



Open eLearning Content Observatory Services

## Tutorial: USE open source tools

December 2007

### About the tutorials:

Please note, that this tutorial (December 2007) is based upon web based information (<http://www.olcos.org/tutorials/>). It could be that the contents and links in this tutorial change, e. g. for technological changes. The latest version of the tutorial can be found on the Internet: [http://wikieducator.org/Open\\_Educational\\_Content](http://wikieducator.org/Open_Educational_Content)



### Copyright:

This work is licensed under the Creative Commons [Attribution-ShareAlike 3.0](http://creativecommons.org/licenses/by-sa/3.0/) License. For more information please visit the Creative Commons website: <http://creativecommons.org/>



Co-funded by the  
EU Commission

eLearning





## Open Educational Content – Introduction and Tutorials

A collaborative development with the OLCOS project consortium ([www.olcos.org](http://www.olcos.org)).

The term **Open Educational Resources (OER)** stands for are educational materials and resources offered freely and openly for anyone to use. The OLCOS Tutorials intend to support students and teachers in the creation, re-use and sharing of eLearning material. Management staff will find information about how to implement open learning policies and activities in their institution.

### OLCOS (Open eLearning Content Observatory Services):

This tutorial is based on the work of people within the project OLCOS ([www.olcos.org](http://www.olcos.org)).

The project aims at building an (online) information and observation centre for promoting the concept, production and usage of open educational resources, in particular, open digital educational content (ODEC) in Europe. OLCOS was co-funded by the European Union under the eLearning Programme (Duration January 2006 - December 2007). Please feel free to contact [info@olcos.org](mailto:info@olcos.org) if you have suggestions for, or questions about the tutorials.

### Authors:

Cesar Córcoles, Veronika Hornung-Prähauser, Marco Kalz, Julià Minguillón, Núria Ferran Ferrer, Viola Naust-Schulz & Sandra Schaffert (Translation to Spanish: Cèlia Solà, Núria Ferran Ferrer, Julià Minguillón, Mireia Pascual y César Córcoles; Translation to German: Anika Giebel & Markus Deimann)



## eLearning

This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



## Table of contents

|    |  |   |
|----|--|---|
| 1. | Introduction .....   | 4 |
| 2. | Why choosing open source tools in education? .....         | 4 |
| 3. | Suggestions and tips for finding an open source tool ..... | 5 |
| 4. | Install and work with open source software .....           | 6 |
| 5. | Useful Material .....                                      | 7 |
| 6. | Further Materials.....                                     | 7 |

## Objectives:

This tutorial provides general information and practical tasks for:

- Open Source Tools
- and how to use them.

The tutorial will take about 20 minutes. Please notice that internet access is needed.

## 1. Introduction

In this tutorial, you assist some teachers to choose an open source tool.

- Tom wants to start a Wiki-project for the collaborative creation of learning materials about Hypatia of Alexandria and needs to install a Wiki-system.
- Susan wants to publish her lecture notes.
- Peter creates open content with his learning management system.
- Dolores, a statistic teacher, wants to install a repository system.

## 2. Why choosing open source tools in education?

What is open source? We propose the following definitions:

- "Open source describes the principles and methodologies to promote open access to the production and design process for various goods, products and resources. The term is most commonly applied to the source code of software that is made available to the general public with either relaxed or non-existent intellectual property restrictions. This allows users to create user-generated software content through either incremental individual effort, or collaboration." (Wikipedia "open source": [http://en.wikipedia.org/wiki/Open\\_source](http://en.wikipedia.org/wiki/Open_source); 2007-02-15)
- "Open source promotes software reliability and quality by supporting independent peer review and rapid evolution of source code. To be OSI certified, the software must be distributed under a license that guarantees the right to read, redistribute, modify, and use the software freely." (Opensource.org: <http://opensource.org/search/node>; 2007-02-20)

Open source software is based on and uses open formats, and for that, it is predestinated for the creation of open educational content. You will find more informations about open format in our In-

roduction: PLAN the use of OER ([http://wikieducator.org/Open\\_Educational\\_Content/olcos/introduction](http://wikieducator.org/Open_Educational_Content/olcos/introduction))

Find below a list of cons and pros for administrators and technicians, who are thinking of open source in education (based on <http://www.netc.org/openoptions/home/quickstart.html>; 2007-02-20)

#### *Why*

- Cost - The software is free of charge. There are no complicated licenses. With enough expertise, it may save money.
- Quality - Many programs are mature enough. (Open source is not a new model and much of the software has been used and improved for years.)
- Independence - Schools cannot be forced to upgrade software. Open source solutions are modular and can be customized.
- Community support - Free support is available from a thriving online community of educators.

#### *Why not*

- Legacy issues - Many programs in schools are not compatible. The software may not be user friendly.
- Specific applications - Specific curriculum software may not be available for classroom teachers.
- Migration - Changes can be extremely disruptive. New software requires new support and training for effective integration.
- Uncertain future - Many programs and companies are still growing. The long term costs could be high."

These are quite general hints and one should explicate the pros and cons for special goals and software products.

### **3. Suggestions and tips for finding an open source tool**

In a way, it is a monstrous task to write this tutorial, because there are so many tools we can write about. You find some more information about other services and lists instead of a list of single recommendations.

There are several sites with information about open source tools. Do not forget to verify the licenses of the software! Tip: In any case, watch out, if an open source tool has an OSI certification (Opensource.org: <http://opensource.org/search/node>; 2007-02-20). In our Exemplary Collection of Open Software Tools ([http://wikieducator.org/Exemplary\\_Collection\\_of\\_Open\\_Software\\_Tools](http://wikieducator.org/Exemplary_Collection_of_Open_Software_Tools)) you find a list of open software tools, which can be used in creation of open educational content.

### Web Resources:

- Our Exemplary Collection of Open Software Tools ([http://wikieducator.org/Exemplary\\_Collection\\_of\\_Open\\_Software\\_Tools](http://wikieducator.org/Exemplary_Collection_of_Open_Software_Tools))
- Top 25 Web 2.0 Apps to Improve a Student's or Professor's Productivity (Online Education Database; <http://oedb.org/library/beginning-online-learning/top-25-web20-productivity-apps>)
- Freshmeat (<http://freshmeat.net/>)
- SourceForge (<http://sourceforge.net/index.php>)
- Open Source Directory - OSDir.com (<http://osdir.com/>)
- BerliOS (<http://developer.berlios.de/>)
- Bioinformatics.org (<http://www.bioinformatics.org/>)

### Assignment:

Please assist Tom, Susan, Peter and Dolores to choose an open source tool. Which would you recommend for this purpose?

- Tom wants to start a wiki for the collaborative creation of learning materials about Hypatia of Alexandria.
- Susan wants to publish her lecturer notes.
- Peter creates open content with his learning management system.
- Dolores, a statistic teacher wants to install a repository system.

## 4. Install and work with open source software

Here we cannot give instructions for the work with open source software in general, too.

Often, it is easier to get reliable support for open-source software. For the operating system Linux the InfoWorld's 1997 "Best Product of the Year" roundup show: "... readers who are using Linux in

a business environment said they found the support they received to be far more impressive than what they were used to with commercial software." (<http://www.infoworld.com/cgi-bin/displayTC.pl?/97poy.supp.htm>; 2007-02-20)

Not surprisingly, the Open Source Initiative states: "Linux is not an exception. In fact, business users will generally find that mature open-source products are far more reliable to begin with, and that when support is needed it is dramatically cheaper and easier to get than from closed vendors." (<http://opensource.org/search/node>; 2007-02-20)

## 5. Useful Material

- You find a list of Open Source Software for the Education Market (edited bei Eduforge; <http://eduforge.org/wiki/wiki/eduforge/wiki?pagename=Open%20Source%20Software%20for%20the%20Education%20Market>) with a collection of tools
- You can also take a look in our Exemplary Collection of Open Software Tools ([http://wikieducator.org/Exemplary\\_Collection\\_of\\_Open\\_Software\\_Tools](http://wikieducator.org/Exemplary_Collection_of_Open_Software_Tools))
- NETC & NWREL. Making decisions about Open Source Software (OSS) for K-12 (<http://www.netc.org/openoptions/>)
- More FLOSS (<http://aliens.csir.co.za/~ktucker/floss-libre-learning-resources.html>) for libre learning ([http://en.wikipedia.org/wiki/Libre\\_learning](http://en.wikipedia.org/wiki/Libre_learning)), etc.

## 6. Further Materials

Below you find further OLCOS tutorials. The materials are available in PDF format [pdf] or can be found online on the OLCOS wiki [wiki] .

Because the content of the OLCOS wiki ([http://wikieducator.org/Open\\_Educational\\_Content](http://wikieducator.org/Open_Educational_Content)) will be updated we recommend you to visit the wiki.

- Overview [wiki]
- Introduction: PLAN the use of OER [pdf] [wiki]
- Tutorial: SEARCH & FIND OER [pdf] [wiki]
- Tutorial: PRODUCE & REMIX OER: author and modify [pdf] [wiki]
- Tutorial: SHARE OER: publish and re-use [pdf] [wiki]
- Tutorial: CHOOSE a license [pdf] [wiki]

## Tutorial: USE open source tools

- Tutorial: USE open source tools [\[wiki\]](#)
- ORGANIZE: Collections
  - Exemplary Collection of Open eLearning Content Repositories [\[wiki\]](#)
  - Exemplary Collection of institutions with OER policy [\[wiki\]](#)
  - Exemplary Collection of open content licensing approaches [\[wiki\]](#)
  - Exemplary Collection of open formats, educational standard and tools for producing open educational content [\[wiki\]](#)