35 Tools for
GRASSHOPPERS

01. **WEBLOG** (BLOG)

Background information & Tips

A blog (a contraction of the term "web log") is a type of website, usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video. Entries are commonly displayed in reverse-chronological order. "Blog" can also be used as a verb, meaning to maintain or add content to a blog.

Many blogs provide commentary or news on a particular subject; others function as more personal online diaries. A typical blog combines text, images, and links to other blogs, web pages, and other media related to its topic. The ability of readers to leave comments in an interactive format is an important part of many blogs. Most blogs are primarily textual, although some focus on art (art blog), photographs (photo blog), videos (video blogging), music (MP3 blog), and audio (podcasting).
Micro blogging is another type of blogging, featuring very short posts very often written from the palmtop or phone. This is also known as "Twitter".

There are many free weblog providers available, when you search for them on the internet.
A very good one to start with is "Blogger".

Browse to "Blogger"by

1. Double click **Internet Explorer** (or any other browser) on your desktop.
2. Type the web address of "Blogger" in the toolbar https://www.blogger.com/start
3. Click on "create a blog" to start, you will be directed to a form where you have to fill out some personal details and your email address.

4. Once you have done so and have given your blog a name, you will be directed to a starting page from where you can start blogging.
5. You can start writing blogs, add pictures, add short movies, customize and edit the blog, etc.

6. You can use your blog for many different purposes but it will fit well in education. For example when you are starting up a project at your college/school. The difference between a blog and a wiki is that on a blog other people can comment but they can't change the content.
7.

Conclusion:

In Grassroots Projects Blogging can be used in many different ways e.g. to share information on a certain project, as an e-portfolio, for project work etc. Blogs are very often used by lecturers and teachers to let the students know what keeps them busy, how the progress of a certain project is, what the latest news is on a certain range of topics. The difference between a blog and a wiki is that on a blog other people can comment but they can't change the content.

02. DIGITAL PLANETARIUM

Background information & Tips

Star gazing is undisputedly the oldest scientific hobby on earth. Prior to the invention of the telescope, stargazers required no special apparatus but their own eyes and a clear view of sky to appreciate the splendor of the infinity. For many people, star gazing doesn't start just as a favorite pursuit. In some, it is a natural response to an inborn desire - to reach out to the stars. In others, star gazing originates from the growing respect they cultivate for the vastness of this universe.

A thrilling way to refresh your senses, star gazing could actually be a great learning experience. Star gazing eventually inspires us to accumulate knowledge of heavenly bodies of our limitless cosmos. Many star gazers don't just stop at star gazing. They continue to learn in great detail the working principles of the universe and its constituents.

If you're new to the wonderful world of astronomy, or star gazing, a great outset would be Asynx Planetarium Software. To download the software and to start your observations today, visit http://www.asynx-planetarium.com, an invaluable source of information for beginners.

Browse to Digital planetarium by

1. Double click **Internet Explorer** (or any other browser) on your desktop.
2. Type the web address of the Asynx planetarium in the toolbar (or search for any other)Http://www.asynx-planetarium.com/
3. Click on "download" to start downloading the program.

4. You will be directed to a new page where you. have to click on the download button (either as a Zip file or .exe file, the Zip file is fast).

5. A download box will appear and when you click "run", your computer starts downloading the program and ask you where to save it (desktop is a good option). When you downloaded the Zip file you will have to open it with an unzip program ("winrar" is free, search for it on the net).
6. You are also asked on this page to fill out the forms so you can enter your location (choose the closest city) in the program. On the page you find explanation on how to do it.
7. After installing the program it will open. When open press any key to continue.

8. By clicking on the buttons your view will change.
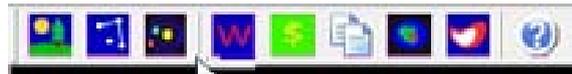
9. When you go to "cinfig" in the toolbar and then "preferences" you can adjust you position. Indicate "Geocentric Southern view", press OK.

Conclusion:

This tool is very good to use in the classroom for Science or Geography.

03. **EXCEL**

**Background information & Tips**

Microsoft Excel (full name Microsoft Office Excel) is software that lets you create tables, and calculate and analyze data. This type of software is called spreadsheet software. Excel lets you create tables that automatically calculate the totals of numerical values you input, print out tables in neat layouts, and create simple graphs.

Excel is a spreadsheet application written and distributed by Microsoft for Microsoft Windows and Mac OS X. It features calculation, graphing tools, pivot tables and a macro programming language called VBA (Visual Basic for Applications). It is the most widely used spreadsheet application.

Excel forms part of Microsoft Office. The current versions are Microsoft Office Excel 2007 for Windows and 2008 for Mac. In late 2009, Microsoft released the beta version of Microsoft Excel 2010.

Start Microsoft Excel by

1. Go to the "Start" menu > All programs.
2. Select Microsoft Office.
3. Click on Microsoft Excel.
4. The program will open and an empty spreadsheet will appear.
5. You can start using the spreadsheet by typing text and adding numbers but it won't be making sense at once.
6. You can either start learning working with Microsoft Excel by experimenting and trying but there are also some very good online tutorials. Hereunder you find two examples of good ones but when you search for excel tutorials you will find plenty more.
    Http://www.baycongroup.com/excel2007/01_excel.htm
    http://homepage.cs.uri.edu/tutorials/csc101/pc/excel97/excel.html
7. Browse to the website above and start with lesson 1, than lesson 2, etc.

8. In case you don´t have Microsoft Excel installed on your computer, browse to http://www.microsoft.com/office/2010/en/default.aspx. Here you can download a free beta version of Microsoft Excel.
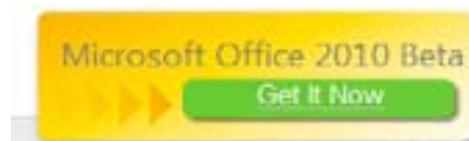
9. There is also a free alternative to Microsoft Excel which is called `Open Office`. It is free and features most of the features of Microsoft Excel.
10. Google docs also provides a free online alternative to Microsoft Excel See http://www.presentationmagazine.com/free-powerpoint-download-51.htm for more information and tips. Again when you search the internet for alternatives, you will find even more.

Conclusion:

Microsoft Excel has been used in different groups of the Grassroots Projects mainly for topics that are related to mathematics and economy. Nevertheless Microsoft Excel is a very useful application that can be used in many other topics as well as in classroom organization, school management and administration.

04. GOOGLE EARTH

Background information & Tips

Google Earth is a wonderful program that allows you to see various aspects of the earth by typing in their longitude and latitude or an address if you have it. You can also go to certain places by scrolling with your mouse. Google Earth is ideal for Geography lessons and the basic version is free.

This program is a little memory intensive, so if you have a slow computer, this may not be something that you want to have permanently on it.

Browse to Google Earth by

1. Double click **Internet Explorer** (or any other browser) on your desktop.
2. Browse to the Google Earth website, type: http://earth.google.com/
3. Click on "Google Earth download" and you will come to a page

   where you are asked to agree to Google Earth's Privacy Policy. Click on "Agree and Download".
4. After this you will get a box " googleupdatsetup.exe" and you will be asked to choose from three options: run, save, cancel. Choose "run" and now Google Earth starts to download. This might take some time cause GE is a rather large application. Note that when you have a slow internet connection it might even take a few hours to download.
5. Complete the download and the program will install an icon on your desktop.

6. Double click on the Google Earth icon and the program will launch. You might have to restart your computer before you can use Google Earth.
7. Take your time to explore the program and give the images time to get sharp.
8. On the homepage of Google Earth you can find many tutorials on how to work with Google Earth.

Conclusion:

In this Grassroots project Google Earth was used for Geography/Biology in combination with a GPS but you can also use for science and environmental studies.

There are many ideas on how to work with Google Earth in the classroom. Check for some lesson plans
http://www.shambles.net/pages/learning/GeogP/gearthplan/
Http://gelessons.com/lessons/

Or browse for many others. Even better is it to make lessons plans that are adjusted to the country where you are situated. Have fun!!

05. GOOGLE SKETCH UP

Background information & Tips

With Google Sketchup 7 you can create 3D models, share them with the world and even add them to Google Earth. You can download Google SketchUp Pro 7 (8 hours unlimited use). It has powerful features and applications for design and engineering professionals

The free version is not as capable as SketchUp Pro, but it includes integrated tools for uploading content to Google Earth and to the Google 3D Warehouse, a repository of models created in SketchUp. They have also added a new toolbox where you can walk, see things from a person's point of view, labels for models, a look around tool, and an "Any polygon" shape tool

.While the free version of Google Sketchup can export 3D to SKP, .dae and Google Earth's .kmz file format, the Pro version extends exporting support to include the .3ds, .dae, .dwg, .dxf, .fbx, .obj, .xsi, and .wrl file formats.

Google SketchUp can also save "screenshots" of the model as .bmp, .png, .jpg, .tif, with the Pro version also supporting .pdf, .eps, .epx, .dwg, and .dxf.

However, the free version of SketchUp does support Ruby scripts which has allowed many people to get around SketchUp's importing and exporting disabilities.

Browse to Google Sketchup by

1. Double click **Internet Explorer** (or any other browser) on your desktop.
2. Type the web address of Google Sketchup in the toolbar http://sketchup.google.com/
3. Click on **"Download Google Sketchup"**.

4. Sketchup will start downloading.
5. When the download is finished it will ask to install, simply double click on the logo on the desktop. Sketchup starts installing.
6. After installing a Sketchup logo (in the form of a house) will be placed on your desktop, click on that to start the program.

7. The program opens and a tutorial starts automatically. You can also learn how to work with Sketchup by studying the tutorials on the homepage of Google Sketchup.
8. Every time you open Sketchup a new "nameless document" will appear. You can start working on it and when you finished your work, you can name it and save it in a file.

Conclusion:

In this Grassroots project Google Sketchup was used to teach technical drawing instead of using a expensive CAD program. You can also use SketchUp in science, geography and many others subjects.

06. JAWS (JOB ACCESS WITH SPEECH)

Background information & Tips

JAWS for Windows is a powerful accessibility solution that reads information on your screen using synthesized speech.

This feature allows JAWS to be very useful to students who have trouble reading or seeing what is the screen in front of them.

JAWS provides many useful commands that make it easier to use programs, edit documents, and read Web pages. With a refreshable Braille display, JAWS can also provide Braille output in addition to, or instead of, speech. An array of versatile features and customizable options lets you tailor JAWS for your individual needs and preferences.

JAWS is simple to start-up, and has many features that more experienced users might find useful (voice changes, speed, etc).

Browse to JAWS by

1. Double click **Internet Explorer** (or any other browser) on your desktop.
2. Browse to the JAWS website, type: http://www.freedomscientific.com/jaws-hq.asp
3. **Install JAWS on your computer or network.** Note that JAWS is not a freeware program so you will have to pay for it to obtain it.

4. Double click on the JAWS icon on the screen. You should see a thin blue banner appear on the screen followed by a voice that will begin telling you about JAWS.
5. Whenever you wish to interrupt JAWS, or silence it, you may press the CTRL key, and JAWS will stop speaking. JAWS will not start again until you perform another task with the mouse or arrow keys.
6. To get JAWS to read the entire screen in front of you as you work within a document, press "ALT" and the "A" keys at the same time.
7. JAWS will now read to the bottom of the screen. Use the mouse or "PAGE DOWN KEY" to scroll down and have JAWS read more.

JAWS Quickstart:
1. Double click the JAWS icon on the screen.
2. Press CONTROL as soon as you hear anything.
3. Press the INSERT and DOWN ARROW keys at the same time. JAWS will now read the entire screen.

Conclusion:

In this Grassroots project JAWS was used for SEN in a college where there are some visual impaired students. The lecturer and the students were given a training in the use of JAWS.

07. **MOODLE**

Background information & Tips

Moodle is a Course Management System (CMS), also known as a Learning Management System (LMS) or a Virtual Learning Environment (VLE). It is a Free web application that educators can use to create effective online learning sites.

Moodle is a software package for producing Internet-based courses and web sites. It is a global development project designed to support a social constructionist framework of education.

Moodle is provided freely as Open Source software (under the GNU Public License). Basically this means Moodle is copyrighted, but that you have additional freedoms. You are allowed to copy, use and modify Moodle provided that you agree to: provide the source to others; not modify or remove the original license and copyrights, and apply this same license to any derivative work. Read the license for full details and please contact the copyright holder directly if you have any questions.

Moodle can be installed on any computer. It can run on Windows and Mac operating systems and on linux.

Go to http://demo.moodle.net/
To learn more about the Virtual Learning Environment in Moodle. Click on one of the course catagories in English. You can log in with the provided temporarily username and password.

Start creating a Virtual Learning Environment in Moodle by

1. Double click **Internet Explorer** (or any other browser) on your desktop.
2. Type the web address of Moodle in the toolbar: http://moodle.org/
3. Click on the Download menu item at the home page.

4. Once you are on the download page, you are given a few different options. Choose the Moodle package that fits you best, the standard package is a good option. Click on the package of your choise and a new page will open.
5. Click on the Download button of the latest version, choose either .tgz or .zip (these are schrink packages). Your downloading will start automatically.

6. The common download box will appear, choose "save" and a location to save it (desktop might do well).
7. Now you need a bit of time to let the package come in, depending on your internet speed. It might be a good idea to run the downloading overnight.
8. When the package is downloaded, you'll need to open it. For this you can use "unzip" or "WinRAR". These packages can be downloaded for free and don't take long to download.
9. Now you can install Moodle on your computer or server.

Conclusion:

In this Grassroots Zambia project Moodle has been downloaded by at least one group. The main constraint is that you need a stable internet connection to download. After that you can start building your virtual learning environment.

08. **MICROSOFT POWERPOINT** (PPT)

Background information & Tips

Microsoft PowerPoint is a presentation program by Microsoft. It is part of the Microsoft Office suite, and runs on Microsoft Windows and Apple's Mac OS X operating system.

PowerPoint is used by business people, educators, students, and trainers.

The most frequent versions used are Microsoft Office PowerPoint 2007 for Windows and 2008 for Mac. In 2010, Microsoft released Microsoft PowerPoint 2010.

PowerPoint presentations consist of a number of individual pages or "slides". The "slide" analogy is a reference to the slide projector, a device that has become obsolete with the use of PowerPoint and other presentation software. Slides may contain text, graphics, movies, and other objects, which may be arranged freely on the slide. PowerPoint, however, facilitates the use of a consistent style in a presentation using a template or "Slide Master".

The presentation can be printed, displayed live on a computer, or navigated through at the command of the presenter. For larger audiences the computer display is often projected using a video projector. Slides can also form the basis of webcasts.

Start Microsoft PowerPoint by

1. Go to the "Start" menu > All programs.
2. Select Microsoft Office.
3. Click on Microsoft PowerPoint
4. The program will open and an empty presentation will appear.
5. You can start making the presentation by typing text and adding pictures, graphics or movies or other objects.
6. In the presentation you can apply three types of movements:
    1. Entrance, emphasis, and exit of elements on a slide itself. They are controlled by what PowerPoint calls Custom Animations.
    2. Transitions, these are movements between slides. These can be animated in a variety of ways.
    3. Custom animation, this can be used to create small story boards by animating pictures to enter, exit or move.
7. You can either start learning working with Microsoft PowerPoint by experimenting and trying but there are also some very good online tutorials. This is a very good one especially for teachers. http://www.actden.com/PP/index.htm
8. Browse to the website above and start with unit 1, than 2, etc.
9. In case you don´t have Microsoft PowerPoint installed on your computer, browse to http://www.microsoft.com/office/2010/en/default.aspx here you can download a free beta version of PPT 2010.
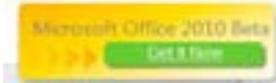
10. There is also a free alternative to PowerPoint which is called `Open Office impress`. It is free and features most of the features of PowerPoint it has also the ability to export a presentation to a simple Flash file.
11. Also Google provides a free online alternative to PowerPoint Google docs.
12. See http://www.presentationmagazine.com/free-powerpoint-download-51.htm for more information and tips.

Conclusion:

In the Grassroots Zambia Projects Microsoft PowerPoint has been used in many groups for many different topics. It has had a huge impact on the way teachers and lecturers, but also students give presentations in class.

09. **MICROSOFT PUBLISHER**

Background information & Tips

Microsoft Publisher, officially Microsoft Office Publisher, is a desktop publishing application from Microsoft. It is an application that has been specially developed to produce brochures, business cards, newsletters, flyers, websites, e-mails and much more.

The most frequent versions used are Microsoft Office Publisher 2007 for Windows and 2008 for Mac. In 2010, Microsoft released Microsoft Publisher 2010.

The application is very easy to use and will take you in steps through the document to produce the desired object.
You can import text from word documents directly or type it into the Publisher document.

You can save it as a publisher document but Publisher's proprietary file format (.pub) is unsupported by most other applications, with the exception of Adobe PageMaker and Corel Draw X4 (open only).

You can also save your Publisher document as a PDF.

Start Microsoft Publisher by

A
1. Go to the "Start" menu > All programs.
2. Select Microsoft Office.
3. Click on Microsoft Publisher if you have it installed. If not, follow the steps under section **B**.
4. The program will open and the start page of Publisher will appear.
5. You can select the Publication Type that you want by clicking on it.
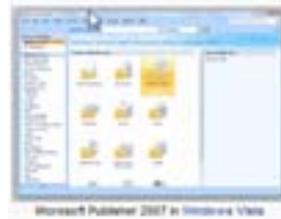
6. After that a new page with different formats of the chosen object appear.
7. Choose the one you like and start editing the object.

B
In case you don't have Publisher installed on your computer you can get a free version that you can use for 60 days.

1. Double click **Internet Explorer** (or any other browser) on your desktop.
2. Type the following web address in the toolbar http://www.toggle.com/lv/group/view/kl46468/ Microsoft_Office_Publisher.htm
3. Click on **"Download now"**.

4. Click on "run" or "save" in the download box and allocate a location.
5. After downloading you can install the program and start with **A**.

Conclusion:

In the Grassroots Zambia Project Microsoft Publisher has been used in the group that had "Newsletter writing" as project. Also other groups became very interested in the use of Publisher and started using it.

10. **SKYPE** (HOW TO USE)

Background information & Tips

You don't need to buy equipment to use Skype when your computer has a built in microphone and speakers, but a simple headset with microphone makes it much more convenient. Once you're using it, it feels no different from an ordinary phone and when you both have a computer with a camera in it and a fast internet connection you can even see each other while speaking .

(Do note, though, that Skype doesn't do emergency calls; if you need 911, use a real phone.)

Also, look at the online user guides for Skype at www.skype.com/help/guides.

Open Skype by

If it's your first time opening Skype:

1. Double click the Skype icon on your desktop or choosing it from the Windows > Start menu.

2. Click Don't have a Skype Name? This opens a Create account window.

3. Type in your name, then create a Skype username (called a Skype Name) and a password.
   - Pick one you can remember so you can sign in next time.
   - Follow the directions from there and click Sign in.

4. This will sign you in to Skype, ready for you to use.

If you've opened Skype before:

1. Open Skype from your desktop or Windows > Start menu.

2. In the start-up screen, click in the box under Skype Name and type your Skype name. Then do the same for your password.
   (If you forget your password, click the Forgot your password? link and follow the directions from there.)

3. This will sign you in to Skype, ready for you to use.

Conclusion:

Skype is a very useful and cost effective tool to communicate. It can also be used for conferencing and video chatting.

11. **SKYPE** (INSTALLING)

Background information & Tips

Skype isn't newit launched in 2003, and millions of people around the world use it. Skype, which routes your calls through the Internet, is easy to set up and pretty hassle-free to use. It requires no contract. you can set it up yourself and use it as often as you like, and you can use it to supplement (rather than replace) your normal phone if you prefer.

Look at the online user guides for

Skype at www.skype.com/help/guides.

Browse to Skype by

1. Double click **Internet Explorer** (or any other browser) on your desktop.
2. Type the web address of Skype in the toolbar: www.skype.com
3. click on the Download menu item at the home page.

4. Click on the link which takes you to the download page.
5. Click on the Download button, which displays a page with helpful step-by-step instructions.
6. **Run the Skype Setup application**
   A window will open asking what you want to do with a file called **SkypeSetup.exe**. You might see a confirmation message, asking if you're sure you want to run this software. Click 'Run' again.

7. **Follow the Setup Wizard**
   When the download has finished, the **Skype Setup Wizard** will appear and guide you through the rest of the installation.
8. After the installation has finished, you can open Skype at any time by clicking the Skype icons located either on your desktop or in your system tray (this can be found at the bottom right of your screen).

9. See next page on "how to use Skype"

Conclusion:

In the Grassroots Projects Skype was used to set up ways of communication between the members of the Grassroots groups. Some lecturers also used it to establish communication between experts around the world to gather information and share ideas on their teaching.

12. **DOWNLOADING VIDEOS ON Mp3ify**

Background information & Tips

Mp3ify is a <u>video sharing</u> <u>website</u> on which users can download videos.

YouTube and many other video streamers display a wide variety of <u>user-generated</u> <u>video</u> content, including <u>movie</u> <u>clips</u>, <u>TV</u> clips, and <u>music videos</u>, as well as amateur content such as <u>video blogging</u> and short original videos. Most of the content on YouTube has been uploaded by individuals, although media corporations including CBS, the BBC and other organizations offer some of their material via the site.

Unregistered users can watch the videos but it takes some time to stream the video. When you want to show the video in the classroom you should have it already on the computer. Now with some special applications you can download the videos in advance (for example during the night) to your computer and show them during the lessons in class.

Browse to mp3ify by

1. Double click **Internet Explorer** (or any other browser) on your desktop.
2. Type the web address of mp3ify in the toolbar
3. http://www.mp3ify.com/ You'll be asked to consider a donation……(feel free)
4. A search box appears where you can type the name or topic of the video.

5. When you are searching for a specific video just type in the name or topic in the search box and click on search.
6. Several video's related to the name or topic will appear, choose the one you like or that you think fits best.
7. Click on the right sided green "play" button to have a preview if you want.
8. Click on the black "mp4ify" to start downloading it on your computer.

9. You'll be redirected to a new page where this box appears

10. Click on download MP4 now and choose a directory to put it.
11. After downloading the video is on your computer to stay and to play as many times as you like.

Conclusion:

In the Grassroots Projects mp3ify or related programs can be used for science, history and geography lessons.

13. WIKIS

Background information & Tips

A wiki is a website that lets any visitor become a participant: you can create or edit the actual site contents without any special technical knowledge or tools. All you need is a computer with an Internet connection. A wiki is continuously "under revision". It is a living collaboration whose purpose is the sharing of the creative process and product by many. One famous example is Wikipedia, an online encyclopedia with no "authors" but millions of contributors and editors. The word "wiki" comes from Hawaiian language, meaning "quick" or "fast".

The idea is that the quality of information increases when everyone is encouraged to edit improvements on a certain topic.

When you become a member of a wiki, you can:
· **edit pages**
· **upload files and images**
· **post to discussions**
· **...and much more**

On the internet you can find many different servers for Wiki's (Wikifarms) In Grassroots Zambia we have mainly used Wikispaces. Wikispaces is a very "light" application, built to work anywhere, anytime. All you need is a web browser and an Internet connection.

A group of Grassroots Zambia has started a wiki, you can go to the solwezicollege wiki now at: https://solwezicollege.wikispaces.com/

Take a look around to get the idea or create a new wiki yourself.

Browse to Wikispaces by

1. Double click **Internet Explorer** (or any other browser) on your desktop.
2. Go to http://www.wikispaces.com/
3. Fill in the registration and click "Get started".

4. A new page will appear on which they tell you to confirm the password via your email account, open a new browser page to do so. Click on the link in the email message to confirm.
5. They offer the option to create a new wiki page:

6. Click on "create" and your wikipage will appear.

7. Now you can directly start building your wiki, start by experimenting or by following a tutorial that can be found on the wikispace site. There is also the "help" button in case you need it.
8. When you click the "edit" button at the right top, this toolbar will appear. This is working more or less similar to word.

9. You can drop a topic, start a discussion, invite people/ students, etc.

Conclusion:

Wiki's can be a very powerful learning tool but it needs a bit of exploration and you need to get your students involved in it. To do so they need to have good internet access.

14. YOU TUBE

Background information & Tips

YouTube is a <u>video sharing</u> <u>website</u> where users can upload, share, and view videos.

The company is based in <u>San Bruno, California</u>, and uses <u>Adobe Flash Video</u> technology to display a wide variety of <u>user-generated</u> <u>video</u> content, including <u>movie</u> <u>clips</u>, <u>TV</u> clips, and <u>music videos</u>, as well as amateur content such as <u>video blogging</u> and short original videos. Most of the content on YouTube has been uploaded by individuals, although media corporations including CBS, the BBC and other organizations offer some of their material via the site

Unregistered users can watch the videos, while registered users are permitted to upload an unlimited number of videos.

The account profiles of registered users are referred to as "channels".

Browse to YouTube by

1. Double click **Internet Explorer** (or any other browser) on your desktop.
2. Type the web address of YouTube in the toolbar <u>Http://www.youtube.com/</u>
3. Click on a video that you would like to watch and wait for it to start.
4. When you are searching for a specific video just type in the name or topic in the search box as shown below and click on search.

5. Several videos related to the name or topic will appear. Choose the one you like or that fits best.

Conclusion:

In the Grassroots Projects YouTube video channel was used by many different groups for a variety of subjects. It can be used in nearly every teaching but is especially in science, history, geography etc. The major constraint is that you need high-speed internet to show it in class or that you should be able to download the video. This used to be very difficult but nowadays it is much easier. Under "YouTube Video downloading" we will explain how.

15. **UP LOAD VIDEOS ON YOU TUBE**

Background information & Tips

YouTube is a <u>video sharing</u> <u>website</u> where users can upload, share, and view videos.

The company is based in <u>San Bruno, California</u>, and uses <u>Adobe Flash Video</u> technology to display a wide variety of <u>user-generated</u> <u>video</u> content, including <u>movie</u> <u>clips</u>, <u>TV</u> clips, and <u>music videos</u>, as well as amateur content such as <u>video blogging</u> and short original videos. Most of the content on YouTube has been uploaded by individuals, although media corporations including CBS, the BBC and other organizations offer some of their material via the site

Unregistered users can watch the videos, while registered users are permitted to upload an unlimited number of videos.

The account profiles of registered users are referred to as "channels".

When you register you can freely and unlimited upload your video's and share them with colleagues

Browse to YouTube by

1. Double click **Internet Explorer** (or any other browser) on your desktop.
2. Type the web address of YouTube in the toolbar <u>Http://www.youtube.com/</u>
3. Click on "create account", make a username and fill out the form.When you have a Gmail account you can directly use that username and password.
4. Click on "I accept"

By clicking 1 accept below, you are agreeing to the YouTube Terms of Use, Google Terms of Service and Privacy Policy.

I accept

5. You will be directed to the next page where you find the following box:

Video File Upload

Press "Upload Video" to select and upload a video file.   Upload Video

6. Click on "upload video" and choose the directory where your video is situated on your computer.
7. Select the video and start the uploading. You can give it a name, description, tag and category. It can take a while to upload your video depending on the size and internet speed.
8. Don't forget to decide on whether you want your video to be public or not. Then press save changes.

Privacy

Share your video with the world (Recommended)

Private (Viewable by you and up to 25 people)

Save Changes

Conclusion:

In the Grassroots Projects YouTube video channel can be used by many different groups for a variety of subjects. It can be used in nearly every teaching but is especially good for science, history, geography etc. The major constraint is that you need high-speed internet to upload videos. Once you know how to do it, you can share video's and lessons with your colleagues and students.

16. **WEB QUEST**

Background information & Tips

A WebQuest is an inquiry-oriented lesson format in which most or all the information that learners work with comes from the web.

Since the beginning days, tens of thousands of teachers have embraced WebQuests as a way to make good use of the internet while engaging their students in the kinds of thinking that the 21st century requires. The model has spread around the world, with special enthusiasm in Brazil, Spain, China, Australia and the Netherlands.

WebQuests are reflective, fluid, and dynamic. They provide teachers with the opportunity to integrate Internet technology into the course curriculum. A WebQuest activity presents students with access to resources that have been pre-screened by the WebQuest's creator. The way the activity is designed discourages students from simply surfing the Web in an open-ended, unstructured manner. The WebQuest activity is a useful tool for enhancing the development of transferable skills and helping students to bridge the gap between school and "real world" experiences.

You can find WebQuests on primary, secondary and higher educational level. Students can also construct WebQuests themselves.

Browse to "Web Quest" by

1. Double click **Internet Explorer** (or any other browser) on your desktop.
2. Type the web address of the WebQuest host in the toolbar: http://www.zunal.com/
3. Click on one of the topics in the WebQuest menu when you want to search for an existing Web Quest to get an idea on what web quests are about, you might find one that you want to use in your class, go ahead, it's free.
4. To make a new WebQuest yourself, Click on "register free" to make a new account

5. Fill out the form and click on "create account".

6. Once you have done you will be directed to a starting page from where you can start building your WebQuest. You will be directed trough the pages.
7. Before you start, think about what you're plan is.

8. Take a look at http://webquest.sdsu.edu/designsteps/index.html
9. You can add more WebQuests along the way.

10. Don't forget to teach your students how to work with WebQuests.

Conclusion:

The idea is that students can do the WebQuest and learn more about a certain topic but they can also produce a WebQuest. This is a very serious business though because you don't want your WebQuest database polluted with bad WebQuests. It is thus very important that they get clear instructions and make a WebQuest plan in advance.

17. **AVAST**

Background information & Tips

A computer virus is a computer program that can copy itself and infect a computer. The word "virus" is also commonly used to refer to other types of infection like malware, adware, and spyware programs that do not have the reproductive ability. A virus can spread from one computer to another for instance because a user sent it over a network or the Internet, or carried it on a removable medium such as a CD, DVD, or USB drive. Viruses can increase their chances of spreading to other computers by infecting files on a network file system or a file system that is accessed by another computer.

Antivirus software is used to prevent, detect, and remove computer viruses, worms, Trojan horses and malware, including adware and spyware.

Antivirus software can be obtained or downloaded from a dealer or website. For some you have to pay and others are freeware.

Installed antivirus software running on an individual computer is only one method of guarding against viruses. Other methods are also used, including cloud-based antivirus, firewalls and on-line scanners

There is a vast number of antivirus programs available. Look at http://en.wikipedia.org/wiki/List_of_antivirus_software
for a list of notable antivirus software in the form of a comparison table.

Grassroots Zambia has been using "Avast" in some projects. That's why we choose to describe it here.

Browse to Avast by

1. Double click **Internet Explorer** (or any other browser) on your desktop.

2. Go to http://www.avast.com/ and choose.

Or go directly to http://www.avast.com/free-antivirus-download

3. Click on "download now".

4. You will be directed to the download page on cnet.com.

5. A downloadbox will appear and choose "run".

6. Fill out the registration and your Avast will run automatically.

7. When you have installed the Avast antivirus software you can click on the Avast icon and the program will open.

8. Now you can set all kind of preferences and priorities.

Conclusion:

No one can work without antivirus software these days (even Mac and Linux systems should be aware). Avast is a reliable program amongst many others. In Grassroots Zambia it is used in the project where files are shared amongst students on a USB drive.
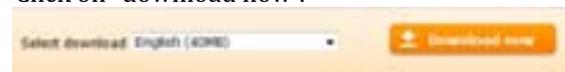
18. AUDACITY

Background information & Tips

Audacity is free software, developed by a group of volunteers and distributed under the GNU General Public License (GPL).

Audacity is a free, easy-to-use and multilingual audio editor and recorder for Windows, Mac OS X, GNU/Linux and other operating systems. You can use Audacity to:

- Record live audio.
- Convert tapes and records into digital recordings or CDs.
- Edit Ogg Vorbis, MP3, WAV or AIFF sound files.
- Cut, copy, splice or mix sound together.
- Change the speed or pitch of recording.

Free software is not just free of cost (like "free beer"). It is free as in freedom (like "free speech"). Free software gives you the freedom to use a program, study how it works, improve it and share it with others. For more information, visit the Free Software Foundation.

Programs like Audacity are also called open source software, because their source code is available for anyone to study or use. There are thousands of other free and open source programs, including the Firefox web browser, the OpenOffice.org office suite and entire Linux-based operating systems such as Ubuntu.

Browse to Audacity by

1. Double click **Internet Explorer** (or any other browser) on your desktop.

2. Go to http://audacity.sourceforge.net/
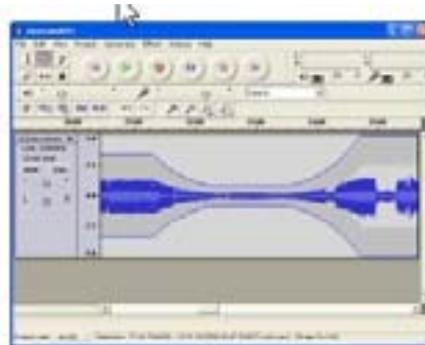
3. Choose "download".

4. A new page will appear on which they ask you to select your operating system to download the latest version of the free Audacity sound editor.

5. When you click the "Audacity installer" button you will be directed to the downloadpage.

6. A download box will appear and when you choose "run" the program will be installed on your computer.

7. You can start using Audacity for recording, editing and transferring soundfiles.

8. Find out how the program works by trying or go to "help", where you find tutorials etc.

Audacity running on Windows

Conclusion:

Sound recording and editing on a computer can be a very useful tool for students. It can be used in language lessons, music, and many other lessons.

19. **FL STUDIO** (FRUITYLOOPS)

Background information & Tips

FL Studio, formerly known as FruityLoops, is a digital audio workstation (DAW) developed by a Belgian company Image-Line Software.

FL Studio is a computer program that you can use to compose, record, edit and mix your own music.

FL Studio features a fully automatable workflow centered around a pattern-based music sequencer. The environment includes MIDI support and incorporates a number of features for the editing, mixing, recording, and mastering of audio. Completed songs or clips may be exported to Microsoft WAV, MP3, and the OGG Vorbis format using various high-quality sampling interpolation algorithms.
Scoring to video is possible using the video-player plug-in.

Browse to FL Studio by

1. Double click **Internet Explorer** (or any other browser) on your desktop.
2. Go to http://www.tucows.com/
3. Type "Fruity loops" in the search box

4. A new page will appear on which you will be give the possibility to download the program. Click on "FL Studio" and the download box will appear. Click on save.

5. The program is rather large (192 Mb) so plan to download it overnight.

6. Click on the program icon after downloading and FL Studio will start.

7. Now you can directly start recording and editing music by experimenting or by following a tutorial that can be found via Google or the FL Studio website. There is also the "help" button in case you need it.

Conclusion:

FL Studio is a very powerful tool for music lessons at school but it needs a bit of exploration and it needs some hardware to record with e.g. guitar, keyboard. Once you get your students involved in it they will be very enthusiastic. To do so they need to have good access to the computer where FL Studio is installed.

20. VIEWLET BUILDER

Background information & Tips

Viewlet Builder is a multimedia authoring tool. It enables you to create animated, interactive tutorials and demonstrations quickly and easily. They are entirely self-contained and may be posted to your web site for instant use by your site visitors. No plug-in is required and nothing needs to be downloaded. Just click and run.

To get started with Viewlet Builder you begin by taking screen shots. As you create your presentation, you can view your screen shots in a slide tray of thumb nailed images very similar to PowerPoint's slide tray. Then you add balloons or on-screen notes to add textual explanations about what the viewer is looking at and what they should be expecting next. You can even animate the mouse icon and have it engage menus, click on buttons, and totally simulate an end user's experience.
You can also add sound to your presentations to enhance the user experience.

There are many ways to use this software. Certainly it lends itself to presentations, web-based training and even product demonstrations.

The freeware edition with some limitations is available for immediate download.ng systems such as Ubuntu.

Browse to Viewlet Builder by

1. Double click **Internet Explorer** (or any other browser) on your desktop.
2. Go to http://www.qarbon.com/download/

3. Click on "download" and a new page will show where they ask you to fill out the registration and press "submit".

4. A new page will appear on which you have to click on "download" again.

5. When you click "download" a download box will appear and asks you where to put the program. Select a place e.g. desktop and press "save" or "run".

6. The program will start downloading and will be put on your computer.

7. When downloading is finished (this can take a while, maybe it's good to do it overnight) you can start the program by double clicking on the icon.

8. You can start building your presentation and put it on the web, on a certain computer or network or use it in the classroom with a projector etc.

Conclusion:

Viewlet Builder is easy to use and the impact of it can be very big. Students will learn a lot when you use it to give them tutorials on especially "how to use/do" certain things via the computer.

21. WINDOWS MOVIE MAKER

Background information & Tips

Windows Movie Maker is video creating/editing software, included in Microsoft Windows Me, XP, and Vista. It contains features such as effects, transitions, titles/credits, audio track, timeline narration, and Auto Movie. New effects and transitions can be made and existing ones can be modified using XML code. Windows Movie Maker is also a basic audio track editing program. It can apply basic effects to audio tracks such as fade in or fade out. The audio tracks can then be exported in the form of a sound file instead of a video file.

Windows Movie Maker is not included anymore in Windows 7, the latest version of Microsoft Windows. Instead it is now as a "web based tool", included in "Windows Live".

This "Windows Live" version of Movie Maker can be downloaded for free, but be aware that it only works on Windows 7 and Vista, not on XP.

In the older versions of Windows, like XP and Vista, Windows live and thus Movie Maker is included in the software. When you use this version you can start directly using Movie Maker. There are many online tutorials on how to work with Movie maker but by just playing around you can learn it as well.

http://www.microsoft.com/windowsxp/using/moviemaker/default.mspx

Go to Windows Movie Maker by

   A. When you are using XP or Vista

1. Click on "start" (the Microsoft icon) in the left corner of your desktop.
2. Move the cursor to "Programs".
3. Move the cursor to Windows Movie Maker and double click on it.
4. The program will immediately start and you can start editing a video.

   B. When you are using Windows 7.

5. Double click **Internet Explorer** (or any other browser) on your desktop.
6. Go to http://download.live.com/moviemaker

7. When you click on "download", a Windows Live installer will be downloaded on your computer. Start that application and choose Movie Maker.
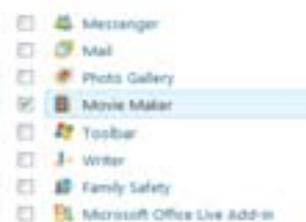
8. Fill out the registration if needed and click "Get started". You can also download other "Live" applications but choose only Movie Maker because when you download all the other applications as well, the download will take long. After downloading you can start Movie Maker.

Conclusion:

Windows Movie Maker is one of the easiest programs to edit videos and it is very useful to use in school situations. It can be used to show videos from excursions and certain lessons but also from all kind of other (school) situations.

22. **TUX PAINT**

Background information & Tips

Tux Paint is a free and open source bitmap graphics editor (a program for creating and processing raster graphics) geared towards young children. The project was started in 2002 by Bill Kendrick who continues to maintain and improve it.

Tux Paint was designed to be usable by children as young as 3 years of age. The user interface is meant to be intuitive, and utilizes icons, audible feedback and textual hints to help explain how the software works. The brightly-colored interface, sound effects and cartoon mascot (Tux, the mascot of the Linux kernel) are meant to engage children.

Drawing with Tux Paint's Paint tool. Tux Paint's normal interface is split into five sections:

- Toolbox, various basic tools and application controls (undo, save, new, print).
- Canvas, where the images are drawn and edited.
- Color palette, where colors can be chosen.
- Selector, providing various selectable objects (e.g., brushes, fonts or sub-tools).
- Information area, where instructions, tips and encouragement are provided.

A simple slideshow feature allows previously saved images to be displayed.

Browse to Tux Paint by

1. Double click **Internet Explorer** (or any other browser) on your desktop.

2. Go to http://www.tuxpaint.org/

3. Choose the download version that you need for your computer system.

4. On the next page you are asked to fill out a survey but you don't need to if you don't feel like. When you scroll down a bit you'll come to the download section. Click on Tux Paint 0.9.21 or any newer version. There is an option to install the rubber stamps as well.
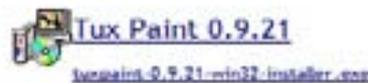
5. A new window will appear with a download box. Allocate a place where you want the program to be installed and click on "run" or "save". The downloading will start.

6. After downloading, double click on the .exe file and the program will be installed on your computer.

7. Click on the Tux Paint logo and start letting your children work with it.

Conclusion:

Nice program. Very imaginative, and the kids really like it.

23. MS WORD FOR MATHS

Background information & Tips

Microsoft Office Word 2007 includes built-in support for writing and editing equations. In previous versions you had to install the Microsoft Equation 3.0 add-in or the Math Type add-in. Equation 3.0 was included in previous versions of Word and is available in Office Word 2007.

Math Type was not included in previous versions of Word but was available for purchase.

If an equation was written in a previous version of Word and you want to edit the equation by using Office Word 2007, you need to use the add-in that was used to write the equation. If you purchased Math Type, you need to have Math Type installed.

MathType™ is a powerful interactive tool for Windows and Macintosh that lets you create mathematical notation for word processing, web pages, desktop publishing, presentations, and for TeX, LaTeX, and MathML documents. MathType is the professional version of the Equation Editor in Microsoft Office and works with 100s of applications and websites. http://www.dessci.com/en/products/MathType/
When you search the web you might find an older version to download for free. Http://software.emule.com/mathtype-5-2/

Go to Microsoft office Word by
Click on "start" and open a Microsoft Office Word document.

Write an equation
To write an equation, you can use Unicode character codes and Math AutoCorrect entries to replace text with symbols. When you type an equation, Word automatically converts the equation into a professionally formatted equation.
1. On the **Insert** tab, in the Symbols group, click the arrow under Equation, and then click Insert New Equation.
2. Type an equation.

Insert a commonly used math structure
1. On the **Insert tab**, in the Symbols group, click the Equation in the dropdown menu, and then click Insert New Equation.

2. Under Equation Tools, on the Design tab, in the Structures group, click the structure type that you want, such as a fraction or a radical, and then click the structure that you want.
3. If the structure contains placeholders, click in the placeholders and type the numbers or symbols that you want. Equation placeholders are small, dotted boxes in an equation.

When you open a document that contains an equation that was written in a previous version of Word, you cannot use the built-in support for writing and changing equations, unless you convert your document to Office Word 2007.

Click the **Microsoft Office Button** , and then click **Convert**.

You also might want to insert some "shapes" in your math's worksheet.
1. Click on "insert" and then on "shape", a collection of shapes shows up.
2. Choose the shape you want to insert and click on the place in your worksheet where you want it to be.
3. You can now adjust the shape or add text if needed.
4. Under Drawing Tools, on the Format tab, in the Insert Shapes group, click Edit Text .

Conclusion: MS Word is probably the most known and used Microsoft program. Most people come across it when working on the computer. Using MS Word in Mathematics though needs some more exploration. Take your time to familiarize yourself with it. Type "ms word for math" in your search engine and you will find a lot of information math" in your search engine and you will find a lot of information.

24. **LIBRARY MANAGER** 6.6.0

Background information & Tips

This library management program organizes student, staff and book information, and prints reports.

It can keep track of the magazines and newspapers the library subscribes to and print the bill accordingly. You can also maintain issue and deposit of books, magazines and newspapers.

Late fine settings and number of books to be issued can be changed as required, and it automatically calculates fines on late books. Books for staff members can also be issued separately. A record of book agencies can be kept.

In this shareware version, entries of only 100 books, 25 students and 15 Staff members can be made. For making further entries you may need to purchase the full retail version of the software.

Browse to Library Manager by

1. Double click **Internet Explorer** (or any other browser) on your desktop.

2. Go to http://www.tucows.com/preview/296512 or type "library manager" into your search engine and choose a download site.

3. When going to the site mentioned above, click on "download now".

   Library Manager 6.6.0
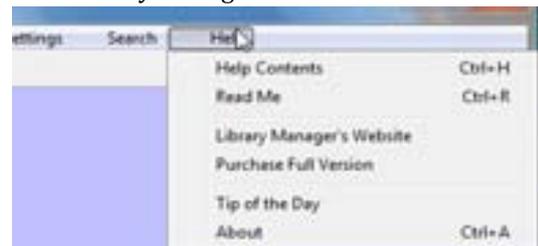   Download Now
   Filesize: 3.35 MB
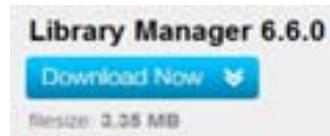
4. A download box will appear and you can start the downloading by clicking on "save" or "run".

5. Double click on the Libray Manager.exe icon to install the program.

   librarymanager 660

6. The program will launch directly and you can start building your library database.

7. Go to the "Help" section to learn how to work with Library Manager.

ettings	Search	Help	
		Help Contents	Ctrl+H
		Read Me	Ctrl+R
		Library Manager's Website	
		Purchase Full Version	
		Tip of the Day	
		About	Ctrl+A

Conclusion:

Library Manager is a perfect tool for building a library database and keeping track of all books. It is a pitty that in this shareware version, entries of only 100 books, 25 students and 15 Staff members can be made. It might be worth obtaining the full version for your college/ school.

25. WEBS.COM

Background information & Tips

In the early days of the worldwide web building a website was something that only could be done by specialist who knew how to write HTML or any other language where you build websites with. Nowadays it has become much easier because everyone now can build simple websites with pre -shaped formats. When you want a very unique and special website you still better leave that to the professionals or learn yourself how to make one like that.

For a simple website with a free hosting space there are plenty of opportunities on the web. Use your search engine and you will find…

We will give an example and show the one we have used for the Grassroots Zambia website. Remember, there are plenty of others but do a bit of research before you start building because some of the hosting promise more than they fulfill.

Also, take time to think about what you want on the site and where you want it. Remember that most sites can be found by any person so be careful with confidential information. Be careful with pictures. Always ask people before you publish their picture. Especially school website should take care with that!
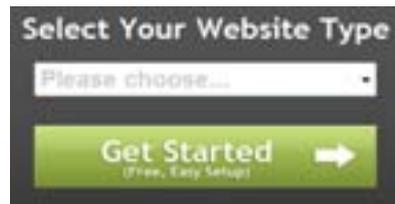
http://www.webs.com/

Browse to webs by

1. Double click **Internet Explorer** (or any other browser) on your desktop.
2. Go to http://www.webs.com/
3. Select your website type, choose "group/organization" in case you want to make a site for your school.

4. Sign Up: Create your own website for free, in case you need more space later, you can upgrade.

5. Choose a site address and title and fill it out in the box. Think well in advance about the name you choose, it should be easy to remember. The title can be changed later the address can't.

6. Select a template. This is what you will see as header of the site. You can always change the template later. Click on

7. Now you can start filling your website with materials and documents. You can always change the looks of it and change the template. Be aware that it is better to first organize the website properly and have it tried out a few weeks and when you are sure it works well, you can communicate the web address to the users.

Conclusion:

A free website is now available for every school and even for every teacher. Make sure that as a school you communicate who is responsible for the site and that there is a clear structure. Be aware of the privacy of the children and teachers.

A very good alternative to webs.com is http://www.doteasy.com/. This has as extra feature, the opportunity to create up to 10 e-mail addresses for school staff.

26. CAMTASIA STUDIO

Background information & Tips

Every day, thousands of people around the world use Camtasia Studio to create videos that train, teach, sell, and more! It's the easiest way to demonstrate a process, product or idea.

Camtasia Studio is a screen video capture program, published by TechSmith. The user defines the area of the screen or the window that is to be captured before recording begins; it is also possible to capture the entire screen area. You can also talk, and use a videocam.

After the presentation has been captured, the presenter is able to revise it by cutting and/or pasting different parts, as needed. In addition, the presenter is also able to overlay their voice, as well as sound effects or music onto the presentation.
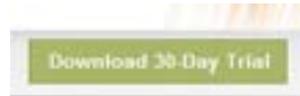
The program allows files to be stored in its own proprietary format, which is only readable by Camtasia itself; this format allows for fairly small file sizes, even for longer presentations.

Browse to Camtasia Studio by

1. Double click **Internet Explorer** (or any other browser) on your desktop.
2. Go to http://www.techsmith.com/camtasia.asp
3. Double click on

   Download 30-Day Trial

4. Fill out your email address.

   Email:

   We will not share your email address with anyone, period.
   -Bill Hamilton, President.
   TechSmith Privacy Policy

5. Click on download

   Download Camtasia Studio

6. The download will start automatically.

7. A download box will appear

   File Download - Security Warning

   Do you want to run or save this file?

   Name: camtasia.msi
   Type: Windows Installer Package, 179MB
   From: download.techsmith.com

   Run   Save   Cancel

8. Choose save or run and the program starts to be downloaded. Be aware that it can take a few hours so it might be a good idea to do it overnight.

9. This software is a 30 days free trial, after that they expect you to buy the software.

Conclusion:

Camtasia is a very useful tool for explaining certain handling \processes of a computer. It can also train and teach students how to work with certain applications. The program is easy to install and to use but it requires some download time.
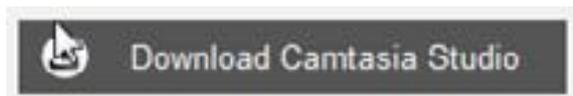
27. SURVEYMONKEY

Background information & Tips

SurveyMonkey is a survey and polling tool, available in free and paid-for versions.

SurveyMonkey has the purpose to enable anyone to create professional online surveys quickly and easily.

It is a powerful yet simple to use online survey tool. You can customize, share results and password protect your surveys.

The free version is for quick and small scale surveys of students and colleagues.

Browse to SurveyMonkey by

1. Double click **Internet Explorer** (or any other browser) on your desktop.

2. Go to http://www.surveymonkey.com/

3. Create a Basic (free) account to begin using the online survey system. You won't have to download software because everything is accomplished by logging into your registered account.

4. You are prompted to enter a unique username and password to create a Basic account.
    NOTE: The login fields are case sensitive

5. After creating an account you will enter the page where you can create the survey in three easy steps.
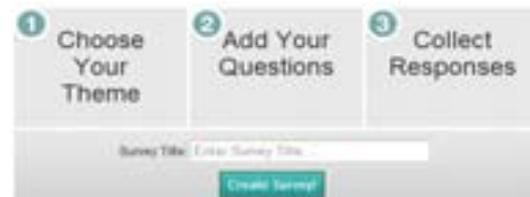
6. A users manual is available in PDF on http://s3.amazonaws.com/SurveyMonkeyFiles/UserManual.pdf

Conclusion:

SurveyMonkey is a tool for designing professional looking questionnaires, polls etc.
It is excellent for social science surveys or democracy enhancing polls of students views. It is a highly intuitive Web based product.

28. **DERIVE**

Background information & Tips

Derive is an application developed for the mathematical environment because it has multiple options for solving the most intricate problems.

With this application you can perform symbolic calculus, which means working with symbolic constants, derivatives, defined and undefined integrals, series, limits, polynomials, vectors, matrixes, determinants, solving of equations systems, function graphs and many operations more.

It also has the possibility of programming your own mathematical routines observing the results in tables and graphics, for posterior analyses.

Derive has intuitive graphical interface for the person of the mathematical environment but also for the student.

The following webpage gives you a list of other updated computer algebra systems.
http://en.wikipedia.org/wiki/Comparison_of_computer_algebra_systems

Browse to Derive by

1. Double click **Internet Explorer** (or any other browser) on your desktop.

2. Go to a search engine e.g. Google.com and type "Derive"

3. A list of options will show up and choose one where it says you can download it for free.
4. Go to one of these pages and start downloading the program.

5. A download box will show up, choose a location where to put it.

6. The program will be on your computer ready for use.

7. Search the web for a users manual if needed.
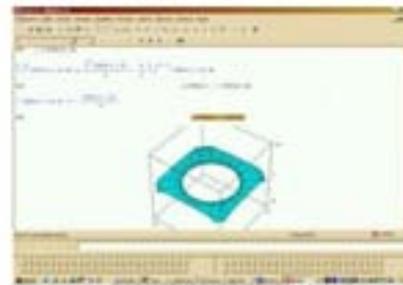
Conclusion:

If you are a student or a teacher and need a tool that helps you with your mathematical problems, algebra, vector and functional graphics, then Derive is a powerful and interesting tool to use.

29. **MICROSOFT MATH**

Background information & Tips

Microsoft Math is an educational program, designed for Microsoft Windows, that allows users to solve math and science problems. It is developed and maintained by Microsoft, it is primarily targeted for students as a learning tool.

A related add-on that offers certain limited features of Microsoft Math is available for Microsoft Word 2007. It is also maintained by Microsoft and is available free to users of Word successfully validated by the Genuine Microsoft Program.

Microsoft Math contains features that are designed to assist in solving math, science, and tech-related problems, as well as to educate the user. The application features such tools as a graphing calculator and a unit converter. It also includes a triangle solver, and an equation solver that provides step-by-step solutions to each problem, a feature beneficial to students attempting to learn problem-solving skills.

The standalone version of Microsoft Math 3.0 also has support for calculus and Ink Handwriting, allowing the user to write out problems by hand and have them recognized by Microsoft Math.

Browse to Microsoft Math by

1. Double click **Internet Explorer** (or any other browser) on your desktop.
2. Go to http://www.microsoft.com/learningspace/ here you can buy the program.

   Microsoft®
   Math
   Get all the tools you need to tackle math and science problems quickly and easily— from a single source.
   $19.95
   Buy Now!   Learn More

3. Via a search engine you can easily find an (older) free version of MS Math. e.g. http://www.toggle.com/lv/group/view/kl37371/Microsoft_Math.htm

4. Click on "download now" and start downloading the program.

   Download Now!!!

5. After downloading you can start using the program. On http://download.microsoft.com/documents/australia/EDUCATION/Teacher_Tools/MSMathProductGuide.pdf you can find a users manual on MS Math.

Conclusion:

Math is the Microsoft utility for students that need some help that need some help to assimilate math concepts while they practice at their own pace. The application offers material on algebra, trigonometry and calculus, and it also includes physics and chemistry.

Microsoft Math incorporates different tools to help students understand while they incorporate knowledge and go deep into the subject. You will find an advanced calculator for graphics and resolution capacity for equations, many simple equations to start from scratch and a utility to convert measures.

30. **MICROSOFT SONGSMITH**

Background information & Tips

Microsoft Research Songsmith is a musical accompaniment application for Microsoft Windows, launched in early 2009. It generates musical accompaniment to match a singer's voice. Just choose a musical style, sing into your PC's microphone, and Songsmith will create backing music for you. Then share your songs with your friends and family, post your songs online, or create your own music videos.

Songsmith immediately generates a musical accompaniment after a voice is recorded. The user can adjust tempo, genre (such as pop, R&B, hip-hop, rock, jazz, or reggae), and overall mood (e.g. to make it happy, sad, jazzy, etc.).

The software was developed by a team at Microsoft Research.

Browse to Songsmith by

1. Double click **Internet Explorer** (or any other browser) on your desktop.
2. Go to http://research.microsoft.com/en-us/um/redmond/projects/songsmith/

3. Choose "download"

4. After clicking on "download" you will be directed to a new page, here you can find explanation on how to download and use the program. You can use the free trial version 6 hours before you have to purchase it.

5. On the Songsmith webpage you will also find a "help" button and a "forum" in case you want to learn more about the program.

Conclusion:

Songsmith is a nice tool for your music lessons. Give your students a first taste of songwriting just by singing into a microphone, then explore different styles and arrangements, even if they don't know anything about music theory.

31. **MICROSOFT OFFICE LIVE WORKSPACE**

Background information & Tips

Office Live Workspace is an online tool to collaborate on and contribute to a project. Students and/or teachers can share one document or a calendar, and add comments or review ideas from others in the group. The group leader decides who has access to view or edit the material that is posted.

Office Live Workspace is a free service for storing and sharing documents online. It is most commonly used for work, school, and home projects because documents may be managed from remote locations without a flash drive. Office Live Workspace requires web access and a compatible browser. Use of a workspace can be enhanced by installing **Silverlight**, a plug-in that makes it easier to upload multiple documents and collaborate with others on a workspace. In order for workspaces to be accessed directly from Office, users of Word, Excel and PowerPoint must install an Office Live Update. Files can't be edited from within workspace, but clicking on "edit" will open them in Microsoft Office. The workspace doesn't offer offline collaboration instead documents are "checked out" and "checked in" but the service does integrate with SharedView for real-time screen sharing.

Another opportunity to use a similar kind of tool can be found in Google. Docs.

Browse to Office Live Workspace by

1. Double click **Internet Explorer** (or any other browser) on your desktop.

2. Go to http://workspace.office.live.com/

3. Register with your email address and remember (save) your login ID and password.

4. After you have registered you can login and you will enter your windows live space.

5. Here you can upload documents and make workspace for certain projects.

6. You can also assign persons who are enabled to share your documents and workspace. There is a maximum of 250 persons.

7. Under "more information" you will find a clear explanation on who to work.

Conclusion:

Office Live Workspace is one of the good opportunities to create a project workspace. Of course there are plenty of alternatives but Office Live Workspace has proven itself to be reliable. When students start working with it, a teacher can follow their online collaboration and productivity.

32. **MICROSOFT OFFICE LIVE SKYDRIVE**

Background information & Tips

With Windows Live SkyDrive you can store and share files and photos for free.

Windows Live SkyDrive offers a 25 gigabytes (GB) of free, online storage. You can use it for a workgroup to upload and share documents in one central place, rather than bouncing them around in emails.

You can also use it for personal files and photos or for files and documents for your work e.g. lesson plans. You can store them and access them with a password.

Browse to Windows Live SkyDrive by

1. Double click **Internet Explorer** (or any other browser) on your desktop.
2. Go to http://skydrive.live.com/

3. Register when you haven't done already or otherwise use your ID and password.

4. You will enter your SkyDrive which functions more or less like a external hard drive or usb stick The size is 25 GB.

5. You start uploading documents, photo's, and other materials.

6. You can protect your documents by a password, you can share your documents by giving other people access.

Conclusion:

Windows live SkyDrive is a smart place to back up your electronic grade books, vital lesson plans and teaching materials. You can also use Windows Live SkyDrive to share photos from a school event or field trip. You can store personal documents there as well. Be sure to protect them with a password.

33. **RAPTIVITY**

Background information & Tips

Raptivity is a computer software pack that you can use to build interactive learning activities for your students on any topic that you like.
Raptivity is an interactivity builder and not a course creation tool. Once you have made your interactivity, you can store it on a website or on your learning environment e.g. Moodle, Blackboard.

The software comes with a Raptivity library of 175+ rapidly customizable interactions and the content of these interactions can be used in various learning situations.

It is possible customize these interactions is possible without programming.
The wizards, forms and templates make Raptivity easy to use.

The software is produced by Harbinger Knowledge Products and you can obtain a trial version for 14 days, after that you need to purchase the software.

For informational instruction video go to:
http://www.raptivity.com/Raptivity%20tour.htm

Browse to Raptivity by

1. Double click **Internet Explorer** (or any other browser) on your desktop.
2. Go to http://www.raptivity.com/index.html
3. Click on "free trial"

4. You will be directed to another page where you can start the free trail download.

5. Fill out the usual

6.   After completing the form you will receive the download details in your email inbox, from there you can start downloading.

7. Once you have the program you can start building learning activities.

Conclusion:

Raptivity is a very exciting product and meets the need of teachers and students to build their own learning activities on the computer without having to write it in program language. How easy the software works is still hard to say, but the idea is very nice and promising.

34. FREE MIND

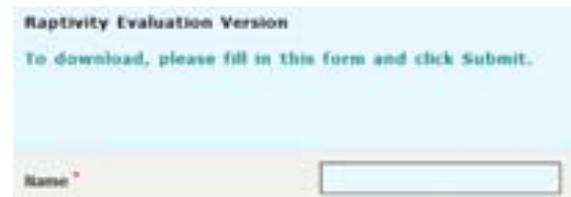**Background information & Tips**

FreeMind is a free mind mapping application written in Java. It runs on Microsoft Windows, Linux and Mac OS X.

As with other mind mapping software packages, FreeMind allows the user to edit a hierarchical set of ideas around a central concept. The non-linear approach assists in brainstorming new outlines and projects as ideas are added around the mind map. As a Java application, FreeMind is portable across multiple platforms and retains its same user interface.

Mac users may notice a slight difference in lay-out.

FreeMind was a nominee for Best Project in SourceForge.net's Community Choice Awards for 2008.

For clear instructions on how to work with Freemind look under the "help" button in the program.

Browse to FreeMind by

1. Double click **Internet Explorer** (or any other browser) on your desktop.

2. Go to http://freemind.sourceforge.net/

3. Here you will find very accurate information on the free mind mapping software.
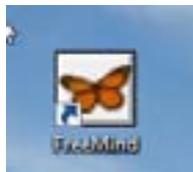
4. Click on the "download section.

5. Scroll a bit down on the page and find a box in which you can find your download version.

6. Click on the version of your choice and the downloading will start.

7. The download box will appear and store the program on the allocated place. A desktop icon will appear on your desktop.

8. Open the program, open "new" and start mindmapping. Look under help if needed.

Conclusion:

Freemind is a very good mind mapping application and is obviously written by people who really understand mind maps and how they are used. Once you start working with it, it will be so much fun that you can't stop and while working you will experience the benefit and the learning strength of it. The fact that Freemind is free, makes it even better.

35. MICROSOFT **AUTO COLLAGE**

Background information & Tips

Microsoft AutoCollage is a photo editing program that in a few simple clicks allows you to process your own digital photos automatically into a fantastic collage.

With the user-friendly design of the program, it is easy for everyone to put pictures into an instant collage!

A free 30-day trial version of Auto Collage can be downloaded.

With the program it is easy to make a different collage for each day. You can use it as a background on a smart board or in a PowerPoint is a fun way for students to share their work with the rest of the class.

Look for how to work with AutoCollage on http://www.youtube.com/watch?v=yiH6M-9n2j4

Browse to AutoCollage by

1. Double click **Internet Explorer** (or any other browser) on your desktop.

2. Go to http://research.microsoft.com/en-us/um/cambridge/projects/autocollage/

3. Click on "download" you'll be directed to the next page.

4. Here you can download a free 30 day trial version.
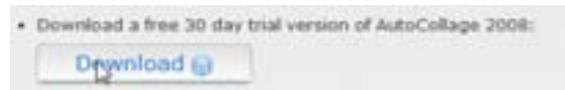
5. Downloading will automatically start when you click the button, a download box will appear.

6. If you want you can also get the program permanently for free. Just search on the internet and you may find it.

Conclusion:

The use of the program in education can be included in project reports. Students working with a specific theme can search for photos and illustrations on the internet and from the images of the theme they can create a collage in Microsoft AutoCollage. This collage can again be used in the project.

VVOB?

Oh, that stands for Very Very Organised Business