- Learning environment

The KrUUt/CrED Follow-up 2012

Report 1. Development initiatives within the prioritised areas (or any other initiative worth highlighting)

Disciplinary domain:

Faculty: Faculty of Arts

Department: Department of History

Project title/developmental activity:

Student mentorship for first year students in History

1. What did you do?

The Department facilitated for senior students to arrange mentors´ seminars at least once a week. The mentors had the support of a teacher whom they met recurrently to discuss methods and problems that might have occurred in the seminar work. The actual seminars were the mentors´ responsibility, and they were conducted according to the method of Supplemental instruction (SI).

2. Why did you choose to do what you did?

An increasing number of the students are newcomers to the academic world not accustomed to the learning and teaching methods at a University. The aim has been to provide additional support for first year students in order to enhance their learning abilities and techniques, and thus to ensure that they reach the course's learning outcomes.

3. How did you go about doing your work in concrete terms?

A number of second and third year students attended a course in Supplemental instruction arranged by the University's Division for Development of Teaching and Learning. These students formed a core group for the mentor activities. They held mentors´ seminars and reported recurrently to the Director of Studies. The aim of the seminars was to help the students to create meaningful cognitive learning structure. The mentors also met in average once a week. The mentors' activities have been assessed at the end of each semester, both orally and in written form. Additionally The Director of Studies has interviewed the teachers of possible effects of the mentors´ seminars.

4. What were the main results?

The results are very difficult to assess as the student participation in the mentors lead discussion seminars was voluntary. The number of individual students attending at least once was around 30. No list of attendance was kept. However, there seem to be a small improvement in the exam results. Also, the written evaluations done by students confirm that those who took part in the mentors´ seminars found them very productive. The teachers

believed that they were able to pin point the students that had attended the seminars, meaning that the mentor's seminars had desired the effect.

5. Who and roughly how many people have been involved in the activities work in one way or other?

One person from University's Division for Development of Teaching and Learning acted as support for the mentor's group and had recurrent meetings with them.
Two persons have been involved in the department of History: The director of Studies and a coordinating teacher. All teachers on first semester History courses were required to inform the mentors about the central themes of the course and the expected learning outcomes. 3-5 mentors have been involved, each responsible for a student group of around 10 persons. Roughly 30 students have taking part in the mentors´ seminars.

6. Strategy for possible further implementation.

The mentor's seminars are going to continue, lead by senior student's even in the future. The department tries to ensure the continuity of the mentors´ group by recruiting new mentors. In the near future the tutoring in Si will be the responsibility of the Department, which requires a person with adequate skills in the method. Strategies for involving more students in the mentors´ seminars have been vividly discussed with the mentors, one solution being to formally schedule the seminars, thus hopefully attracting more students.

7. Advice to others wishing to do something similar.

A strategy for continuity is necessary as the students involved as mentors tend to leave the University sooner or later. The Department had difficulties to raise the necessary funds for the mentors´ activities. The cost of seminar rooms and for the support and additional instruction given by the University's Division for Development of Teaching and Learning did constitute financial a burden for the Department. Additional financing should be arranged otherwise this form of instruction threatens to take resources from the academic tutoring.

8. Name/s (department and e-mail) of person/s to contact in case there are questions from colleagues wishing to do something similar

György Nováky, Department of History gyorgy.novaky@hist.uu.se

The KrUUt/CrED Follow-up 2012

Report 1. Development initiatives within the prioritised areas (or any other initiative worth highlighting)

Disciplinary domain: *Humanities and Social Scienes*

Faculty: *Faculty of Arts*

Department: *The Department of History ; The Department of History of Science & Ideas*

Project title/developmental activity: The Mentorship Program

1. What did you do?

A mentorship program initiatied by history students and with support of the involved Departments. Senior students where trained to work with other students learning at undergraduate level.

We also promoted coordination between similar initiatives at Uppsala University and other universities, nationally and internationally.

2. Why did you choose to do what you did?

Active student participation can complement ordinary education and improve both retention and the quality of the course for students and teachers alike, with few additional resources.

We also wanted to increase collaboration between universities and students in order to learn from each others experiences and in turn avoid steep upstart-costs.

3. How did you go about doing your work in concrete terms?

Students meet a mentor every week for meetings in which the course literature and lecture are discussed. Students practice at raising questions to the material and find ways to answer them. The mentor is trained in facilitating discussion, increase participation and raising questions without giving any answers themselves. Average time every week for a mentor is 5 hours.

We visited and held workshops with other universities mentor programs and hosted several more during KrUUt-seminars on the subject of active student participation in Uppsala.

4. What were the main results?

According to students who participated it increased the possibility of passing the course. They expressed a deeper understanding of historical thinking and many felt enticed to continue studies at advanced level. There is also a fierce competition among the participating students for serving as mentors themselves.

5. **Who and roughly how many people have been involved in the activities work in one way or other?**

For the Mentorship program there were **80** students at the start of the semester, about **40** at the end of the course. Apart from students there are several teachers at the Departments who have contributed with their time and advice in making the Mentorship program qualitative.

6. **Strategy for possible further implementation.**

A supervisor for mentors at each Department. This person is responsible for providing updates of the work with the Mentorship program. The student mentors will perform most of the work but a supervisor is necessary for the long-term maintenance, organising and training of mentors and meetings during the semester.

There must be ample incentives for mentors. There are several ways to do this, as long as the end result is a sense of duty towards the Department in being a mentor.

In extension there should be coordination between Departments in joint training of mentors (most methods and pedagogies used are transferable between disciplines). This would also allow for future cross-disciplinary pedagogical enterprises within Uppsala University.

A supervisor could be a teacher, doctoral student or amanuensis, depending on what suits the Departments own conditions, i.e. budget. Further, supervision of student activation should be counted as a pedagogical merit as incentive for teachers who undertake this work.

7. **Advice to others wishing to do something similar.**

Adjust active student participation to your Departments own needs and conditions. Participate in coordination of pedagogical initiatives. Currently this is done at grassroots-level by dedicated students and teachers but could be organised by a division at Uppsala University.

Division for Development of Teaching and Learning contributed with funds for our initial training of mentors. This is an excellent start, and with time and effort there is must potential for starting up more initiatives. Our impression as students is that there needs to be a plan for long-term implementation of student activation, i.e. mentorship programs, within the collegium of the Department and Faculty.

8. **Name/s (department and e-mail) of person/s to contact in case there are questions from colleagues wishing to do something similar**

Johan Gärdebo, student in history and economic history, johan.gardebo@gmail.com

Karin Apelgren, Student Affairs & Academic Registry Division, karin.apelgren@uadm.uu.se

Gyorgy Novaky, Department of History, gyorgy.novaky@hist.uu.se

Mats Persson Department of History of Science & Ideas, mats.perssson@idehist.uu.se

The KrUUt/CrED Follow-up 2012

Report 1. Development initiatives within the prioritised areas (or any other initiative worth highlighting)

Disciplinary domain: Semitic Languages

Faculty: Faculty of Languages

Department: Linguistics and Philology

Project title/developmental activity: Student support in learning inspired by the SI-model

1. What did you do?

Initiated a pilot project with two student mentors for one course in Arabic (Arabic B, second term). The mentor tutoring of the students was scheduled once a week during spring 2012, alternating between the two mentors. As the group was fairly small, one of the students had as his responsibility to focus on proficiency training, the other on support in understanding grammar

One of the students had taken the course the previous year, the other was a student on advanced level taking the same course, through joint teaching of different classing, but having a broad knowledge of similar languages and theoretical grammar. The students were carefully selected – the choice of a mentor who was actually among the same group would not have worked without having the total confidence of the teachers involved. We also assigned a PhD-student to coordinate the project, with a fairly generous time agreement (ca 10%).

2. Why did you choose to do what you did?

The origin was one of the CrED-seminars on Supplemental instruction, attended by the professor in Semitic Languages, who was inspired to try the model within his field, and sent his colleague, the lecturer on Arabic B, to the next seminar with the similar theme. At the same time the Faculty of Languages had assigned this model as one strategic area of development.

3. How did you go about doing your work in concrete terms?

Once the coordinator and mentors had been assigned, the coordinator was responsible for introducing the students. In this particular case, the students were not new to

working as assistants on courses, and were familiar with what could be done. The change was primarily in the way of working. For the first project, the students were given salaries as assistants; however, this will change with the continuation of the projects. The students have clearly indicated that money is not the important factor in participating in the project.

Two hours a week were scheduled, and the student mentors at large agreed amongst themselves on the distribution between them. The coordinator informed the students, and also gave a presentation of the model for the entire teaching collegium in Semitic Languages. The courses had from the start fairly clear outlines of what the different lections would focus on, available for the mentors. Most of the contacts between mentors was via the coordinator; however, they were also sometimes briefly in touch with the teacher with concrete questions that had remained unsolved regarding the subject area, of the kind "Why is this grammatical form like this here, we couldn't agree…?" . the fact that one of the mentors actually also took the course meant an additional input to the teachers as to areas that might need repetition, the mentors came to speak on behalf of the group, allowing the rest of the group to not feel bad about having missed a particular chapter.

One of the difficulties for this as a pilot project, was finding suitable introductions on short notice. Fortunately, the students involved in a similar project in history helped out, initiating the coordinator, and allowed the coordinator as well as the student mentors to attend their SI-meetings. Eventually – towards the end of the first term, the coordinator also attended a course at Lund University, which was very useful, both in content and form, but also in allowing her to see how other universities arranged similar projects, in particular Lund University that has fairly long experience in this. The fact that it was also set in another faculty (technical) was actually an additional advantage, in making possible a focus on the method rather than content.

4. What were the main results?

The group of students who attended the SI-meetings, seem to have developed an unusually strong connection to each other. The student group at large was already at the start of the semester a very qualified and engaged group, but after the mentoring project started more of the students were inspired to go beyond the course material, searching for knowledge outside course material, gaining an unusually high level of knowledge for this course. Some of them also indicated an interest in getting a chance to become mentors next semester.

The most marked result, was however the engagement of the mentors, who clearly became advocates of the subject they were studying, and started feeling more as "part of" the teaching and research environment, gaining confidence through their mentoring, and are probably more likely to want to continue within the field.

5. Who and roughly how many people have been involved in the activities work in one way or other?

Directly involved was the Professor of Semitic Languages, the teachers of the course involved (2 lecturers), 1 coordinator (PhD student), 2 mentors, a student group of ca 15 students. In addition, the entire staff (including PhD-students) involved in Semitic Languages were informed of the project (about 15 persons). In addition, close contacts were maintained between the coordinator and the project going on at the Historical-Philosophical Faculty (in particular Johan Gärdebo, who was very helpful)

6. Strategy for possible further implementation.

This was a pilot project on a very small scale. In autumn 2012 we plan an expansion within the field of Semitic Languages, to more mentors (the A-level usually has more students) within Arabic, this time a beginner's course, and also including another language, modern and classical Hebrew as well as Assyriology. Other subjects have indicated some interest. The already existing mentors will continue alongside the new. The students will no longer receive salary, and the plan is for the model to become more closely linked to the traditional SI-model. Expanding the number of mentors will hopefully allow for the model to start spreading itself. The existing mentors have been giving input into the selection of new mentors, together with the teachers and coordinator. Only after a longer period, at least a year, it seems reasonable to evaluate results.

7. Advice to others wishing to do something similar.

Get in touch with a pre-existing project for help, and possible visit. Start in a small scale so that it is manageable, and without too high demands on immediate success and expansion. Build from there, based on the experiences. Make sure the teachers of the courses that will have mentors are on board with the project and aware of what it is about, and that it is not intended to add to their own workload, but that the coordination is done by someone else. It is probably also important for the beginning, that you take care to select the students, so that they have the confidence of the teachers involved.

8. Name/s (department and e-mail) of person/s to contact in case there are questions from colleagues wishing to do something similar

Bo Isaksson, professor in Semitic Languages, bo.isaksson@lingfil.uu.se

Mirjam Lindgren, PhD student in Semitic Languages, coordinator, mirjam.lindgren@lingfil.uu.se

Anette Månsson, Senior Lecturer in Semitic Languages, anette.mansson@lingfil.uu.se

The KrUUt/CrED Follow-up 2012

Report 1. Development initiatives within the prioritised areas (or any other initiative worth highlighting)

Disciplinary domain: Humanities and Social Sciences

Faculty: Social Sciences

Department: Economics

Project title/developmental activity:

Mentor programme for introductory economics (A-level)

1. What did you do?

We selected B and C-level students to work as mentors in the introductory course in economics. 8 mentors in total were selected for the first term (fall 2011). The 300 students registered to the course were split into 8 groups with one mentor responsible for each group.

2. Why did you choose to do what you did?

First of all we thought that the extra resources should be used to facilitate teaching in smaller groups. The reason for this was that students are very reluctant to ask question in groups of 300. Furthermore, time is very limited during the ordinary lectures since the teacher needs to cover many important topics. The ordinary lectures thus simply make for one-way communication exclusively.

We choose more senior students as mentors since we thought that this could bridge the gap between teachers and students. Students might be more inclined to asking "stupid" questions to older students than to senior teachers. Senior teachers are sometimes thought, by students, to have all the answers. The presence of senior teachers may therefore subdue lively discussions.

3. How did you go about doing your work in concrete terms?

The mentors acted as teachers/discussion facilitators at 14 two-hour sessions. During the spring of 2011 a special additional study material was created by the two teachers (Tomas Guvå and Javad Amid) and a research assistant (Jonas Poulsen). The study material included a lot of applications, discussion questions, short movies, news paper articles etc etc. The mentors could then pick and choose (under some restrictions) from this material when facilitating the sessions. The mentors were also free to include additional material they had created themselves or in collaboration with the other mentors.

In addition to this we also dedicated a special mentor office that the mentors could use. We made a schedule so that there was always a mentor present in the office (during working hours) to answer questions from the students.

4. What were the main results?

We have not evaluated the project yet. The fall term of 2012 is a so called "control term" (without the mentor programme) that is needed for proper evaluation. The anecdotal evidence we have so far indicates that the project was a big success: the course evaluations improved; many students have spontaneously told Tomas and Javad (and the mentors) that they found the programme very helpful; the mentors themselves are very happy with the project; many students write in evaluations of subsequent courses that they miss the mentor programme; and last but not least, the applications to the B-level were on record level for the spring of 2012 and the fall of 2012 (i.e. the two terms following the terms with mentors)

5. Who and roughly how many people have been involved in the activities work in one way or other?

Design, planning and evaluation: Tomas Guvå (teacher), Javad Amid (teacher), Per Engström (responsible for evaluation), Jonas Poulsen (assistant in planning and evaluation).

Mentors: Sebastian Escobar (head mentor and assistant); Alice Fredrikson (mentor and assistant); Axel Wollin; Josefin Pasanen; Fredrik Lindholm; David Enocksson; Per Sax Kaijser; Tamás Vasi; Rebecca Riesenfeld; Pernilla Mcalevey.

6. Strategy for possible further implementation.

We hope to be able to continue with this in the future. If we do we will probably make only minor adjustments to the implementation of the fall 2011 and the spring 2012.

7. Advice to others wishing to do something similar.

i) Do not underestimate the mentors' capabilities of assuming responsibilities – in our experience they can cope perfectly well.
ii) Advertise the programme a lot to the group of potential mentors.
iii) Select mentors on merit – either a special test (that is what we did) or past performance.
iv) Think carefully about how you will evaluate the programme – there are many pitfalls.
v) Leave some degrees of freedom to the mentors on the exact content of the study material. However, there should be enough material prepared in advance so the mentors have a safe fall-back in case their creative ideas would backfire.

8. Name/s (department and e-mail) of person/s to contact in case there are questions from colleagues wishing to do something similar

Tomas Guvå: tomas.guva@nek.uu.se

Javad Amid: javad.amid@nek.uu.se

Per Engström: per.engstrom@nek.uu.se

All at the Economics department

The KrUUt/CrED Follow-up 2012

Report 1. Development initiatives within the prioritised areas (or any other initiative worth highlighting)

Disciplinary domain: Science and Technology

Faculty: Science and Technology

Department: Uppsala Union of Engineering and Science Students

Project title/developmental activity, example 7:

Prep course in mathematics

1. What did you do?

At the beginning of each academic year the faculty and the local student organisation, Uppsala union of Engineering and Science Students, together arrange a introductory course in mathematics for all students at the faculty level that study mathematics. The teachers of these courses are students, prep teachers, actively involved in the reception of new students.

2. Why did you choose to do what you did?

To prepare new students for the mathematics education at university level and refresh the knowledge acquired during the upper secondary education.

3. How did you go about doing your work in concrete terms?

Each year during the spring semester, the prep teachers get a couple of lectures in pedagogy and the art of teaching. A week before the actual autumn semester starts, the prep teachers start giving lectures in basic mathematics for the new students at the faculty.

4. What were the main results?

The new students get a crash-course in the mathematics needed to begin university studies. The transition between university studies and upper secondary school becomes smoother and the students feel more welcome. New students get a structured and welcoming introduction by other students to the university environment by other students. A positive side effect is the personal development of the prep teachers that gets a better insight in both the subject of mathematics and in their own learning.

5. Who and roughly how many people have been involved in the activities work in one way or other?

Each year there approximately 30 new prep teachers that each have responsibility of a student group the size of 20 – 50 students.

6. Strategy for possible further implementation.

Further education for the prep-teachers to help the personal development of the older students, many of these students also begin to teach mathematics at ordinary courses at the faculty. The pedagogical training sessions should also involve teaching assistants. Another development possibility is spread the idea into other subject beside mathematics.

7. Advice to others wishing to do something similar.

Involve students and student-organisations in the learning and teaching process, there are many positive side effects. One way to do this is to educate experienced students to become teachers and mentors for new students.

8. **Name/s (department and e-mail) of person/s to contact in case there are questions from colleagues wishing to do something similar**

Fredrik Härlin, Uppsala Union of Engineering and Science students, fredrik.harlin@utn.se

The KrUUt/CrED Follow-up 2012

Report 1. Development initiatives within the prioritised areas (or any other initiative worth highlighting)

Disciplinary domain: Science and Technology

Faculty: Science and Technology

Department: Department of Physics and Astronomy

Project title/developmental activity, example 8:

Supplemental Instruction

1. What did you do?

All students at the bachelor program of Physics are able to take part of a Supplemental Instruction-program (SI). SI is a type of mentorship-program that uses experienced students to guide groups of younger students in discussions and problem solving activities without answering direct questions.

2. Why did you choose to do what you did?

To incorporate students to take more responsibility for own and other students' learning. But also because the activity is shown to increase retention amongst students and at the same time being cost effective. All involved parts experience a personal development that is not possible within traditional educational methods, teachers leading the activity, students that are leaders and students taking part of the program all broaden their view on education and develop different useful generic skills.

3. How did you go about doing your work in concrete terms?

Teachers leading the activity have gone through a SI supervisor training that makes them certified to lead the activity and train students to become SI-leaders. The SI-leader training is given to a chosen group of second year students each year. After the SI-leader training the leaders use their training to plan, lead and evaluate SI-sessions with an own group of younger students. Evaluation sessions are continuously occurring during the course for supervisors to be able to give feedback and for leaders to exchange experiences amongst each other.

4. What were the main results?

Students who attend SI sessions statistically earn better grades and SI is shown to increase retention. Students that take part of the activity learns to freely discuss problems, express themselves orally within the subject and they get a deeper understanding of the subject from the different aspects within the group. The leaders develop unique generic skills from planning, leading and evaluating sessions. Generic skills that are useful in all parts of the working life.

5. Who and roughly how many people have been involved in the activities work in one way or other?

Two to three department employees have been involved in developing and leading the activity at the department. Each year 5-10 students are educated to become SI-leaders and the activity engage between 10-30 students at each physics course given within the bachelor program during the first two years.

6. Strategy for possible further implementation.

There has to be a continuous possibility for teachers at the university to attend SI supervisor training courses. It is important that the first step of implementation is taken at department level by engaged teachers and students. But there also has to be some kind of coordination and support at faculty and/or disciplinary domain level to enable and encourage initiatives.

7. **Advice to others wishing to do something similar.**

The most important ingredient in a successful SI activity is engaged supervisors and leaders. If you are interested there are several similar activities through the entire university that are willing to contribute with their experience in a start-up phase.

8. **Name/s (department and e-mail) of person/s to contact in case there are questions from colleagues wishing to do something similar**

Olof Karis, department of physics and astronomy, olof.karis@physics.uu.se
Håkan Rensmo, department of physics and astronomy, hakan.rensmo@physics.uu.se

The KrUUt/CrED Follow-up 2012

Report 1. Development initiatives within the prioritised areas (or any other initiative worth highlighting)

Disciplinary domain: Science and technology

Faculty: Science and technology

Project title/developmental activity, example 11:

Introduction of first-year students

1. What did you do?

The faculty of Science and technology has for a long time strived to make the first year of study a positive experience for all students. These initiatives have significantly improved during recent years through a number of reasons, such as improved cooperation between involved parties, strengthened research foundation for activities and increased exchange of good practice.

2. Why did you choose to do what you did?

Extensive research underlines the importance of the first year of study. This critical period provide much of the foundation for future student success. There are numerous examples of activities aimed at improving the first year experience. Most programmes in Science and technology now have introductory courses during the first year that provide a bigger picture of the programme studies. Students involved in teaching on preparatory courses are provided with additional training. Programme start-ups have been redesign. Most elaborate of these initiatives, so far, is the introduction for the bridging-year at the faculty.
Many of these initiatives are founded on a solid body of research about successful practice, especially regarding academic integration. This is discussed in more detail (and in swedish) in Andersson & Andersson Chronholm (2012) *Academic integration - How can it be done?* in an upcoming volume from Uppsala University.

3. How did you go about doing your work in concrete terms?

There are a number of elements that build a successful introduction. The following list shows the most important ones from the introduction programme at the bridging-year. These, and other activities, can often be found to varying extent at other programmes.
- Meeting and greeting each new student individually.
- Touring relevant university environments.
- Explaining the university culture
- Discussing views about knowledge and learning as well as goals with studies.
- Practical training in study skills.
- Welcoming activities arranged in collaboration by faculty and student union.
- Introductory course providing a holistic view of the programme.
- Introductions about learning and examination methods at the university.
- Practical group work about university organisation and culture.

4. **What were the main results?**

The first semester drop-outs on the bridging year decrease by two-thirds compared to previous numbers after starting the new introduction activities. Students on many programmes testify about the importance of parts of their introductory activities in questionnaires and interviews.

5. **Who and roughly how many people have been involved in the activities work in one way or other?**

Almost a thousand students have passed through the improved introduction activities at the bridging year. Many thousands of students have participated in other introduction activities. Large numbers of senor students, teachers and other university staff participate and contribute every year.

6. **Strategy for possible further implementation.**

Improved collaboration and exchange of ideas will always contribute to further implementation. There might also be cause for more coordinated efforts. Currently some good examples spread quicker outside our university than within.

7. **Advice to others wishing to do something similar.**

There are many good reviews on successful practice for student introduction. The area is also very well researched. Take the time to read up on what has been done before. Previous work, at our own and other universities, provide a good foundation for building successful introduction practices.

8. **Name/s (department and e-mail) of person/s to contact in case there are questions from colleagues wishing to do something similar**

Staffan Andersson (staffan.andersson@physics.uu.se)