

**Introducing Open Source  
Software  
- including OpenOffice.org -  
into Slovenian Schools**



# Agenda

- Introduction
- OS project (Slovenia)
- Some findings of our research, based on a research by Northwest Regional Educational Laboratory (USA)
- Some findings of our research, based on a study *Free/Libre Open Source Software: Evidence from Germany, Sweeden and UK*
- Introducing OSS into ICT curriculum and analysis of the questionnaire results
- Q & A



# Introduction

- ICT is important in learning environments, but usually expensive.
- Proponents of OSS emphasise economic/technological reasons
  - *TCO*
  - *Better stability, reliability, security*
- Slogan of French Revolution – ideals, that are important part of the OSS movement:
  - *Liberty: free to use, understand, modify, distribute SW*
  - *Equality: even 'poor' students can use the same SW at home and at school*
  - *Fraternity: cooperation and mutual help*



# OS project (1)

- In the past, some teachers wanted to introduce OSS into educational processes on their own.
- In the year 2003, Slovenian Ministry of Education started Open Source Project – 'OS Project'.
- Expert group of enthusiastic teachers was formed to:
  - *acquire quality and free didactic SW for education*
  - *offer to educational establishments OSS based on open standards*
  - *inspire the use of OSS and its future development*
  - *educate teachers so they could teach students about OSS*



# OS Project (2)

- one of important ideas – 'Reference schools':
  - *to act as a model and a guide to others*
  - *they are centers for exchanging knowledge in using OSS for their region*
- we have started a research about using OSS in education:
  - *this kind of research was the first one in Slovenia*
  - *the aim was:*
    - *to answer: who, why, how...uses OSS in education*
    - *to get information about experience of 'OSS users' in schools (primary, secondary)*



# Our research based on a similar research made by NREL

- NREL:
  - *Their research has been running in USA since 2002.*
  - *The purpose is to study the use of OSS in K12.*
  - *More info: <http://www.netc.org/openoptions>*
- Our research:
  - *The questionnaire was available at the website of the OS project: <http://oko.edus.si> from January – March 2004.*
  - *67% of invited primary, secondary and music schools (public) participated.*
- I will summarize only results that apply to use OSS on desktops – especially office suites.



**Table 1.** Types of OSS that participants/their students use on their desktops

	Yes	No	I don't know
Do you use OS operating system on your computer?	12%	81%	7%
Do you use OS operating system on your student's computer?	5%	88%	7%
Do you use OS browser on your computer?	24%	70%	6%
Do you use OS browser on your student's computers?	12%	82%	6%
Do you use OS office suite on your computer?	28%	66%	6%
Do you use OS office suite on your student's computers?	14%	80%	6%



**Table 2.** Factors influencing the selection of OS Office suite

	Very important	Important	Not as important	Unimportant	I don't know
Customization	62%	21%	13%	0%	4%
Desirable features	58%	33%	0	0	9%
Interoperability	79%	13%	0%	0%	8%
Price	79%	13%	0%	0%	8%
Reliability	67%	25%	0%	0%	8%
Reputation	8%	21%	46%	21%	4%
Teachers/students can use SW at home	55%	21%	8%	8%	8%



**Table 3.:** The importance of different obstacles in using IT in education

	Very important	Partly important	Not important
Poor education teachers get in using IT	61%	37%	2%
Nonexistent equipment in schools	48%	47%	5%
Inefficiency of using IT in schools	27%	61%	12%
Lack of materials, documentation and other support	39%	55%	6%
Unsuitable system of educating teachers for using ICT	42%	53%	5%



# Our research, based on a FLOSS

## (Free/Libre OSS – Evidence from Germany, Sweden and UK) study (1)

- More info on FLOSS study:  
<http://www.infonomics.nl/FLOSS/report/>
- Methodology, time... was similar as in previous study, but username/password were required.
- Valid questionnaires represented 19% of target population.
- Results for OSS on desktops and clients:
  - *The most frequently used desktop OSS is OpenOffice.org office suite – it is already being used by nearly one third of the participants and another 31% plan to use it. A very similar ratio is for Mozilla browser.*



# Our research, based on a FLOSS

## (Free/Libre OSS – Evidence from Germany, Sweden and UK) study (2)


- According to this study, the most important OSS characteristics that influence the decision to use it are: price, security and stability.
- Other interesting findings:
  - *The main motive for using OSS in education is the desire of educational establishments to become **more independent** of the policies and licences of certain SW producers – 60% of the participants agree with this statement.*
  - *Only 13% of the participants agree with the claim that OSS is not needed in teaching process because the existing CSS fulfills all their needs.*



# Our research, based on a FLOSS


## (Free/Libre OSS – Evidence from Germany, Sweden and UK) study (3)

- Over a third of participants says that they are willing to use OSS but **do not have the proper knowledge.**
- One of the final questions was: 'Which are, in your opinion, the main obstacles preventing the use of OSS in education?'
  - *81% of participants agree that teachers and school administrators are **unable to use OSS because they have not been trained well enough.***




# Introducing OSS into ICT curriculum and analysis of the questionnaire results (1)

- I teach courses in Business Informatics at the Business School in Brežice (Slovenia).
- Each generation of my students not only hears something about OSS but also uses it in the classroom.
- My observations:
  - *For students MSOffice is a synonym for all office suites.*
  - *They simply don't know about other possibilities.*
  - *A very similar situation is regarding operating systems.*




# Introducing OSS into ICT curriculum and analysis of the questionnaire results (2)

- We (the teachers of ICT subjects) have a great opportunity to change this situation (nearly all of the future ICT users go through somekind of formal education).
- Don't start with operating system (for ex. Linux), but – especially in business schools – with OpenOffice.org (uncomplicated installation, exploring on their own).



# Introducing OSS into ICT curriculum and analysis of the questionnaire results (3)

- I dedicate to OSS at least six hours (among 70):
  - *theoretically introduction on SW licensing*
  - *benefits/disadvantages connected with OSS*
  - *presentation about OpenOffice.org, made with Impress*
  - *show sources on Web – for ex. a book about OpenOffice.org in slovenian language, that can students download from the slovenian OpenOffice.org project website*



# Introducing OSS into ICT curriculum and analysis of the questionnaire results (4)

- Methodology of research:
  - *The aim was to find out the attitude of my students towards OpenOffice.org.*
  - *56 students about 15 years old*
  - *Time: the last lesson of my 'project', May 2004*
  - *Students previously had a basic knowledge of MSOffice package – they could compare both office suites.*
  - *They remained anonymous.*





Where/how have you heard about OSS for the first time?	%
At ICT lesson at school	82
From computer magazines	7
From internet	4
Other	7



Do you have a non-MSWindows operating system on your home computer - for ex. Linux (or even dual-boot)?	(%)
MSWindows only	71
'Other' only (from the answers we cannot conclude which)	4
Dual boot: MSWindows + Linux	7
I don't have computer at home	2
Other – 'I don't know.'	16



Do you have a non-MSOffice office suite on your home computer – for ex. OpenOffice.org (or even both of the m)?	(%)
MSOffice only	64
MSOffice and OpenO ffice.org on the same computer	2
OpenO ffice.org only	14
I don't have computer at home.	2
Other – 'I don't know.'	18



What is your general impression about OpenOffice.org, comparing to MSOffice?	(%)
OpenOffice.org is equal to MSOffice.	36
OpenOffice.org is worse than MSOffice.	16
OpenOffice.org is better than MSOffice.	36
Other – 'I don't know.'	12



Are you going to continue to explore OpenOffice.org package also on your home computer?	(%)
Yes	48
No	30
Other - 'I don't know.'	22



- Thank you!
- Q & A