

COLLABORATION AND ITS DISCONTENTS: STEPS TOWARD OVERCOMING BARRIERS TO SUCCESSFUL GROUP PROJECTS*

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MY TEACHING IS POWERFULLY MOTIVATED by two beliefs: first, that higher education is a *moral enterprise*, one “properly directed toward a cultivation of total selfhood and not merely a training of the mind” (Long 1992:19); and, second, that cultivation of selfhood—in educational institutions and in society generally—is best achieved in and through *community* (Bellah et al. 1985). Translating these beliefs into concrete teaching strategies is anything but easy. Course requirements and their attendant grading systems are particularly difficult to construct because the relationship of requirements and grades to the cultivation of selfhood through communal learning is highly problematic. The motivation for grading is typically not to foster selfhood, and most grading systems neither acknowledge nor support a communal learning environment (Bell 1991). Most often, grades are given to individuals for work done as individuals; this frequently produces a situation in which students view grades as a zero-sum commodity. We may tell our students that they should learn from their classmates and take advantage of opportunities to interact with them, but they know that ultimately they will be judged according to their accomplishments *as individuals*.

Especially in grading, then, we see the central role of the educational system in producing and reproducing the most pernicious forms of competitive individualism in our society (Bellah et al. 1991:161). I try to lessen the tension between individualistic grading conventions and my “communitarian” educational principles by implementing less conventional and more princi-

pled course requirements and grading systems in my classes. An increasingly popular approach to teaching and learning which articulates well with my philosophy of education is *collaborative learning*, “a form of indirect teaching in which the teacher sets the problem and organizes students to work it out collaboratively” (Burfee 1984:636). Collaborative learning encompasses a broad spectrum of techniques, all of which involve students in learning actively and cooperatively. The many benefits of collaborative learning are well known (Goodsell, Maher, and Tinto 1992; McKinney and Graham-Buxton 1993; Rau and Heyl 1990). Most important for me, it embodies a value system “that regards teamwork, cooperation, and community as just as important as academic achievement”; these values support a participatory civic life (Smith and MacGregor 1992:11).

Thus, I not only use collaborative learning groups in the classroom, but also, in Introduction to Sociology, I base 45 percent of the final grade on a *collaborative research project* (CRP), the product of which is structurally a mini-version of the typical research report found in social science journals. The paper is submitted cumulatively in three parts over the course of the semester (about every four weeks). The first part, worth 10 percent of the final grade, includes a statement of the problem, literature review, and hypotheses. The second part, also worth 10 percent, includes the first part as well as a research design (specifying sampling and/or other data collection procedures). The final 20- to 25-page paper, worth 25 percent of the final grade, includes Parts 1 and 2 as well as an analysis of the data and the conclusions. I base the components of these three parts on the “ideal-typical” model of research presented by Henslin (1995), which the students read in the second week of the semester. In completing this assignment,

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students work together in groups of three to five, submit a single assignment for the group, and receive a single grade as a group. This procedure sends out a symbolic message: at least in my class, if not in higher education generally, students will be judged not only on their individual performance, but also on their capacity to work with others toward a common goal.

The findings I report below are taken from an Introduction to Sociology class at a small, moderately selective Catholic college. Of the applicants to the college, 76 percent are admitted; 30 percent of these were in the top 25 percent of their high school classes. The college draws largely from the local community and from rural areas in the state. The most popular majors are business administration, education, and nursing; this vocational orientation was reflected in the career goals of my students (a plurality of whom were planning to be elementary or secondary schoolteachers). Because there are few sociology majors at the college, most of the students in my introductory course were there to fulfill a breadth requirement. Seventy percent were freshmen or sophomores; as in the college as a whole, my students were predominantly female (73 percent) and white (91 percent). The majority were from working-class or farming backgrounds, and several were first-generation college attenders.

COLLABORATION AND ITS DISCONTENTS

Although the benefits of collaboration are recognized in education and industry (e.g., the Total Quality Management movement), so are the many potential pitfalls. In the rush to implement collaborative learning, instructors frequently fail to think through the organizational complexities and subtleties of group work; consequently many group projects fail. The common failure of ill-conceived collaborative projects has led to what Goodall (1990) calls "grouphate," an attitude of disdain for the group process which is created by being required to work in poorly organized groups. The two most frequently cited reasons for "grouphate" are *free-rider problems* and various organizational concerns centered on *transaction costs*.

FREE-RIDING

Because the group as a whole receives a single grade, the grade is a kind of nonexcludable public good. Like other such goods, group grades are susceptible to students' taking advantage of others by avoiding personal cost or evading personal contribution to the production of the group product. That is, group projects are susceptible to free-riding (McKinney and Graham-Buxton 1993; Olson 1965; Rau and Heyl 1990). My students' comments in this regard are unremarkable to anyone who has spent time among college students: "There are times when the group is 'punished' for the lack of contribution on the part of 1 or 2 [members of the group]"; "It was hard to get everyone involved in what was assigned. Some people just slacked off and did nothing while others did everything." Free-riding is not students' only concern about group projects, however. In fact, among my students it is not the most frequently cited problem. A second major problem concerns the transaction costs involved in group work.

TRANSACTION COSTS

Certain *direct* costs are involved in completing a research project as an individual. Time and energy (physical and mental) must be spent in surveying the literature, articulating a problem and/or hypothesis, gathering data, analyzing the data, and writing up the results. Working on such a project as a group incurs another set of costs that are not present in the individual project, namely transaction costs. These are costs that result from having to interact and collaborate with "exchange partners" (i.e., group members), such as time spent in scheduling and meeting as a group, and in negotiating differences of opinion in formulating and writing up a group research project. Students frequently cite increased transaction costs as an overriding concern about group projects. As one student stated succinctly when asked to explain his negative opinion of group work, "Not enough time." Another student emphasized stumbling blocks in the writing of a group paper: "In my group it was difficult because everybody had their own views and ideas. If we wrote something that two people agreed on, then the third and fourth people usually didn't like

[it]....It took so long for people to agree on wording or ideas." Students' discontents with the organizational challenges involved in a CRP can best be summarized in this comment: "It was inconvenient."

Thus a philosophical commitment to assigning a CRP and giving a group grade can clash with students' concerns. Any instructor who would proceed with a collaborative project must do so armed with a strategy for dealing with the problems outlined above, because the technical and organizational success of the groups sets a limit on their educational and moral success.

STEPS TOWARD OVERCOMING BARRIERS TO SUCCESSFUL GROUP PROJECTS

These barriers to successful CRPs are no surprise to students of organizations, who have found repeatedly that when a group which has little history of working together is confronted with unfamiliar and challenging tasks, group management is essential (Shaw 1981). Knowing this, one can take steps toward overcoming such barriers. Three important steps are (1) setting up research teams so that the members have common interests and common free time, (2) requiring groups to allocate various roles (presider, scribe, coordinator) among team members, and (3) ongoing monitoring of the research teams. I describe these fully below.

SETTING UP RESEARCH TEAMS

Because scheduling team meetings is a major concern of students (especially those with families and those who are forced to work more and more hours for pay), I begin by collecting work and class schedules from every student during the first week of class. On the back of the schedules, students list three or four of their specific interests within sociology. With this information, I form groups of three to five students (with a model size of four) according to areas of interest *and* days and times available outside class.¹ Students are not allowed to form their own

¹ Although I do not give the students the option of working alone, I offer them the option of an individual paper when the schedules reveal students with unmanageable time constraints. In my classes, fewer than 10 percent of students have exercised this option.

groups. Fiechtner and Davis (1992) made a survey of their students' experiences with learning groups, which revealed that "by nearly a 2 to 1 margin, if students formed their own groups they were also likely to list the group as being a worst group experience" (p. 61). I make no effort to form heterogeneous groups according to gender, race, age, or ability, as some authors suggest for collaborative learning groups (McKinney and Graham-Buxton 1993:403). My students are too homogeneous on the first three factors (they are predominantly 18- to 24-year-old white women), and I do not assess their "ability" at the beginning of the semester.

Forming groups in this way ensures that students will work with others who share their substantive interests, and that for at least five hours during the week, all the members of each group will be available to meet to work on the project. Students should free-ride less when working on a topic that interests them, and guaranteeing free time in common lessens the transaction costs involved in organizing group meetings.

INTERNAL ORGANIZATION OF RESEARCH TEAMS

Both free-riding and increased transaction costs can also result from poor internal organization of research groups. One way of guaranteeing that everyone contributes at least minimally to the project and that a division of labor reduces transaction costs at least somewhat is to require each group to allocate various roles among team members. Four possible roles are a presider/discussion leader, a scribe/reporter, a meeting coordinator, and an intermediary.²

The *presider/discussion leader* is responsible for keeping group meetings "on task," and has the additional responsibility of setting an agenda for the team meetings and giving the instructor a copy of the meeting agenda ahead of time. The agenda keeps the group on task and helps the instructor to monitor its progress throughout the semester.

The *scribe/reporter* is responsible for recording and transcribing the minutes of the meetings in a timely fashion and distributing

² I adapted this division of roles from Rau and Heyl (1990). For groups of five, the members rotated among the four roles.

them to members of the research team and to the instructor. Again, this helps to keep the group members organized and on task, and allows the instructor to monitor them.

The *meeting coordinator* is responsible for knowing the schedules of everyone on the team (copies of which are given to the coordinator), deciding on the basis of those schedules the date, time, and place of team meetings, and notifying the team of scheduled meetings. This procedure reduces transaction costs involved in scheduling group meetings because it is easier for one person to set the details of a meeting than for several people to negotiate them. This person is not solely responsible for determining whether the group will meet in any given week—only *when* and *where*. The instructor also should “empower” this member early in the process so that others see her or him as having the authority to override minor dissent.

Finally, the *intermediary* is responsible for periodically meeting one-to-one with the instructor to report on the progress of the group. This person must be aware not only of the work the group is doing, but also of how the group is working as a team. I tell the intermediaries to consider questions such as these: Is everyone contributing to the team effort? Are there personality conflicts hampering the group’s progress? Is there anything the instructor can do to help the group run better?

This division of roles and responsibilities within the group seeks to reduce the transaction costs associated with working as a group. As a further benefit, it gives the instructor some information about any free-riding. Students who fail to fulfill the minimal requirements of their role—and therefore are judged to be hampering the group’s progress—can be docked points as individuals, a way of directly penalizing free-riding. I have had to do this only once, when a student twice missed meetings with her group. In general I try to let the students resolve their own group difficulties, but I also let them know that I support them if they truly have a free-rider problem. This arrangement works best for extreme cases. In less obvious instances, the direct penalty may be somewhat difficult to apply consistently because groups can tolerate different levels of

free-riding before they will inform an instructor and because of students’ sometimes strong norms against “snitching.” For the most part, I try to eliminate the need to penalize free-riding by directly monitoring the research teams over the course of the semester.

MONITORING RESEARCH TEAMS

In addition to having the groups’ meeting agendas, minutes, and reports from intermediaries to keep track of their progress, instructors also should involve themselves *directly* with the research teams. Because the research project is due in three parts, for each part the groups are required to meet with the instructor at least once as a group for 15 to 30 minutes. I cancel one or two class sessions for each of the three parts in order to facilitate these meetings. This not only reduces the additional time burden on the instructor, but also symbolically reinforces the importance of the group project and process within the class. By meeting semi-regularly with the groups, the instructor can facilitate their progress by suggestion or concrete intervention (thereby reducing transaction costs) and can observe individuals’ relative contributions to their group’s work (thereby deterring free-riding).

ASSESSMENT

In assessing these steps toward overcoming barriers to successful group research projects, I consider two measures of “success”: (1) students’ evaluation of the experience and (2) my appraisal of the work produced by the groups.

STUDENTS’ EVALUATION

I obtained the students’ evaluation of the CRP in a special survey at the end of the semester. After telling them that the question concerned their view of the *group* aspect of the project and not their view of the research project *per se*, I asked the students to respond to the following question: “How would you describe your experience with the group research project?” The response categories were very good (scored 1), good (2), average (3), poor (4), and very poor (5). The mean response to this question was slightly above average (2.944, sd

= .539), not an unsatisfying outcome given the scope and difficulty of the assignment. I also asked the students to evaluate the CRP by answering this open-ended question: "What did you *dislike* about this way of doing a research project?"³ Only 5 percent of the students cited free-rider problems, while 39 percent cited transaction costs and 11 percent mentioned both. The largest group (44 percent) named neither free-riding nor transaction costs.

In this case, transaction costs are clearly the students' most common concern. It seems that the difficulty of such costs cannot be reduced as easily as free-rider problems. Although group work brings definite benefits that are absent in individual projects (see below), it will always entail costs that working alone does not incur; negotiating the challenges of working together is one of the most important lessons of a group project. The key point here is that the perennial problem of transaction costs was kept manageable by the strategies outlined in this note.

Unfortunately there are no baseline data with which to compare these students' reactions to the CRP. Yet because the mean rating of the group aspect of the project was above average, and because a plurality of students named neither free-riding nor transaction costs even when specifically prompted to criticize the project, I am not reluctant to use the strategies described here to ease the organizational difficulties involved in group research projects. Certainly none of the students' feedback indicated that the steps I took were harmful to their group work.

INSTRUCTOR'S APPRAISAL

Students' subjective experience is only one measure of the success of any pedagogical tool. The instructor's appraisal of the work done must be considered as well. I assess the success of the projects in terms of the *scope* and the *quality* of the work produced by the groups. On both counts, I find that the CRPs were quite successful. The scope of these projects was far greater than the students could have achieved individually. The papers ranged from 20 to 25 pages in

length—at least twice as long as the longest papers most had written previously—and the analyses were based on surveys of 40 to 100 respondents. Students who, at the beginning of the semester, had bristled (or had been incredulous) at the idea of writing a 20-page research paper remarked at the end of the semester that it wasn't as difficult as they had feared. In addition, the CRPs were far superior in thoughtfulness and analytical rigor to other written work done individually over the course of the semester.

Two examples are instructive on this point. Because the college is dedicated to Catholic "social justice," one group wanted to test whether attending the college had a "liberalizing" effect on students. They did so by comparing the racial attitudes of 20 freshman and 20 seniors, and found that length of time at the college was correlated *negatively* with positive racial attitudes. They speculated that the possibility of living in a racially diverse neighborhood, competing with members of racial minorities for jobs, having a family member marry a member of a racial minority, and the like were more "real" to college seniors than to freshmen. In a second project, a group studied exposure to and involvement in youth gang activity through surveys and follow-up interviews of 20 students from a local high school. Seeing that youths from "broken homes" were more likely to be involved in gang activity, these students claimed qualified support for the proposition that youth gangs are a functional equivalent to nuclear families. As 19- and 20-year-olds themselves, these students also applied their perspective to the manifold pressures faced by young people, which make gangs attractive regardless of the situation at home. Although these two papers stood out from the crowd, on average all of the papers were comparable in quality to similar papers I have read by students at considerably more selective colleges and universities.

CONCLUSION

Collaborative research projects do not automatically work well. Instructors must recognize and take steps to respond to students' concerns about the efficient functioning of

³ This question produces more negative comments than do standard, neutrally phrased course evaluation questions.

their groups in order to ensure that the educational benefits of collaborative work are not overshadowed by the organizational challenges inherent in the group process. Failure to recognize and address the two major difficulties identified here—free-riding and increased transaction costs—has major consequences, notably the aforementioned “group hate.” In the words of Fiechtner and Davis (1992:59), “Entirely too many students are leaving the classroom experiencing only the *frustrations* of group work and not the numerous *benefits* possible through team effort” (authors’ emphasis).

I have proposed several initial steps that instructors can take to overcome barriers to successful group projects by helping research groups to work efficiently together on a common task. These steps can be modified or amplified by others who share the educational vision embodied in collaborative approaches to teaching and learning. For example, free-riding and transaction costs might be reduced further by “averaging” individual and group grades on the project, as do McKinney and Graham-Buxton (1993) in their in-class collaborative learning groups. For a CRP, students could be required to submit group papers for Parts 1 and 2 (20 percent of the course grade, in my case), and an individual final paper (25 percent of the course grade). This system effectively averages the individual and the group work, and one can weight the average as desired by modifying the relative percentages. I will continue to build on the foundational practices described here; I do not doubt that these steps taken to facilitate successful CRPs are far superior to simply assigning group projects, sitting back, and waiting for the complaints to roll in.

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