

**Presentation by Anne Østergaard**

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**<http://fscons.org>**

**“Educating in Freedom - Free access to knowledge and collaboration is the key.”**

**We should not ask:**

**“How can we convince more primary schools to use Free Knowledge based on Free Software in our education systems?”**

**We should ask:**

**“What can we do for Free Libre Software and resources for education to be more attractive, effective, adapted to fit closely to the surroundings of pupils and teachers?” --- Jean Peyratout**

**The reason to use Free Software is to become independent of a single proprietary vendor, to avoid paying high costs for licenses, to be able to use the money for customizing the software to ones specific, individual needs, and to be able to see the code in order to be able to make changes.**

**It is important to have a free choice between many different free software solutions.**

**Service supplier companies can be closer to you, and thus better knowing your business, your needs, as well as your culture. This means that the money stays in the region to the benefit of the local society and economy etc...**

**What is the present status?**

**Case stories:**

**There are many. You are welcome to have a look on previous presentations that I have given to find examples for your inspiration.**

**Here I want to point you to a resent case with a special motivation involved:**

**A different new case story:**

**In recent case stories from Austria, schools are financially motivated by the Austrian Federal Ministry for Education, Arts and Culture.**

**[http://www.osor.eu/case\\_studies/desktop4education-bringing-new-environments-to-austrian-schools](http://www.osor.eu/case_studies/desktop4education-bringing-new-environments-to-austrian-schools)**

**“As of the school year 2009 – 2010, the Ministry is paying every school in Austria €10 for each workstation that uses the Open Office suite instead of Microsoft Office. Contrary to that schools have to pay a € 10 licensing fee for the**

use of Microsoft Office. Therefore the savings of using Open Office instead of Microsoft Office amount to € 20 per workstation, with the ultimate decision on which software to deploy being left with the respective school.

As of 2012 the governmental contracts with Microsoft will expire, and this perhaps will change the status of open source operating systems, such as desktop4education or Linux Advanced, from being marginally used to becoming the main IT systems at Austrian schools. “

### **Change**

“It is necessary to implement a solution slowly. Anyone who thinks a migration is merely a simple software change will come into trouble. Preparing the students, the teachers and the parents to the software migration, by highlighting the benefits and removing the fears, was a very important step prior to the actual software migration. This helped in creating support for the solution and to further diminish resistance for the project: desktop4education and Linux Advanced. “

### **Cooperation**

The time is over for an education system where it is the students who must adapt to the school. The teachers want to follow the development in society and offer a more individually based learning, but in many cases the politicians want something different.

The reason probably mainly being that for the industrial era it was important to foster discipline and order to prepare students for the industry where the workers shall produce a product without being interested in or knowing about the manufacturing process. But these times are over at least for successful industries.

Having said this, it is evident that we must maintain the classic, and basic skills to master our own native language, mathematics as well as one or more foreign languages, at the same time as the creative and innovative skills are being underlined.

### **Barriers for change:**

The largest barrier is the traditional understanding of learning that we have had up till now. This understanding is in the way of using the potential of the new technologies.

What the pupils are learning in their spare time from social media such as Facebook, World of Warcraft etc. is considered by the teachers as something in contrast to what the pupils should learn at school.

When technology impacts us so profoundly as it is the case to day with Facebook, web logs, chat, Skype, virtual communities, and on line worlds, should it not

**influence the schools?**

**The spread of social media among the young generation highlights this dilemma:**

**Surveys from Danish Media Council 2009 show us that up to 80 % of young persons are using the Internet every day. In Denmark 86% of young persons 14-16 years of age has got a profile on the Internet.**

**While all this is going on in the students spare time they are feeling extremely bored during school hours.**

**A survey shows us that 2/3 of the pupils are bored.**

**They consider their own goals as more important than those of their teachers.**

**A study by the Danish Research Center on Education and Advanced Media Materials shows in a report from January 2009 that schools are as bad as it was the case in 1995 when it comes to using ICT in teaching.**

**EVA, the Danish Evaluation Institute has made a study on: The Use of IT at Schools. Published in 2009:**

**At first we thought that it was a matter of getting computers to the schools. We also focused on education for teachers. But it still isn't enough.**

**It is still the black board and the paper that is mostly used, and ICT is used very little in the development of the teaching and learning process. Though some countries are more advanced than others. Canada and Norway are ahead in using the possibilities of the new technologies, that can be accessed from the Internet.**

**On the other hand the leader, Carsten Jessen, DPU, Center for Playware where researchers are developing interactive products with focus on technological learning processes, claims that students should make their own experiences in stead of listening to the teachers telling them every thing.**

**The teachers professional teaching methods will change.**

**The teachers barriers to using ICT is probably for a greater part because this new rationale of learning clashes with the teachers vision of being in control and being the only authority in the class room.**

**Some other potential barriers could be governmental demands to cover and meet a specific curriculum, and being able to measure and control the knowledge of each individual student in each individual subject.**

**In Denmark group exams are not allowed any longer which makes it difficult to**

**motivate pupils to collaborate in groups because they are asked to tell which part of a report has been written by whom. The pupils are often unable to do this as the inspiration could consist of a joint idea, the description, and evaluation of this idea.**

**Collaboration between different professions.**

**Spreading awareness about the collaboration models from Free Software development are important. We should not only focus on the technical solutions.**

**We are moving on from the industrial era to the information and communication society.**

**Our schools today are for a greater part still preparing the students for the industrial era. I imagine teachers as well as students, parents, and politicians wish to prepare students for the knowledge based society where people need to be very flexible in order to navigate their lives to earn a living. This means life long learning as well as adapting to technology tools.**

**My conclusion.**

**What we are faced with now is how technology can support and develop the learning and education process in various subjects.**

**We all learn best from experience, by trying and error, and by copying others that knows the things we would like to know better, than we do.**

**This is why up till now the way we have been learning at school has been artificial to an extent. But it has been our only option.**

**Now the technology offers other possibilities. An example is learning foreign languages. The wide spread use of social media offers a possibility to participate in a living community on the Internet. We can learn other languages by experience pretty much the same way we learned our mother tongue. With evolving speech recognition technologies this will become even more so.**

**Some researchers has experienced that even if the teachers that they collaborated with were positive towards integrating social media in concrete teaching situations they could get afraid to permit this. Their hesitations were due to the freight of being outside their professional area, and outside the curriculum. On the other hand they could see that drawing on unauthorized knowledge sources could as well foster creativity as be barrier breaking.**

**The use of ICT affects the teachers basic vision of what knowledge is, and how it is created: Is knowledge a social constructed communication, which has to be supported on a large scale, - or is it a teacher who standing at the black board**

sends a specific information out to single individuals.

Here we have two completely different understandings of knowledge production, and this rubs off on the teachers understanding of didactic. There is a freight of turning back to an experience based teaching method, which has dominated the reform pedagogy of the 70ties which was considered hippie like. We are simply afraid of loosing our professionalism.

Traditionalists claim that we can not let it up to the pupils to just be on the Internet- then they will automatically learn by themselves. This is a too optimistic view on the human nature.

One can not learn alone. You need to have others giving you resistance in an asymmetric relation. We are not all able to raise our individual level. This view has been supported by researches that show that the same social layers that we find in traditional teaching methods shows up in relation to ICT.

This kind of debate has just started, and it will probably go on for a long time.

But what I will point out as very important is that children gets the experience that they themselves can be creative as well as creators.

Access to free knowledge as well as to free software programs are important to defending freedom of expression, privacy, innovation, consumer rights and creativity on the net.

It will result in possibilities of an enormous mind share worldwide. But it requires a change in our mindset.

We have only seen the beginning of a very interesting, and ongoing process which involves the use of new information and communication technologies as well a growing pool of freely accessible free knowledge.