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## Conflict Management in Student Groups - a Teacher's Perspective in Higher Education

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Students working in groups is a commonly used method of instruction in higher education, popularized by the introduction of problem based learning. As a result, management of small groups of people has become an important skill for teachers. The objective of our study is to investigate why conflicts arise in student groups at the Faculty of Engineering at Lund University and how teachers manage them. We have conducted an exploratory interdepartmental interview study on teachers' views on this matter, interviewing ten university teachers with different levels of seniority. Our results show that conflicts frequently arise in group work, most commonly caused by different levels of ambition among students. We also found that teachers prefer to work proactively against conflicts and stress the student's responsibility. Finally, we show that teachers at our faculty tend to avoid the more drastic conflict resolution strategies suggested by previous research. The outcome of our study could be used as input to future guidelines on conflict management in student groups.

*Keywords:* Group Work, Conflicts, Higher Education, Interview Study, Free-riders

### INTRODUCTION

Group work is today a common method of instruction in higher education. Its popularity increased with the introduction of problem-based learning (PBL) by Camp (1996) as a new approach to medical education in the 1960s. PBL was developed as a response to poor student results including too much memorization and poor applied skills. The popularization of group work has introduced management of small groups of people as a critical skill for teachers in higher education.

Group work as a method of instruction has several inherent good qualities that make the method interesting to use in higher education. Oakley, Felder, Brent, and Elhajj (2004) identify several of these qualities. Students taught in small groups achieve higher grades, are more inclined to use a deep approach to learning, retain information longer and acquire greater teamwork and communication skills than students taught in a traditional manner. Moreover these students are less likely to "drop out" and they also get a better understanding of the environment in which they will come to work as professionals.

Group work also inherits certain risk factors, one being conflicts among group members. Payne, Sumter, and Monk-Turner (2005) conclude that the students' main concern about group work appears to be that conflicts often arise when the method is used. They also note that many

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professors are negatively disposed to group work because of the possibility of conflict. Other teachers however, see an advantage in the creation of conflict, because the students will be forced to learn how to resolve them. Payne et al. point out three main forms of conflict: conflict about how to assign grades fairly, conflict about time commitments and free riding and interpersonal conflicts that arise when students are expected to work together. The authors also make three points about students' response to conflict. First, whenever people are expected to work collaboratively conflict will almost always occur, and the task is to see that the conflict can be productive and useful. Second, it is prudent to note that students will be able to handle conflicts that arise. A big strength of group work is to develop the ability to overcome conflict. Avoiding group work to avoid conflict does a disservice to students, who will be better prepared for their future work as professionals if they have learned how to handle conflicts. Third, it is equally prudent to recognize that students learn a lot from overcoming conflict. They learn how to work collaboratively and they improve their communication skills. Unmanaged conflicts might lead to severe problems for the students and especially for inexperienced teacher it is a difficult situation.

In an effort to understand the conflict management skills required by teachers to successfully supervise group work, we devised an exploratory interview study at the Faculty of Engineering at Lund University. The purpose of the study was to investigate how conflicts arise within group work in higher education and how they are perceived and managed by teachers. In particular we were interested in identifying the root causes of conflicts, how to prevent conflicts and how conflicts are resolved. Our interpretation of conflict is broad and includes a range between: friction between members, outspoken conflict and finally collapse of the group. Earlier studies concerning group work conducted at the faculty have covered the problems of unfair work allocation, such as the free-rider problem (Bernstad, Ek, Holmqvist, & Önnby, 2010; Börjesson, Hamidian, Kubilinskas, Richter, Weyns, & Ödling, 2006). The main contribution of this paper is to share experiences on conflict management considering group work, between different departments and from senior teachers to junior teachers.

The paper is organized as follows. Section 2 gives a short overview of related work on group work and conflict management in higher education. Section 3 presents the research methodology. Section 4 presents the results from the interview study. In section 5 we discuss our results and present some concluding remarks. Finally, section 6 suggests directions of future research.

## RELATED WORK

Group work is a common education method in higher education and there are many studies on the topic. This section summarizes related work and is divided into causes, prevention and resolution of conflicts in student groups. An overview of the reviewed literature is presented in Table 1.

### *Causes of dysfunctional student groups*

Hitchcock and Anderson (1997) did a literature study on problems in student groups, from which they made a number of conclusions. First, they found that conflicts are inevitable as groups mature and that it is a natural part of group development. The authors claim that a conflict does not necessarily mean that a group is dysfunctional at all and refers to the Tuckman model describing the stages of group development (Tuckman, 1965). Second, the dysfunctional groups are instead those that are stuck in the conflict stage. Their third conclusion is that proactive interventions work best; when a group becomes dysfunctional it is difficult to get it to function

well again. Recent work by Forsyth (2006) is in line with the Tuckman model. Conflict is not only considered unavoidable in modern research on group dynamics, it may actually lead to improved group cohesion.

According to Oakley et al. (2004), the most common causes of group conflicts are that team members refuse to do their share of the work, a domineering team member tries to coerce the others into doing everything in a specific way or a team member refuses to participate or even tries to sabotage the work. Chan and Chen (2010) studied reasons behind conflict in teamwork in an undergraduate college program in foreign language teaching in Taiwan. They identified the following causes of conflicts: poor communication, poor task management, unfair work allocation, unequal treatment, being egocentric, having different values and finally, lack of sense of responsibility and initiative. The authors cite Winter, Waner, and Neal-Mansfield (2008) who studied group work in business education, "To facilitate teamwork, college teachers should teach students group development, phases of team development, steps in dealing with conflict, and the decision making process". Other interesting work from the field of business education includes a pedagogical framework developed by Keyton and Beck (2008), which allows students to self-evaluate their group interactions and processes such as leadership, decision making and conflict management.

#### *Prevention of conflicts in student groups*

Oakley et al. (2004) also stress that students need to be prepared before starting to work in groups. They claim that although group work potentially provides many benefits, students are not born with the knowledge of project management and conflict resolution or with the communication skills required for high performance teamwork. They also claim that most teams eventually run into problems with one or several of its team members. Both Oakley et al. (2004) and Felder and Brent (2001) suggest that a way to give groups a good start to avoid conflict is to have them prepare and sign a list of ground rules that everyone agrees to follow. Such rules include coming to team sessions prepared, to outline problem solutions individually before the group meetings and to communicate time conflicts.

#### *Resolution of conflicts in student groups*

To deal with problematic team members Felder and Brent recommend what they call crisis clinics (Felder & Brent, 2007), wherein the teacher leads a brainstorming session with the students and discusses possible solutions. The purpose is to provide them with strategies for dealing with conflicts. According to Felder and Brent, another way to identify and handle non-participating team members is to use peer ratings. They also suggest the opportunity of "firing" and "quitting". It should be possible for the group to exclude ("fire") the team member, if all other measures have failed. Similarly, a student should be given the opportunity to leave ("quit") and join another group, if the other team members do not contribute to the team effort. Davis (1993) and Oakley et al. (2004) also discuss this and recommend that groups should be able to exclude a member who does not contribute to the work. This student must then persuade the group to reconsider or find another group to work with, or gets a failing grade. Individual grading in group work, which could be used as a tool to resolve conflicts, is encouraged by Kagan (1995): "Giving the same grade to everyone on a team is not only patently unfair, it undermines the positive outcomes of cooperative learning." In contrast, Payne et al. (2005) note that such promoting of individualism might not be the message teachers wish to communicate to their students.

When a group is approaching collapse Felder and Brent recommend active listening (Felder & Brent, 2001). In a group conflict there are often two sides with divergent opinions. Active listening includes three steps. First, the students on one side of the conflict make their case without interruption and the students on the other side have to repeat this to the initial group's satisfaction. Then the second group gets the same opportunity. Finally, the students try to work out a solution.

Hitchcock and Anderson (1997) studied how tutors can intervene when medical student groups become dysfunctional. They present an intervention model with four levels. First, after recognizing problems in a group, the tutor should try to correct the problem by asking questions and trying to involve all students. If the problem persists, the group should be interrupted to acknowledge the problem as well as brainstorm potential solutions. If this fails, the tutor should impose non-negotiable rules for work in the group. This could include attendance, punctuality, thinking aloud and using the white board. Finally, outside assistance is sought, for example a mediator or counselor.

Table 1. Overview of reviewed literature on conflicts in student groups.

Publication	Method	Discipline	Sample
Bernstad et al. (2010)	Interview study	Engineering	4 teachers
Börjesson et al. (2006)	Literature review	Engineering	N/A
Camp (1996)	Experience report	Medicine	N/A
Chan and Chen (2010)	Observation	Humanities	99 students
Davis (1993)	Literature review	Not specified	N/A
Felder and Brent (2001)	Experience report	Engineering	N/A
Felder and Brent (2007)	Literature review	Engineering	N/A
Hitchcock and Anderson (1997)	Observation	Medicine	25 students
Kagan (1995)	Experience report	Not specified	N/A
Keyton and Beck (2008)	Literature review	Business	N/A
Oakley et al. (2004)	Literature review	Engineering	N/A
Payne et al. (2005)	Survey	Humanities	145 students
Winter et al. (2008)	Survey	Business	88 students

## METHOD

Our interview study was performed at the Faculty of Engineering at Lund University. The study was exploratory, which motivates the use of interviews as data collection method (Robson, 2002).

### *Preparations*

Preparing the study was done by constructing the interview instrument through a brainstorming session and by conducting the literature study reported in section 2. The interview instrument was then refined, by grouping the questions into relevant areas as seen in Table 2.

The interview subjects were selected using a strategy with emphasis on getting a wide variety of subjects, with different experiences of group work as a method of instruction. A group was defined as consisting of at least three students, but the interpretation of the term conflict was left to the interviewees. The ten subjects were selected among five levels of seniority: Ph.D. student (2), assistant lecturer (2), assistant professor (2), associate professor (2) and professor (2), and from five different departments: Engineering Logistics (4), Production Management (1), Electrical and Information Technology (2), Physics (1) and Mathematics (2).

### Interviews

The data collection was performed by using a semi-structured interview strategy (Robson, 2002). Two researchers were always present at each interview session, where both asked questions and took notes. The interviews started with one of the researchers describing the purpose and background of the study. This was followed by directed questions and discussions about the topics in Table 2. The length of the interviews varied from 30 to 60 minutes. The interview notes were compared and compiled into a summary that was sent to the interviewee for approval.

The collected data was systematically analyzed using content analysis (Robson, 2002). The purpose of the analysis was to code the statements from the summaries and categorize them to identify “what was shared”, “with whom” and “to what extent”. Initially, the question areas from the interview instrument were used as categories. As our understanding increased, we refined the categories through several iterations. The result of this process can be seen in Table 3.

Table 2. The interview instrument used in the data collection process.

Area	Questions
Background	1. What is your teaching background?
	2. Which methods have you used in your teaching (lectures, seminars, experimentation ...)?
	3. How much are you teaching?
Group Work	4. What is your experience of teaching group work?
	5. Do you have a concrete example of a project where group work was a central part?
Causes	6. Do you perceive group conflicts as a problem? Do they exist?
	7. How do you think conflicts arise in group work?
Detection	8. What are the root causes of this kind of conflicts?
	9. How often do conflicts come to the attention of the teacher?
	10. When do you notice a conflict in a group? Early, at the end, or after the course has finished?
	11. How do you notice conflicts in your groups?
	12. Is it you or the students who address the problem first?
Solutions	13. Have you experience of solving group conflicts?
	14. Can you explain how you resolved the conflict?
Consequences	15. How do conflicts affect goal achievement and grading? Can you give an example?
	16. Do conflicts sometimes lead to a collapse of the group, failing the assignment? If so, how often does it happen?
Development	17. Do you have any thoughts about the development of your own teaching skills during your career concerning conflict management in group work?

### Validity

In relation to the four groups defined by Cook and Campbell (1979), threats to the validity of the study are discussed in this section.

Threats to conclusion validity are issues that affect the ability to draw accurate conclusions from the outcome of the study considering the relationship between the treatment and the outcome. The study was exploratory and the authors had no preconception about which results to expect, thus minimizing the threat from inadvertently affecting the outcome by “fishing”. By performing all interviews in a similar manner, and with the same interview instrument, threats

to the reliability of the measurement were reduced. The issue about the subjects not having relevant experience was eliminated by consciously selecting people with known experience from group work.

Threats to internal validity are threats that can affect the data collection due to unknown causal relationships. Threats originating from the timing of the data collection were handled by conducting all interviews in the same week. By limiting the duration of the interviews to 60 minutes each, preparing the interviewees, and by giving them the interview instrument prior to the interview, maturation threats were reduced. In some cases the interviewer and the interviewee had a professional relationship, which might pose a threat to validity. A related problem is that the subjects might be affected by the registration of their answers. To reduce both these threats, complete anonymity was given to the interview subjects.

Threats to construct validity threaten the ability to generalize the results of the study to the theory behind the study. The data in this study was collected using semi-structured interviews, where the participants described their own experiences. The threat of mono-operation bias was reduced by selecting ten interview subjects from five different departments, with five different levels of seniority and teaching experience. Method bias was handled by having two different interviewers during each interview, taking individual notes. Evaluation apprehension was avoided by ensuring anonymity to the participants.

Threats to external validity affect the ability to generalize to other people and settings, i.e. in our case the ability to generalize our results to higher education in general. The interviewees in the study represent five different departments with different methods of teaching and student populations. They also represent five different levels of seniority and have experiences from different types of group work setups. The wide variety of interview subjects is believed to give a fair representation of the total experience of using group work as a method of instruction at the faculty. Extrapolating further should be done with care and not without considering the fact that the study was performed at a faculty of engineering at a Swedish university.

## RESULTS

In this section, we present the results of our interview study. A summary of our findings is presented in Table 3.

### *General experiences of conflicts and their consequences*

Friction was reported to be a common element in group work and that it sometimes leads to conflict. Learning to deal with conflicts was according to interviewee D considered an important learning objective. Serious conflicts are not a frequent problem according to the interviewees. In three cases the group collapsed and in two other, students left ongoing projects. The most commonly reported consequence of conflicts in the student groups was uneven workload. However, students sometimes accept this. Other consequences of conflicts mentioned by the interviewees include unaligned student reports, students failing courses and additional teacher workload.

### *Perceived causes of conflicts in student groups*

Eight out of ten interviewees reported different levels of ambition (referring to the combination of work load, quality of deliverables, and grade) to be the most frequent cause of conflicts in student groups. Most interviewees have also experienced the more extreme form, when a very low ambition level manifests itself in free-riding. Poor project management was mentioned



by two interviewees. A student bad at allocating the available time and schedule the work in different courses, perhaps aggravating the situation further by poor communication, will most likely be considered a big problem to other group members. Interviewee G and I give project courses that are free and reported that fuzzy goals are leading to conflicts. The unclear goals are deliberate from the course responsible, forcing the students to search information in a wider sense and formulating the actual problem themselves. Interviewee G is responsible for a project including a high extent of hands-on work in the lab, where the practical skills of the students vary greatly. One student might have similar work as a major hobby and as a result be skillful, which can cause other group members to become passive bystanders. Also interviewee J has encountered students being overambitious in relation to the other group members, related to courses including programming. Too domineering students with strong wills is another problem according to three interviewees, making it the second most mentioned cause.

#### *Preventive strategies*

Several interviewees believed that conflicts could be prevented if students are allowed to choose their own groups. Interviewee B claimed this to be the key to successful group work. Students tend to choose group members with similar level of ambition, rather than their closest friends. Clear instructions and learning objectives are important. Interviewee C recommended starting a project with a small task to give the groups an opportunity to get organized. Two interviewees begin their project courses by describing group work, group dynamics and how to handle conflicts. Interviewee A was of the opinion that the most effective way of preventing dysfunctional groups is well-defined roles. A group must distribute responsibilities and choose a leader. Interviewee E has experience of using group contracts, where the students agree on level of ambition, distribution of roles and work allocation. Interviewee D claimed that it is important to schedule several occasions in a course for the students to reflect on their contributions.

#### *Resolving strategies in ongoing projects*

It was a common opinion that the students should solve conflicts on their own. An alternative approach, adopted by four interviewees, is to confront the group and let them acknowledge and discuss possible solutions to the conflict. At these confrontations, two interviewees expressed the importance to clarify the risk of not passing the course. To split dysfunctional groups can be a solution and is accepted by two interviewees. Interviewee E mentioned a dysfunctional group that was divided and the result was two well performing groups. Another interviewee allowed a student who was forced to carry an unreasonable burden of a project to change groups. Interviewee I, on the other hand, does not allow students to change groups, claiming that students should be able to cooperate and that conflict resolution is an important learning objective. Interviewee D gave an example of a conflict where a group member did not contribute. When all efforts to solve the conflict had failed, the problematic student was moved to another group. Unfortunately the student continued to be non-performing and the result was big irritation in both groups. Interviewee A pointed out the importance of never moving a free-rider to another group, since most likely this person will not perform better in the new group.



Table 3. Summary of interviews.

Topic	Interviewee				
	A	B	C	D	E
<b>Interviewee's teaching experience</b>	some years, course leader	over a decade, course leader	over a decade, course leader	some years, course leader	some years, course leader
<b>Discussed group work</b>	free groups of 4, collective supervision	industrial case, free groups, collective supervision	industrial case, free groups of 4, collective supervision	assigned groups, collective supervision	case and role playing, free groups 3-4, collective supervision
<b>Presence of conflicts in group work</b>	common	always friction, no collapses	uncommon, one collapse	always friction, one collapse	always friction
<b>Consequences of conflicts in group work</b>	bad reports, increased teaching effort	uneven workload	failing students, good experience	good experience	displeased students
<b>Causes of conflicts in project groups</b>	ambition difference, bad communication	ambition difference, cultural difference	ambition difference, strong wills	ambition difference, bad communication, cultural difference	ambition difference
<b>Prevention of conflicts in group work</b>	successive assignments, group leader, follow students closely	check-points	kick-start, workshops	check-points	information at start, successive assignments
<b>Solution to conflicts in ongoing projects</b>	state rules clearly, confront students, "fire" non-performing students	state rules clearly, confront students	confront students	confront students, apply conflict theory, encourage students to discuss	reform groups, encourage students to discuss
<b>Detection of conflicts in group work</b>	students report, operative evaluation	students or company report	students or company report, students grade each other (suggested)	students report	students report, students grade each other (suggested)

Topic	Interviewee				
	F	G	H	I	J
<b>Interviewee's teaching experience</b>	several decades, course leader	several decades, course leader	some years, course leader	over a decade, course leader	some years, course leader
<b>Discussed group work</b>	technical problem, assigned groups of 3-4, group supervision	technical problem and crafting, free groups of 4-5, collective supervision	technical problem and crafting, free groups of 3, group supervision	role playing based argumentation, assigned groups of 7, collective supervision	technical problem, random groups of 3-4, group supervision
<b>Presence of conflicts in group work</b>	common, no collapses	common, one collapse	uncommon	always friction, no collapses	uncommon, no collapses
<b>Consequences of conflicts in group work</b>	increased teaching effort	uneven workload	uneven workload	students skeptical and passive	uneven workload
<b>Causes of conflicts in project groups</b>	ambition difference, strong wills	ambition difference, unclear goals, different prior knowledge	ambition difference	unclear goals, bad communication, aversion towards method	different prior knowledge
<b>Prevention of conflicts in group work</b>	information at start	information at start (suggested), workshops	check-points, workshops	workshops	successive assignments
<b>Solution to conflicts in ongoing projects</b>	encourage students to discuss	encourage students to discuss	encourage students to discuss	state rules clearly	encourage students to discuss
<b>Detection of conflicts in group work</b>	students report, supervision meetings	students report	students report, supervision meetings	students report, supervision meetings, interactive web tools	students report

*Detection of group conflicts* All interviewees expressed that students have a responsibility to highlight conflicts in their groups to the supervisor or course leader. They stressed that it is difficult to detect conflicts at an early stage unless the students report. However, for the students to bring up the problem, the teachers must be easy to reach. Interviewee A even explicitly encourages the students to report any issues. The means for detection of conflicts in groups include hand-in assignments, scheduled supervision meetings and operative evaluation. Tool support can be utilized to provide insight to group work. The discontinued web application Google Wave™ was successfully applied by interviewee I.

## DISCUSSION

In this section, information obtained during the analysis of the interviews is further discussed in relation to the material reviewed at the beginning of this report. It is found that although many views expressed during the interviews are similar to those stated in the reviewed material summarized in section 2, at some points the interviewees expressed contradicting opinions.

### *Perceived causes of conflicts in student groups*

This study establishes, in agreement with the findings of Hitchcock and Anderson, that conflicts are a recurring part of group work. As some interviewees commented, it is also an important learning objective for the students. However, in line with theory (Hitchcock & Anderson, 1997) it was confirmed as important not to get stuck in the conflict stages since this ultimately could create a dysfunctional group.

A long list of factors that cause conflicts was identified during the interviews, and these correlate well with previous theory on the subject, e.g. domineering team member (Oakley et al., 2004), unfair work allocation, poor task management and communication (Chan & Chen, 2010) were discussed. However, the issue of students having different levels of ambition was in particular emphasized in this empirical study. Furthermore, fuzzy goals were mentioned during the interviews to be an important cause for conflicts. These findings were not found explicitly mentioned in the reviewed literature.

### *Resolution of conflicts in student groups*

It was a common understanding among the interviewees that it is primarily up to the students to solve group conflicts on their own. This view could explain why most interviewees only have applied basic strategies for conflict resolution. Only if needed, the teacher will intervene and act as a mediator which could be done through a confrontation where the group is engaged in a discussion to solve the conflict. These comments are in line with theory, which recommends actions such as setting up a crisis clinic (Felder & Brent, 2007), using the technique called active listening (Felder & Brent, 2001) or actively help students recognize and acknowledge an issue (Hitchcock & Anderson, 1997). Moving beyond the resolution based on mediating, literature suggests getting outside assistance (Hitchcock & Anderson, 1997), peer ratings or even excluding a non-performer from the group (Felder & Brent, 2001). It would then be up to an excluded student to convince a group to accept him or her (Oakley et al., 2004; Davis, 1993).

The findings from this interview study open up for a continued discussion how to deal with non-performers if the alternative to exclude a student from the course is, for one or another reason, not the preferred option. While literature suggests a drastic approach where the non-performer could be excluded from the course, the interviewed persons seemed to take a less radical approach

to a serious group conflict. A first step, as earlier mentioned, would be to make clear the risk of not passing the course at these confrontations and it was also mentioned to adapt peer ratings. To split a dysfunctional group can be a solution but the interviewees do not believe that moving a non-performer to another group is wise. Yet, this approach had been applied in one case with a non-satisfactory result where the new group also ended up with a conflict.

#### *Preventive strategies*

As indicated in literature, rather than being reactive many prefer to take a proactive stand towards conflict handling (Hitchcock & Anderson, 1997). This approach is confirmed by the many reflections and suggested actions mentioned during the interviews. One suggestion is to have students agree on a group contract where they discuss level of ambition, roles in the group and distribution of work. This finding supports the method of signing of a list of ground rules that everyone agrees to follow (Oakley et al., 2004; Felder & Brent, 2001).

In the reviewed literature, it was also proposed to teach students about group development, phases of team development, steps in dealing with conflict and the decision making process (Winter et al., 2008). Moreover, theory stresses the importance of students being equipped with strategies to deal effectively with interpersonal problems that often arise within group work (Oakley et al., 2004). Three interviewees had spent significant time to deal with these aspects. A concrete example mentioned was to give lectures about group work and group dynamics in the beginning of the course to prevent conflicts.

In addition to the above, there were many more suggestions mentioned by the interviewees. A popular approach was to let students choose their own groups. Thereby it is possible to avoid certain tension as students, if they know each other from before, tend to choose group members with similar level of ambition. Another method to prevent conflict, which was not explicitly stated in the reviewed literature, is to encourage the assignment of well-defined roles in the group. By distributing responsibilities and choosing a leader, the students take ownership and improve task management and communication structure. Also clear instructions for the project and explanations of the learning objectives are important to prevent unnecessary conflicts. One interviewee recommended starting the course with a smaller task so that the groups have an opportunity to get organized, which could be linked with the first stage of the Tuckman model describing the stages of group development (Tuckman, 1965).

Finally, in some interviews it was discussed to schedule several occasions in the course where the students are encouraged to reflect over their own contribution to the project. This concurs with the pedagogical framework developed by Keyton and Beck (2008) where students self-evaluate their group interactions and processes such as leadership, decision making and conflict management. One example given by interviewees is to allow for a mid-term self-evaluation exercise.

To summarize, many interviewees talked about preventing serious conflicts by providing a clear structure from the beginning of the course. While the reviewed literature focuses on how to manage and prevent serious conflicts throughout a project, this study highlights the possibility of setting the expectations, rules and consequences before transfer of the main responsibility for conflict resolution to the students.

### LIMITATIONS AND FUTURE RESEARCH

This interview study was limited to consider only the view of the teacher. Thus, looking at causes, prevention and resolution of conflicts from the students' perspective has not been explored. Also, as this study indicates, the course design may have an impact on conflict severity. Future research could investigate this aspect and compare it to conflicts caused by the students. Moreover, interviews could be conducted at other departments at the faculty. An early idea in this study was to explore how experience impacts teachers' attitudes and handling of conflicts in student groups, which is also reflected in the interview instrument in Table 2. Due to reprioritization, this data was however never specifically analyzed.

When comparing our findings to theory, two areas that could be subject to future research evolved. The first would be to build on this study and the preventive strategy and actions that have been identified to establish a set of guidelines for teachers to follow with regard to group work. These instructions would help to minimize the risk of serious conflicts and the appearance of dysfunctional groups. The second topic that could be further investigated is how non-performers should be dealt with. As shown in the discussion, reviewed literature argues for the "firing" approach where the non-performer is forced to leave the group. While interviewees agree that moving a non-performer to another group is not a good solution, there were no examples given of what is the ultimate fate of the non-performer. Still, non-performers such as free-riders do exist and either cause a lot of pain and grief for other group members, or potentially receive a grade which is too high in relationship to the effort put in to the project.

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