

Members of the workgroup in 2013-2014:
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Report of activities and findings: Workgroup on satisfaction in PhD studies

Doctoral Students Guild at Chalmers

1	Introduction	1
2	Findings of the quantitative analysis	2
3	Findings of the qualitative analysis	4
3.1	Supervision: Social issues	4
3.2	Supervision: content-related issues	5
3.3	Organizational problems	6
4	The project: the past and the future	9

1 Introduction

The process of becoming a Ph.D. is long and complicated. Ph.D. students start from knowing very little about academic research and over time, through training and doing research become qualified researchers. On this way, Ph.D. students take various courses, read a great deal of academic material, contribute to the universities' academic output, teach and supervise. In this process the importance of the role of supervisors who direct the Ph.D. students over the years is needless to emphasize, and so is the significance of the existence and continuous improvement of the environment in which the complicated conversion of 'students-to-Ph.D.s' takes place.

The 2012 Chalmers employee survey on work environment and job satisfaction showed a relatively 20%-30% of dissatisfaction of PhD students with their working conditions in general. This became an inspiration for the Doctoral Students guild to further investigate the matter. The doctoral students' guild (DS) represents all Ph.D. students at Chalmers in various decision-making bodies within the university and on a national level. The vision of DS is defined as (DS vision statement, 2013):

*“To improve terms for doctoral students at Chalmers university of technology by:
- representing doctoral students in several key boards and committees at Chalmers;
- identifying, preventing and eliminating structural problems;
- becoming a hub for doctoral students.”*

Hence, contributing to improvement of the conditions in which Ph.D. students work and develop as researchers is central to the role of DS as a representative body. Inspired by the results of the aforementioned survey, the DS decided to initiate a series of discussions in the form of a workgroup on how certain problems that many PhD students deal with can be addressed. The first step was to prepare a working document to find a focus for further follow-ups and improvements in the Ph.D. students' satisfaction in their work. That document was first made in autumn 2012, and the members of the workgroup continuously contributed to improving it by conducting various discussions in and outside the workgroup. In spring 2013, the document was finalized as input to a brief survey that aimed to specifically examine if the identified issues were of importance or in fact problematic from the viewpoint of Ph.D. students. The findings from the survey and the results of combining them with information from other sources are presented in this brief report. The report ends with a brief description of the process that the workgroup has gone through and suggested plans for the future.

2 Findings of the quantitative analysis

The quantitative analysis of the survey data resulted in a number of interesting findings, a summary of which is presented here. Firstly, the following are the most important contributors to the PhD students' overall satisfaction: satisfaction of the PhD students about the length of supervision meetings, the availability of the supervisor(s), satisfaction of the PhD student about the quality of their supervision meetings, and the satisfaction of the PhD student regarding the frequency of supervision meetings. Besides, when it comes to the satisfaction of the PhD students regarding their relationships with their supervisors, the same set of factors plus the perception of the PhD student regarding the competence of his/her supervisor were found important.

Secondly, with regards to the frequency of meetings, the survey showed that no standard can be defined that would apply to all cases, because how frequently should PhD students and their supervisors meet is very much dependent on the context. However, the high contribution of the factor, satisfaction of the PhD student regarding the frequency of supervisions, to the overall and relational satisfaction show that despite the irrelevance of having a standard, working on adjusting the frequency of meetings can be very helpful to creating good conditions for PhD students to work in. The analysis showed that the majority (78%) of those respondents who are satisfied with their supervision frequency have meetings with their supervisors more often than once in every two weeks. Currently, the issue of timing for the supervision of PhD students is not regulated, but the findings above point at a need for such regulations or at least guidelines.

Thirdly, the survey analysis showed that too long meetings are not necessarily satisfactory for PhD students. Nevertheless, overall, too short meetings can be compensated for with increased frequency. These findings call for a need to increase awareness about the issue and highlight the importance of communication between supervisors and PhD students for adjusting the amount of time they meet.

Fourthly, a rough cut analysis of the data regarding the actual frequency and length of the meetings that our respondents have with their supervisors was also conducted by assigning average length and frequency estimations to the responses. The calculations showed that around 30% of the respondents receive on average less than 15 hours of their supervisor(s) time over a full year. This amount of time is equivalent to less than 1% of the supervisor's total working time each year. Although the calculations can be criticized for being based on estimations and oversimplification, the finding is shocking to such a high extent that would deserve further investigation.

Fifthly, regarding master suppression techniques, there are two reasons to worry and take immediate action. First, 33% of the respondents answered that they do not know what those techniques are. This means that there is a clear need for increasing awareness about master suppression techniques among PhD students. Second, around 15% of the respondents (or 25% percent of those who have answered that they know what such techniques are) have mentioned that they have been subject to such techniques. Even though such people are not in the majority, the workgroup suggests that Chalmers must have a zero tolerance policy

regarding issues such as master suppression techniques, and therefore even a 15% minority is a very large figure that demands awareness and immediate action.

Last but not least, departmental duties are an important source of problems for PhD students. A large share of such problems relate to transparency and clarity of the definition of such duties. In many cases departmental duties are not well defined or even roughly kept track of. The survey analysis shows that clarity and transparency in the definition of such duties can improve the perceptions of PhD students regarding the fairness of handling the allocation of such duties. However, this may not be necessarily the best solution in every context. Therefore, departmental and divisional discussions can be suggested to raise, solve and avoid such issues.

3 Findings of the qualitative analysis

Despite the relatively low response rate (around 25%), the results of survey revealed various interesting issues. Besides the quantitative data analysis, the survey comments were qualitatively analyzed and the findings were combined with other qualitative data sources to enrich the qualitative analysis. The additional data sources include titles of problems that PhD students have discussed with the Doktorandombudsmann, the problems that PhD students have discussed with DS representatives orally and in writing, and findings from a specific departmental survey. All of the identified problems were categorized into three major categories. The categories, their sub-categories, the problems they include and a few examples are presented below in bullet form.

3.1 SUPERVISION: SOCIAL ISSUES

- Problems regarding the relationship between the supervisor and the PhD student
 - o Dictatorial supervision
 - E.g.: Giving “orders” to “weak” PhD students, instead of teaching them how to think right
 - o Supervisor not interested in the PhD student
 - E.g.: The supervisor has too many other PhD students
 - o Supervisor views the PhD student as a competitor
 - E.g.: the supervisor refrains information about recent research results from the PhD student
 - o Change of supervisor results in problematic relationships
 - E.g.: The PhD student faces new challenges in his/her social life in the division/department because he/she has changed supervisor
- Problems related to bad communication
 - o Conflicting ideas in supervision
 - E.g.: Main and co-supervisor frequent disagreements affect the PhD student
 - o Not valuing the PhD student’s time
 - E.g.: The PhD student is expected to look for things or try to fix things for hours instead of a small investment, or s/he is supposed to cover for a part of the supervisor’s duties instead dedicating her/his time to personal development as a researcher
- Problems related to master suppression techniques
 - o Harassment
 - E.g.: Supervisor gives sexist and orientation-related comments in groups, or presses the PhD student by group pressure, giggles, whispering, etc.
 - o Using information as a means of power
 - E.g.: Withholding and selectively spreading information,
 - E.g.: Avoiding to answer emails,
 - E.g.: Avoiding to write down and document a promise made orally
 - o Hostile or problematic meeting environments
 - E.g.: The PhD student is run over by the examiner in a big meeting

- Humiliation
 - E.g.: Exemplifying with other PhD students as “perfect”
- Other master suppression techniques
 - E.g.: Asking in public for what the PhD student does not know must be aware of, or must have done
 - E.g.: Belittling other areas of science

3.2 SUPERVISION: CONTENT-RELATED ISSUES

- Problems related to the competence of the supervisor
 - Incompetent supervisor
 - E.g.: It does not help even if they meet often, because the supervisor does not have much to give
 - E.g.: The PhD student’s topic is not the supervisor’s field of expertise
 - E.g.: The supervisor is not interested in the topic
 - E.g.: The supervisor is incompetent in helping with the planning of the PhD process
 - Lack of confidence between the supervisor and the PhD student
- Problems that directly cause hinders in the PhD process
 - Misuse of the study plan
 - E.g.: The PhD student received no help filling it out or interpreting its content
 - E.g.: Late study plan or non-existing
 - E.g.: Study plan not taken seriously or followed up properly by the supervisor or the study director
 - E.g.: Filled out study plan unspecific regarding goals and deadlines
 - Lack of sufficient scientific discussions between the PhD student and the supervisor
 - E.g.: Resulting in lack of opportunities for the PhD student to progress and understand things
 - Ambiguous PhD project
 - E.g.: Resulting in lack of proper supervision and the PhD student who quit
 - Lack of focus on the development of the PhD student as a researcher
 - E.g.: Shortages regarding overall responsibilities for the PhD student, and too seldom discussions regarding how the PhD student could improve as a researcher
- Problems regarding the prioritization and efforts of the supervisor
 - Too limited availability of supervisor
 - E.g.: A supervisor who works mostly from home, and thus only communicates via email or pre-booked meetings
 - E.g.: A supervisor who has too much administrative work
 - E.g.: Takes too long to get the emails answered
 - Too little effort by the supervisor
 - E.g.: Supervisor comes to meetings unprepared

- E.g.: Supervisor does not read emails carefully, forgetting attachments
- E.g.: Too short and irrelevant answers to emails
- E.g.: All supervisors of a PhD student are busy professors
- E.g.: Too many PhD students per one supervisor
- E.g.: Supervisor does not commit to regular meetings
- E.g.: No individual supervision by some supervisors

3.3 ORGANIZATIONAL PROBLEMS

- Intentional misbehavior
 - Violation of rules
 - Mutual problems amongst supervisors
 - E.g.: Rivalry
 - Problems related to intellectual property rights
 - Problems related to publication policy
- Lack of evaluation of the supervision process and problem-solving procedures
 - Absence of director studies in follow-up meetings
 - E.g.: A case of several industrial PhD students
 - Not finishing PhD within pre-set time-frame
 - E.g.: Not clear who is responsible, but the PhD student is often blamed
 - Lack of utvecklingsamtal and medarbetarsamtal
 - Too slow pace of dealing with problems
 - E.g.: Problems in the PhD student's process, identified by the supervisor or director of studies, but not taken care of until it is late
 - Students do not know where to turn in such matters
 - Lack of possibilities to discuss supervision problems
 - E.g.: Meetings with the director of studies cannot be used for this because the supervisor attends them all too
 - Lack of a feedback and quality control system for supervision of PhD studies
 - E.g.: Even the bad supervisors keep getting new PhD students
- Problems with travelling and international collaboration
 - Travel allowance hardly provided
 - E.g.: Lack of information
 - E.g.: The "ask someone else" chains
 - E.g.: Manually reduced in some divisions
 - Lack of rules about travel funding
 - E.g.: Unclear who is responsible
 - E.g.: Some ask for travel reports and some don't
 - E.g.: PhD students are forced to share cheap rooms, while seniors use single expensive rooms
 - E.g.: The division money is moved between projects and this makes it difficult to know the travel budget
 - The division/department does not proactively encourage travels for PhD students
 - E.g.: Supervisor is OK with it, but not the head of division

- E.g.: Guidelines are unclear
 - E.g.: The head of division only agrees with the PhD students' trips for conferences, not for other reasons
 - E.g.: The head of division gives the OK in a meeting, but does not practically support the travel
 - E.g.: The head of division avoiding to provide travel funds for study trips because it is "out of freewill"!
 - E.g.: The supervisor is worried about losing control of the PhD student if s/he travels
 - E.g.: The visa issue for non-EU PhD students has caused the PhD student to miss several conferences
 - Lack of support from the division/department on funding
 - E.g.: The PhD student spends too much time applying for travel funding
- Problematic choice of supervisor
 - Too many PhD students for one supervisor
 - The PhD student has to receive supervision from someone else than his/her own supervisors
 - Supervisor was not assistant professor in the beginning
 - Supervisor not affiliated at Chalmers
 - Examiner and the main supervisor are the same person
- Unfairness in the conduct of departmental duties
 - Vague definition of departmental duties
 - E.g.: No clear definition exists
 - E.g.: Existing definitions are not communicated well
 - E.g.: Other departmental duties than teaching are not counted
 - E.g.: Some courses and labs are harder than the others, but that is not taken into account
 - E.g.: Running and maintenance of equipment for companies are not defined as departmental duties
 - E.g.: Too much time spent on web design and web server maintenance
 - E.g.: The department says be happy and keep quiet
 - Unequal departmental duties
 - E.g.: Swedish speaking PhD students are only given bachelor level courses
 - E.g.: Swedish courses are given to a non-Swedish speaking PhD student
 - E.g.: Some PhD students get away by being incompetent in teaching, and the better PhD students are forced to have more departmental duties
 - E.g.: The 4+1 year rule is not followed: e.g. some PhD students have to finish in 4 years because of lack of budget, no matter how much departmental duties they have had

- E.g.: Lack of balance in definition of different kinds of duties: e.g. there is a big difference between the actual and nominal time some duties take
 - E.g.: The PhD student has to do the job of a lab technician
 - E.g.: The division/department lacks resources
- Problematic change of supervisor
 - PhD student does not get help to change/find a supervisor
 - It is difficult to change supervisors because there are not many choices in some areas
 - When not able to change, the PhD student begins working closely with someone else
 - E.g.: Difficult to handle the responsibility of taking care of the PhD student with such level informality in allocation of the job of supervision
- Financial problems
- Complex knowledge transfer situations
 - Industrial PhD students
 - E.g.: Unclear relations to the university and the company
 - Several universities involved in supervision
 - Lack of relevant PhD courses offered to the student
 - Coordination of knowledge, expertise and schedules is difficult in interdisciplinary research

4 The project: the past and the future

The efforts of the workgroup during the final months of the 2011-2012 period were to formulate a first draft of a series of initially identified problems that PhD students have. In the early months of the 2012-2013 period, this was continued and resulted in conducting the survey that was discussed above. In the beginning of the 2013-2014 period, the workgroup resumed its work with a new plan that consisted of four strategic directions:

- A. Gaining a better understanding of what needs to be improved in the Ph.D. students' work conditions
- B. Developing guidelines and suggestions for improving the Ph.D. students' satisfaction in their work
- C. Applying the findings
- D. Developing a mechanism for continuous improvement of the Ph.D. students' satisfaction in their work

The following table illustrates what the plans have been, and the grey color in some rows shows that they are accomplished. Items that are struck through are decided along the project to be left out.

Table 1 - Plan of activities for DS Workgroup on Satisfaction in PhD Studies: planned in early autumn 2013

Strategic direction	Activity and goal	Details and deliverables
A	Analyzing the results of the survey to identify the most important dimensions of problems that Ph.D. students experience or recognize	1. Identifying the problems questioned with the highest means
		2. Analyzing correlations among the problems questioned to identify if any groups of problems interrelate
		3. Analyzing the survey individually for each department to identify specific problems related to each department
A	Comparing the findings of the survey with the university wide survey 2013	4. Choosing the questions to focus on
		5. Identifying the highest means among the problems questioned in the university survey
		6. Qualitative comparison of the two lists of the most important problems
		7. Qualitative analysis of the departmental findings of the two surveys
Milestone 1		- Oral report (presentation) for the DS General Assembly
AB	Identifying further problems and/or possible causes of the problems	1. Qualitatively analyzing the comments of the two surveys

Milestone 2		- Detailed report on the identified problem areas
AB	Anonymously studying certain problematic cases	<ol style="list-style-type: none"> 2. Finding certain problematic issues and discussing them with the doktorandernas ombudsman (focusing on finding possible solutions) 3. Discussing the issues with the PhD students anonymously, if possible 4. Analyzing the findings with regard to the results of the previous analyses (with a focus on finding possible solutions)
B	Analyzing the results of the survey to identify possible opportunities for improvement	<ol style="list-style-type: none"> 1. Discussing the results of all previous analyses and preparing preliminary suggestions for guidelines and improvements 2. Finalizing the suggestions through discussing them with different bodies (the DS board, the ombudsman, experienced senior researchers, etc.)
Milestone 3		- Updating the report with ideas on possible solutions and directions
C	Spreading the awareness about our findings among different parties involved	<ol style="list-style-type: none"> 1. Publishing the results online 2. Providing the DS board members with overall and departmental analysis to present to their respective departments 3. Possible information/discussion meeting with Chalmers vice-president for Ph.D. studies
C	Aligning the DS policies with the guidelines developed by the workgroup	<ol style="list-style-type: none"> 4. Discussing the findings with DS representatives in different decision-making bodies and creating clear guidelines or points of interest to consider when taking part in discussions in their respective committees
D	Making this a routine!	<ol style="list-style-type: none"> 1. Developing guidelines for an annual revision of this procedure for the workgroup and DS to stay up-to-date 2. Creating organizational routines for involving the workgroup or the results of its work in decision-making in DS
Milestone 4		- Finalizing the report with guidelines for different parts of DS and other implications if any.

It is worthwhile to mention that along the way, the workgroup decided to update the plan and focus on finalizing the first strategic direction. Therefore, the qualitative analysis stage was expanded to cover multiple data sources and discussion meetings.

As it is shown in the table, by finishing most of what was expected from the first strategic direction the workgroup has managed to provide a firm ground for normative work in this field. The workgroups contribution in the past two years is identification and structuring of the wide variety of problems PhD students may encounter during their studies. It is needless to say that more problems may exist, but what is reported here can be a promising start for answering the critical but very difficult question of how these problems should be avoided or dealt with in cases of occurrence. This report calls for more efforts in this field, and suggests that future work should be guided by the strategic directions B, C and D and the unfinished steps of the project (presented in the table above) should be accomplished if the general assembly and the board of DS in the next year still see the need for empirical and analytical support for improvement of the satisfactions of PhD students at Chalmers.