

Education by Collaboration

How to Get More Free Knowledge into Primary
Schools

by

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Content

1. Where do primary schools use Free Software today?
2. Use of Information and Communication Technologies (ICT) is part of everyday life.
3. How can we convince more primary schools to use Free Knowledge based on Free Software?
4. Who do we need to convince?
5. Collaboration between different professions.
6. Spreading awareness about the collaboration model from Free Software development. Not focusing only on technical solutions.
7. Conclusion.

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Difficult to get an overview over projects

Today there are so many different Free Software school project models to choose among, it is difficult to chose.

As far as I can see Andalucia has done most things right.

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State of the Art

In 2004 during GUADEC in Kristiansand, Norway, a joint declaration was made about:

- International collaboration
- Sharing of architecture and applications.
- Elimination of duplication of work.
- Communicating and sharing of ideas.

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State of the art

Cape Town Open Education Declaration 2007:

“ Educators worldwide are developing a vast pool of **educational resources** on the Internet, open and free for all to use. These educators are creating a world where each and every person on earth can **access and contribute** to the sum of all human knowledge.”

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Projects 1/2

- Spain LinEx: www.linex.org and
- Averroes-Guadalinex: www.juntadeandalucia.es/averroes/cga
- Skolelinux in Norway: www.skolelinux.org
- Debian Edu: wiki.debian.org/DebianEdu
- Projeto Software Livre, PSL-Brasil in Brazil:
- www.cic.unb.br/docentes/pedro/trabs/freesoft5.htm
- AbulÉdu in France: www.abuledu.org
- One Laptop Per Child (OLPC): www.laptop.org

Free Software in Education

Projects 2/2

- SELF: <http://selfproject.eu/>
- Edubuntu: <http://edubuntu.org/>
- One Laptop Per Child (OLPC): www.laptop.org
- Sugar Desktop Environment: wiki.sugarlabs.org
- and many others!

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Kindergarden to University

For very young children we have GCompris

<http://gcompris.net/>

For university students we have

- Master Degree in Libre Software: Italy, Spain Portugal, France.....many others are nearly there.
- The US and in Latin America....

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Use of Information and Communication Technologies (ICT) in Everyday Life

- Most people need to be able to operate computers to get a job and earn a living!
- Children who do not learn about Information, Communication, and Technology (ICT) systems - and how to use them are missing their chance to **education, knowledge and democracy.**

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Whom do we need to convince?

There are many stakeholders:

- Schools: Students + Teachers
- Technicians, developers and maintainers
- Parents
- Politicians

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Grundtvig



N. F. S. Grundtvig, was a Danish teacher, writer, poet, philosopher, historian, pastor, and politician. He is one of the most influential people in Danish history.

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Grundtvig 1782- 1873

- Grundtvig's pedagogical efforts was to promote a spirit of freedom, poetry and disciplined creativity, within all branches of educational life.
- He promoted soft values like wisdom, compassion, identification and equality.
- “Only willing hands make light work.”

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Basic ICT skills

- To know about the freedom rights to use, share and change software...
- To know the differences between Free Software and vendor owned software.
- To know about how the internet works.
- To know how to communicate with others by using e-mail etc.(IRC and Wiki)- this implies netiquette!
- To avoid the dangers of the internet!

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Basic ICT skills

- To know about Digital Freedom Rights covers many issues relating to **privacy** and digital rights, from data retention to copyright and software patents, from the transfer of passenger data to freedom of speech online and security and privacy problems.
- **Freedom** with responsibility– **not fear** and surveillance is what we wish for in society.

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How to Get Free Software into Primary Schools

- We need both a **top down** and a **bottom up** approach
- Top down = Decision made on the relevant political level (government, local government)
- Bottom up = Individual schools or teachers take private initiatives

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- Free Software solutions for education should be simple and user friendly for students and teachers.
- Only few students will later be able to write good source code. But the gifted ones should at least have the possibility to see what code looks like, how it works, and how it can be adapted.

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How can we make progress? 1/2

Ask the teachers what they have now?

- Then ask them what they want to have in the future?
- The teachers need assistance to find the tools suited for the creation of their learning programs.
- Show the teachers where they can find existing learning programs created by others to work on and with.

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How can we make progress? 2/2

How do the stakeholders collaborate better and more?

- By setting up programs for training teachers in Free Knowledge during their education. Giving them information about Free Software, copyleft, open standards, IPR, patents, software, and where to find free learning materials.
- By spreading awareness among politicians.
- By holding conferences for librarians, and others.
- By building repositories for education programs with various technical solutions.

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Collaboration between different professions.

- It is important to listen to the teachers' needs as teachers are creating new learning material.
- The technical infrastructure is there to back and support the creativity and the collaboration as well as the communication efforts.

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Spreading awareness about the collaboration model from
Free Software Community

We need not only focus on the technical
solutions.

In fact we might do better by focusing
on the **global access** to Free Knowledge.

Approval by the government is necessary for
the acceptance by administrations and users.

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Collaboration between men and women.

- Bear in mind that the technical infrastructure is mostly developed and maintained by men, whereas a very large percentage of the primary school teachers who are supposed to use the software solutions are women.
- Men and women communicate very differently.
- There are huge differences between competing and sharing alike.
- In the technical field women in general are not on a level playing field. Women are easily ridiculed.

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The Master suppression techniques were a framework articulated by the Norwegian feminist Berit Ås to describe means by which women are or were ridiculed in western patriarchal societies:

These techniques are:

- Make Invisible
- Ridicule
- Withhold Information
- Damn If You Do and Damn If You Don't (double bind)
- Heap Blame and Put to Shame

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Equal opportunity

- Equality between rich and poor
- Between men and women
- Equality means to me to be free and able to be a player on a level playing field
- Equal access to knowledge.
- Examples: Equal rights to education, employment, and health care....

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Competition – Digital Divide

- Advances in technology have revolutionized the way people live, learn and work.
- These benefits are not spread evenly around the world.
- A huge digital divide still exists.
- The United Nations are aware of the importance of including technology development as a part of a larger effort to bridge the global digital divide.

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Competition – Free vs Proprietary

- Currently, all UN coordination happens on a national and regional scale, because there is considerable opposition to using FOSS for development coming from parts of the developed world. Most of the traditional software industry has its base in the developed world.
- There is concern that promoting FOSS could hurt this industry. From the developing countries' perspective, however, FOSS is a way to introduce **competition** in order to lower costs and expand options.

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- Universal Declaration of Human Rights

- “Article 19:

Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.”

- Media include cellphones, internet, radio, television...

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Conclusion

- Teachers training courses
- Case stories
- Installation Parties
- Repositories
- Wikipedia
- Netiquette (mailing lists + newsgroups)
- Backup for librarians
- Info kiosks
- Collaboration between professions

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- The use of FLOSS in education is planting the seeds of a new pedagogy where educators and learners create, shape and evolve knowledge together, deepening their skills and understanding as they go.

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Norwegian report on use of Skolelinux

- A new report from Norway concludes again that Skolelinux is ready for use in schools.

Very simplified conclusion:

- Teachers in favour of using Free Software and Skolelinux are happy.
- Teachers who think that they are being forced to using a cheap and to their mind inferior software program are not happy- they feel disappointment.
- Thin client systems have environmental advantages in class rooms.

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Report: University of Strathclyde in Glasgow.

“Impact of ICT in schools: a landscape review.”

“The overwhelming message is that most pupils and teachers have found that the introduction to ICT into the classroom a positive development, motivating pupils and teachers alike and changing radically the learning experiences of both.

There has been a shift in views of teachers, in particular, with initial scepticism and apprehension being gradually replaced by optimism and confidence.”

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Office Programs

- OpenOffice.org en Español.
- OpenOffice is Free Software and gratis.
- OpenOffice is compatible with Microsoft Office.
- OpenOffice uses an Open Document Standard.

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Global Access and Government Approval

We need not only focus on the technical solutions.

In fact we might do better by focusing on the **global access** to Free Knowledge.

Approval by the government is necessary for the acceptance by administrators and users.

Thank you for your attention!

Knowledge is universal, so is Free Software
- It's all about free access!

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Slides available at
www.easterbridge.com