

Assessing group work

Advice and examples



Introduction

There is a great deal of benefit to be gained from group work, for both staff and student alike. From the lecturer's point of view it can promote a variety of transferable skills and, depending on how the work is assessed, it is possible to enhance the learning process too. On a purely pragmatic level it may also be possible to save time spent on assessing students' work.

From the student point of view, engaging in group work offers a range of benefits and the assessment process can be an interactive part of the learning process. The major gains in transferable skills are in the areas of oral communication, negotiation and interpersonal skills. Working in a group can also promote the sharing of ideas and problem solving skills, as the student might feel less intimidated and more willing to discuss work with their peers.

Whilst the assessment of group work can also play a major part in the learning process, it is often this aspect of group activities which most concerns many academics. What is important is that the assessment methods and criteria are made clear to students before they begin the activity. Academics have to decide whether they are prepared to give each student the same mark for the group outcome or whether they feel more comfortable embedding some means of generating an individual mark. The group mark approach more closely mirrors the world of work, where scientists working in teams generally all share in the success or failure of a project. If students are aware of this before the activity begins then they must be made aware that it is up to them to ensure that all group members contribute to the activity. If academics are uncomfortable with this then there are other approaches that may be successful. For example, students can anonymously peer assess each other's contribution to the activity and the tutor can award a mark based on their assessment.

As group work is successful in developing a range of skills as well as discipline specific skills and knowledge, both the tutor and the students must be clear what is being assessed by a given method. For example, is an oral presentation being assessed on scientific content or presentation skills, or both? All options may be appropriate but students must be aware of what the tutor is looking for.

Depending on the assessment tools employed students can both receive and provide feedback to their peers. This process helps students gain a better appreciation of the skills being developed and how to work effectively as a group. For example, peer assessment of a presentation can improve student understanding if they have to assess their peers on the same criteria with which they will be assessed.

There are many assessment methods suitable for assessing group work. They may be used individually or in combination in order to assess a range of skills and knowledge and to generate a group or individual mark. Some of them are summarised briefly here.

Individual report or assignment

Students work as a group but each student would submit their report separately. Students gain the benefit of sharing ideas and information amongst each other but draw their own conclusions in the final work. This method promotes group work but does not necessarily enhance the learning process for individuals. If a student has trouble with a concept they are left to find the solution on their own when producing a report, without the support of the other group members. Whilst a student may feel they understand something when part of the group, they may find they have problems when it comes to writing these ideas down. There is the added practical problem that marking individual work for each student can be time consuming.

Group report or assignment

This is probably the most fundamental way of assessing group work, where a mark is given to each member of the group based on a single piece of work submitted by the group. The main advantage of this for the tutor is that it reduces the time spent marking individual student scripts. If this approach is used for formative assessment, where the process of encouraging students to work in a group may be the main objective, then this method can be very effective. Potential problems may arise when it is used for summative assessment when students often resent other group members for not doing their fair share of the work and so contributing negatively to their own mark. This can be overcome to an extent by making the students aware that they must ensure that all group members participate or by including an additional mark for individual effort.

Observation and interview

Depending on the type of activity, for example a laboratory experiment, it may be possible to assess group work based on direct observation and interviewing. Here, the lecturer can observe how the students work together and divide activities and assess the students on this basis. This can then be backed up by questioning the students whilst they actually work. For example, students can be asked how and why they divided the work load or question individual students to assess their overall understanding to see if they have made an effort to involve themselves in the group work. Unfortunately, the difficulty with this approach is that not all types of group work can be assessed in this way and the process can be time consuming and subjective.

Group presentations

A widely used method for assessing group work is the oral presentation. This has the advantage that students develop presentation skills alongside subject specific skills and knowledge. The assessment can be based on the quality of the presentation, the quality of content, overall understanding and comprehension during questioning. The presentations may be given by a group representative or by all members of the group and it is up to the tutor to decide which is most appropriate. The presentations can be assessed by the tutor or can be peer assessed by the rest of the students. If the students are to be involved in the assessment it is a good idea to discuss assessment criteria with them before starting the process. In this way they will all be clear about what they are looking for, and how their own efforts will be evaluated. It can be effective to ask students to peer assess the quality of the presentation whilst the tutor assesses the quality of the scientific content. Although this is a direct way of assessing the group members, the potential disadvantage is that students may get nervous and the process can be subjective and very time consuming.

Poster presentations

Posters can be effectively used as an alternative to reports and oral presentations. Each group would produce a single poster which may be assessed by the tutor or peer assessed by the other students. This method has the advantage of developing new transferable skills. In addition, many posters can be assessed quite effectively within a relatively short session. The criteria for assessment should be discussed with the students before they produce their posters.

Peer assessment of contribution to the group

An extension to the method of requiring a single report from the whole group is to ask each team member to generate an anonymous peer mark for each individual member of their team. The mark may be based on their assessment of the overall group interaction and contribution to the work load. In this way, each student gets a mark based on the quality of the group report or assignment but also a mark based on their individual efforts. Problems can arise if students feel that they are being marked subjectively by their peers, for example if one person falls out with the group but still does their part of the overall work. In order to avoid such problems clear marking guidelines must be prepared for the students so that there is no ambiguity about how they are being assessed. If these guidelines are developed in discussion with the students then they gain a better understanding of what is required of them and what makes effective group work.

Individual exercises

If tutors are uncomfortable with awarding all students the same mark for a group activity and are not happy with peer assessment of individual contributions, then they may set each student a piece of work which supports or complements the group activity but which is completed individually. This, in some ways, goes against the ethos of group work but both students and tutors may be more comfortable if some proportion of the marks come from individual effort alone.

Some examples of peer assessment marking schemes

These examples are not meant to be definitive. The aim is to provide some suggestions of how tutors might weight peer assessment in different approaches.

Example 1 - A group report

Written group report	80%
Individual mark	20%

The group would submit a single report and each group member would receive the same mark. The individual mark would be awarded for one part of the report that students had prepared individually. For example, each student might produce their own final discussion section. Alternatively, the individual mark could come from an extra piece of related work completed by each group member.

Example 2 – Mini project

Project outline	10%
Final report	60%
Contribution to group work	30%

Students have to collaborate throughout the project so a group assessed outline clarifies the role of each member of the group during the project. Each student receives the same mark for the single final report. Individual marks for overall contribution to the group work can be generated by the tutor or by the other students in the group. This mark can be reached by mutual consent within the group or by anonymous submission to the tutor.

Example 3 – Poster presentations

Group poster	60%
Individual summary report	40%

In this example, the group produce a poster of their assignment which may be tutor or peer assessed. To generate an individual mark, each student produces a summary report. This generates an individual mark and the summary report keeps marking load to a reasonable level.

Example 4 – Group presentations

Final report	50%
Group presentation	50%

In this example, the students submit a final report prepared by the group and deliver a group presentation. There is no individual mark.

Further information

- 1 Practice guide, *Designing Assessment to Improve Physical Sciences Learning*, Phil Race LTSN Physical Sciences.
<http://www.physsci.heacademy.ac.uk/Publications/PracticeGuide/guide4.pdf>
- 2 Primer, *Getting started with computer-assisted assessment*, Roger Gladwin LTSN Physical Sciences.
<http://www.physsci.heacademy.ac.uk/Publications/Primer/caa.pdf>
- 3 *Peer Learning in Higher Education*, edited by David Boud, Ruth Cohen & Jane Sampson Kogan Page 2001. ISBN 0 7494 3612 3
- 4 (The former) LTSN Generic Centre Assessment Series (by commissioned authors). Available on the Higher Education Academy web site in the resources database under the heading 'Assessment'.
<http://www.heacademy.ac.uk/resources.asp>