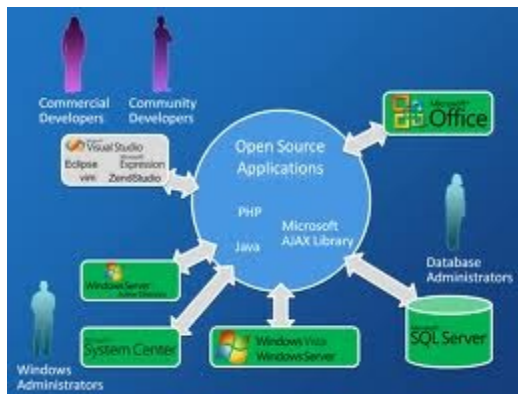




The images above are all part of an open source movement. Here, creators and developers of open source software (OSS) believe that software should be designed, developed, created, changed, modified, shared, distributed, and freely licensed to the public by the public for the public. This includes educators, students, educational institutions, and educational settings as well. Indeed, this movement operates contrary to proprietary software, which is not free or freely distributed to the public or to the educational marketplace. Instead, companies hold the rights of all the software they develop for the purpose of profit and market share or monopoly.

Below is a digital depiction of the difference between OSS and proprietary software. *What do you notice? What is interesting or compelling to you? How does this apply to students and/or to educators?*



Now that you have had a glimpse into OSS, please proceed to the Introduction Lesson.

# **Introductory Lesson: What is OSS?**



## ***Intro Lesson: Objectives***

**After completing this lesson, you will be able to...**

- 1) Discuss OSS in relation to educational settings.
- 2) Discuss proprietary software as it relates to students and to educators.
- 3) Explain how students and educators could contribute to the open source movement within a particular educational setting of choice.
- 4) Be familiar with some of the OSS logos as a springboard to choosing productivity tools for learning and for teaching.
- 5) Explain why and how OSS could be used in educational settings.

## ***Intro Lesson: Pre-test***

**If you can answer these questions, skip this lesson and proceed to the next.**

1. What does OSS have to do with students and educators?
2. What minor or major role(s) could students and educators play in the open source movement?
3. Why would students and educators choose OSS rather than proprietary software in an educational setting?
4. As a student or an educator, what OSS would you consider using and why?
5. Why is OSS important in education as a whole?

## ***Intro Lesson: Rationale***

One of many definitions, **OSS** is “any computer software program whose source code is free to its licensed users for use, modification, and redistribution” (Pan & Bonk, 2007, p. 2). The **Open Source Initiative** has a more detailed definition, which can be found [here](#). The **Free Software Foundation** has a more radically ideological one [here](#). This is where the expression “Free as in speech, not as in beer” comes from (fsf.org, 2009). OSS is distributed under a wide range of [licences](#). OSS is usually distributed for free, but in some cases a fee is charged.

In 1997, Eric S. Raymond wrote a paper entitled "[The Cathedral and the Bazaar](#)," which describes the different styles of software development in the proprietary and free-software worlds. He wanted to explain why free software projects were able to produce high-quality products, but his metaphor also outlines what it is that free software, or OSS, is all about. The hierarchical, controlled cathedral represents the way in which proprietary software is developed while the busy, loosely organized, social atmosphere of the bazaar represents the kind of environment in which OSS is created.

Watch this video where Raymond outlines his ideas [click here to view on YouTube](#).

OSS began with a developer named Richard Stallman, who wanted to modify the software that came with a printer. The only person he found who had the source code for the software was unable to give it to him due to a nondisclosure agreement. Stallman felt that the source code that made up software should be freely available to the user to modify, and that to keep source code from the user was a symptom of corporate greed (Pfaffman, 2008).

In turn, he wrote the [GNU Manifesto](#) (Stallman, 2009) “proclaiming that software should be free of charge, and give everyone the unrestricted right to learn from it, use it, change and distribute it.” The GNU project (which stands for “GNU's not Unix”) was started to develop an operating system that would be free of charge and free of corporate influence, and could replace operating systems like Unix and Windows, which would be, at least, cost effective for everyone including students and educators as well as the education system as a whole. The GNU project joined with a project developed by a Finnish graduate student named Linus Torvalds and Linux (named after Torvalds and the operating system it replaces – Unix) was released as an operating system alternative (Machado & Thompson, 2005).

In 1998 the **Open Source Initiative** was founded to support the use of the new term Open Source. The idea was to move away from the more radical ideas of the **Free Software Foundation** and to bring OSS to more commercial environments (Wikipedia, 2009b) as well as educational environments.

OSS is a computing term denoting software for which the original source code is made freely available and may be redistributed with or without modification (Apple Dictionary). Certainly, students and educators can participate in the advancement of any OSS in order to further learning and teaching in various educational settings.

According to Wikipedia, OSS is computer software that is available in source code form for which the source code and certain other rights normally reserved for copyright holders are provided under a software license that permits users to study, to change, and to improve the software. Again, members in the educational marketplace can use OSS for the benefit of learning and teaching.

Some OSS is available within the public domain, which is free and accessible for students, educators, and educational institutions. After all, OSS is developed in a public, collaborative manner. The term open-source software originated as part of a marketing campaign for free software, which is an alternative to proprietary software.

Some people believe that creating and using OSS are a choice to free you from proprietary software companies. Other people, however, want to use good software with quick bug fixes and low costs. Many of the developers of OSS are volunteers, working for free on projects that they are truly interested in. Watch [this short video](#), which covers some of what OSS is and where it comes from.

## ***Intro Lesson: Interactivities***

1. View [the following video](#) to find out how you, as a student or an educator, could play a role in the open source movement.
2. Read [the following article](#) on open source in relation to Facebook, a social networking site used by many students.
3. Read [the following article](#) on open source used for snooping on mobile phones, an educational technology used in some educational settings.

## ***Intro Lesson: Post-test***

**After completing this lesson, you should have the working knowledge to address the following:**

- 1) Why is the Open Source Initiative important and applicable to students and to educators?
- 2) How can students and educators contribute to the GNU Manifesto?
- 3) In what ways does the Free Software Foundation affect educational environments?
- 4) As per the essay *The Cathedral and the Bazaar*, why would the 'bazaar' scenario be more beneficial to students and educators than the 'cathedral' scenario?
- 5) Name two benefits of OSS in educational settings?

## ***Intro Lesson: Resources***

**Students may also want to review these resources for further understanding.**

Will Open Source Software Become An Important Institutional Strategy in Higher Education? [http://www.a-hec.org/research/in-depth\\_articles/open\\_source0505/open\\_source0505\\_toc.html](http://www.a-hec.org/research/in-depth_articles/open_source0505/open_source0505_toc.html)

The Adoption of Open Sources within Higher Education in Europe and a Dissemination Case Study  
<http://tojde.anadolu.edu.tr/tojde17/articles/carlos.htm>

Open source not ready for higher education?  
<http://arstechnica.com/old/content/2006/03/6317.ars>

Open source, openness, and higher education  
[http://innovateonline.info/pdf/vol3\\_issue1/Open\\_Source,\\_Openness,\\_and\\_Higher\\_Education.pdf](http://innovateonline.info/pdf/vol3_issue1/Open_Source,_Openness,_and_Higher_Education.pdf)

Open Source in Higher education <http://www.slideshare.net/scyuen/open-source-in-higher-education>

# **Lesson 1: Why OSS?**



[OSS](#)

## ***Lesson 1: Objectives***

**After completing this lesson, you will be able to...**

- 1) Define OSS as it relates to educational settings.
- 2) Define proprietary software as it relates to educational settings.
- 3) Explain the primary differences between OSS and proprietary software as productivity tools for students and educators in educational settings.
- 4) Know the premise of OSS so that you understand its educational value and benefits.
- 5) Know the history of OSS so that you understand the direction and the current trends of OSS in relation to education.



## ***Lesson 1: Pre-test***

**If you can answer these questions, skip this lesson and proceed to the next.**

1. How does OSS play a role in educational settings?
2. What are the benefits of using and supporting OSS in educational environments?
3. Because OSS has been gaining momentum, how could this affect the education settings?
4. What is open source code and what does this mean to students and to educators?
5. What does open source code allow students and educators to do?

## ***Lesson 1: Rationale***

Why is OSS important for education? Why is it important to have a working understanding of OSS for education? Why, as students and educators, do we need to explore various OSS?

The strategy of open source is to provide access to the source code of any given software so that educational environments, for example, can benefit from its cost effectiveness, technological stability, and accessibility. Here, the rationale of OSS development is based on the following four freedoms:

- The freedom to run the program for any purpose
- The freedom to study how the program works and to adapt it to your needs (Access to the source code is needed.)
- The freedom to redistribute copies so that you can help others
- The freedom to improve the program and to release your improvements to the public so that the whole community benefits (Access to the source code is needed.)"The Free Software Definition - GNU Project - Free Software Foundation (FSF)"

The premise behind the development of OSS seems simple. In a society where there is a shift from an industrial approach to an information approach, the concept of proprietary software appears outdated. Many content creators believe in OSS. View [the short video](#) in which Matt Mullenweg, the founder and the lead developer of WordPress, explains the rationale behind OSS and some of the differences between OSS and proprietary software.

The rationale of an open decentralized model dependent upon concurrent input from a community reflects many of the principles of [Situated Learning Communities of Practice](#). Ongoing peer-based collaboration is the foundation for OSS. The ongoing exchange, adaptation, and modification of ideas contrasts with the traditional protection of intellectual property rights (Weber, 2004).

[The following video](#) presents John Lilly, CEO of Mozilla, and Mike Beltzner, Director of Firefox. The speakers explain the development of the Mozilla project, the production of Firefox, and the philosophy behind OSS.

## ***Lesson 1: Interactivities***

1. View [the following video](http://www.youtube.com/watch?v=QfXkxkybQ4Q) <http://www.youtube.com/watch?v=QfXkxkybQ4Q> to learn more about how OSS is defined.
2. View [the following Web page](#) [http://en.wikipedia.org/wiki/List\\_of\\_free\\_and\\_open\\_source\\_software\\_packages](http://en.wikipedia.org/wiki/List_of_free_and_open_source_software_packages) to see the list of free and open source software packages.
3. Download and explore one or more of the [open source software packages for Windows](#) or [for MAC](#). <http://www.opensourcemacs.org/>
4. View [the following video](#) <http://sf2010.drupal.org/conference/sessions/open-source-opens-doors-youth-professional-nonprofit-foundation-collaboration> to learn how a group of youth used an OSS to own and to operate a for-profit business providing professional services to their community.

## ***Lesson 1: Post-test***

**After completing this lesson, you should have the working knowledge to address the following:**

- 1) What are the principles of Situated Learning communities of practice and how could these principles be applied in educational settings?
- 2) What is the Mozilla Project and how is it beneficial to students, to educators, and to educational institutions?
- 3) What are the four freedoms upon which OSS is based and how are they applicable to educational environments?
- 4) According to Mullenweg, what is the rationale behind OSS? How is this beneficial to students and to educators?
- 5) According to Mullenweg, what are some of the differences between OSS and proprietary software, and what does this mean to students and to educators?

## ***Lesson 1: Resources***

**Students may also want to review these resources for further understanding.**

**SourceForge Web Site** <http://www.openwebdesign.org/> You download and develop free open source software.

**Open Source Web Design** <http://www.oswd.org/> You download free web design templates and share yours with others.

**opensourceCMS** <http://php.opensourcecms.com/> You can try out some of the best open source software systems.

**PACKT Publishing** [www.packtpub.com/open-source-awards-home](http://www.packtpub.com/open-source-awards-home) You can read up on the latest information about open source.

**Open Source Templates** <http://opencourcesites.com/> You can use free open source templates to design Web sites.

**Open Web Design** <http://www.openwebdesign.org/> With no design skills, you can put up a site and showcase your content, share your designs, and showcase your talent.

## **Lesson 2: Types of OSS / FLOSS / FOSS**



### ***Lesson 2: Objectives***

**After completing this lesson, you will be able to...**

- 1) Define and list different open source software/FLOSS/FOSS.
- 2) List types OSS/FLOSS/FOSS.
- 3) List and explain the benefits of open source software/FLOSS/FOSS in an educational setting.
- 4) Identify the drawbacks of open source software/FLOSS/FOSS in an educational setting.
- 5) Identify various open source software/FLOSS/FOSS available.
- 6) Describe ways to implement open source software/FLOSS/FOSS in an educational setting.

## ***Lesson 2: Pre-test***

**If you can answer these questions, skip this lesson and proceed to the next.**

- 1) What types of software can be defined as open source software/FLOSS/FOSS?
- 2) Name three benefits of using open source software in an educational setting?
- 3) What are some of the open source software/ FLOSS/FOSS alternatives to proprietary closed source software?
- 4) What obstacles do educators face in implementing open source software/ FLOSS/FOSS in an educational setting?

## ***Lesson 2: Rationale***

### **For this Lesson:**

With Microsoft Windows and Apple Mac OSX what is the point in users taking advantage of open source software? Why would home users, businesses, educational institutions look to open source software as a feasible alternative? What types of software can be defined as open source software anyway and what types of OSS exist?

Over the last decade, open source software/FOSS/FLOSS has gained considerable ground as a viable alternative to closed proprietary software. Home users, as well as businesses and educational institutions are beginning to adopt open source software as a result of the many benefits it can provide. But what types of software can be defined as Open source software/FLOSS/FOSS? Furthermore, does open source/FLOSS/FOSS have the potential to provide educators with freely distributed high quality educational software that can translate easily from the school setting into students' homes.

There are literally thousands of open source software titles to choose from which can be freely downloaded from the Internet. This can provide educators with vast options in providing their students with a plethora of high quality digital tools. While this is a benefit of the open source movement, there are some obstacles that still need to be overcome if educational institutions are going to switch over to OSS.

## ***Lesson 2: Interactivities***

1. Sit back and watch the video "[What is Linux and Its Implications for Education](#)". [This video](#) may also be helpful in understanding open source software.
2. Read this article by Gary Hepburn and Jan Buley entitled, "[Getting Open Source Software into Schools: Strategies and Challenges](#)".
3. Head over to the [schoolforge website](#) and take some time exploring. Have a look at some of the open source software resources for education.
4. Download and read [Open Source in Education](#) by Timothy D. Hart.
5. [Read FOSS vs. open source as an American debate](#) article by Dana Blankenhorn.
6. Browse the [Ubuntu website](#) for a look at a very popular open source operating system. Next cruise over the [Lifehacker](#) for a glimpse of their list of the best downloads for Linux.
7. Watch [Richard Stallman interview](#) on open source and his GNU project.

## ***Lesson 2: Post-test***

**After completing this lesson, you should have the working knowledge to address the following:**

1. What types of OSS/FLOSS/FOSS exist?
2. Who is Richard Stallman and why is he important in the open source movement?
3. What is Linux and who first created it?
4. For software to be considered open source software/FOSS/FLOSS, what criteria must it meet? How are OSS/FLOSS/FOSS different?
5. What are the benefits of running open source software in an educational setting?
6. What are some of the drawbacks of running open source software in an educational setting?

## ***Lesson 2: Resources***

**Students may also want to review these resources for further understanding.**

St. Amant, K., Still, B. (Ed.). (2007). *Handbook of Research on Open Source Software: Technological, economic, and Social Perspectives*. Hershey, PA: Information Science Reference.

Meeker, H. (2008). *The Open Source Alternatice: Understanding Risks and Leveraging Opportunities*. Wiley, illustrated edition.

[http://en.wikipedia.org/wiki/Open-source\\_software](http://en.wikipedia.org/wiki/Open-source_software)

[http://en.wikipedia.org/wiki/Free\\_and\\_open\\_source\\_software](http://en.wikipedia.org/wiki/Free_and_open_source_software)

<http://www.opensource.org/>

[http://en.wikipedia.org/wiki/Open\\_source\\_software\\_development](http://en.wikipedia.org/wiki/Open_source_software_development)

<http://edge-op.org/grouch/schools.html>

<http://cnx.org/content/m14762/latest/>

<http://oedb.org/library/features/how-the-open-source-movement-has-changed-education-10-success-stories>

**On the Differences between Open Source and Open Culture**

<http://publication.nodel.org/On-the-Differences>

## **Lesson 3: Using open source software**



### ***Lesson 3: Objectives***

**After completing this lesson, you will be able to...**

1. Become familiar with 2 types of open source software and how each could be used in an educational setting.
2. Understand the basics behind using Audacity software.
3. Demonstrate an understanding on how to record your voice and add audio effects using Audacity.
4. Understand the basics behind using Paint.net software.
5. Demonstrate an understanding of the icons and functions of Paint.net software.



## ***Lesson 3: Pre-test***

**If you can answer these questions, skip this lesson and proceed to the next.**

- 1) What are the main advantages of using Audacity over a proprietary software such as Garageband?
- 2) What hardware and software is needed to record and edit a Podcast in Audacity?
- 3) How are *Paint.net* and *Adobe Photoshop* similar? How do both differ?
- 4) What are the main advantages and disadvantages of using *Paint.net* over proprietary software?
- 5) How could Audacity and Paint.net be used in an educational setting?

## ***Lesson 3: Rationale***

### **For this Lesson:**

As reviewed in other parts of this lesson, open source software provides users with a cost effective means of enriching daily lessons and activities over costly proprietary software. This being said, it is important for end-users to review a variety of software so that they are aware of the advantages and possible drawbacks of using each piece of software. Advances in technology have resulted in a decline in the cost of audio, video, and image equipment. As a result, educational environments focus greatly on using such technologies to scaffold learning. Prior to purchasing proprietary software, it is important to review what is currently available for free and if such software will satisfy the needs of the end-users.

## **Lesson 3: Interactivities**

1. Read the following website on the OSS, [Audacity](#).
2. Watch the [video](#) on Audacity.
3. Download Audacity [here](#).
4. Create a podcast using the software. The theme of the podcast should be your plans for summer vacation and should be at least 1.5 minutes long. You can use this [website](#) to help you start your podcast.
5. Submit the podcast to your instructor via email.
6. Compare and contrast the Audacity software to a proprietary software such as Garageband. Use the following resource in addition to your own knowledge. [The Prescription: Audacity and Garageband](#)
7. Review the *Paint.net* [website](#). Be sure to review the features and tools offered by the software. In addition, read the following information from [Wikipedia](#).
8. Compare and contrast Paint.net with any other proprietary raster graphics editor. What are the advantages of using Paint.net? What are the limitations? Use this [website](#) to start your research.

## **Lesson 3: Post-test**

**After completing this lesson, you should have the working knowledge to address the following:**

1. Describe 5 of the main features of the OSS *Audacity*?
2. What hardware and software are needed to record a podcast?
3. What are 3 limitations of the OSS *Audacity* over proprietary software such as *Garageband*?
4. Describe 5 of the main features of the OSS *Paint.net*.
5. What hardware and software are needed to support basic picture editing in *Paint.net*?
6. How can Audacity be used within an educational setting?
7. How can Paint.net be used within an educational setting?

## ***Lesson 3: Resources***

**Students may also want to review these resources for further understanding.**

[Audacity](#) tutorials

[Tutorials](#) on paint.net

[Wikibook](#)- A great deal of tutorials on using paint.net

A [beginner's guide](#) to paint.net

[Paint.net Blog](#)- Very informative and up-to-date information with tips and techniques.

## **Lesson 4: Creative Commons**



### ***Lesson 4: Objectives***

**After completing this lesson, you will be able to...**

- 1) Describe the philosophy that initiated the formation of the Creative Commons (CC).
- 2) Identify the various Licenses offered by the CC.
- 3) List some organizations, musicians, educational institutions, and others that use CC.
- 4) Discover ways in which you already use CC in an educational setting.
- 5) Identify additional ways in which you can use CC in an educational setting.

## ***Lesson 4: Pre-test***

**If you can answer these questions, skip this lesson and proceed to the next.**

1. Anytime you create a written work, digital production, piece of music, or any other creative work, it automatically has a copyright attached to it. Would you agree with this statement? How does this impact your use of educational materials?
2. At this time, it would be pertinent for you to go and complete the [4 question quiz](#), testing your knowledge of some of the CC licenses. Based on your results, assess your knowledge about these licenses. What must you further explore to truly understand how the CC can serve you in an educational setting?
3. Collaboration is an invaluable educational tool that depends on teachers sharing their creations with one another. How does CC fulfill the needs of collaboration in an educational setting?
4. What kinds of programs and websites exist that operate under a CC philosophy? How can / do you use these for your professional collaboration?

## ***Lesson 4: Rationale***

The Creative Commons is described as “a place where collaboration rules.” It was founded in 2001, and by 2002 had released its first set of Creative Commons Licenses to the public. The inspiration behind these Licenses can be attributed to the Free Software Foundation’s GNU General Public License (GNU GPL). Today, these Creative Commons Licenses extend internationally.

Creative Commons talks about getting creative, by ***standing on the shoulders of your peers***. Educators no longer operate solely in the halls of the educational institutions that we work in. Our collaborative peers now extend into cyberspace. Leaning into your colleague’s classroom to ask if you can borrow a lesson is not the only way that teachers develop and expand upon their educational programs. In fact, in today’s era of digital information, educators have a responsibility to guide their students through

the information that they may find on the Internet. In this way, teachers need to become savvy and efficient tour guides of this digital information, showing students the way. In order to be a successful guide, teachers need to know the rules governing the allowed use of the information they find in cyberspace.

Creative Commons operates by refining the rules of copyright. They allow creators to clearly identify the uses of the works that are *put out there* and in that way CC likes to think of itself as a “welcome, please come in” sign on the internet. This in opposition to the Copyright symbol which denotes a locked door, or a less welcoming sign.

Creative Commons opens the doors to creative sharing across many platforms, and across many disciplines. From images, to music, to videos, to a single lesson plan, the Creative Commons is paving the way to the collaborative spirit that education relies on.

## ***Lesson 4: Interactivities***

1. Start your journey through the Creative Commons by reading [this page](#) describing what the CC is all about. This is a good way to get a feel for the history and philosophy of the CC. This informative, [animated video](#), entitled **Get Creative**, explains why the CC formed, what they do, and how they do it. View this video, entitled [A Shared Culture](#), focusing on the philosophy behind the Creative Commons.
2. How can sharing our creative wealth lead us to accomplishing great things in our classrooms? View this video entitled [Wanna Work Together](#) to see what the CC has to say.
3. The licenses of the Creative Commons can be a little confusing to understand at first. Based on the results of your pretest quiz on these licenses, it may be of value to you to [find out more about the CC licenses](#) here. Which license lends the most to teachers finding and reworking resources found on the internet? Additionally, you can hear **Lawrence Lessig** explain the licenses in [this video](#) interview. (Lessig is a lawyer, political activist, proponent of Open Source Software (OSS) and founding member of the Creative Commons).

4. Who uses CC? Would it surprise you to know that **Al Jazeera** does? Or the Alternative Rock band **Nine Inch Nails**? [Follow this link](#) to see these examples and who else is using CC.

5. Why would educators be interested in the licenses of the Creative Commons? According to CC philosophy, "*making educational materials fully accessible, adaptable, interoperable and discoverable will help to realize the full benefits of digitally enabled education*". Discover [more about this here](#). Also visit the link on [Open Educational Resources \(OER\)](#).

6. After exploring the philosophy on the CC and education, you should have come across the Curriki platform. Read this [wiki page](#) to learn more about Curriki. Explore this [Curriki platform](#) and see how educators are using it everyday to collaborate on a global scale.

7. Explore other places where educators collaborate on the internet. Are they following the licenses of the CC? Note the sites that *seem* to promote collaboration but operate under "all rights reserved." Note those that offer "Non-Commercial" type use of the works posted there

8. Although the CC seems to be a "free and open" place to share work on the Internet, they still operate under certain types of Copyright Licensing. Does Copyright Inhibit or Inspire Creativity? [Watch this video](#) and decide for yourself.

## ***Lesson 4: Post-test***

**After completing this lesson, you should have the working knowledge to address the following:**

- 1) Repeat the [4 question quiz](#), testing your knowledge of CC licenses. Do you feel better informed about these licenses? Why are they important in an educational setting?
- 2) What types of copyright are attached or assumed in works that are provided on the Internet? How does this impact the ability of teachers to use these resources in an educational setting?
- 3) Collaboration is an invaluable educational tool that depends on teachers sharing their creations with one another. How does CC fulfill the needs of collaboration in an educational setting?

4) How might Curriki be a useful platform for teachers to collaborate? What evidence is there that they operate under CC philosophy?

5) How does the trend towards OpenCourseWare, for example, at MIT, promote this Creative Commons philosophy? What concerns would you have as an educator?

## ***Lesson 4: Resources***

**Students may also want to review these resources for further understanding.**

Creative Commons website – so much more to explore  
<http://creativecommons.org/>

Creative Commons website – Canada  
<http://creativecommons.ca/>

Creative Commons – finding resources  
<http://search.creativecommons.org/>

Flickr Images in the Commons  
<http://www.flickr.com/commons/>

Jamendo  
<http://www.jamendo.com/en/>  
On Jamendo artists allow anyone to download and share their music. It's free, legal and unlimited.

Curriki platform – a useful bookmark for educators  
<http://www.curriki.org/xwiki/bin/view/Main/WebHome>

ccLearn  
[ccLearn](#) is a division of Creative Commons, dedicated to realizing the full potential of the internet to support open learning and open educational resources.

MIT opencourseware  
<http://ocw.mit.edu/index.htm>

DiscoverEd  
<http://discovered.creativecommons.org/search/>



# Additional Resources



## Timeline of the History of OSS

# **Self Assessment Survey**

***In the box next to each question below,  
please rate according to the following scale:***

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>not at all improved</i>	<i>slight increase</i>	<i>can't say/ no opinion</i>	<i>more than before</i>	<i>to proficiency level</i>

	Since completing this Digital Module, my knowledge about Open Source Software (OSS) and the philosophy behind it has increased.
	From this Digital Module, I have learned about the benefits of OSS in educational settings.
	From this Digital Module, I have become aware of some drawbacks of running OSS in educational settings.
	Using applications such as Audacity and Paint.net introduced in this Digital Module have increased my awareness of OSS and its uses.
	This Digital Module has allowed me to identify ways in which OSS could be used for collaboration in an educational setting.
	I have learned about copyright and collaborative philosophy through the Creative Commons information in this Digital Module.

If you could answer each question with a 4 or a 5, please comment on which aspects of the Digital Module helped improve your knowledge and skills about OSS in an educational setting.

If you answered some of the questions with a 3 or less, please comment on which aspects of the Digital Module could better help you build knowledge about OSS in an educational setting.

## **References:**

2007, m. (n.d.). Free and open source software - Wikipedia, the free encyclopedia. *Wikipedia, the free encyclopedia*. Retrieved July 31, 2010, from [http://en.wikipedia.org/wiki/Free\\_and\\_open\\_source\\_software](http://en.wikipedia.org/wiki/Free_and_open_source_software)

Apple Dictionary. (2005-2009). Version 2.1.2. Apple Inc.

Audacity: About Audacity. (n.d.). *Audacity: Free Audio Editor and Recorder*. Retrieved July 22, 2010, from <http://audacity.sourceforge.net/about/>

Blades, S. (n.d.). The Prescription: Audacity and GarageBand: Audio Production Made Easy. *The Prescription*. Retrieved July 24, 2010, from <http://ufprescription.blogspot.com/2008/11/audacity-and-garageband-audio.html>

Brewster, R. (n.d.). Paint.NET - Free Software for Digital Photo Editing. *Paint.NET - Free Software for Digital Photo Editing*. Retrieved July 24, 2010, from <http://www.getpaint.net/>

CC in Education - Creative Commons. (n.d.). *Creative Commons*. Retrieved July 10, 2010, from <http://creativecommons.org/education>

code., i. t. (n.d.). The GNU Manifesto - GNU Project - Free Software Foundation (FSF). *The GNU Operating System*. Retrieved July 28, 2010, from <http://www.gnu.org/gnu/manifesto.html>

Comparison of raster graphics editors - Wikipedia, the free encyclopedia.

(n.d.). *Wikipedia, the free encyclopedia*. Retrieved July 24, 2010, from [http://en.wikipedia.org/wiki/Comparison\\_of\\_raster\\_graphics\\_editors](http://en.wikipedia.org/wiki/Comparison_of_raster_graphics_editors)

Creative Commons. (n.d.). *Creative Commons*. Retrieved July 20, 2010, from <http://creativecommons.org/>

Creative Commons Quiz. (n.d.). *ProProfs: Knowledge Sharing Tools & Free Online Education*. Retrieved July 30, 2010, from <http://www.proprofs.com/quiz-school/story.php?title=creative-commons-quiz>

Creative Commons and Open Educational Resources - CC Wiki. (n.d.). *Creative Commons Wiki*. Retrieved July 10, 2010, from [http://wiki.creativecommons.org/Creative\\_Commons\\_and\\_Open\\_Educational\\_Resources](http://wiki.creativecommons.org/Creative_Commons_and_Open_Educational_Resources)

Curriki - WebHome . (n.d.). *Curriki - WebHome*. Retrieved July 10, 2010, from <http://www.curriki.org/xwiki/bin/view/Main/WebHome>

Free software - Wikipedia, the free encyclopedia. (n.d.). *Wikipedia, the free encyclopedia*. Retrieved July 15, 2010, from [http://en.wikipedia.org/wiki/Free\\_software](http://en.wikipedia.org/wiki/Free_software)

Get Creative! - Creative Commons. (n.d.). *Creative Commons*. Retrieved July 12, 2010, from <http://creativecommons.org/videos/get-creative>

*Handbook of Research on Open Source Software: Technological, Economic, and Social Perspectives*. (2007). Hearsey: Igi Global.

History - Creative Commons. (n.d.). *Creative Commons*. Retrieved August 1, 2010, from <http://creativecommons.org/about/history>

History of Open Source. (n.d.). *History of Open Source*. Retrieved July 28, 2010, from [en.wikipedia.org/wiki/History\\_of\\_Open\\_Source](http://en.wikipedia.org/wiki/History_of_Open_Source)

Home | Open Source Initiative. (n.d.). *Home | Open Source Initiative*. Retrieved July 31, 2010, from <http://www.opensource.org/>

How the Open Source Movement Has Changed Education: 10 Success Stories | OEDb. (n.d.). *Online Education Database - Online Colleges and Universities | OEDb*. Retrieved July 15, 2010, from <http://oedb.org/library/features/how-the-open-source-movement-has-changed-education-10-success-stories>

Licenses - Creative Commons. (n.d.). *Creative Commons*. Retrieved July 17, 2010, from <http://creativecommons.org/about/licenses/>

Mara Hancock - Open Source Software and the User Experience in Higher Education. (n.d.). *Connexions - Sharing Knowledge and Building Communities*. Retrieved June 25, 2010, from <http://cnx.org/content/m14762/latest/>

Meet the Gang [digital Image]. Retrieved July 14<sup>th</sup>, 2010, from: <http://www.fsf.org/>

Open Source Definition - Wikipedia, the free encyclopedia. (n.d.). *Wikipedia, the free encyclopedia*. Retrieved July 10, 2010, from [http://en.wikipedia.org/wiki/Open\\_Source\\_Definition](http://en.wikipedia.org/wiki/Open_Source_Definition)

Open Source Initiative - Wikipedia, the free encyclopedia. (n.d.). *Wikipedia, the free encyclopedia*. Retrieved July 18, 2010, from [http://en.wikipedia.org/wiki/Open\\_Source\\_Initiative](http://en.wikipedia.org/wiki/Open_Source_Initiative)

Open source - Wikipedia, the free encyclopedia. (n.d.). *Wikipedia, the free encyclopedia*. Retrieved July 5, 2010, from [http://en.wikipedia.org/wiki/Open\\_source](http://en.wikipedia.org/wiki/Open_source)

Open source software development - Wikipedia, the free encyclopedia. (n.d.). *Wikipedia, the free encyclopedia*. Retrieved July 31, 2010, from [http://en.wikipedia.org/wiki/Open\\_source\\_software\\_development](http://en.wikipedia.org/wiki/Open_source_software_development)

Open-source software - Wikipedia, the free encyclopedia. (n.d.). *Wikipedia, the free encyclopedia*. Retrieved July 14, 2010, from [http://en.wikipedia.org/wiki/Open-source\\_software](http://en.wikipedia.org/wiki/Open-source_software)

Pan, G. & Bonk, C. J., (2007). The Emergence of Open-Source Software in North America. *International Review of Research in Open and Distance Learning*, 8(3), 1-17.

Project MUSE - The High School Journal - Transforming High School Classrooms with Free/Open Source Software: It's Time for an Open Source Software Revolution. (n.d.). *Project MUSE*. Retrieved July 28, 2010, from [http://muse.jhu.edu/login?uri=/journals/high\\_school\\_journal/v091/91.3\\_pffaffman.pdf](http://muse.jhu.edu/login?uri=/journals/high_school_journal/v091/91.3_pffaffman.pdf)

Proprietary - Wikipedia, the free encyclopedia. (n.d.). *Wikipedia, the free encyclopedia*. Retrieved July 31, 2010, from <http://en.wikipedia.org/wiki/Proprietary>

Stalder, F. (n.d.). On the Differences between Open Source and Open Culture [1] • F.Stalder | Media Mutandis - a NODE.London Reader. *Node London Readers | Media Mutandis - a NODE.London Reader*. Retrieved July 18, 2010, from <http://publication.nodel.org/On-the-Differences>

The Cathedral and the Bazaar. (n.d.). *Index of /*. Retrieved July 28, 2010, from <http://www.catb.org/~esr/writings/cathedral-bazaar/>

The Free Software Definition. (n.d.). *GNU Operating System*. Retrieved July 28, 2010, from [www.fsf.org/licensing/essays/free-sw.html](http://www.fsf.org/licensing/essays/free-sw.html)

[Untitled image of a dollar sign]. Retrieved July 14<sup>th</sup>, 2010, from: <http://www.flickr.com/photos/adriarichards/4369276799/sizes/o/>

[Untitled image for GNU operating system]. Retrieved July 15<sup>th</sup>, 2010, from: <http://www.fsf.org/working-together/gang/gnu>

[Untitled digital image of linux logo]. Retrieved July 15<sup>th</sup>, 2010, from: <http://www.linux.org/info/logos.html>

[Untitled digital image of the open source logo]. Retrieved July 22<sup>nd</sup>, 2010, from <http://www.opensource.org/>

[Untitled digital image of the Ubuntu logo]. Retrieved July 22<sup>nd</sup>, 2010, from <http://www.flickr.com/photos/buggolo/446182466/>

[Untitled digital image of Wordpress logo]. Retrieved July 14<sup>th</sup>, 2010, from  
<http://www.flickr.com/photos/4everyoung/276380757/>

[Untitled digital image of Audacity logo]. Retrieved August 1<sup>st</sup>, 2010, from  
<http://audacity.sourceforge.net/>

[Untitled digital image of Paint logo]. Retrieved August 1<sup>st</sup>, 2010, from  
<http://www.getpaint.net/>

VanOrden, J. (n.d.). Audacity Tutorial for Podcasters. *How to Podcast*.  
Retrieved July 25, 2010, from <http://www.how-to-podcast-tutorial.com/17-audacity-tutorial.htm>

Wanna Work Together? - Creative Commons. (n.d.). *Creative Commons*.  
Retrieved July 17, 2010, from  
<http://creativecommons.org/videos/wanna-work-together>

Weber, S. (2005). *The Success of Open Source* (New Ed ed.). Cambridge:  
Harvard University Press.

White, R. (n.d.). YouTube - Audacity Tutorial for Podcasting . *YouTube - Broadcast Yourself* . Retrieved July 23, 2010, from  
<http://www.youtube.com/watch?v=IC3VZkfdgV8>

Who Uses CC? - Creative Commons. (n.d.). *Creative Commons*. Retrieved  
August 1, 2010, from <http://creativecommons.org/about/who-uses-cc>

Why Open Source in Schools. (n.d.). *free the people, too* . Retrieved July 30,  
2010, from <http://edge-op.org/grouch/schools.html>



YouTube - A Shared Culture . (n.d.). *YouTube - Broadcast Yourself* .

Retrieved August 1, 2010, from

<http://www.youtube.com/watch?v=1DKm96Ftfko&feature=related>

YouTube - June 23 final movie version. (n.d.). *YouTube - Broadcast Yourself*.

. Retrieved July 10, 2010, from

<http://www.youtube.com/watch?v=s9dEPa535O8>

YouTube - Prof. Lawrence Lessig Explains Creative Commons Licensing.

(n.d.). *YouTube - Broadcast Yourself* . Retrieved August 1, 2010, from

<http://www.youtube.com/watch?v=AWxyx5iYdvI>

YouTube - What is Linux and What are its Implications for Education. (n.d.).

*YouTube - Broadcast Yourself* . Retrieved July 10, 2010, from

<http://www.youtube.com/watch?v=O1W0tsqtqMg>