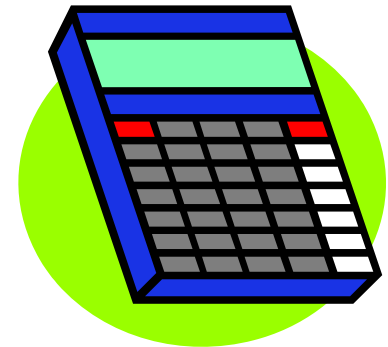# CfE for Free*

*If not free then very cheap!

Sean Stratton

PT ICM, Coltness High School

# ICT in CfE

- The computer is a tool, a very expensive and powerful tool, but a tool none the less.
- Computers can help with education either by the use of software or online resources
- Computers are not the only tool in our tool box but they are one of the most versatile.

# The eight curriculum areas are:

- Expressive arts
- Health and wellbeing
- Languages
- Mathematics

- Religious and moral education
- Sciences
- Social studies
- Technologies

**All** of these areas can be enhanced and delivered with the aid of ICT!

# Types of resources

- Hardware
  - These are devices that attach to the computer
- Software
  - These can be installed on a machine that is not connected to the internet. However, they are often not portable and require a licence
- Online
  - These require a connection to the internet to use them but they are available from any where.

## Hardware Resource
## Not free but you can improvise

- Flip type video camera (so versatile)
- Camera on a stick
- Wiimote smartboard
- Mice remotes
- Flash drives
- Digital TV Recorder

# Camera on a stick

- You need
  - A small video camera (flip)
  - Cheap £1 tripod from a pound shop
  - A painters pole or stick
  - Some duct tape
- What next
  - Tape the tripod to the stick and record yourself

# Wiimote smartboard

- You need
  - Wiimote
  - Software (free or commercial)
  - IR Pen (homemade or commercial) – www.irpens.co.uk or ebay
  - A projector (and hard surface) or monitor
- What next
  - Connect the wiimote to the computer using the software
  - Use the IR to make an interactive white board for very little money.

# Mice remotes

- You need
  - Microsoft mouse mischief
  - a bunch of mice (wired or wireless)
  - Powerpoint

- What next
  - Install the mouse mischief software and use powerpoint to create the presentation (or download a sample from MS website)
  - The software will allow the pupils to answer the questions by clicking on the answers

# Digital TV recorder

- You need
  - DVB-T USB stick (keep your eyes open they often go for about £15)
  - Computer
- What next?
  - Use the supplied software to record programs

# Flash Drives

- You need
  - A flash drive (shop around but Asda have 4GB for £7)
- What next
  - Use it to store portable apps
  - Use truecrypt to keep data secure
  - Use it to backup your network area
  - Keep some music on it
  - Create a boot disk for an Apple

# Free Online Resource Creators

- http://www.blockposters.com/
  - Create giant posters for your room
- http://www.comicbrush.com/
  - Create comics
- http://docs.google.com/
  - A suite of applications to use for free, **now mobile**
- http://www.picnik.com/
  - Edit photographs from anywhere
- http://www.text2mindmap.com/
  - Create simple mindmaps that can be saved as pictures
- http://quizlet.com/
  - Create and share flash cards online

There are far more online application than those listed here, these are just a small sample.

# Free Online Resources

- glowscotland.org.uk
  - Glow – use it or lose it
- https://blogs.glowscotland.org.uk/nl/
  - NLC Blogs in Glow
- http://www.flickr.com/
  - Photo sharing
- http://www.slideboom.com/
  - Share powerpoints
- http://www.googlelabs.com/
  - I wonder what Google are planning for the future?

There are far more sites than listed here, try sticking the title into Google!

# Online Search Tools

- http://search.creativecommons.org/
  - Search using Google to get CC resources
- http://flickrcc.bluemountains.net
  - Search flickr for images
- http://johnjohnston.info/flickrCC/index.php
  - Flickr search but with easier attribution
- http://search-cube.com/
  - A search engine in 3D (a bit of fun)
- http://www.google.com
  - One of the biggest and best

# Glow

- A "free" service that allows teacher, pupils & parents to share information and work
- Glow Blogs
  - Allows staff and pupils to communicate with the world beyond Glow
- Glow Groups
  - Create sites and pages to share work and ideas
- Glow Learn
  - Create courses and classes to track attainment and achievement

# Google for Educators

- Google have a range of resources (on and off line) and most are free for Educators
  - http://www.google.com/educators/tools.html
- Training
  - http://edutraining.googleapps.com/

# Software Licences

- Commercial – You have to pay to use them
- Demo – A cut down version of the commercial product, with features missing. (often timed)
- Shareware – You have to pay to use them eventually
- Freeware – You do not have to pay to use them, often contain hidden programs that give you pop up ads.
- Open Source – You often do not have to pay to use them and you can modify the programs

# How to find open source software

- Searching on Google will often lead to dead end sites, so try and search smart

- Check on http://sourceforge.net/ a lot of software is "born" here

- Use sites like http://bearware.info/ which catalogue and sometimes review free software.

- A lot of educational software is free, look out for specialist sites.
http://www.schoolforge.net/education-software

# Working with free or open source software

- Make sure your anti-virus and firewall are up to date.
- Look for reviews and problems before you install the software.
- Think portable! Do you have to install it or will it work off of a flash drive? http://portableapps.com/
- Support is often lacking so you might have to make up documentation as you go along.
- Remember its free, don't give the developer too much of a hard time but feel free to praise them :)
- Keep a note of the licence with your software audit

# Advantages of free software

- ITS FREE!!!!
- Give a copy to the kids to take home.
- Put it on a flash drive and never be without it
- The software is often very well built and robust
- Allows for small developers to become well know.
- Performs task that commercial software doesn't
- Did I mention ITS FREE!!!!

# A Small List Of Free Software
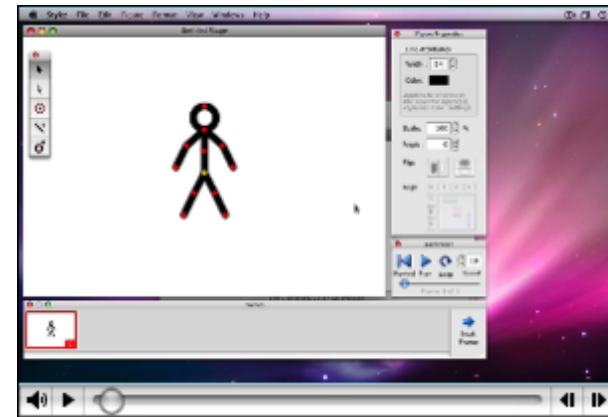## (Don't Panic – more on the coming pages)

- Picassa
- Open Office
- Freemind
- Maryo
- Inkscape
- Pivot
- iSpring free

- k-sketch
- audacity
- cdburnerxp
- google earth
- hot potatoes
- irfanview
- sketch up

# Sample Application

- The text on the following slides comes from the website of the applications.

# Stykz

Stykz is the first multi-
platform stick figure
animation program in
the world (as far as
we know!), and it is
COMPLETELY
FREE!

Download From:

http://stykz.net/Home.html

# Scratch

Scratch is a programming language that makes it easy to create your own interactive stories, animations, games, music, and art -- and share your creations on the web.
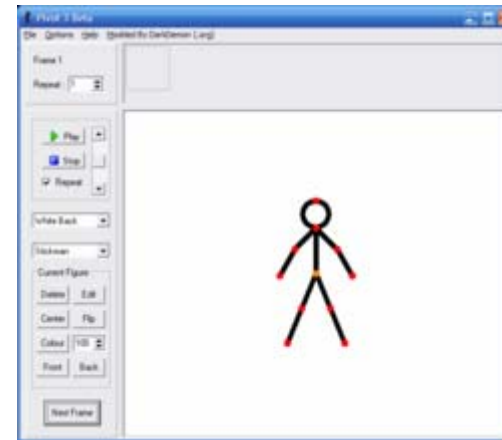
Download From:

http://scratch.mit.edu/

# Pivot Stickfigure Animator

(usually shortened to Pivot) is a free Windows application that allows users to create stick-figure animations, and save them in the animated GIF (Graphics Interchangeable Format) format used on web pages and, which can also be converted into videos using other software, such as Windows Movie Maker.



Download From:

Search on Google, but you can use http://darkdemon.org/downloads/ after creating an account

# iSpring Free

lets you easily create web-ready Flash presentations preserving every aspect of your original PowerPoint content.



Download From:

# Kodu

is a new visual
programming language
made specifically for
creating games. It is
designed to be
accessible for children
and enjoyable for
anyone.



Download From:

http://research.microsoft.com/en
-us/projects/kodu/

# Formulator Tarsia

makes it easy to create your own mathematical learning activities. With this software you will easily be able to create, print out, save and exchange customised jigsaws, domino activities and a variety of rectangular card sort activities. The activities created using this software can be presented in printable form, ready to cut out.
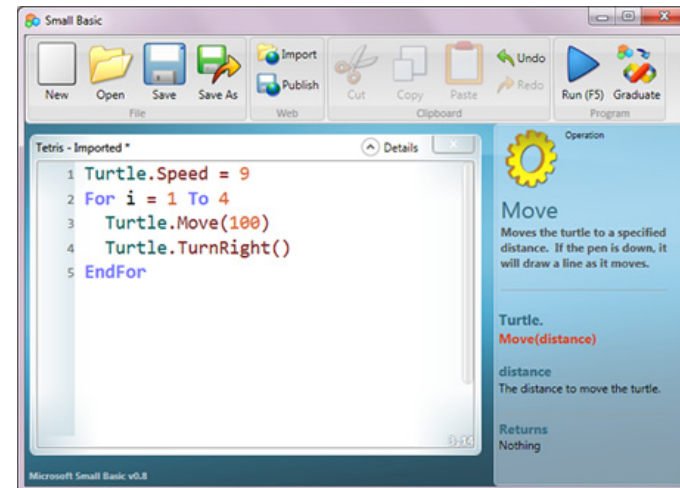
Download From:

http://www.mmlsoft.com/index.php?option=com_content&task=view&id=4&Itemid=5

# Microsoft Small Basic

puts the *fun* back into computer programming. With a friendly development environment that is very easy to master, it eases both kids and adults into the world of programming.



Download From:

http://smallbasic.com/

# **Picasa**

is free photo editing
software from
Google that
makes your
pictures look
great.



Download From:

http://picasa.google.com/

# OpenOffice.org

is the leading open-source office software suite for word processing, spreadsheets, presentations, graphics, databases and more.
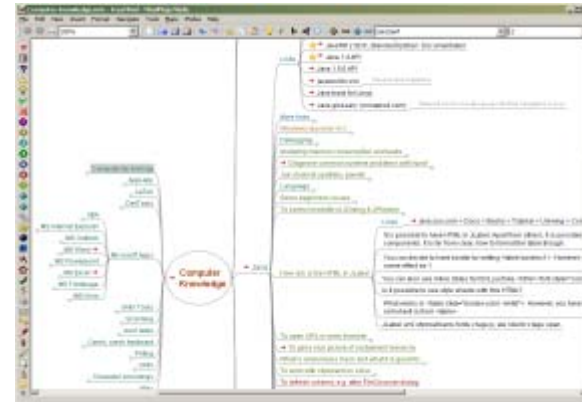


Download From:

http://www.openoffice.org/

# FreeMind

is free <u>mind-Mapping</u> software written in Java.

It can export to many file types including flash.



Download From:

http://freemind.sourceforge.net/ wiki/index.php/Main_Page

# Secret Maryo Chronicles

is an **Open Source two-dimensional platform game** with a design similar to classic computer games.
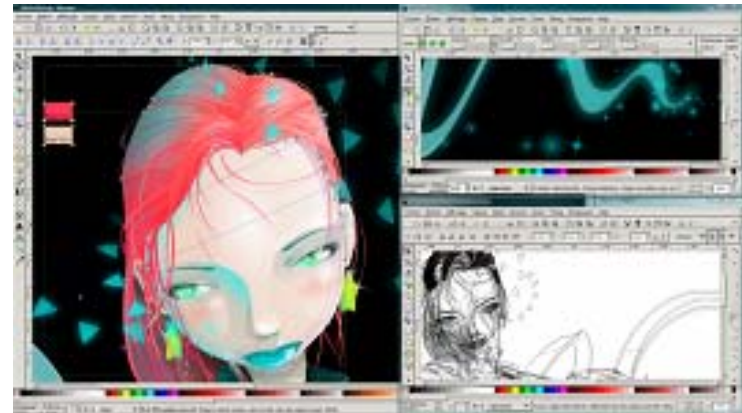
It allows for level editing and creation



Download From:

http://www.secretmaryo.org/

# Inkscape

An Open Source vector graphics editor, with capabilities similar to Illustrator, CorelDraw, or Xara X, using the W3C standard Scalable Vector Graphics (SVG) file format
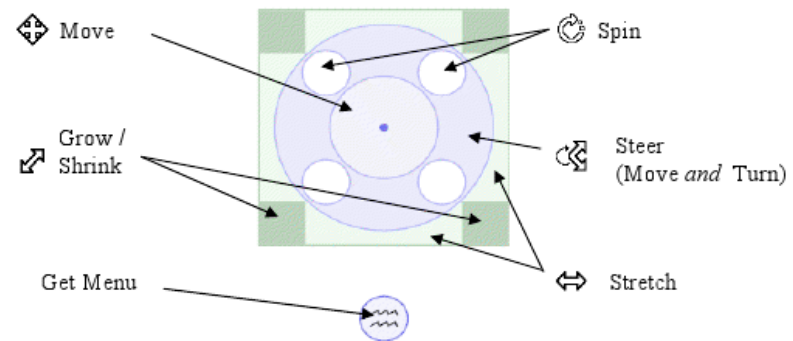


Download From:

http://inkscape.org/

# K-Sketch

allows ordinary computer users to create informal animations from sketches.



Download From:

http://www.k-sketch.org/

# Audacity®

is free, open source software for recording and editing sounds. It is available for Mac OS X, Microsoft Windows, GNU/Linux, and other operating systems.
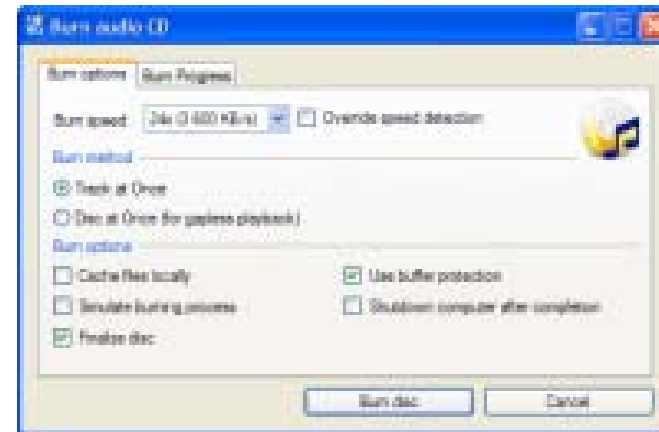
Download From:

http://audacity.sourceforge.net/

# CDBurnerXP

is a **free** application to burn CDs and DVDs, including Blu-Ray and HD-DVDs. It also includes the feature to burn and create ISOs, as well as a multilanguage interface. Everyone, even companies, can use it for free.



Download From:

http://cdburnerxp.se/en/home

# Google Earth

lets you fly anywhere on Earth to view satellite imagery, maps, terrain and 3D buildings from galaxies in outer space to the canyons of the ocean. You can explore rich geographical content, save your toured places and share with others.



Download From:

http://www.google.com/earth/index.html

# *Hot Potatoes* suite

includes six applications, enabling you to create interactive multiple-choice, short-answer, jumbled-sentence, crossword, matching/ordering and gap-fill exercises for the World Wide Web. Hot Potatoes is freeware, and you may use it for any purpose or project you like.



Download From:

http://hotpot.uvic.ca/
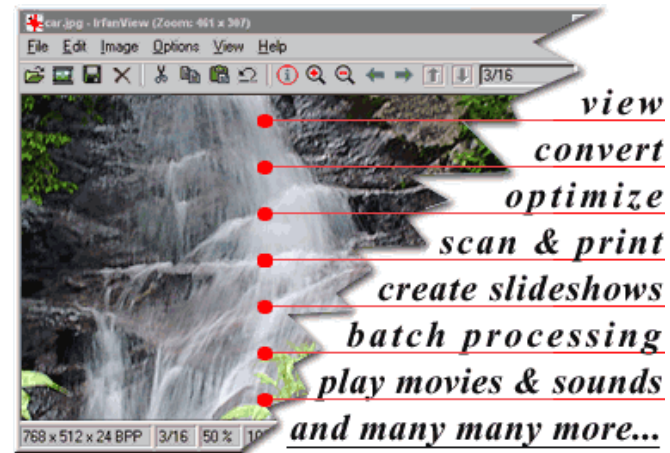
# IrfanView

**is a very fast, small, compact and innovative FREEWARE (for non-commercial use) graphic viewer for Windows 9x, ME, NT, 2000, XP, 2003 , 2008, Vista, Windows 7.**



Download From:

http://www.irfanview.com/

# SketchUp

**Model anything you can imagine.**

Redecorate your living room. Invent a new piece of furniture. Model your city for Google Earth. There's no limit to what you can create with SketchUp.
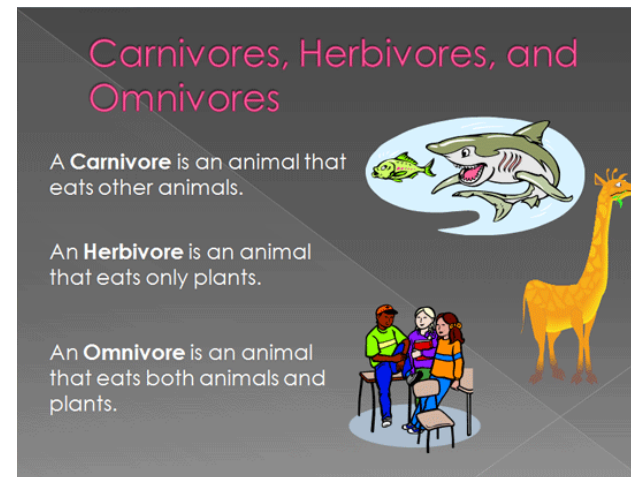
Download From:

http://sketchup.google.com/

# Mouse Mischief

Mouse Mischief integrates with Microsoft PowerPoint 2010 and Microsoft Office PowerPoint 2007, enabling you to insert questions, polls and drawing activity slides into your lessons.

Students can actively participate in these lessons by using their own mice to click, circle, cross out or draw answers on the screen.



Download From:

http://www.microsoft.com/uk/multipoint/mouse-mischief/default.aspx

# Phun

is an educational, entertaining and somewhat (!) addictive piece of software for playing around in a 2D physics sandbox in a cartoony fashion.

Phun is not just another game, but is intended to bring in interactive physics



Download From:

http://www.phunland.com/wiki/Home

# OOo4Kids

Open Office For Kids

The idea is to prov
a 7-12 years
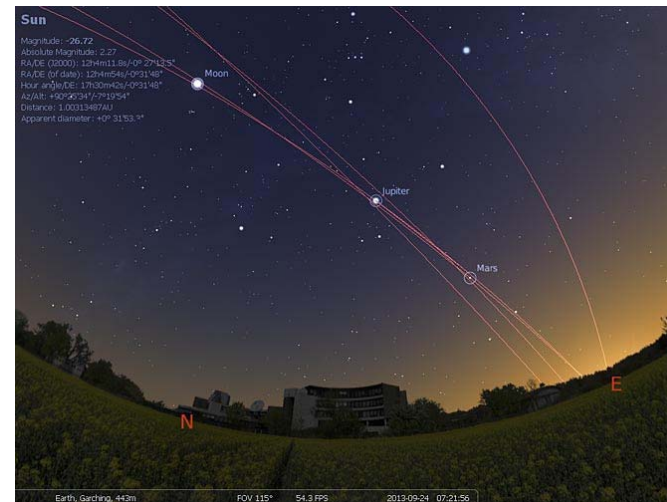software, based
on OpenOffice.org s
ource code

Download From:

http://wiki.ooo4kids.org/index.php/Main_Page

# Stellarium

is a free open source planetarium for your computer. It shows a realistic sky in 3D, just like what you see with the naked eye, binoculars or a telescope.
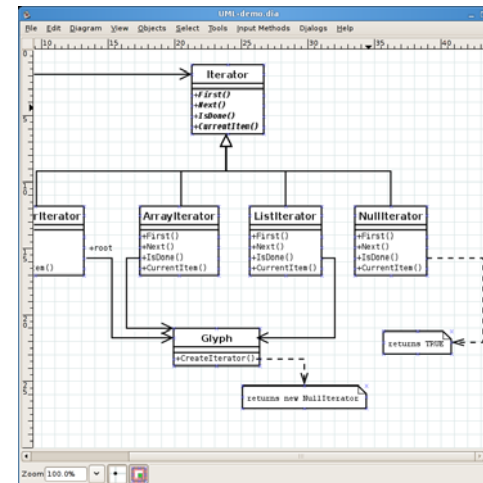


Download From:

http://www.stellarium.org/

# Dia

is roughly inspired by the commercial Windows program 'Visio', though more geared towards informal diagrams for casual use. It can be used to draw many different kinds of diagrams. It currently has special objects to help draw entity relationship diagrams, UML diagrams, flowcharts, network diagrams, and many other diagrams.
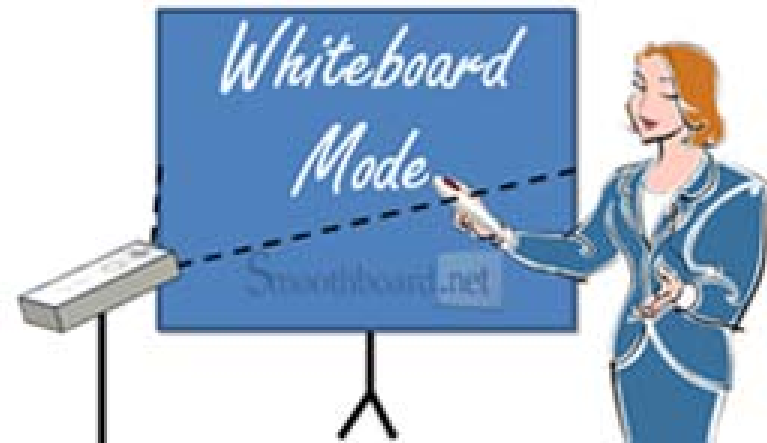


Download From:

http://live.gnome.org/Dia

# Smoothboard 2

is the latest Wiimote Whiteboard \ Wii Whiteboard software that allows you to turn any screen surface into an interactive whiteboard easily with just a Wii Remote and an infrared (IR) pen.



Download From:

http://www.smoothboard.net/downloads

# Wiimote Whiteboard

This program allows you to use the Wii Remote (Wiimote) to turn any surface into a *Low-Cost Interactive Whiteboard*.

Download From:

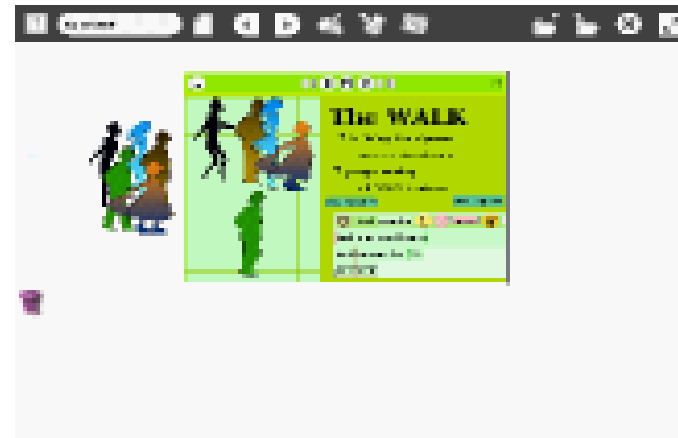http://www.uweschmidt.org/wiimote-whiteboard

# Etoys

is . . .

an educational tool for teaching children powerful ideas in compelling ways

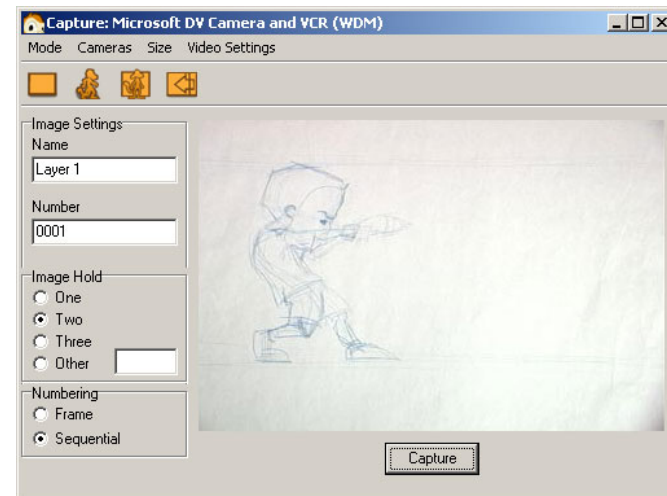a media-rich authoring environment and visual programming system



Download From:

http://www.squeakland.org/

# MonkeyJam

is a digital pencil test program. It is designed to let you capture images from a webcam, camcorder, or scanner and assemble them as separate frames of an animation. You can also import images and sound files already on your computer.



Download From:

http://www.giantscreamingrobot monkeys.com/monkeyjam/down load.html

# contentgenerator.net

Our programs can be purchased individually, or as part of a wider bundle. The best value is in the school site licence bundles, allowing everyone within one instituion to use the programs.

The programs are sold without limitation - once you have purchased a licence you can use it to generate as many games, quizzes or activities as you like.

Some programs are free, check out the site



Download From:
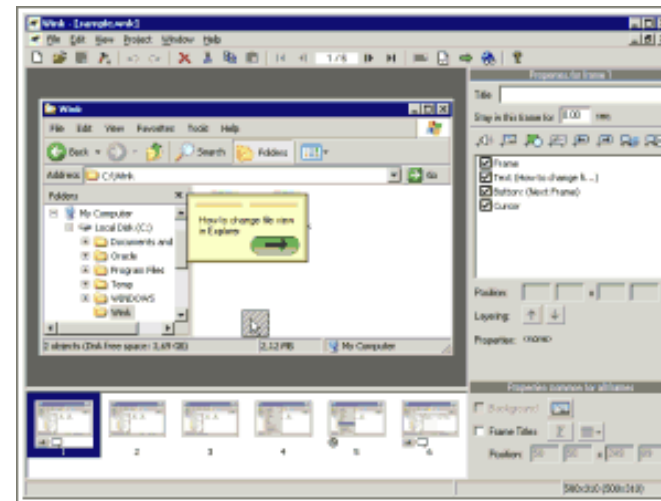
http://www.contentgenerator.net/products/

# Wink

Wink is a Tutorial and Presentation creation software, primarily aimed at creating tutorials on how to use software (like a tutor for MS-Word/Excel etc).

Using Wink you can capture screenshots, add explanations boxes, buttons, titles etc and generate a highly effective tutorial for your users.



Download From:

http://www.debugmode.com/wink/

# VLC media player

VLC is a powerful media player, playing most of the media codecs and video formats out there.

It handles DVDs, (S)VCDs, Audio CDs, web streams, TV cards and much more.



Download From:

http://www.videolan.org/vlc/

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http://www.videolan.org/vlc/

# Amazing Concert

is an educational software for children to play concert together. This application developed by AmazingEdu, Indonesia Education Software Developer, which deployed in cooperation with Microsoft's MultiPoint initiative, based on Windows® MultiPoint™ Mouse from Microsoft.



Download From:

http://www.amazingedu.com/amazingconcert/

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Download From:

http://www.amazingedu.com/amazingconcert/

# Windows MultiPoint Mouse Software Development Kit (SDK)

Not really for the classroom but gives us something to look forward too.

Applications built on the MultiPoint Mouse SDK can provide teachers with tools to gain real-time assessment information to help them provide a personalized learning experience for each of their students.



Download From:

http://www.microsoft.com/multipoint/mouse-sdk/showcase.aspx