GROUP WORK

ADEPT: Resources for Educators Series

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This good practice guide provides an overview of evidence-based principles and practices for effective and efficient design, implementation, and management of group work. The guide includes potential scenarios and approaches, links to resources, templates, and samples to support the various aspects of group work design and implementation.

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Purpose and benefits of collaborative learning and group work

Active learning and assessment designs create a collaborative environment in which students can construct knowledge, develop employability,[1-3] and meet the expectations of employers for graduates with strong collaborative skills.[4]

Students in groups have been found to achieve higher average marks (than individual assessment), reflecting the benefits of working in teams including access to more human resources and increased productivity, increased ability to manage complexity and more challenging tasks, increased creativity and problem solving and the ability to match component tasks to the strengths of group members.[5]

Collaborative tasks can be used for both formative and summative purposes and group work tasks may be designed as a form of authentic assessment emulating the real-world conditions under which many projects are completed. As a means of allocating marks and grades, group work assessment provides some efficiency for markers.

Assessment of group work may evaluate the processes groups use to create an output and/or the product of the group work. Decisions about the design of group assessment tasks shape student behaviour and the learning outcomes derived from group assessment.[1-3] Therefore, group assessment tasks should be included in course assessment designs with a clear purpose and care in their design to ensure that they encourage appropriate student learning behaviour.

This guide uses the term 'group work and assessment' to describe tasks that require students to collaborate in learning activities and assessment tasks. You might want to consider if you are designing a task that requires individuals to coordinate their efforts or if you are aiming for collaboration or teamwork which requires members to be mutually committed to goals and to each other.[3]

Issues and Challenges

Although there is evidence of the value of collaboration, students do not always value it, do not collaborate by default when placed in a group, and do not always have the skills to collaborate well even if they have the intention.[3] Group assessment is also not necessarily a method to make assessment more secure. There is a challenge in ensuring group tasks are both fair and valid as the marker must be able to ensure that individual students have demonstrated the learning outcomes.

> **Please note: some of the suggested external resources in this guide mention technological tools used to support group work which may not be available at the University of Adelaide.**
>
> **To discuss the tools you could use to enhance student learning, please contact the Learning Enhancement and Innovation team.**

Good practice guidelines

Task design

Good practice advice from the literature[2,5,6]

- Assess whether the task needs to be a group assignment. Does it align to the course outcomes?
- Create authentic, open, appropriately scaffolded tasks, rather than simple, closed tasks. The former increase meaningful interaction and have a stronger impact on critical thinking and application skills.
- Avoid overly complex tasks because it can be difficult to discern individual contribution and if grades are allocated at a group level, individual accountability is reduced. However, overly simple tasks can also lead to a lack of motivation and engagement.
- Use marking schemes that allocate differential marks to reflect individual student contribution, as these promote more appropriate student learning behaviour and are likely to lead to better learning outcomes for all students.
- Consider whether marks will be allocated for the output of the collaboration (product) or the way in which students collaborated (process) or both. Ensure student collaboration can be clearly evidenced if it going to be assessed.
- Ensure expectations are made explicit in assignment guides and in rubrics if collaboration is to be assessed.
- Consider using peer and self-assessment of group contribution to promote accountability and learning. Careful design is needed to avoid real or perceived bias in assessment and resultant perception of unfairness in outcome.

In practice scenario #1

A course coordinator has designed a group assessment which requires all of the group members to contribute in order to complete the task. After groups have been formed and have started working on their project, some of the students withdraw from the course and the remaining group members are worried they will now have an increased workload.

Advice:

Ensure task design is flexible enough to accommodate changes in group numbers. For example, if students have been asked to write a 2,000-word report in a group of six but two drop out, adjust the required word count and/or structure of the assignment to reflect that. Also make allowances when grading if elements of the assignment have not been completed. Alternatively, it may be possible to re-define the task and weight the elements again within the new constraints of time and resources.

A tutor notices that one student who has been very diligent with the individual assessment tasks in a course is not contributing to a group assessment task. When they ask the student about this, the student says the other group members are not pulling their weight and they don't see the point in putting too much effort in as the whole group will get the same grade.

Advice:

Use strategies in the resources below to increase individual accountability and ensure students feel the workload and the grade they receive for their contribution is fair. If the task and the weighting of its elements are clear, then the allocation of workload should be reasonable. This may require an iterative approach if it turns out that one element takes far more effort than anticipated. Regular group meetings will help to plan, review, evaluate, and document progress and identify roadblocks early.

Keep in mind the possibility that the capable student may have over-estimated their ability compared to the others, otherwise known as the Dunning-Kruger effect.[7]

Resources and tools

Task design

Assessing by Group Work	This University of New South Wales webpage outlines benefits, challenges, and strategies for designing group work assessments. It covers design concerns such as whether to assess product and/or process, assessment criteria, grading, peer and self-assessment, and the use of technology to develop students' digital skills.
How can I assess group work?	Guidance from Carnegie Melon University Eberly Centre for Teaching Excellence and Educational Innovation. It suggests the allocation of individual grades, assessment of process as well as product, clear expectations, and provides samples of group assessment tools like team contracts.
Assessing Group Work in Hybrid/Remote Environments	Another resource from Carnegie Melon focusing on the particular challenges for educators teaching Mixed Cohorts (remote and on-campus students learning in class simultaneously).
Self and Peer Learning Assessment Tool (SPLAT)	SPLAT is an online tool used by students to assess the contributions of individual members of their team, as well as themselves. If you would like to know more about SPLAT and how it can be used in your courses, please contact MyUni Support.
Disability Support FAQs for Group work	University of Adelaide Disability Advisors have created responses to questions often asked about supporting students with disabilities, learning differences or other reasons for needing an Access Plan. All assessment should be designed based on Universal Design for Learning Principles, and it helps to be aware of the challenges group work may pose for students and understand how Reasonable Adjustments can be made when needed.

Making expectations clear

Sample text for assignment guides	Expectations regarding group work need to be made explicit in instructions for students. This sample text has been provided by colleagues in the Adelaide Law School.
Example team work rubric	This example rubrics from Cornell University Centre for Teaching Innovation is for assessing individual contribution. Note: students will need to provide clear evidence of contribution for example meeting minutes, version history in Google Docs, photos of group work sessions etc.
Example team work rubric	The American Association of Colleges and Universities have created a sample rubric describing criteria for effective team work. Please note the rubric is intended to assess the behaviour of individual students so evidence of contribution by each team member would need to be provided.

Group formation strategies

Good practice advice from the literature[5,6]

- Use group sizes of 4-6 to maximise the benefits of group work without introducing unmanageable complexity or increasing the chances some members of the group will choose not to contribute.
- Construct groups of mixed academic ability to optimise the performance of all group members, in particular students with lower academic performance, using a moderated marking scheme to ensure students with higher academic performance are not disadvantaged.
- Construct culturally heterogeneous groups provided there is sufficient time for the groups to develop effective group processes, as group performance is equivalent or better than outcomes for homogeneous group structures.

In practice scenario #3

Students in a first-year course are asked to choose who they will work with to complete a task. Some of the students are happy with this as they have some friends in the course. The tutor notices that the international students make groups with others from the same national background. Then a couple of students approach the tutor to say that they are unable to find a group to join.

Advice:

As you will see from the resource below, there are advantages and disadvantages to all methods of group formation. Random or self-selection group formation is sometimes justified as 'this is what it is like in the real world', but the university environment cannot be compared to the work environment. Although students should be developing skills to prepare them for the world of work, the focus needs to be on creating conditions that enable students to best demonstrate the learning outcomes of the course. The evidence-based approach is to construct groups so that students of lower academic performance benefit from interaction with students whose academic performance is higher and diverse groups are ideal for creative tasks.

Resources and tools

Group formation strategies

Group Allocation methods	This web-based resource from the University of Technology Sydney includes a table outlining the advantages and disadvantages of each method for forming groups.

Developing collaborative skills

Good practice advice from the literature[2,8,9]

- Provide instruction on effective group practices and scaffold group functioning with supportive structures including task allocation, team contracts or charters.
- Provide formative opportunities to practice group work and receive feedback before undertaking summative group assessment.
- Ensure you have strategies for checking group progress before the assignment is due and an opportunity for reflection on learning at the end of the group work experience.
- Collaborative tasks can develop students' knowledge of, and skill in applying, approaches appropriate for disciplinary and interdisciplinary settings. In group assessments students can learn how to apply mental models such as systems or design thinking. In practice, a Project Based Learning approach would ask students to identify the elements of a task and their relative weight in order to allocate workload evenly and measure progress.

In practice scenario #4

Just before a group work assessment task is to be submitted, a group informs their tutor that one of the group members has not contributed to the task and has not responded to attempts to contact them. The group asks for this student to receive a lower mark for the assessment.

Advice:

Rather than presuming the student is 'free riding', the tutor should check whether the student is registered with *Disability Support* and therefore, could have a disability, health condition or other issue that has made it difficult for them to engage with the task. Even if they are not currently registered with Disability Support, the tutor or course coordinator should contact the student to ask if they are ok, and provide them with information on the *support services* available.

If it looks like the student has intentionally chosen not to contribute and benefit from the work of the other group members, then unless they can demonstrate that they did contribute, the consequences outlined at the beginning of the course can be applied.

The likelihood of this scenario can be reduced through the use of team contracts, requirements for evidence of contribution, and mechanisms to monitor group progress. Peer assessment can also be included in the task design. Ensure students know how this will be used and how it could impact their grade when the assignment is introduced. Students should be informed of a deadline by which they can raise concerns over the contributions of group members if they wish action to be taken.
Group conflict cannot always be avoided; what is important is that students learn strategies for dealing with it. This is part of developing their employability and work place skills such as active listening, showing empathy, and being polite but assertive.

Resources and tools

Learning design for collaboration

Learning activities and assessment tasks for teaching group work skills	This resource from the RMIT Study and Learning Centre provides lesson plans and activity templates to support students through the beginning, middle, and end of the group work process.
Implementing Group Work in the Classroom	From the University of Waterloo, this guide covers strategies for planning and facilitating group work as a classroom learning activity which can prepare students for working in groups independently.
Using Cooperative learning groups effectively	The Vanderbilt University Centre for Teaching provides the evidence base for this approach as well as ways to structure group work in class and evaluating the effectiveness. Note: in the US, 'assessment' is used to mean evaluation.

Resources for students

Group work guide	This resource from the University of Adelaide Writing Centre provides advice for students on effective collaboration. It includes the rationale for group work as part of their studies, but this will be more powerful if you explain the particular requirements for collaboration in your discipline or professional setting for which the task will prepare students.
Guide to Group work	This University of New South Wales resource provides advice for students on effective collaboration. It includes the rationale for group work as part of their studies, but this will be more powerful if you explain the particular requirements for collaboration in your discipline or professional setting for which the task will prepare students.
Improving group work skills through embedding compassion	This project aims to use evidence-based strategies informed by neuroscience, group psychotherapy, ethnography and clinical psychology to embed compassion into the curricula. The resources include videos on unhelpful group work behaviour and guides to support students in reflecting on their group behaviours and how these could be enhanced.

Team contracts and charters

Online assessment team contract template	This article outlines the use of a contract for an online group assessment task. There is a template on page 8. Hesterman, S. (2016). The digital handshake: A group contract for authentic eLearning in higher education, Journal of University Teaching & Learning Practice, 13(3), 2016.
Team contract templates and guides	This folder contains templates and guidance documents for students shared by colleagues at the University of Adelaide.

Peer evaluation templates

Peer Evaluation Template	In the case that group members wish to raise an issue regarding the contribution of another group member, they could be asked to complete this evaluation form from colleagues in the Adelaide Law School.
Peer Nomination Template	When group members all agree that a fellow group member should receive a higher grade due to outstanding contribution to the group, they could be asked to complete this form from colleagues in the Adelaide Law School.

Communication

Sample MyUni announcements	These example MyUni announcements from Associate Professor Tania Crotti (Adelaide Medical School) demonstrate ways to remind students of important milestones, the need to plan and monitor progress in group work, and clearly connect the assessment task to the world of work.

Recommended guides

These resources address the design, implementation, and management of group work as a whole.

Management of Group Work	
[Proactively Ensuring Team Success (PETS)](#)	The PETS process is the outcome of Australian Learning and Teaching Council grant project led by Professor Lydia Kavanah (University of Queensland). It covers 5 stages of group work design and implementation providing guidance on limiting, identifying, and addressing common problems.
[Guide to Group Work](#)	This University of New South Wales webpage outlines benefits, challenges, and effective strategies for using group work in teaching (not only for assessment).
[Student ideas for successful group work online](#)	Wondering what students think? Melissa Connor, Coordinator of the Graduate Career Readiness course (Faculty of the Professions) asked students to present the elements from learning in 2020 they would like to continue. This group has given permission to share their ideas for managing online tutorials.

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