'Coming together is a beginning.

Keeping together is progress.

Working together is success.'

Henry Ford.
Introduction:

Working in groups has gained momentum in higher education, mostly as a consequence of the widely recognized benefits of collaborative group work for student learning. When groups work well, students should learn more and produce higher quality learning outcomes. A group is defined as ‘...two or more individuals who are connected to one another by social relationships’ (Forsyth, 2006, pp. 2-3). This definition brings together the three elements of a group: the number of individuals involved, the connection and the relationship. Group work is a situation where there is a common purpose and shared aims.

In order to be successful in group assignments, students must possess high levels of teamwork skills. It is beneficial if students experience training in group work and when lecturers are familiar with the principles underlying the formation of a group. If these aspects are overlooked, the group may become dysfunctional. Negative views about the value of teamwork may also result.

Students who are not used to working in groups sometimes feel anxious about managing the group work process, and indeed, it is often difficult to keep a team together. The process of working with others can often be ‘... a confusing, complex and demanding experience, both mentally and emotionally’ (Crosby, 2001, p. 60). Some of the problems that students encounter are discussed here, as well as strategies you might use to make sure that your group runs smoothly and achieves a successful outcome.

Students learn best when they are actively involved in the process. Researchers report that, regardless of the subject matter, students working in small groups tend to learn more of what is taught, and retain it longer than when the same content is presented in other instructional formats. Evidence shows that students who work in groups also appear more satisfied with their classes (Beckman, 1990; Chickering and Gamson, 1991; Johnson, Johnson and Smith, 1991).

Advantages and Disadvantages of Group Work:

There are many advantages to group work – the group gets to share ideas; each member can tap into a pool of wider experience through the creation of a network of individuals who bring talents, contacts, skills and experiences that one single person would not possess; group members learn to deal with challenge or criticism; group work stimulates thinking and clarifies group members’ own thoughts; it can increase commitment; it can lead to an improvement of listening skills - hearing and understanding others’ points of view, an improvement of speaking skills and an improvement in the ability to negotiate.

Disadvantages are that one person may try to take over the group; the group may not be focused on the task; personalities may clash; some group members may not contribute as much as others; and there may be an uneven balance of power between the group members.
Why Set Group Work as an Assessment?

Working in a group in college gives students the opportunity to tackle significant projects where each individual group member can offer different talents and perspectives. Group work also enables the student to demonstrate teamwork on a curriculum vitae.

Getting the Most from Group Work:

1. Explain to students the nature and value of the activity - it is extremely important to explain why group work will further immediate course goals and also lead to other desirable outcomes such as acquiring the skills needed in the modern work place.

2. Give clear instructions - group work can be frustrating for both students and lecturers if instructions are not clear.

3. Keep the group size small - four is generally considered the ideal because the group is large enough to contain students who will bring diverse opinions, experiences and learning styles. This number also ensures that if a group member fails to show up for a meeting, the group can continue to function smoothly. A group of four is not so large, however, that students can hide. All must carry their fair share of the workload.

4. Unless there is a compelling reason to do otherwise, aim for heterogeneous groups - Felder and Brent (1999) give a sound case for heterogeneity in ability, as in mixed ability groups the weaker students gain from seeing how better students study and the strong students gain a deeper understanding of the subject by teaching it to others.

5. To ensure heterogeneity, form teacher-composed groups - aim for heterogeneous grouping, deliberately mixing students based on achievement level, gender, ethnicity, academic interests, learning styles, or any other relevant factors. There is a very good learning styles self-assessment tool at the following:


6. Keep groups together long enough to establish positive working relationships - students need time to become acquainted, to identify one another’s strengths, and to learn to support and coach one another.

7. Promote individual accountability - students must be individually responsible for their own academic achievements.

8. Set up a clear, non-competitive, criterion-referenced grading scheme - a common misconception suggests that group work automatically entails group grades. Nothing could be further from the truth. Individual accountability precludes this too-often-used practice.
Undifferentiated group grades for a single project, particularly when the work is completed out-of-class, invite inequity problems.
A Guide for Students:

1. **Get to know each other:** the group should function better if you know each other. The first thing to do is invite introductions and share some social activity, even if it is just a coffee.

2. **Check that you know how to contact each other:** exchange e-mails and mobile telephone numbers.

3. **Agree on meeting dates, times and venues:** make sure you schedule your group meetings well ahead. There should be an agreed commitment to attend group meetings, so schedule the meetings when everyone can come. The venue also influences how successfully you can work. It should be a place where you can talk without interruption, with proper work spaces.

4. **At the first meeting:**

   (i) **Identify your time frame:** work out what tasks have to be done and when. One member of the group could plot this on a timeline and send it to the other members.

   (ii) **Establish clear objectives:** spend time together analyzing the task that has been set, and make sure that you all have a common understanding of what is required. You should also discuss the group’s overall goals to ensure that everyone is aware of what the expected outcome is. Liaise with your tutor when clarifications are needed.

   (iii) **Identify specific tasks and allocate them:** this is important in ensuring that the work is divided fairly and effectively. Discuss the various skills or resources that different members of the group have. Agree roles - a chairperson should be someone who is strongly committed to the task and has the determination (and diplomacy) to keep things running smoothly; a scribe should be someone who can keep good quality notes and circulate them after the meeting as this avoids misunderstandings about what was agreed. Having a time-keeper is also important.

5. **Achieve your agreed outcomes:** to do this the group will have to work together and this can involve some conflict which has to be managed. Remember that successful group work requires the following attributes: tolerance; consultation; inclusivity; openness and sensitivity to other cultures and values. It is best to be open and honest about conflict, whilst remaining tactful.
Formation of Groups:

Group formation ideally furthers the learning and teaching basis of the course. Group formation should promote the course goals, sound learning theory and philosophical convictions. The most famous teamwork theory is Tuckman's 1965 model. His work described the way he observed groups evolve, whether they were conscious of it or not. However, its real value is in recognising where a group is in the process, and helping it to move to the Perform stage. Tuckman described the four distinct stages that can occur as a group comes together and starts to operate. An understanding of these stages can help a group reach effectiveness more quickly.

Stage 1: Forming - Individual behaviour is driven by a desire to be accepted by the others, and avoid controversy or conflict. Serious issues and feelings are avoided and people focus on being busy with routines, such as team organization, who does what, when to meet, etc. Individuals are also gathering information and impressions about each other and about the scope of the task. This is a comfortable stage to be in, but the avoidance of controversy means that not much may actually get done.

Stage 2: Storming - Minor confrontations arise which may relate to the work of the group itself, or to roles and responsibilities within the group. To deal with the conflict, individuals may feel they are winning or losing battles, and will look for structural clarity and rules to prevent the conflict persisting. The conflict will ensure that not much gets done at this stage either.

Stage 3: Norming - As Stage 2 evolves, the rules of engagement for the group become established. Members should now understand each other better. They appreciate each other's skills and experience and feel they are part of a cohesive, effective group. At this stage, the group is effective.

Stage 4: Performing – This stage is characterised by a state of interdependence and flexibility. Members know each other well enough to be able to work together and trust each other enough to allow independent activity. This high degree of comfort means that all the energy of the group can be directed towards the task(s) in hand.

Stage 5: Adjourning - Ten years after first describing the four stages set out above, Tuckman revisited his original work. He added this final stage, which is about completion and disengagement. Members need to recognise what they've done and consciously move on.
Common problems (and solutions):

**Dominating participants** - Some people might dominate the discussion by talking too often, asserting superiority or not letting others finish. The group can agree a rule that everybody can contribute up to three times in the discussion and that contributions have to be less than three minutes.

**Reluctant participants** - Others may rarely speak because they have difficulty getting into the conversation. Again the above rule can help reluctant participants as they know they have to contribute. Once the group is performing, the rule is redundant.

**Storming** - While people are still figuring out the work and their role in the group, the group may experience false starts and circular discussions. This can only be addressed by a frank discussion between the group members about moving the process forward. Tutor facilitation will be important.

**One person doing the most work** – The benefit of group work is that individuals get to work together and no one member of the group should be over-burdened with more work than the other members. The group should allocate tasks on a fair basis and should be prepared to review the allocation of tasks throughout the process.

**Keeping focused** – Diverting away from the task will hinder group progress. It may be necessary to refocus the group and assign time estimates to items.

**Personality conflicts** - Occasionally two people in the group will not get along and this impedes the work. They must be encouraged to work together for the good of the whole group.

**Ignoring or ridiculing others** - When someone consistently ignores or ridicules what others say, criticizing their experience or knowledge, the issue has to be dealt with. It may be that the group leader or tutor or both may have a word with the person outside of a group meeting to bring their behaviour, and its negative consequences, to the individual’s attention.
Assessing Group Work:

All of the basic principles of assessment that apply to individual work apply to group work as well; however, assessing group work has added dimensions, as often both the process and product-related skills must be assessed, and group performance translated into individual grades. This raises issues of fairness and equity. Complicating both these issues is the fact that neither group processes nor individual contributions are necessarily apparent in the final product, thus a method of finding ways of obtaining that information is required.

When effective group management processes are employed, with clear assessment guidelines developed and communicated to the group members, and valid and fair grading processes also employed, the likelihood of positive learning outcomes and student satisfaction with group activities should increase. Alternatively, if students cannot see the objective of group work and are unsure of what is expected of them, or believe the assessment methods are invalid or simply unfair, the educational benefits are reduced and tensions can emerge.

Habeshaw et al. (1993) note that when the product of group work is the only element assessed, the unintended effect can be that students tend to work individually and then combine their contributions for the final mark. This discourages collaboration and can lead to some of the group members not contributing equally to the final assignment and complaints about ‘free-riders’ not contributing to the final product. They suggest a scheme in which the students distribute the total pool of marks among themselves (ibid.). Gibbs (1992) provides a variation of this peer assessment factor in which all students receive the average group score plus a peer allocated score.

Three main approaches toward group-work assessment are considered here – (i) independent observation, (ii) evaluating individual contributions and (iii) peer reviews.

(i) Independent observation requires that an observer (i.e. the lecturer who set the assignment) attends team meetings or other activities and assesses individual performance against established criteria. While this can provide an unbiased assessment of performance, the fact that the team members know that they are being observed might influence their behaviour. This approach is also limited since observation is only practical for activities such as group meetings. Group work involves much more than what goes on in meetings. Although this is certainly a useful tool in assessing group working skills, it is not sufficient.

(ii) The second approach involves evaluating the evidence of the individual team member’s contributions. One method of doing this is to require that each team establishes, on ‘Moodle’, an online discussion group for communication among its members. The lecturer can then monitor the contributions to the discussion group and evaluate the contributions of each individual based on the performance criteria established. Other evidence of individual contribution can also be examined, such as the documents produced. However, this approach is limited since not all team skills can be assessed based on the artifacts produced by the individual students.
The third approach is to conduct peer reviews. In this approach each team member evaluates the performance of the other members of the team based on criteria established for this purpose. To be most effective, these evaluations should be anonymous. This approach has several advantages. First the team members are in the best position to evaluate the performance of their teammates since they work with them continually during the course of the team project. The main disadvantage of this approach is that students are often reluctant to negatively criticize other students and there can be a central tendency in the ratings, thus the reliability of this measure suffers. See Figure 1 below for a sample peer observation form that can be used. The list of attributes is not exhaustive and can be added to.

In spite of the limitations of each of these methods, when used together, they can provide an accurate picture of each student’s individual performance with respect to the identified teamwork skills. Furthermore, if students know more precisely how group work is defined and evaluated, they will strive to learn and practise the identified skills.

GROUP WORK ATTRIBUTES:

Did the group member....
1. Attend nearly all team meetings? YES/NO
2. Arrive on time for nearly all team meetings? YES/NO
3. Ever introduce a new idea? YES/NO
4. Ever openly express opinions? YES/NO
5. Communicate clearly with other team members? (never) 1 2 3 4 5 (always)
6. Share knowledge with others? (never) 1 2 3 4 5 (always)
7. Consider suggestions from others? YES/NO
8. Generally tried to understand what other team members were saying? YES/NO
9. Generally complete individual component(s) on time? YES/NO
10. Generally complete individual assignments with acceptable quality? YES/NO
11. Do a fair share of the work? YES/NO
12. Seem committed to team goals? YES/NO
13. Show respect for other team members? (never) 1 2 3 4 5 (always)

Figure 1: Group Work Evaluation Form
1. Group members must accept the group that is allocated by the lecturer and cannot seek to have someone removed from, or added to, the group except in exceptional circumstances, and only with the written approval of the lecturer who has set the assignment.

2. Group members are expected to complete group assignments on time and to a pass standard.

3. Group members are expected to organise their group so that all group members can play an active role within the group.

4. All group members are expected to contribute actively and equitably to the group work and to be able to show the contributions of each group member, should this be necessary.

5. Group members should respect all other group members and elicit, listen to, and respect the views of all participants.

6. Group members should respect, and seek to respond effectively to, diversity within the group.

7. Each group member should be open to compromise and be willing to co-operate with others; keep an open mind and be prepared to vote on disagreements and accept the outcome of the vote.

8. All group members must engage with peer reviews if the lecturer has stated that it will be part of the process and all contributions to peer reviews must be honest and fair.

9. Any member of the group who is concerned about any issue within the group should, in the first instance, make his/her concerns known to the group with a view to having the matter resolved within the group. Should a team member feel that their concerns are not being addressed within the group, they should then take the matter up with the lecturer who set
the group assignment. The lecturer will mediate a resolution between the individual and the group and this mediation will be accepted by the group.

Reference List:


Further Reading: