Learning effectively through Groupwork

These guidelines provide an overview of three main aspects of groupwork. These are:

1. Working as a team – overview of why groupwork is important
2. Stages in group development – forming, storming, norming, performing and mourning
3. Roles in groups – important behaviors in effective teams

An excellent reference for more information about working in teams and groups is:

1. Working as a team

Many Engineering units involve projects and investigations that are undertaken by small teams or groups of about 4 or 5 students.

Why work in teams? There are several good reasons:

- Engineers work in teams, so it's good to develop these skills as early as possible.
- Research shows that we all learn effectively from each other. Hence, your teams should be learning teams, with the focus on helping each other to learn.
- Teams are much more effective than individuals for work on complex projects.
- Teamwork develops your interpersonal skills in coping with conflict, in being a chairperson, in developing your interdependence and accountability and in developing your sense of self esteem. This aids your personal development and your non-work-related relationships.

Effective teams

Why do some groups accomplish very little, while others achieve much more?

This difference stems very much from the *processes within the group* - its inner dynamics or workings. The features of an effective team include:

- combined group effort of all members
- clear goals
- group members focused on learning
- mutual trust and support
- open communication
- democratic processes.
Making the most of your team

There are many advantages of working collaboratively with other students. To make the most of your experience as a team member, remember to:

- Become actively. Don't wait for another team member to do all the work.
- Share - open communication and the contribution of ideas and information is essential for successful and highly performing teams.
- Learn to work cooperatively. The success of your team will depend on helping each other.
- Respect your fellow team members. Be aware that each team member will have unique talents and ways of learning. Not everyone learns by the same process.
- Use your time productively and effectively. Define clear goals - what needs to get done, by whom and why?
- Expect success - be enthusiastic and positive.
- Meet with your group members regularly.
- Ask your tutor for frequent feedback - that's the tutor's role.
- Maintain a sense of humour - keep things in perspective.
- Hang in there - developing a good team is hard work and demands commitment from all team members.

2. Group development

There is strong evidence that groups pass through a sequence of five stages of development. These are sometimes defined as:

- Forming, or coming together
- Storming, or conflict
- Norming, or working out the rules
- Performing, or getting the job done
- Mourning, or breaking up.

The length of time different groups take to pass through each of these developmental stages will vary, but it is generally not possible to achieve high team performance until the group has passed through at least the first three stages. The duration of each stage will depend on factors such as individual and team maturity, task complexity, leadership, organisational climate, and external climate.

Forming ..... Am I a member of this group?

During this stage of group development new team members discover what being a member of this group means.

You may find that you and/or other group members need:
- clear goals and objectives
- definition of tasks and roles
- clear work plans
- to identify group behaviour, standards and norms and ways to handle behavioural problems
You and/or other group members may:
- demonstrate excitement
- participate hesitantly
- show tentative attachment to the group
- discuss problems peripheral to the task
- be uncomfortable and anxious about the new situation
- accomplish minimal work

This stage is complete when new members start thinking of themselves as part of a group.

**Storming ..... *Who controls this group?***

During this stage of group development, team members may become hostile or overzealous as a way to express their individuality and resist group formation.

You may find that you and/or other group members exhibit:
- infighting, defensiveness and competition
- doubts about success
- low group morale
- polarisation of group members
- concern over excessive work
- disunity and increased tension

You and/or other group members may:
- set unrealistic goals
- resist the task demands
- establish a pecking order
- criticise group leaders or other group members
- complain.

Many groups do not develop beyond this stage because they lack the ability to listen to each other and find mutually acceptable resolutions to the major issues.

**Norming ..... *What are the rules of this group?***

During this stage of group development, members accept the team, the team norms, their own roles and the idiosyncrasies of fellow group members. Emotional conflict is reduced by patching up previously conflicting relationships.

You and/or other group members may:
- attempt to achieve maximum harmony by avoiding conflict
- develop a high level of trust and respect for others in the group
- discuss group dynamics constructively
- form friendships
- develop a sense of team cohesion with a common spirit and goals
- have high group morale
- establish and maintain group boundaries
- accomplish a moderate amount of work

During this stage, if the formally appointed leader is not effective, or there is no formal leader, a leader will emerge or should be agreed upon who can focus the group resources to solve problems.
Performing ..... *How high can this group go?*

Now that the team has established its interpersonal norms, it becomes an entity capable of diagnosing and solving problems, and making decisions. This stage is not always reached by all teams.

You and/or other group members may:
- be willing to sort through group problems
- develop high conflict resolution skills
- understand members' strengths and weaknesses
- undertake constructive self change
- identify closely with the group
- accomplish a great deal of work

Groups reaching this stage will be effective and will devote energy to maintain good group relations.

Mourning ..... *Where do we go from here?*

This final stage of group development applies more to temporary teams like task groups or committees. However these days, with reorganisations occurring frequently this stage is not uncommon.

You and/or other group members may:
- feel elated at the successful attainment of goals
- feel disappointed at unattained goals
- feel a sense of loss when the group is disbanded
- feel relief at the end of the process
- congratulate each other
- celebrate.

3. Roles in groups

Individuals within a team all have unique skills and strengths. It is only when the contributions of *ALL* team members are valued that teams will function efficiently.

Any individual team member can play a number of different roles within the team. Roles are predetermined behaviours expected of people in a group.

Some roles will feel natural - "I'm always the one who . . . " There will be other roles, however, which may be difficult, eg Chairperson or Presenter. Try and gain experience in at both natural and difficult roles in the group.

There are four main types of roles:
- Task roles
- Functional roles
- Maintenance roles
- Dysfunctional roles
**Task roles**

Once a team knows what its goals are, the various tasks needed to succeed can be identified and assigned to group members.

The more clearly the task roles are defined, the better the chosen team member will be able to perform the task. If a task role is too narrowly defined, however, the team may miss out on the opportunity to capitalise on the skills and talents of that team member.

When a team has the right mix of tasks that are well differentiated and integrated, group members develop a sense of cohesion and team spirit, and each can see where their particular role fits with the objectives of the group as a whole.

Some of the tasks you may need to do include:
- developing an understanding of particular technical knowledge
- obtaining references and taking notes
- doing calculations
- analysing data
- devising graphs and tables
- preparing designs
- building a prototype
- writing sections of reports
- preparing presentations

**Functional roles**

In order for a group of people to function as a team, members must find ways to interact with each other beyond just performing their task roles. These ‘functional’ roles help the group to achieve its goals. Each team member can adopt one or more functional roles as needed.

You may find yourself taking on such roles as:
- Coordinator: draws together the various activities of team members.
- Initiator: proposes solutions; suggests new ideas, a new definition of the problem, or new organisation of the material.
- Information seeker: asks for data; requests additional information or facts.
- Information giver: offers facts or generalisations, relating own experience to illustrate points.
- Opinion seeker: looks for options about something from the team; seeks ideas or suggestions.
- Opinion giver: offers a view or belief about a suggestion, regarding its value or its factual base.
- Goal setter: helps the group to set goals.
- Deadline setter: makes sure that deadlines are set and met.
- Progress monitor: makes sure that the group is progressing according to plan.
- Evaluator: measures decisions against group goals.
- Clarifier: tries to see how an idea might work if adopted.
- Summariser: restates suggestions after the group has discussed them; outlines related ideas or suggestions; provides a precis of the ideas.
- Decision pusher: helps the group to come to closure; makes sure that decisions are reached.
- Planner: prepares timelines and schedules; organises.
- Spokesperson: speaks on behalf of the group.
- Troubleshooter: asks the ‘what if ... ?’ questions.
- Diagnosor: determines sources of difficulty; decides where to go next; eliminates blocks.
**Maintenance roles**

As well as the functional roles that assist the group to achieve its tasks there are group maintenance roles which help the team grow and strengthen. These roles support and maintain group life and activities. You may find that your personal skills lend themselves to one or more of the following maintenance roles:

- **Encourager**: is friendly and sincere; praises others; is warmly responsive to others, and their ideas; is accepting when people offer contributions.
- **Gatekeeper**: makes sure that every member of the group has a chance to be heard.
- **Standards setter**: expresses standards for the group to use in its discussions; reminds the team to avoid actions which don't fit these standards.
- **Consensus tester**: checks for agreements, for example ‘I think we are all feeling the same way’.
- **Mediator**: conciliates; harmonises.
- **Tension reliever**: helps eliminate negative feelings.
- **Listener**: is able to listen empathically and hear what others have to say.
- **Volunteer**: offers whatever is needed.

**Dysfunctional roles**

Unfortunately sometimes you may find either yourself or other team members take on roles that are disruptive to genuine efforts to improve team effectiveness and satisfaction. Some of these roles include:

- being aggressive
- blocking or nit-picking
- competing
- clowning or joking to disrupt the work of the group
- withdrawing
- being sarcastic or cynical
- blaming
- taking all the credit
- dominating
- manipulating.

When group members take on dysfunctional roles, this can lead to very ineffective team behaviours. Examples of these behaviours include team members being late to agreed team meetings, or team members not doing the work they were supposed to do. You might have two hour meetings where nothing was accomplished or one student tells everyone else what to do while other students say nothing. Such behaviours inevitably cause team conflict, which needs to be addressed quickly and effectively to get the group back on track to working effectively and collaboratively.

Excellent strategies for overcoming team conflict are discussed in the recommended reference on team work: