

Learning by tablet



a project by

Elise Hilland and Kim Åge Ditlefsen

Introduction

This document was created as team work for the course inf5261. The group consists of Kim Åge Ditlefsen and Elise Hilland. For this group project we would like to look at the use of tablets in a learning situation.

We want to look at how the new tablet technology can facilitate learning. How is this technology different from the ordinary computer technology(laptop), and how is it different from the use of pen and paper in a learning situations?

It seems like the digital aspects of introducing a tablet is what they have been focusing on. By digital aspect I mean that they focus on that this is a digital computer device it opens up for more possibilities, like the live surveys in class, presenting video on students tablets. The problem with these studies is that they demand that all students has a tablet device. This is something that is ofcourse simpler for Universities in USA, since they can force the student to pay for this through tuition fees. In Norway we do not have the same means to force students to buy a product for use in class.

So because we can not depend on every body in a course to have a tablet, we want to focus on what affordances the tablet in a note taking capability gives us in class. How is the tablet as a note taking device?

In our daily life as a student there seems to be little focus on how we best are to make notes in lectures and group work. People seem to be using the same thought in note taking on a computer as they did with pen and paper. Usual method for note taking is by using a text editor like word, and some few uses mindmap programs. Both of these is more picked up from the way we have always done it by pen and paper. Instead of seeing what is it with this technology that makes it easier, harder or different from pen and paper.

What is it with a tablet that differentiate it from a computer, and what differentiate it with paper and pen. The felexibility of interface with a tablet compared to a computer makes it more like pen and paper, but you still have the ease of rearrangeing and deleting that you get from a computer.

Research Question

We wish to focus on the use of tablets within a learning situation such as a lecture or group work. In what way can tablets facilitate learning? How can tablets facilitate learning in a different ways than ordinary laptops or pen and paper? We would like to focus on the learning situation and therefore we have chosen to focus on students as a user group. For this project we have chosen to narrow the user group down to students attending inf5261 UiO. (tja, kjenner du noen av de andre som går på INF5261?, kan det ikke bli litt vanskelig å få nok folk til å hjelpe oss fra inf5261. Kanskje vi heller burde begrense det til alle studenter på uio eller no slikt.

We would like to pursue these questions through observing and interviewing students at the university level. Both on how they go about taking notes in class and group work now, and how they see the use of a tablet in will be in note taking. In doing this we hope to get information on how the students feel about tablets in a learning situation. We think this approach will give us rich information into the use of this technology in learning situations to understand the users and their needs.

Our aim is mainly to understand the use situation and to evaluate existing technology. We are not aiming at designing anything as that would be too extensive for this class project.

- We believe our study could contribute as a preliminary research for design suggestions as well and we might want to use simple prototypes or mock-ups.
- We believe that tablets are more similar to the the old note-taking technology, the pen and paper.
- One of our assumption is that by having some restriction on how fast you can type in on a tablet, will affect the information you type.
- We also think that tablets facilitate a better connection between people, through allowing eye-contact. It's easier to hide behind a computer screen.
- We also think that it might be easier to mix writing and drawing when using a computer without a keyboard. In this way tablets facilitates making notes that also consists of mind maps or small drawings.

Another affordance of the tablet is that it slows down the writing speed. This might be a downside by restricting how much information one are able to capture. But we believe it might also sometimes be a benefit having to choose only the most important information. This way one have to choose more carefully what's important enough to note.

While trying to make a questionnaire we found out that the best approach is to first make a qualitative study. We see that many of the questions we want to ask are easier to ask in an interview. And making it a interview prohibits how many subjects we can question. So a qualitative approach to broaden our understanding of how people goes around making notes in lectures and group seminars.

A solution could be to interview four five people in depth to find out some of the way people take notes in lectures and group work. From the information we get from the interview we will be better equipped to make a good questioner for quantitative research. We will also test out the questionnaire on a small sample before we send it out to the broader population at UiO.

Qualitative Research

Interview and a one hour observation of students at a lecture. We will try to create as open ended question as possible. Trying to get the subject to tell us how he goes around making notes. Rather than trying to direct the student with leading questions.

- What do you normally do in an lecture?
- How do you go about remembering things that are talked about in the lecture?
- If taking notes on a laptop?
 - What do you feel is the main reason for taking notes on a laptop?
 - How often do you go back to your notes?
- Have you ever used another electronic device than a laptop to take notes?
- What would be your preferred method of taking notes in class?

These questions are merely guidelines, as the interviewer will discover what questions that fits in each interview.