NATIONAL SURVEY ON THE USE OF ICT IN HIGHER EDUCATION IN NORWAY

Every third year NOU conduct a national survey on the use of ICT in Higher Education in Norway. The first time was in 2008 with a follow up in 2011. The survey documents the status of ICT use and conditions for use, national development and changes since the previous surveys, students' perception of the value and progress in using technology, academic staff and administrators' assessment of opportunities and justifications for the use of technology and conditions that promote the use of ICT. The survey includes all universities and public/government and private colleges with more than 500 students. All academic fields are represented.

Who are we?
Norway Opening Universities (NOU) is a national advisory agency under the Ministry of Education and Research. Our focus is the use of ICT and we work, among other things, to:
- increase the access and quality of higher education
- encourage flexibility in education
- stimulate collaboration between educational institutes and the working place
- share experience, effective educational models and digital learning resources
- provide knowledge on a national level for the development of strategies and plans of action

What can the survey tell us about the status on the use of ICT the last three years?
First of all the study tells us that incorporating technology in the work of the academic staff and implementing it in higher education takes time. Although 6 out of 10 institutions have a strategy that include the use of ICT in teaching and about 7 out of 10 institutions has development projects or measures for the use of ICT in teaching, there is little evolvement since the 2011 study. As for MOOCs - only 2 out of 10 institutions includes this kind of education as part of their strategy. Administrators agree that they have a central role when it comes to implementing the use of technology in teaching but the findings indicate that there is a large opportunity in being a more visible and active facilitator.

So what about the academic staff? How do they participate in the implementation process? As it turns out, most administrators regard the academic staff as the driving force behind the increasing use of ICT in education. The teachers however are not as positive as the administrators in this matter, and feel they are less involved in the decision making process than the administrators think they are. The study indicates that highly committed teachers seems to be the driving force behind the increasing use of technology in higher education in Norway. Still, technology is just a supplement in teaching practice. The majority of faculty conducts traditional lectures in plenary on campus. Faculty want to see technology work and they want evidence that this is making an impact on student learning before they take it into use.

In addition to the more strategic perspective the study also contains questions about infrastructure, students and staffs competence in the use of ICT and how they use technology both in private and teaching. The preliminary findings shows that the infrastructure at the universities and colleges are good, but not without improvements. In addition, the students have a lot of mobile equipment - almost everyone has a laptop and a smart phone, but they are not incorporated into teaching. Bring your own device is neither a part of the institutions strategies. The students are also diligent users of social media but only 2 out of 10 teachers makes use of this kind of technology as part of their teaching.

Technology is today pervasive in higher education, but not necessarily for educational purposes. Both students and the academic staff regard themselves as fairly competent ICT users, but 6 out of 10 teachers feel the need to acquire more knowledge of how they can make better use of ICT in their teaching. When it comes to support, the students prefer to be able to go to their teacher for help, and preferably face-to-face communication. The result concurs to the EDUCAUSE ECAR survey 2014 of US undergraduate students. Students also prefer a more flexible teaching environment. Today campus is
the main arena, but every third student now seem to prefer a more individually organized learning environment better suited their personal preferences.

Is potential brought to bear?

- We identify a clear positive connections between
  - varied use among faculty and what they arrange for the students to use
  - and reasons for use and facilitation for students.
- Faculty has great academic freedom and they particularly emphasize academic relevance and variation in the use of digital tools.
- Students use tools in ways the faculty arranges for, as well as initiating their own use when they feel it is appropriate (practical, easy, etc.).
- Students have mobile devices. These seem to be little integrated into instruction and institutions have a small degree of guidelines for use.

50% of faculty support mandatory training in the use of digital tools. It is interesting that so many faculty feel mandatory training is necessary considering the great degree of autonomy faculty enjoys. It may be interpreted that faculty do see the value of high competence in digital tools, and that this should not be up to the individual’s own preferences or left to random initiatives.

The most active and skilled teachers (about 10% of the total population - equivalent to innovators/early adapters) deviate from the total population when it comes to justifications of the use of technology by being considerably more concerned about increased quality (85% vs 46%), learning outcome (83% vs. 41%) and student motivation (79% vs. 32%). The same findings are present in the corresponding population among the students, which also constitutes about 10% of total population. Increased quality (56% vs. 23%) and learning outcome (47% vs. 17%) are the most important motivational factors for adopting ICT.

Overall, the study indicates little trace of systemic change and substantial structural measures essential to adaptation to learning in the 21st Century. The above mentioned results is just some of the findings from our study. The study also include topics such as digital exam, the interaction between students and academic staff, in addition to if and how ICT promotes quality in education. We will also link our findings with international trends in ICT.

References

Biography
Hilde Gaard (born 1972)
Work experience
2012- Adviser, Norway Opening Universities.
Education
1995. BA, Librarian. Library and Information Science, UiT The Arctic University of Norway
2003. BA-courses in pedagogy. Oslo University College
2011. MA-courses in Project Management. BI Norwegian Business School