially “empty heads”—as in Paulo Freire’s “banking concept of education” (Freire, 1970)—to more of a facilitating role where the instructor is a co-explorer of

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1 “Think-Pair-Share” is a process in which students are asked to address an issue individually, then pair up with another student and share their answer. “Co-operative learning” essentially consists of creating small groups of students who are then assigned various tasks which they collectively work on based on principles such as positive interdependence and individual and group accountability. (See Abram et al., 1995)
the material (albeit one with much more knowledge and experience). To put it succinctly, the instructor is perhaps best looked at as “not a sage on the stage, but a guide on the side.”

**Question 2: What Participatory Learning Techniques Have you Used in Your Classes?**

Building upon the co-operative learning inherent in “think-pair-share,” I then asked those present to divide themselves into co-operative learning groups of four-five each, appoint a Chair and a Recorder/Secretary, and then answer three questions within 15 minutes. The first question was “What participatory learning techniques have you used in your classes?” A co-operative learning worksheet was distributed to each group.

A subsequent examination of the worksheets indicated that many participants had, during the course of their teaching career, utilized a wide variety of participatory learning techniques:

1. Individual student presentations (i.e., one per student per term)
2. Working in pairs (i.e., labs, cooking)
3. Discussion groups
4. Acting & role-playing (live or video presentations)
5. Demonstrations
6. Team-based learning (both group and individual responses, reports and/or quizzes)
7. Peer editing
8. Ink-shedding (brief, free writing by students to be read by others and discussed)
9. Peer assessment
10. Games (i.e., one instructor arrived in class in a costume around Halloween and played a game to illustrate the workings of “economic markets”)
11. Students sent out into the “real world” to collect data (i.e., used to teach probability)

After the 15 minutes for deliberations was over, I attempted to gather some of the responses by writing them on the whiteboard. Before doing so, however, I made a crucial, spur-of-the-moment decision to try to cover more ground; I asked for a volunteer to come up and assist me
in writing down the oral responses (Ed MacDonald of the University of Prince Edward Island graciously agreed to do so). I divided the six co-op learning groups in two, depending on which side of the room they were on, and we proceeded to consult each group on our respective side of the room asking for examples of co-operative learning techniques which had been used and how effective they had been. In addition to the techniques written on the worksheets, several others were mentioned during this discussion: jigsaw co-op learning exercises, case studies, shared quick responses, the posing of a scenario and subsequent discussion to solve/address an issue, group problem-solving, and “expert” students teaching other students on their topic of expertise.

**Question 3: How Effective Have These Participatory Learning Techniques Been?**

Although the use of participatory learning techniques may have been relatively new for some of the workshop participants (someone noted this explicitly on one of the worksheets), there were numerous comments about both the “pros” and the “cons” of such techniques. Participants commented that these techniques had numerous advantages: improved student concentration, ownership by students of their learning, the development of interpersonal and group processing skills, and the creation of variety in learning environments. Some advantages were technique-specific, such as in the improved attitudes towards writing often promoted by ink-shedding.

On the other hand, workshop participants saw many potential problems with the use of participatory learning techniques. Some problems were specific to particular techniques, such as the possible embarrassment from poor handwriting and/or learning disabilities revealed by the sharing of one’s written work in ink-shedding or peer editing. Most potential problems with participatory learning techniques, however, were general in nature: the danger of overuse, the reluctance of some students to participate due to peer pressure and/or shyness, the perceived “inefficiency” of such techniques when compared with the more “efficient” lecture mode in covering a large amount of material, the physical problems of classroom set-up (i.e., stationary desk and chairs), and the difficulties in adequately assessing student participation. In the subsequent general discussion, other potential problems emerged as well, including how to allocate sufficient time for participatory activities, the limitations imposed by large class sizes, the difficulties created by some students having English as a second language, the varying levels of “social maturity” of different students, and whether to compose learning groups along the lines of heterogeneity or homogeneity.

**Question 4: How Have You Varied and/or Modified These Strategies to Take into Account Differing Abilities and Background?**

This question was the least well-addressed of the four. In part this was due to time constraints, but also it was the most difficult question we addressed, especially for those who had just started using participatory learning techniques. As a result, one participant asked the question: “But how does an instructor deal with students of differing abilities and backgrounds?” This prompted a lively, free-ranging general discussion of that question. For my part, I described my experience with my *Prohibition and Rum-Running* class which always draws students from a wide variety of disciplines and years in university. When I first started teaching this course in 1998, I divided
students into heterogeneous groups based on gender, program of study, and year in university; I found on several occasions, however, that fourth year and first year students did not work well together. Grouping first and second year students together and third and fourth year students together tended to provide improved group dynamics.

A subsequent examination of the co-operative learning worksheets indicated that some of the groups had considered the question of modifying participatory techniques. One group suggested that the introduction of specific participatory techniques such as peer review helped to instill a more co-operative environment in the classroom. Two other groups advocated the use of mixed groups, although my own experience (as described above) was that there can be too much heterogeneity and that this can detract from the learning environment. The written comments also focused on overcoming some of the potential problems of participatory learning: the importance of assessing student participation to prevent it from being seen as mere busywork and the importance of adopting techniques that are both useful for a particular discipline and attentive to the dynamics of each class.

Evaluating the Workshop

The workshop was a success in several ways. It succeeded in capturing much of the collective wisdom of the assembled participants on the issues surrounding creating a participatory classroom, especially in terms of possible techniques to use, some of the challenges which arise and how these challenges might be addressed. The workshop also accomplished its objective of utilizing an alternative pedagogy to that of the lecture model. Finally, the workshop provided a working example for those present—especially for those relatively new to the subject—of how participatory learning might work within a classroom situation.

While it was clear from both the spoken and written comments during the workshop that many of the participants had considerable experience in this area, the clear sense of camaraderie and enjoyment which emerged during the one-hour session underlined the benefits of such an approach—a camaraderie and enjoyment which no doubt encouraged those present (and who had not yet done so) to at least try to make the transition to a more participatory style of teaching and learning in their own classrooms.

References


