



AALBORG UNIVERSITET

School of Engineering and Science
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Principles for Group Formation

1 Background

Group formation processes are an essential part of the project based learning approach at AAU, and these processes greatly influence the students' wellbeing and learning in the project work. Usually the group formations are carried out without problems, but for some students the group formation process can be experienced as problematic, chaotic and sometimes unpleasant and associated with exclusion.

A number of different stakeholders with varying levels of interest are involved in the group formation process. The most important stakeholders are the students (both strong and weak students), the semester coordinators (who are overall responsible for the processes) and the university in general (academic/pedagogical/didactic).

These guidelines attempt to establish some tools to assist with the group formation process, including different possibilities for the course of the process, and they also address the problems which can arise during the group formation process, e.g. students, who are not assigned to a group and subsequently the possibility of splitting and reorganizing groups.

2 Overall Principles

Overall, group formations can vary from the entirely administrative groupings where the university takes full responsibility (for example P0) to processes that are fully managed by students. Despite the different attitudes to and wishes for group formations a number of conditions can be agreed upon:

- As a starting point it is a good principle that no group is closed until all students have been assigned to a group.
- Especially at the first semesters of the study programmes conditions could call for more controlled group formation processes (for instance administratively formed groups).
- At semesters with international students distribution of nationalities/international students in different groups is as a starting point desirable.
- Generally students learn different things by working in different groups, and for this reason this must be attempted.
- Project supervision is not just limited to academic guidance, but also pedagogical guidance. It is therefore important that the supervisors are professionally prepared to support and challenge the students in both the group formation process and the collaboration process.

- The semester coordinators must be in a position to change and adjust the group formation processes as variations between different study programmes and semesters will exist.
- Coordination between semester coordinators should be established in order to enable an exchange of experiences from previous semesters in terms of group formation and the group work in general (however, without stigmatizing any individual students).
- The group formation process should as a minimum be evaluated in connection with the semester evaluations.

It may be desirable with certain semesters that 'break' with the normal group formation processes controlled by students in order to secure that students are not always working with the same group. This can for instance be done through different semester structures, other working methods than the 'AAU-project', varying group sizes or new group formation processes.

3 Choice of Project

Prior to the beginning of the semester, the semester coordinator has collected project proposals from supervisors and possibly students. In collaboration with the supervisors the coordinator has ensured that the project proposals relate to the topic of the semester and that the proposals are realistic in terms of learning objectives, time frame, equipment, laboratories etc.

The project proposals must be made public not later than one week before the beginning of the semester. On certain semesters the project can be more fixed due to specific laboratory work or the like. In these instances a description of the project must, however, still be available at the beginning of the semester.

4 Group Sizes

Group sizes are determined by the individual Study Boards in consultation with the School. However, the maximum group size is normally recommended to be:

- 1st-2nd semester: 8 students per group (normally 7 students per group)
- 3rd-5th semester: 6 students per group
- 6th semester: 4 students per group
- 7th semester B.Eng.: project must be written individually
- 1st 3rd semester master's programme: 6 students per group
- 4th semester master's thesis or extended master's thesis: max. 3 students per group.

5 Different Methods of Group Formation

Full Student Control

The students themselves control the group formation process. The semester coordinator defines the conditions for the group formation and supervises the process, including the number of groups, number of group members in each group etc. It will help facilitate the group formation if the semester coordinator announces these conditions prior to the day of the group formation so that the students can be prepared for the conditions of the group formation. The groups can be formed according to the topic, which the

students wish to work with, and/or the persons the students wish to be in a group with. As a starting point, the groups are not final until everyone is assigned to a group.

Based on previous experience, the group formation process is carried out most effectively if the students demonstrate:

- Honesty – state your opinion, but in a nice way
- Openness – say what you think in the situations that can/will arise in connection with the group formation
- Respect – show your fellow students respect. Even when there is someone who you at first hand do not wish to be in a group with
- Responsibility – remember that you as a student are responsible for ensuring that the group formation is carried out without problems and that everyone is satisfied in the end.

If it, contrary to expectations, turns out that one or more students claim their right to write by themselves this right cannot be denied them. However, the student(s) must be informed that the allocated supervision is reduced accordingly, e.g. proportionally according to the size of the group.

If it turns out that the other students refuse to accept one or more students in a group (it is impossible to close the groups) resulting in students involuntarily left without a group, it will be possible in certain cases to agree upon a 'conditional' admission to a group. This means that a student, who experiences difficulties with being accepted by a group, is accepted by a group on the condition that the collaboration between the group and the student proceeds satisfactorily. In this way the group can reserve the right to exclude the student in question within a time period agree upon (try-out period).

It is the responsibility of the semester coordinator to supervise the group formation process and to step in if the process reaches a deadlock. Normally, the semester coordinator is not present at the actual group formation but must be available in case of problems. If the students are not able to manage the group formation process themselves, the semester coordinator must intervene and as an example divide the groups administratively.

Partial Student Control

In some cases it can be appropriate to control the group formation process to a higher degree than with full student control, but in such a way that it is still possible for the students to have influence on the group formation.

This can, for example, be the case on the first semester of Master's programmes admitting students where a portion of the students comes directly from the qualifying Bachelor's programme while the rest of the students comes from outside. In this case there can be an interest in forming mixed groups so that both AAU bachelors and students from other universities are represented in each group. The semester coordinator can in these cases make rules with regard to the number of AAU bachelors and students from other universities in each group. Given these premises the students can then form the groups based on topic and/or who they wish to be in a group with. If one or more students are not accepted in a group, the conditions concerning 'conditional admission' described above under 'full student control' will apply.

However, it should be pointed out that there are alternative options in connection with start-up of Master's programmes. The curriculum may, for instance, include an introduction programme for the students, who do not hold an AAU Bachelor's degree, so that they are eased in through the first semester. Hereafter all students follow the same courses and are free to form groups.

The study programme may wish to form new groups. Another variant of partial student control could in this case be that the groups are changed from semester to semester. Rules as to the number of group members from the previous semester group allowed in a new group can here be established.

Administrative Group Formation

In some cases it may be an advantage to form the groups administratively. This is typically the case on the first semester of a study programme where the students do not know each other. This approach can, however, be unsuitable if the project groups have different topics, because the individual student is then deprived of the possibility of free choice of topic.

By administrative group formation the groups can either be composed randomly, or they can be formed on the basis of personality tests from a wish to compose a group of students with different competences.

6 Split-Up of a Group

As a last resort a group of students can be split up if the collaboration does not work and the principal supervisor/semester coordinator has actively attempted mediation etc. All the students are equally entitled to the materials (documents, data, prototypes, experimental setup etc.) that exist at the time of split-up. Before the group is split up, a clarifying meeting with the principal supervisor and the semester coordinator must be held. The split-up must take place well in advance of the conclusion of the project period. It can, for example, be specified that the split-up can only take place within the first 1-2 months of the project period.