

## The Emergence of an Academic Support Centre

PAPER FOR THE CONFERENCE *CREATING KNOWLEDGE IV*

### **Abstract**

In this paper we will present some of the main findings of a research project carried out at the department of teacher education at Stord/Haugesund University College (SHUC), 2004-2005. The use of teaching methods requiring active student participation, process oriented assessment and the use of ICT has been three of the main focus areas in all levels of education in Norway for the last 6 years. These three initiatives were finally formalised by the Norwegian government through a large reform in 2003 called The Quality Reform. In order to meet the challenges of this reform SHUC started a process of developing an academic support centre for both students and staff. The college has a socio-cultural (Säljö 2001, Wertsch 1998) approach to teaching, learning and organization of the studies. All important for how the learning environment and therefore also the academic support centre was developed. The first practical manifestation of the academic support centre emerged in the autumn of 2004 with the establishment of a technical ICT-helpdesk. The service was located in the new and modernised library. The results presented in this paper relate to how this ICT-helpdesk developed into a service that corresponded not only to technical, but also pedagogical and subject oriented needs of students and staff. We will also comment on how the learning activities had an affect on how the ICT-Helpdesk evolved.

### **Background and context**

Over the last 10 years the number of students within higher education in Norway has increased by over 70%. We see the same tendency all over Europe. This affects the whole educational system and gives us all the great challenge of managing to give all these students the support, guidance and tutoring they are entitled to. Additionally, the political demands on the education system are high. It manifests itself through the many reforms and evaluations especially over the last 6 years.

Higher education in Norway has recently undergone a major reform, called 'the Quality Reform'(Stortinget . Kirke-, utdannings- og forskningskomiteen 2001) (QR), which forms the background of the changes in how learning activities are organized. QR can only be understood in light of the Bologna Declaration, which objective can be specified as:

- a common frame of reference for comparing diplomas from all the European countries
- an alignment of programs at undergraduate, graduate and postgraduate level: 3 year Bachelor + 2 year Master, followed by 3 year PhD
- implementation of the European Credit Transfer System (ECTS) <sup>1</sup>

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<sup>1</sup> The European Credit Transfer System (ECTS) is the EU system for transfer of study credits and grades between countries. The system is meant to supplement, not replace national systems, and plays an important role in creating mobilization between European institutions and create a European education area: ([http://www.europa.eu.int/comm/education/programmes/socrates/ects\\_en.html](http://www.europa.eu.int/comm/education/programmes/socrates/ects_en.html)).

- quality assurance systems
- student and teacher mobility

QR<sup>2</sup> was highly influenced by the internationalization of the higher education sector in general and the Bologna Declaration in particular. It is comprehensive and represents an attempt to achieve a higher degree of efficiency through devolution of authority to the higher education institutions, the provision of stronger leadership, increased emphasis on internationalisation and the formation of an agency for quality assurance and accreditation.

The new study structure represents a radical break with many of the traditions in Norwegian higher education. It affects both structure and length of undergraduate and graduate studies, our assessment system, teaching, supervision and student learning.

The pedagogical expectations of the reform were clearly formulated in the official documents (Stortinget . Kirke-, utdannings- og forskningskomiteen 2001), and can be briefly summarized as follows: 1) more use of student active teaching methods, 2) closer follow-up of each student and regular feedback on papers, 3) closer connection between teaching and assessment, 4) more emphasis on formative assessment and alternatives to traditional exams, for instance portfolio assessment, 5) increased use of ICT.

Educational institutions also have to make agreements or contracts with students concerning courses, clearly outlining the rights and responsibilities of the institution and the student in relation to each other. These measures are clearly in line with international trends in higher education (Engelsen, Dysthe & Lima 2006).

To meet these challenges Stord/Haugesund University Collage especially focused on student-active teaching methods, process oriented assessment and the use of ICT within their study programs. The research project described in this article was (Sjo 2005) focusing on the development of the new *ICT helpdesk* during its first year in operation. The original idea behind the ICT-Helpdesk was to support students and staffs in technical matters such as connecting to the wireless network, provide courses in the use of various applications and audio visual equipment and designing net resources. Within these areas the students had previously received little or no support. Teachers were provided with some support but far from the amount needed. Now everyone knew where to go and whom to ask if they needed technical support. The ICT-Helpdesk also administrated the lending service of lap-tops, digital photo and video cameras, equipment to record sounds, web cameras, scanners and other technical equipment. This service was earlier distributed amongst the different departments, and was difficult to manage. In short; these changes could be considered as the first step towards a fully developed academic support centre.

The staff of supervisors in the helpdesk was all master students in *ICT in Learning* and thus already educated as teachers. Their main approach to the different challenges in the helpdesk came from a pedagogical point of view. The consequence of this will be explained as one of two main success criteria for the whole academic support centre later in this paper. The result of the cooperation between the helpdesk and the teachers at the first year of teacher education is the other topic we will discuss.

All the teachers involved in the first year of teacher education were organised in a team. This team also included two students and one member of the ICT-Helpdesk staff. Within the team all the discussions and decisions concerning the first year of teacher education were taken. How are we going to assess the students? What kind of assignments are we going to give them? When are we going to hand out which assignment? How are we to

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<sup>2</sup> QR was formally introduced through Stortingsmelding (Parliament Proposition) 27/2001,

collaborate with the in-service institutions? This was amongst the questions discussed in the meetings. There was a close collaboration between the different participants in the learning activity.

The research question of the study was divided in two

1. How would the learning activities influence and affect the ICT-Helpdesk and vice versa?
2. How could the ICT-Helpdesk evolve to meet the technical and pedagogical as well as subject related challenges amongst the students and teachers in their learning activities?

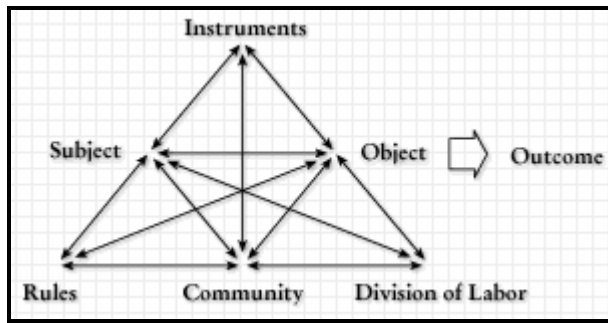
## ***Methods in use***

The research design was founded in a qualitative tradition, and the data were mainly collected through the methods of participatory observation, qualitative research interviews (Kvale 1997), analysis of different minutes, reports and other kinds of documents. As participants in the activities investigated, we got an inside look at the activity (Wadel 1991). We were trusted by both students and teachers and they shared their successes and failures with us as long as we participated as equals. Our experience corresponds with what Atkinson and Hammersley (Atkinson, Hammersley 1996) refers to as “the importance of the door keepers”. We established contact with people that had access to the research field and they introduced us to the activities we wanted to study. The drawback of this method of research is the researcher’s tendency to get narrow minded and the risk that the researcher loses the overview. There is also a chance that the researcher gets so involved in the observed activity as a subject, that he or she become less aware of a possible negative development in the activities examined. To counteract this, the researchers involved regularly discussed these drawbacks.

The intention of the study was not to generalise the findings as representative for all other similar projects. This was a case study at SHUC and the findings can identify some success factors present in this specific study-context. We also think that the findings can be of interest for others as they might show some alternative ways of organizing academic support for students.

## ***Theoretical platform***

In the analysis we chose activity theory as proposed by Yrjö Engeström (1987 & 1998). Making use of this theory has helped us organize the different elements of the activities in relation to each other, making it easier to find out what moves, influences and alters an activity. In our case: the learning activity that appeared in relation to the ICT-helpdesk. According to this theory the smallest unit for analysis is an activity and this is illustrated in the activity-system shown in fig.1. The figure shows six different elements that regulate and affect the activity, and one of the underlying assumptions is that all human activity is object-oriented. The main strength of this theoretical approach is that as a researcher you have to take into consideration all the factors that have influence on the activities. In order to analyse what went on in the students learning activity related to the helpdesk we therefore had to define the six elements in the activity-system.



We placed the student or the student group as the subject in the activity and his, hers or their learning as the object. Then we started looking for what instruments or tools they used as support for learning. Examples on what tools that we identified were books, computers, the internet, online discussions, tutoring and more. Teachers and other supervisors supporting the learning activities in different ways were also defined as tools, as was the ICT-Helpdesk. In our analysis on what rules were regulating the learning activities, we identified different formal laws. We were also able to identify influence from both the curriculum, and from decisions based on conclusions from the teacher team meetings. Finally we looked at what kind of community the activity related to and how the participants divided the work.

Student-active teaching methods, process oriented assessment and the use of ICT represents major pedagogical changes and implies that teachers must shift focus from their own teaching to the students' learning. The activity theory was a good instrument to use in order to uncover some of the mechanisms that came into force at the institution during the process towards changed student- and teacher roles. By employing activity theory the learning activity became placed in a perspective that incorporated both the student's individual and collective interaction with learning tasks and different tools, as well as to the rules and the division of labour that characterized the activities.

### ***The case: from ICT-Helpdesk to Academic Support***

The ICT-Helpdesk was meant to be in function from the start of the autumn semester 2004. The first six weeks was a busy period for the staff. All registration and almost all the information the students needed for their courses were only available online at SHUCs web based learning management system (LMS). As a consequence the first fourteen days were mainly dominated by technical issues and questions.

Many students needed a lot of 'hand holding' the first time they logged on to the computer network in order to register and get the necessary information. That was expected. What was rather unexpected was that so many of the senior students also needed a lot of support. One example of this is shown by the following field note.

**Student:** Are you (helpdesk staff) busy?

**Helpdesk staff:** No. Is there any thing I can help you with?

**Student:** Yes. I am so terribly bad with computers and now I have to hand in this assignment on the LMS. I have always been allowed to hand in my papers handwritten. I get physically sick around these machines, but my teacher this year won't accept anything handwritten. I don't know what to do.

**Helpdesk staff:** Ok, but of course we can help you. It is not so many students here this late. You can sit down by this machine and do your typing here. I will sit at my desk

over there and if you get in any trouble with the machine I will come right over. We could start right away if you like?

**Student:** Oh could I really? That would be wonderful.

(Field note September 2004)

This student was starting her fifth semester at the teacher education and the lack of digital literacy was significant. This was a typically challenge for ICT-Helpdesk to meet. One of the things this example shows is how difficult it was to concentrate on barely technical support. The question asked in the research project was how the ICT-Helpdesk could evolve to meet technical and pedagogical as well as subject related challenges amongst the students and teachers in their learning activities. When professional teachers with competence within pedagogy, pedagogical use of ICT and knowledge within information literacy they met the students on all these fields. This combination of competence with the staff was crucial. The student in this example was in need of someone to patiently sit down with her and to help her gain sufficient confidence in order to use digital tools. The helpdesk staff knew how important it was to provide guiding and 'hand holding' to the student that called up for help. This situation is an example of what Vygotskij (Vygotskij, Cole 1978) calls "the zone of proximal development". This zone describes the zone between what the learners can manage all by themselves and what they can manage in collaboration with "the more competent other", which could be a peer student or a teacher. According to Vygotskij this is briefly how learning happens. In this case the helpdesk staff was aware of this and took the role as supervisors instead of actually doing the work for the student. In this way the student developed her own skills and competence on ICT while working with the current assignment.

As the first two weeks went by, the staff at the helpdesk also held several introduction courses in cooperation with subject teachers on how to navigate in and use the LMS. This useful collaborative relationship between teachers and the helpdesk staff was established through the team work they both participated in.

The supervisor from the helpdesk could participate in these discussions and suggest solutions or alternatives on how to organize and incorporate the ICT-training into the learning activities. They saw the students when they were working with their assignments and answered questions related to all the different assignments. Therefore they also gained a lot of knowledge on what obstacles the students met in their learning activity. The helpdesk staff was informed about the assignments and the purpose of it in advance and was able to prepare different courses or workshops on needed topics. This could for instance be image processing, video editing, sound recording, online discussion ethics, internet exposure and protection of privacy in the information society. These courses were often developed in cooperation with the subject teachers or on the request of the students themselves. Courses on different applications were also popular, such as word processing, Excel, Internet search, basic Photoshop, Power point. The rate of popularity of the different courses were to some degree determined by the challenges of the different assignments

The helpdesk staff caught many of the potential learning situations through questions from the students that were initially technical. The following situation describes how the staff daily picked up potential learning situations hidden in what the students understood as barely practical questions.

A student group entered the ICT-Helpdesk to do the final editing on an assignment before they handed it in through the LMS. They had heard that they could automatically generate a table of content in Word and wanted the helpdesk staff to

show them how to do this. The staff member sits down with the group and starts showing them how to do it. When he looks at the text made by the students he recognises that it lacks consistence, structure and logical order. The chapters and paragraphs are all in a mess. He asks the students if it is ok for them that he gives some guiding on the structure of the assignments and they accept. Together they print out all of the text, every chapter on a blank sheet. They use a big table and the students are asked to discuss within the group how the text should be put together again logically and why. They are also asked to think about the problems they were meant to discuss in the text. Have they answered it or have they written about something else? Do they get to show how much they know about this topic through the text or do they need to write some more? After a few hours the students are finished and want the helpdesk member to look at it one more time. They have discussed the text, organised it, and written some new passages and paragraphs.

The student's extra effort on the assignment had improved it. By asking questions the way the ICT-helpdesk assistant did, he pushed the students to take a meta perspective on their own learning process and to reorganise and reconstruct their knowledge. This kind of tutoring was far from the original intention behind the establishment of the helpdesk, but again, this must be understood as a consequence of the education of the staff and the collaboration with the subject teachers

### ***Analysis of the activity***

After the first semester one of the subject teachers was interviewed about the quality of the student assignments. She was encouraged to elaborate on the technical skills of the students.

Because the ICT-Helpdesk was available for the students, everyone has handed in the assignments digitally. (...) Many of the assignments had images and pictures and one even had a video clip in it. As teachers we could never have been able to help the students with this. It steals too much time from subject teaching. But the (ICT) courses this autumn was tailored to fit in with the students' assignments and that made it so successful. (...) The students found the courses useful for their work and assessment.

(Interview with subject teacher after first semester)

This was said by one of the subject teachers that took full advantage of the ICT-Helpdesk for herself and for her students. The assignments she had been giving throughout the semester were developed through a collaborative process, involving all the members of the teacher-team and the ICT-assistant.

The quotation describes many of the new aspects in the student's activity after the introduction of the QR and the establishment of the ICT-Helpdesk. The assessment methods had changed towards a more process and portfolio oriented form, hence the students had to hand in new assignments during the semester. The overall object of the activity was learning through writing assignments. In order to give the students the best conditions to create and build their knowledge we analysed the activities and tried to locate where the obstacles appeared. When this teacher refers to ICT-Helpdesk at the beginning of the quotation she talks about it as a new tool in her own and the students activities. We examined the students' activity where the assignment was the objective which was meant to be transformed into an outcome. The outcome would hopefully be higher knowledge around the actual topic. To

solve the assignment the student used several of the tools available in the ICT-Helpdesk. During the activities it appeared to be necessary with more than mere technical support. The students also needed guiding and pedagogical support along with subject related tutoring. If the tools available for the students were limited to technical ones, the outcome would be affected negatively. When the ICT-Helpdesk and the subject teachers managed to collaborate on how to support the student with the tools they needed for the activity, the outcome became qualitatively different.

In the quotation the ICT-helpdesk is also described as part of the community the activity relates to, and as an element in the division of labour. At the start of the semester it was difficult for the student to separate ICT staff from subject teachers. Both subject teachers and ICT staff was part of the community of the students learning activities, and because of the close collaboration the contradictions within the community were not very dominant. When it came to the division of labour some teachers felt relieved when the ICT-Helpdesk was established. This is also commented in the quotation. She points out the fact that to become a literate user of ICT you have to use some amount of time. She already feels the pressure on her resources to subject teaching and is sceptical to the use of subject recourses on ICT training. On this theme the activity system had larger contradictions. If all of the ICT training was to be left with the helpdesk the result could easily have been separation of ICT and subject, not integration and mutual benefits. Earlier research on this issue (Engelsen. In progress) shows that ICT has to be legitimated within the subject teaching in order to be understood as useful. The division of labour was a source of constant discussions during the whole research period. Many interesting questions were raised and debated here. As the collaboration between the subject teachers and the ICT-Helpdesk worked so well the students were not affected negatively by these contradictions. Contradictions are by nature a moving force and make the activity constantly change and evolve.

The rules that regulated the students activity was given by several different authorities. We identified different formal laws and national curriculum as part of the rules regulating the activities, but in this paper we will focus at the decisions based on conclusions drawn from the teacher team meetings. Here we saw that the different assessment methods had a huge affect on how the activity turned out. If the students were going to be assessed through an eight hour written school exam, the student had totally different needs in terms of tools and help from the ICT-Helpdesk than the students with portfolio assessment. Thus, assessment became directive rules that to a great extent regulated the activities. This conclusion led to discussions related to different assessment methods. When the teachers wanted the students to construct their own knowledge, to reflect over it and to understand and evaluate it, the assessment method had to reflect the same working method.

The ICT-Helpdesk was able to provide support to this kind of assessment and way of learning. During its first year in operation the helpdesk had evolved from a technical service to a wider support centre. The staff at the helpdesk still provided technical support, but they also concentrated on the pedagogical issues concerning the student problems. They guided the students on their writing; they discussed assignments with both subject teachers and students, and in this way supported the students in their struggles for knowledge and understanding. The ICT-Helpdesk had evolved into something not intended, but needed. It was primarily the student's needs in relation to the learning activity they participated in that moulded the ICT-Helpdesk, a service emerging to become an academic support centre.

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