A Persuasive Example of Collaborative Learning

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This article details the process of integrating a 12-week collaborative learning project within a course on Persuasion and Propaganda. We present a specific instantiation of Meyers's (1997) articulation of general principles for incorporating small group projects into college courses. Student groups designed, executed, and evaluated persuasive campaigns to change the attitudes and behavior of target populations. Student self-reports indicated that the course format was significantly more popular than traditional formats in other psychology courses. Moreover, students worked significantly harder for and learned more from the cooperative learning components than from the traditional lecture- and text-based components of this course.

Several decades of empirical research have demonstrated conclusively that collaborative learning (CL) is an effective teaching device in higher education (Johnson, Johnson, & Smith, 1991; Meyers, 1997; Slavin, 1985). However, despite this evidence, and despite the fact that education scholars have called for an emphasis on this type of teaching for some time (Dewey, 1916; Snedden, 1927), there is still an over reliance on traditional methods that emphasize individual learning (Panitz & Panitz, 1998). Reasons for this gap include the difficulty in translating the principles of CL into actual practice and the fact that CL can introduce more difficulties than solutions when done poorly (for similar conclusions, see Bryant, 1978; Giordano & Hammer, 1999).

Meyers (1997) summarized the components of successful CL tasks in a review of 68 empirical articles. He delineated three critical domains—task structure, student evaluation, and group structure—and offered general guidance for incorporating CL tasks into courses. This article describes a particular instantiation of these principles: We first summarize how we translated Meyers’s principles into practice, next we present empirical results on the course’s effectiveness, and finally we briefly discuss how our instantiation could be modified for other courses in psychology.

We designed a course on persuasion that included a semester-long empirical group project. This offering was not merely a persuasion course with a research project appended; rather we designed it from the beginning to integrate the benefits of CL while minimizing the difficulties and drawbacks. The project consisted of small groups (n = 5) that designed, implemented, and evaluated a persuasive campaign. Each campaign was based on principles of social psychology and sought to change the attitudes and behavior of some target population.

Task Structure

Meyers (1997) emphasized that the structure of CL tasks should be amenable to small-group work and should avoid the trap of social loafing. Our research project achieved these goals through its complex and ongoing nature (Jackson & Williams, 1985). For example, the project was clearly divisible and allowed individual participants to take ownership of different aspects of the project. Moreover, the myriad components included disjunctive tasks that capitalized on individual strengths and emphasized the benefits of group work and
conjunctive tasks that required joint participation and thus emphasized the project’s interdependent nature. We further reduced social loafing by permitting students free reign in selecting their projects and ensuring that each subtask required unique and original solutions (Carroll, 1986; Harkins & Petty, 1982).

Student Evaluation

Evaluation is a common concern with CL projects, and we strove to develop a system that was fair to the individual participants and did not promote maladaptive behaviors (Darley, 2001). As Meyers (1997) suggested, we employed a variety of evaluative criteria, assessed at both the individual and group level, including written projects, presentations, and participation. Although there is evidence that peer evaluation can be effective (Harkins & Szymanski, 1988), we avoided this option because of concerns about potential competitiveness among our students.

Group Structure

We proactively created a group structure to promote individual participation. First, we emphasized the broad goals of the project and the steps necessary to achieve those goals (Olmstead, 1974). Second, we borrowed techniques from social identity research to create powerful feelings of cohesion among members of the new groups. For example, we encouraged groups to generate unique group names, meet in separate areas and in social settings, and sit together during class lectures and discussions (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). We did not explicitly assign roles to different members of the groups, but rather assigned people with different strengths to different groups (based on a precourse questionnaire), and encouraged them to take advantage of each other’s unique knowledge and abilities (Bryant, 1978). We ensured that each group had at least one senior, one psychology major with statistical competence, and a person with self-described artistic ability. In this way, we created situations that led to informal role adoption by members of each group.

Method

Participants

Twenty-seven students participated in the course. The modal student was a junior psychology major, but because there were no prerequisites for the course, different years and majors were represented. Sixty percent were psychology majors, 30% were nonpsychology majors, and 10% had not declared a major. All participants resided on campus.

Procedure

The course met once per week for 3 hr over a 12-week semester. The first 5 weeks emphasized the basic principles of persuasion and empiricism through two textbooks (Pratkanis & Aronson, 1992; Shavitt & Brock, 1994). Typically during this time, we devoted 1 to 2 hr of each seminar meeting to a discussion of the readings. Students utilized the remaining class time each week to analyze persuasive messages and advertisements and to organize their group projects. At the end of 5 weeks, we assessed student progress with a 90-min written exam. The results of this exam provided evidence that participants had developed solid bases in the psychology of persuasion.

We devoted the last 7 weeks primarily to group projects, although every seminar spent at least some time on theory and CL projects. We intentionally gave students a great deal of latitude in choosing their targets and messages, but constrained them through the necessity of collecting data on the effectiveness of their campaign and of receiving approval from the University’s Internal Review Board.

We provided unstructured class time from the beginning of the semester for groups to work together on their project, but also provided a detailed timeline to organize their semester. By Week 4 each group had met with an instructor as often as necessary to generate a one-page abstract of its campaign. The following week groups submitted proposals with theories, techniques, and a specific timeline tailored to their project. After extensive revision, each group presented its proposal to the class, and all students provided written feedback to the presenting group. This feedback identified potential pitfalls and suggested improvements. Each group conducted its persuasive campaign in the following weeks, evaluated its effectiveness, wrote individual research papers, and collectively produced a group poster similar in format to a conference presentation.

We graded students individually on the following components of the course: participation, written feedback to other groups, midterm exam, and final paper. Students earned a grade on initial project abstract, project proposal and revision, persuasive campaign, and final poster.

Results

Campaign Results

Did the projects succeed in their persuasive attempts? The simple answer is “yes.” Our primary interest, however, is in the pedagogical effects of the campaign rather than the persuasive effects of the campaign. Nonetheless, it is useful, or at least amusing, to track the results. One group, inspired by the “Got Milk?” campaign, sought to convince undergraduates to drink more orange juice. Using famous and easily recognized campus figures (e.g., author Joyce Carol Oates), this group randomly assigned residential dining halls to one of three conditions to test various cognitive routes of persuasion. The clearest measure of success (in addition to traditional attitude and behavior measures) was the cease and desist order received from food services—it seems that orange juice is the most expensive beverage and the budget could not support the campaign! Overall, most of the campaigns were modestly successful, and several project posters would have been suitable for regional psychology meetings. Projects included efforts to increase attendance at the art museum, to reduce
single-use cups at campus parties, and to increase blood donation.

Pedagogical Results

The more relevant question is whether the CL project was academically more effective than traditional text- and lecture-based courses. The results come from three sources: qualitative student evaluations, quantitative comparisons of student satisfaction with other psychology courses, and quantitative within-student comparisons between the first and second parts of this course.

Qualitative summary. In response to the question “Describe your thoughts, feelings, and observations about the positive aspects of the course,” our students were united in their feedback: They found the course unique, involving, and exciting but emphasized the difficulty of working within a small group. Sample comments included: “I found that the creativity, breadth, and depth of the study done by my group was superior to anything I could have done alone”; “I understand all the difficulties that come with doing real research. I have a lot more respect for psychology researchers”; and “I feel that this project was one of the most rewarding experiences of college.”

When asked about the negative aspects, students generally focused on personal discomfort with the group. We discovered through this feedback that several students had rather low academic goals. These aspirational differences generated conflict regarding the minimum standards of quality for the various subtasks of the project and resulted in feelings of inequity and social loafing. This example highlights the importance of generating early discussions about goals and expectations and illustrates one of the negative outcomes that can result from failing to do so.

Between-course comparisons. Based on the end-of-semester evaluations conducted by the registrar, this course compared very favorably to other psychology courses at the university. Three questions about the lectures for this course were rated on a 5-point scale ranging from 1 (unacceptable) to 5 (excellent). The mean was 4.65 (SD = 0.46), whereas the average psychology course scored 3.95 (SD = 1.05), \( t(53) = 6.35, p < .001 \). Four general questions of overall quality produced a mean of 4.75 (SD = 0.89), \( t(45) = 6.17, p < .001 \).

Within-course comparisons. Several weeks after the conclusion of the course, students provided additional feedback via a secure and anonymous Web page. Participants indicated their agreement with five statements on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree), in reference to the lectures and discussions and to the group project (see Table 1).

Students reported that they learned how to conduct research in social psychology more through the project than through the readings and lectures, that they worked more cooperatively with the other students as a result of the project. These ratings are relative and one might suspect that the positive CL ratings are driven by exceedingly poor lectures rather than particularly good project experiences. Fortunately, there is evidence that this interpretation is not accurate. First, all scores were above the midpoint. Second, students reported that they gained commensurate understanding of social psychological theory from both parts of the course and that they enjoyed both parts equally. Thus it seems unlikely that the relative differences were merely an artifact of poor lectures.

Discussion

We offer this project in hopes that it will provide direction for others who wish to incorporate CL techniques. We realize that the data are not unassailable: They are based on our students’ self-reports and our observations, the sample was drawn from a markedly homogeneous population, and we do not have independent sample data that are the benchmark for rigorous educational psychology research. Still, the self-reports, taken at their face value, were definitive in their positive assessments of this course.

Our contribution was not in discovering that research projects can be added to a course, but rather in detailing the importance of integrating the project into the core design of the course. To achieve this goal, instructors should develop the course and project as one unit rather than as stand-alone modules, and it is helpful if students can conduct research on questions that are inherently interesting to them. Importantly, the results indicate that this technique is most likely to benefit instructors seeking to improve their students’ understanding of research methods.

Does this course represent a useful contribution to psychologists who teach courses other than Persuasion and Pro-

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Table 1. Postcourse Attitudes Toward Lectures and Group Project

<table>
<thead>
<tr>
<th>Question</th>
<th>Lectures</th>
<th></th>
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<th></th>
<th>Group Project</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( M )</td>
<td>( SD )</td>
<td>( t(18) )</td>
<td>( p )</td>
<td>( M )</td>
<td>( SD )</td>
<td>( t(18) )</td>
<td>( p )</td>
</tr>
<tr>
<td>I learned how to conduct research in social psychology.</td>
<td>3.21</td>
<td>0.92</td>
<td>5.43</td>
<td>.001</td>
<td>4.53</td>
<td>0.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I worked hard for this part of the course.</td>
<td>3.68</td>
<td>1.06</td>
<td>3.49</td>
<td>.003</td>
<td>4.68</td>
<td>0.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It provided me an opportunity to work cooperatively with other members of the class.</td>
<td>3.21</td>
<td>0.98</td>
<td>5.48</td>
<td>.001</td>
<td>4.21</td>
<td>0.85</td>
<td>-0.83</td>
<td>ns</td>
</tr>
<tr>
<td>I gained a better understanding of social psychological theories.</td>
<td>4.37</td>
<td>0.96</td>
<td></td>
<td></td>
<td>4.21</td>
<td>0.85</td>
<td>5.48</td>
<td>.001</td>
</tr>
<tr>
<td>I enjoyed this part of the course.</td>
<td>4.21</td>
<td>0.79</td>
<td></td>
<td></td>
<td>4.37</td>
<td>0.76</td>
<td>0.72</td>
<td>ns</td>
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Note. Based on a scale ranging from 1 (strongly disagree) to 5 (strongly agree).
paganda? We believe the answer is “yes,” but with qualifications. By using the CL principles that have been extensively catalogued elsewhere, it is possible to adapt this general design to other courses in psychology. Although this technique is most easily applied to advanced courses that have latitude on curriculum and content, one might redesign this technique for survey courses so that students focus on a particular domain of knowledge. For example, small groups in an Introductory Physiology course could generate study guides for the textbook. Groups might construct guides based on learning style (visual, tactile, aural, etc.), level of analysis (molecular, cellular, functional, etc.), or development (early–late). In this way, the product would dovetail with the explicit requirements of a content-based course, while reaping the many benefits of CL.

References


Notes

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