

Effective Groupwork²

Objective

This chapter is designed to help your group work more effectively. It is assumed that you have already had experience of working in groups.

The key to an effective group is to work on the **relationships** between group members. This is not a natural activity for many people, particularly for males!

Competency being developed

Engineers Australia describes this competency as:

PE3.5 Ability to function effectively as an individual and in multidisciplinary and multicultural teams, as a team leader or manager as well as an effective team member

- a. Manage own time and processes effectively, prioritising competing demands to achieve personal and team goals and objectives
- b. Earn trust and confidence of colleagues through competent and timely completion of tasks
- c. Communicate frequently and effectively with other team members
- d. Recognise the value of diversity, develop effective interpersonal and intercultural skills, and build network relationships that value and sustain a team ethic
- e. Mentor others, and accept mentoring from others, in technical and team issues
- f. Demonstrate capacity for initiative and leadership while respecting others' agreed roles

What is an effective group?

Effective groups are a delight. Work is done with seemingly little effort, because everyone is keen to do his or her share. Ideas are generated quickly and effortlessly and no one seems too attached to their ideas. Group achievement is more important than individual achievement.

How can you move your group and yourself to this state of performance? It requires a conscious application of some simple principles and an awareness of oneself and how one behaves with others.

Getting Started

Introductions

Introduce yourselves by saying what you bring to the group. This may be an interest or experience in a particular aspect of the problem for which you've assembled. Describe your interest and goals. Take a minute or two each.

Be interested in what others have to say. Note down people's names and interests as the discussion progresses.

There are two purposes for this stage:

- one is to get to know each other, because it's easier to work with people we know,
- and the other purpose is to look for *assets* in the group to make it easier to complete the task.

Be open and honest with each other.

² (with contributions from Dr Will Rifkin, UNSW)

Get to know each other better

Take a personality test on the web (eg <http://www.personalitytype.com/quiz.asp>). Discuss your preferences with each other. What roles in groups do you prefer? What roles will others choose? Are there any missing?

Arrange to have a meal together and get to know each other on a more personal basis.

Basic roles

A group needs a *chairperson*, so if you haven't already done so, someone needs to take on that role, even if you later pass the role around the group. This person will make sure that tasks are completed on time. This usually involves chairing meetings.

Appoint a *scribe* from the group who will record discussion and action required as a permanent record for everyone to keep.

Use your different abilities

Recognise different abilities that each team member has. This includes personality type, but is not limited to it. By getting to know each other better, and being open with each other, talents will emerge in the group. Make the most of them.

Look for talents in your team.

Write a team contract and be honest about it

Delineate responsibilities common to all team members; also delineate different tasks undertaken by different people.

Address some contingencies – illness, slackers, accidents, those just not excited by the class or project; be honest about how much work you are willing to put in and what mark you would be satisfied with. You can propose different marks for different team members, the hyper-dedicated person getting points from each other team member in return for extra work.

One way of preparing a **Group contract** is using the 5 P's:

1. The **Purpose** of the group – *why* your group exists, eg learn about the design of simple structures, design a chemical plant
2. Your **Policies** for effective groupwork – *what* are your expectations, eg everyone attends all group meetings, or provides a valid apology (including a chocolate bar)
3. Your **Procedures** – *how* you will go about it, eg provide each other with weekly feedback (both positive and negative); how you will handle *non-performing group members*.
4. Your **Performance indicators**, eg meeting attendance, deadlines met, conflicts resolved, group social activities, feedback given, marks achieved.
5. Your **improvement Plans**, eg how you have coped with setbacks.

Although steps 1-3 may be written only once, steps 4 and 5 should be visited regularly (weekly, fortnightly, monthly) depending on the duration of the project.

A mindmap is provided to assist you in getting through your contract negotiation. Negotiating a contract will prove critical in your professional life, and it can be a life-saver in team projects at university. During negotiation, you begin to learn about the people you are working with by observing how they negotiate. How candid do they seem? What seems to motivate them? Do they try to get their own way, or do they try to accommodate, and why?

Assess each other and give feedback

A simple marking scheme is:

- 0 for average, expected work
- +2 for good work
- +4 for excellent work
- -6 for non-performance (doesn't complete tasks, doesn't attend meetings).

Assess yourself and each of your group members each week. Be honest! Very few groups have everyone performing at the excellent level. At the end of the semester, your lecturer may ask you to give a summary score for each member of the team, including yourself.

Discuss these scores from time to time. We all need feedback to know whether or not we're performing up to others expectations.

Learn from each other

Enable someone weak in one ability, such as presentation skills, to practise that, even though someone else might be better at it. Help this group member to do the best job possible by rehearsing beforehand. University is a good place to practise – far more forgiving than the workplace. Document how the group has permitted this individual to improve their abilities.

Build a learning team.

Expect conflict

Aim for debate about ideas and strategies rather than personality conflicts. Try not to get too attached to your ideas or your way of doing things.

When people get combative, just say *stop! I thought we were all on the same team*. Discuss why you might be getting on each others' nerves. This may be due to personality type differences.

Expect differences of opinion.

Divide and conquer

Some work and decision making needs to be done by individuals or by sub-groups; trying to gather everyone together to work jointly all the time can be futile and unproductive. Establish effective ways of communicating – employ e-mail or a team web site (and agree to check it daily), record best times to phone each person or use messaging.

Use action plans

At the end of each meeting, fill in an action plan. It can be as simple as:

- What is to be done?
- By whom?
- By when?
- also: Why? How? Where?

At the beginning of the next meeting, check that the tasks are complete or add them to the next action plan.

Find out why tasks haven't been completed. Sometimes tasks are not completed because the delegated person doesn't know how to start it. Some help with *how to do the task* will be required.

A pro forma for action plans is attached at the end of this handbook. Copy it and use it. You can also download it from our website.

Make sure that a copy of all action items goes in your logbook each week.

Use *best practice* feedback

A good strategy is to remember to give *positive feedback*. Although we often do this with children, most adults forget that we also need to give each other praise:

Hey, I really liked what you did with the drawings for our multistorey carpark project! I thought you'd put a lot of effort in the detail of the drawings.

Always start with positive feedback. You might then want to ask the person to do some additional work:

I think the drawings would be improved by the addition of another 3D view. What do you think? The lecturer is probably expecting to see a view from the entryway.

Conflict resolution

When something concerns you about another group member's behaviour, try using "I" statements as follows:

"When you come late to meetings, I feel angry and frustrated.

In future, I would like you to arrive on time like the rest of us; what do you think?"

It sounds pretty awkward, but it works! What is important is that you *acknowledge your own feelings* in the process. The other person may be totally unaware how their actions are affecting you.

If you can master giving feedback this way, all of the relationships in your life will improve – not just your civil engineering groups/teams.

Logbook

Keep a record of all your work on the project. You will need an exercise book where you will keep notes of meetings, emails, phone calls, library searches, and so on. It also serves as a useful lifeline if you need to justify the work you have spent on a project. More details are at the *Sustainable Engineering* site (see later).

Reflection

Each week you should write some reflection on your progress in doing the project:

- What have I learned about the project (and engineering in general)?
- What new learning do I need to do?
- What am I finding really challenging/difficult? Why?
- What am I finding fun? (usually things you're already good at)
- What have I discovered about myself? (things you're good at, or things you need to improve)
- What concepts have you learned that will help you to be a more effective professional?

Use these reflections to look for new learning opportunities. Studying at university is about learning. Getting the project completed is a means to that end; it's not an end in itself. If you're not learning anything in your project work, you're not working hard enough!

Reflection is considered in another chapter of this handbook.

Conclusion

It is very important that you follow these guidelines in each of your team projects. Many groups never get to know each other well enough to form a productive team. In particular, they never learn to deal with conflict in a constructive way. If you don't get to know each other well, you will not be able to trust each other enough to move to a higher level of productivity.

More information

Teamwork is discussed in more detail at:

- <http://www.dlswb.rmit.edu.au/eng/BENG0001/LEARNING/teamwork>