

# **ILET Exchange Visit at Iowa State University**

Tom Nyvang (nyvang@hum.aau.dk)  
Human Centered Informatics  
Aalborg University

## ***Introduction***

In this report I want to give a brief overview of my ILET experience at Iowa State University (ISU) in Ames. The report is divided in four main sections: My purpose, Studying at ISU, Living in Ames and Reflection on purpose and experience. It is my intent to describe and discuss my experience so that both people that I met I Iowa and others with an interest in ILET will get an impression of the learning quality of my stay.

## ***Purpose of visit at Iowa State Center for Technology in Learning and Teaching***

### **The CTLT Community**

CTLT is a community that combines research and practice in the field of ICT in education and thus a valuable source of inspiration for my Ph.D. project. After having met with Niki Davis, co-director CTLT, during her visit in Denmark I was even more convinced that CTLT is of great relevance in my own work and research. Therefore I hoped to get the opportunity to take part in and learn from daily life and interaction at CTLT during a stay there. I expected that the possibility to discuss research related issues with other Ph.D. students and ISU staff would help to improve my own Ph.D. project. I also hoped to be able to bring something to the community by taking part in daily interaction and presenting my own research and experience in the area of ICT in Learning and Teaching.

I planned to work on theoretical and analytical issues in relation to implementation of ICT in higher education with the primary focus on analysis of data during my stay.

### **International Leadership for Educational Technology (ILET)**

CTLT is also interesting to me as partner in the ILET project. I am aiming for the ILET specialization in my Ph.D. and have earlier taken part in ILET activities and have also taken part in the preparation of an upcoming ILET Ph.D. course at Aalborg University. A visit at CTLT will supplement my earlier experiences in the area of intercultural collaboration and strengthen that aspect of my ILET specialization remarkably.

### **Co-write Paper on Aspects of Implementation of ICT in Higher Education**

To produce a tangible result of the visit I hoped to get the opportunity to co-write a paper with either someone from CTLT or another visiting Ph.D. student.

### ***Collaborating in ISU***

Immediately after coming to ISU I was invited to join different academic activities: A weekly seminar, a development project designing an electronic portfolio (eDoc) and a project collecting and disseminating good practice regarding ICT in local high schools. Later I also joined the annual

ILET on-line transatlantic reading group. In the following sub-sections I reflect on each of these different modes of collaboration.

Before moving on to the formal activities I want to mention one of the informal, but still important ways of interaction and learning. I shared an office with other Ph.D. students and we shared some of our experiences and concerns related to being Ph.D. students and living in Ames. To me this was important because I gained insight in the culture I was in and helped me find answer to all the small daily questions regarding life at ISU.

## **Technology Seminar**

The technology seminar<sup>1</sup> is part of the formal course structure. It draws on local professors, professors from other departments in- and outside ISU and participant contributions. It thus also allowed the visiting ILET scholars to present and discuss their research in a scholarly community.

The seminar was my opportunity to enter the greater CTLT community of Ph.D. students in Curriculum & Instructional Technology (CIT). Early on it gave me the opportunity to present my own research and over the course of the semester it introduced me to the knowledge and to a broad range of interests and concerns of the community. The presentation of my own research resulted in valuable comments that raised my awareness about some of the differences between ISU and Aalborg University (AAU). It became clear that activity theory as I use is less used among the Ph.D. students in the CTLT community, but not unknown.

The seminar did not in itself contain a lot of close collaboration, but it promoted collaboration by making me visible to a lot of people and making a lot of people visible to me.

## **CIT eDoc Project**

The CIT eDoc project is part of a larger ISU initiative that aims at developing digital portfolios for programmes across the university. Within CIT the eDoc is supposed to help Ph.D. students to create annual portfolios that are required within their program:

*Ph.D. students enrolled in the Curriculum & Instructional Technology program are required to create their professional portfolio each year starting with a simple portfolio for their first annual review. This portfolio is a professional record that represents and documents students' learning and growth throughout their program of study.*<sup>2</sup>

I was invited to join the project when I arrived in Iowa. The eDoc project had been going on for some time and the design phase was just about to begin. The design was to a large extent handed over to the primary future users; the Ph.D. students. This resulted in a highly collaborative process with weekly meetings, on-line collaboration and iterative development of mock-ups and prototypes that finally lead to a fully operational first version of the CIT eDoc.

Participation in the eDoc project was valuable to me for 3 reasons: 1. It was real experience in design of educational technology, 2. Digital portfolio is an area of educational technology in growth that is relevant to Aalborg University too, and 3. It was highly collaborative.

---

<sup>1</sup> <http://www.educ2.iastate.edu/ci/classes/615B/fall03.htm>

<sup>2</sup> Program criteria section of CIT eDoc,

It is my impression that all members of the design team had something to give to the project and that no one could have done a design of equal quality on their own. This promoted a genuine collaboration in which it is my impression that all participants both went through a learning process and contributed to the final CIT eDoc product. In my case the learning process mainly had to do with something that is difficult to describe here, namely being part of a design project in a foreign university. The CIT perspectives on how and why a portfolio is used also taught me something about the research, practice and culture of CIT, CTLT and ISU. The idea about constructivist learning is not new to me since this paradigm is well known in Denmark, but it was refreshing to see a new way of integrating it in practice.

## **Virtual High School**

The VHS project collects and disseminates good practice in the use of ICT in high schools in Iowa. This project contributed to my experience in yet another way since it brought me into contact with experienced high school teachers and more CTLT faculty than in the eDoc project. Due to the focus of the project it opened my eyes to other levels of the U.S. educational system than the universities.

It is fair to say that I did not spend as much time on the VHS project as I did on the other activities mentioned here. I do not think it had anything to do with lack of interest in the subject area, but at the time I guess I found that I had better possibilities to contribute actively to some of the other activities discussed here. In hindsight I suspect I prefer to take part in projects in which I can both learn something (I did so in the VHS project) and contribute actively (I did that to a lesser extent).

## **ILET Reading Group**

The annual ILET reading group was part of my ILET experience during my stay in Iowa and is thus included here as well.

Looking at the readings and discussions at least one thing of major importance to comes to mind: Collaborative learning in communities of practice seems a promising way to enhance learning even though it may be implemented differently in different cultures and domains. It also seems important to the development of new forms of lifelong learning that a complex society calls for that learning communities can be formed across existing educational and professional boundaries. It is also important that we are not looking at one way of collaborative learning emerging as the best one, sure we see a number of good ones emerging, but that's different from one colonizing the domain of teaching and learning in higher education.

In relation to my scholarship this indicates that a theory unfolding the challenges of implementation of ICT in higher education should 1) focus on understanding changes that lead to collaborative learning in communities and 2) when envisioning implementation as a learning process (and the complexity of the process suggests we should do so) we should consider orchestrating the implementation as a collaborative learning process. This would at best lead to a process that are both democratic and the most effective because it has the potential to include faculty, students and other parties that are necessary to design and run collaborative learning environments. The eDoc project links very well with this discussion because it to a large extent represent a way of integrating ICT in an educational practice through a collaborative effort.

If staying in Iowa was a chance to get away from home and meet new people and perspectives the reading group was a chance to get *away from away from home*. This way I became aware that participation in the reading group even though was on-line was not regardless of where I lived

during the time span of the readings and discussions. It somehow meant something that I sat in ISU, it is however difficult to document what exactly it meant, but one thing comes to mind here. My stay at ISU had increased my knowledge of other cultures and practices then the one I work within in Denmark and this knowledge influenced my perception of the reading group.

## **Joint Paper**

I managed to find an ISU Ph.D. student, Natalie Johnson, that had interests similar to my own and we had no trouble formulating the purpose of a joint research paper. In the final version the first part of the abstract sounds like this (Nyvang and Johnson 2004):

*The purpose of this paper is to show how Activity Theory Framework (ATF) was used for understanding the challenges, contradictions, and turbulences that are inevitable when institutions of higher education (IHEs) as learning organizations integrate ICT to change teaching and learning practices, demonstrated through two cases. The first case is situated in a Danish university, whereas the second case is in a mid-western university in the U.S.A. In each case, qualitative methodology was used allowing for a deeper generalized understanding of the challenges, contradictions, and turbulences that accompanies integration of ICT.*

I have co-written research papers before and cannot say that this time was different from what I have experienced earlier. In my somewhat limited experience it is always a challenge to combine research interests of two people no matter if they come from the same department, from different universities in the same country (in this case Denmark) or from different countries. On the other hand multiple theoretical perspectives or cases and of course the fact that a collaborative effort normally increases reflection and the quality of the paper.

In this case the joint writing process taught me at least two things. The theoretical perspective I build my own Ph.D. thesis on (activity theory) seems to be useful when it comes to analyse and explain cases different from, but still somewhat similar to my own. The other thing I learned came specifically from the case Natalie brought into the analyses. Her case much more clear than my own underlined the importance of leadership in integration of ICT in higher education. In the case from a Danish university I analyse leadership is less visible, but writing this paper reminded me how important leadership is to the sustainability of ICT integration in my case too. In more general perspective it also reminded me of the leadership element in ILET and stressed the importance of it.

The paper we wrote was accepted for the SITE 2004 conference in Atlanta and I had the experience of going there and presenting the paper added to my ILET experience. Participating in the SITE conference convinced me that the idea of splitting the ILET abroad stay in two shorter stays also has the potential of being a powerful learning experience. At least it was my experience at SITE that I very fast fell into a pattern of collaboration with colleagues from ISU that was grounded when I was at ISU. On the other hand I think that the duration of my stay at ISU is inversely proportional with the time it took to find back into the same pattern of collaboration again at the conference. I thus cannot say that two stays abroad of e.g. four weeks each would be an equal success.

## **Living in Ames Iowa**

During my stay in Ames I shared a two-bedroom apartment in the University Village. It was in walking distance from the university and had good bus connections to e.g. shopping.

I took the opportunity to use some of the ISU sport facilities (primarily for swimming) both for the exercise and to experience some of the sports culture in U.S. universities. The sports culture is very different in Danish universities. In our culture sports are placed outside the universities and handled by private non-profit organisations with financial support from public authorities (we do also have professional sports that are in nature commercial, but that is a different thing).

When I lived in Ames I often wondered whether I would ever meet any of the truly locals that had lived in Ames or even Iowa most of their lives. As it turned out I spent most of my time talking to students or faculty that had lived in Ames a few years. They had either come from other states in the U.S.A. or from other countries all over the world. In a city with a very high percentage of its inhabitants working or studying in the university this is probably a very common experience.

I found Ames and ISU in particular a very friendly community.

### ***Reflection on purpose and experience***

My stay at ISU fully met the goals I had set up when I was planning it. As I have discussed here I managed to get a sense of a culture different from my own. In the process I took part in production of tangible products, namely a research paper (Nyvang and Johnson 2004) and a roundtable paper for the SITE conference (Hagenson, Nilakanta et al. 2004), and the eDoc portfolio. I have to stress that these products all were created in a collaborative effort, but nevertheless I feel that I played a role. In the collaborative process the intercultural aspect was present, but at times seldom in focus. This could be a sign that we were able to focus on the task at hand and make the intercultural element in the collaboration a driving force instead of a barrier.

In Etienne Wenger's words (Wenger 1999) I was part of a community of practice in which learning is characterized by the duality of participation and reification (in a broad sense). In that respect it is fair to say that I was learning in a community of practice. Both participation and reification took different forms in the activities discussed above. In retrospect I think these different modes of participation and reification complemented each other. In some cases I was deeply embedded in collaboration on a specific subject (eDoc, joint papers) and in other cases I was engaged in a looser collaboration (technology seminar) in a larger community. In combination these modes of collaboration gave me both a broad overview of the place I was visiting and the experience of close collaboration on specific tasks of particular interest to me.

It is my impression that I have met the relevant overall ILET objectives with my stay at ISU<sup>3</sup>. I have improved my knowledge of the U.S.A. and its educational system and insight in the academic culture of ISU. In the subject area of educational technology I have also learned something from collaborating in a community different from the one I know in Denmark. I found the differences between the cultures to be small enough to overcome and big enough to provoke learning on my part.

The ILET experience has also had some spin offs in my case. Even though ILET aims at making students cross the Atlantic it has also improved my network in Europe. I could thus help a group of students from Aalborg that wanted to visit Barcelona in Spain to find relevant contacts in the ILET partner university in Barcelona. I hope to be able to help my new ILET network in similar ways in the future. At first glance this may seem relatively insignificant, but today research and (higher)

---

<sup>3</sup> [http://web2.iastate.edu/%7Eilet/public\\_files/Pdf\\_publications/EC-US-overview%2Bobjectives.pdf](http://web2.iastate.edu/%7Eilet/public_files/Pdf_publications/EC-US-overview%2Bobjectives.pdf)

education are in many ways international. It thus may be very useful to be part of an international community even prior to finishing our Ph.D.'s.

## **References**

Hagenson, L., R. Nilakanta, et al. (2004). ILET: An Intercultural Learning Experience in Educational Technology. SITE 2004, Atlanta, SITE.

Nyvang, T. and N. A. Johnson (2004). Using Activity Theory Framework (ATF) to build an analytic bridge across the Atlantic: Two cases of Information and Communication Technology (ICT) integration. SITE 2004, Atlanta, SITE.

Wenger, E. (1999). Communities of practice - learning, meaning and identity. Cambridge, Cambridge University Press.