

Best practices for coping with the free-rider problem with group work

The use of group assignments/projects has become a more common form of assessment in higher education globally. Students often can suffer from a negative reaction to group work due to two main factors, low grades on assessment and free-riders in group work. The free-rider problem may contribute to both of these problems as individual, hard-working students often adopt a sour grapes framework and blame lower-than-anticipated grades on their free riding classmates, with the latter having the potential to wreak havoc and create ill will. Typical free-riding behaviors reported include inconsequential contributions to group work, students who mysteriously only show up for final presentations and students who are willing to take advantage of their classmates' passivity.

One difficulty that arises with student group work is the assessment of individual student work in a group context. Assessing students individually is necessary because academic grades assigned to students are supposed to represent the individual student's performance. When asking students to work in groups, it cannot be taken for granted that each student has contributed equally to any given assignment. A small but not insignificant number of students may attempt to take advantage of the group work setting and contribute a minimal amount of work. These students ride on the efforts of others for and this is why they are dubbed 'free-riders', and they are a source of frustration for both student and teacher alike.

This paper is broken into four main sections. The first part allows the reader to situate his/her respective choice amongst a continuum of options in addressing free-rider problems in group work based on current practices at PolyU. The second section draws on international best practices and offers teachers ideas about the design of their group projects, the third offers advice on ways to encourage students to take the initiative in policing their fellow group members and the last discusses using peer review as a formative and summative tool.

Assessment strategies for teachers: a continuum of six general strategies

Broadly speaking, there are six general approaches to assessment design that teachers employ to prevent or reduce the problem of free-riding in their courses. Each of the respective approaches has its relative pluses and minuses and it is not easy to generalize which approach is preferable given the wide range of topics in which group work is used. The best assignments build in individual accountability to prevent social loafing. Besides the evaluation of the group work itself, there have to be other components that are part of the assessment or supplementary assessments offered within the context of the course. Courses are designed that:

- Use individual-based assessment only even in group work. This is the easiest way to prevent free-riding and often the toughest. It will work, but one of the reasons that teachers like group work is that it is meant to lessen the grading burden.
- Make each student responsible for a certain section of the overall task and assess each student. This may prove difficult in some fields as it is hard to find equivalent tasks and to get an even division of labor when tasks are assigned.
- Employ a combination of group and individual work. This is a feasible solution but added work for those who prefer to give just one grade.
- Use a group grade but with internal modifications made in light of individual work. Some teachers use peer review or allow students to report back on problematic team members.

- Give the group the same grade but prevent free-riding by working on group dynamics. As above, these teachers use either a peer review or a reporting back to the teacher mechanism.
- Have an assessment policy where at least a certain amount of the overall subject grade must come from individual assessments. Teachers may have a quiz or part of a test in which students report individually on aspects of their group work

Design of student group work for successful projects

One of the most effective ways of overcoming the free-rider problem is by means of how group work is implemented in a course. While free-riding can be a persistent problem, other troublesome behaviors can also haunt group work. These include dominant behavior, poorly-constructed assignments and even intentional sabotage. Teachers who employ best practices in group work can actively prevent both these and the free rider problem. Helpful design factors include:

- Employ peer review (*see below*).
- Make groups small enough so that they are able to make a division of labor and agreed upon tasks for each group member can be clearly delineated. Make individual inputs visible and use a shared presentation time. Ask questions of each individual and let students know that they are jointly responsible for the entire project and might have to answer questions on it in its entirety.
- Avoid giving only a group grade if possible. If not, at least incorporate group peer assessments or design the project so that each student is responsible for a separate part that is assessed.
- Remember that effective practices of individual assignments are also effective practices for group assignments. These include utilizing stages in which the work can be monitored and checked, self-reflective mechanisms for monitoring metacognitive skills, individual journals written about work and the like. Teachers who are only concerned with the final product and who ignore the process are more likely to suffer the negative consequences of free riders.
- Model work on disciplinary competence. Beyond the potential grading convenience, teachers include group work as a means of mirroring the process of working in their field in the workplace. Invest time in building teamwork skills. Don't assume that students know how to work in teams. Too many teachers use a strict division of labor where each student performs one task (e.g. abstract, paper, literature review, etc) and the staple – voila! – makes the work into team work. To work successfully in groups, it is necessary for students to do a task assessment, a division of labor, a team strategy or plan, coupled with time assessment and management.
- Be attentive to special issues that arise in group work but not individual work. Teachers need to be aware of the nuances of group work, and students need to be able to explain their ideas to others, listen and be 'open' to other ideas and perspectives, discuss and reach consensus, delegate responsibilities, coordinate efforts and schedules, conflict resolution.
- As part of PolyU policy, assignments that account for 30% or more of a subject's final grade must use a rubric. But smaller projects can also use rubrics to ensure that students understand what they are being assessed on and they are able to act appropriately.

Empower students to monitor their own group work

It is important to police student work as free-riding needs to be detected early before it can do its damage. One way of policing student behavior to prevent free-riding is by putting the onus directly on the students themselves. The most effective type of cooperative work is one in which students are personally empowered and are able to both design and monitor the work of their project and team. Just as teachers can come up with innovative topics for study, empowered students are also able to do so if given the chance. The following are some tips that you can convey to the group in order to build structure to empower their learning possibilities. Consider the following:

- Students typically prefer to work in their own groups. Whether they are allowed to or not depends on how important student empowerment is to the teacher versus the other learning outcomes underwriting the work.
- Get students to make an agreed upon division of labor. Put down the nature of individual tasks, who does what, who shares what material with the group and when, include the agreed upon tasks in the final submission of the project (consider it as a potential learning contract). Free riders dislike transparency as they hope to take advantage of uncertainty.
- Have students timetable their tasks with deadlines – this gives the person who is behind schedule a chance to catch up if there is some slack in the schedule, it also makes the team aware of potential problems and allows them to respond.
- Students are often too willing to ignore their colleagues' indiscretions. Let them know that they should not encourage free-riding behavior, and that they should have a low to zero tolerance for excuses. Let them know that you prefer that they attempt to solve their own problems before coming to you as the final recourse.
- Provide a mechanism for students to deal with uncooperative group members and employ peer review (see next section).

Effective use of peer review in group work

One of the most widely adopted mechanisms teachers use for avoiding free-riding is by having students conduct peer review of each other's work. But peer review is a powerful tool, so it is important that it is employed wisely. The following are some pointers to keep in mind:

- Ensure the criteria by which students grade each other are known and readily available. In addition to understanding the criteria, students should also have an understanding of how to apply them. As mentioned previously, consider using a grading rubric.
- Decide whether peer review will be used formatively or summatively. While teachers may prefer the latter for ease of use and the power of the grade, it may be that some students just need a slight nudge. A gentle, friendly reminder from their peers is all that some students need to get on task.
- Help students by guiding their work and giving well-defined tasks. In order to help students, it is necessary to clearly explain our expectations. Students often dislike group work because of a perceived lack of fairness and a lack of trust of peer evaluations. It is important to get student 'buy-in', so that they trust the process.

- Design an effective peer review form. Spend some time to consider which factors are important to you (e.g. comes to meetings on time, produces work on time, volunteers for tasks, makes helpful suggestions, meets deadlines, shares resources etc). Don't be afraid of being explicit.
- Those who do not actively wish to use peer assessments may use them as a safety mechanism to warn the teacher of troublesome behavior. One way this is done is by having the students recommend a percentage of the group grade the offending party should receive. The teacher then needs to verify whether the complaint is valid, and, if verified, to adjust the corresponding grade.

Helping the free-riders

Although free-riders are often depicted as the 'bad guys', sometimes they can be victims of circumstances too. Hall and Buzwell (2012) alert us to other possible reasons for free-riding beyond social loafing, such as differing learning style and 'involuntary free-riding' (Vernon, 2008) can result from group dynamics, where low-status members gradually become more submissive and contribute less as their status becomes more polarized within the group over the course of the project. Teaching students how to work in a group and how to handle group dynamics may be another way to solve the free-rider problem.

Although free-riding is a perennial problem when dealing with group work, this paper has attempted to illustrate some of the ways that a teacher can employ clever strategies and reduce the stress it causes to teacher and student alike.

References

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