Description

iStopMotion is a computer program for the Macintosh computer platform that allows the user to capture single frames through external USB or Firewire devices and assemble the image sequences into movies. The resulting effect is known as stop motion animation, a technique that has been used in film since the early part of the 20th century. This software also allows for the automated capture of single frames at regular intervals, a technique known as time-lapse photography. This technique is very useful for observing slow natural process such as flowers blooming or cloud movement in the sky.

iStopMotion allows the user to see previous frames for reference while shooting new frames. Onion skinning, as it is called, is a function of many professional animation programs such as Flash and ToonBoom Studio. The DV version of the program allows capture of images at digital television resolution of 720x486 pixels (NTSC) or 720x576 pixels (PAL). In addition iStopMotion allows for processing of captured images in bitmap editors such as Adobe PhotoShop, before saving the images to the computer's hard disc. A voice control feature allows for hands free image capturing by simply saying the command "Capture one!" for a single frame capture. Image sequences or QuickTime movies created in iStopMotion can be exported to editing programs such as Apple's Final Cut Pro or Adobe's Premiere Pro for additional processing.

iStopMotion is acclaimed for its user-friendly interface. As a result is used widely in K-12 educational settings. Children as young as five years old can operate this software, making it possible to create their own animation projects.

iStopMotion is a product of the Munich based Boinx Software Ltd., a subsidiary of GeBE Computer & Peripherie GmbH. The CEO of Boinx Software Ltd. is Oliver Breidenbach. The lead developers on iStopMotion are Achim Preidenback and Werner Nieke.

iStopMotion may be used with the Mac OS X v10.3, however Mac OS Tiger is strongly recommended. The software is compatible with most web camera models. Current information on compatibility issues can be found on line at www.boinx.com. Additional information may also be available through the web camera manufacturers' websites. iStopMotion is not currently available for the Windows or Linux platforms.

History

iStopMotion is a relatively new program with June 19th, 2003 as the official release date of version 1.0. Occasional changes and improvements have been made in its short life, including support of the RAW image format in the April 2006 1.9.2 release. Originally available in only the DV format, an HR (High Resolution) version of the software is now for sale. The HR version costing $349 US is favored by media professionals for it's higher resolution settings while the $39.95 US DV version is favored by educational institutions for it's affordability. Site licensing prices are available for schools wishing to purchase more than five copies of the software at one time.
Boinx currently is in the "Final Candidate" stage in their release of iStopMotion 2.0. The file can be purchased online by clicking on the following link. The download can also be used as a trial version of the software, operational for five days before a license key is required.

http://www.boinx.com/download/

Impact on Teaching and Learning

iStopMotion's most direct impact on instruction is in the study of animated filmmaking. The students have an immediate, simple outlet for applying animation concepts and techniques. Their results are then directly available for critique by the class. Animation curriculum is a narrow niche however.

Applications for this technology in the classroom extend into many of the scientific subjects. Physics, biology and chemistry can all use this technology. The time-lapse function of this software makes it perfect for studying the growth of plants or organisms. One K-12 science teacher was using it as a way for students to describe the process of frog reproduction in clay animation.
As this example illustrates iStopMotion is also being used as a presentation device. The science students presented their finding to the class in the form of an animated movie. The following link takes you to a movie describing the making of their film.
http://edcommunity.apple.com/ali/item.php?itemID=11205

Heretofore uses of stop-motion animation were unachievable in such settings. The complexity of earlier software and hardware would have

precluded K-12 classroom uses of stop-motion animation as a learning tool. iStopMotion specializes in making animation simple to achieve. Due to the appeal animation has with children and young adults it's use as a learning tool is logical. Designed to work specifically with low cost web cameras, it is affordable for schools. For any software to be successful in the classroom the instructor must be comfortable using it. The simplicity of iStopMotion allows teachers to learn the software in a short time.

Examples or Demonstrations

In addition to the science lab's use of iStopMotion listed above there are many other documented uses of the software in education. George Rota from Glen Lake Elementary school used iStopMotion for a clay animation class he taught.   He was very enthusiastic in his support of the software.   His testimonial is available online at the Boinx website. http://www.istopmotion.com/

Olivier Maissin, an Apple distinguished educator, is a longtime user of iStopMotion with his students in Belgium. In February of 2007 he organized the first Animation Movie Festival at the Saint Joseph School in Libramont, Belgium. The festival consisted of 27 films made iStopMotion by students aged 11-12 years. He attested to the value of the tool to "empower" his young students as well as develop film-making skills.

Events are organized in different parts of the world regarding iStopMotion. A training workshop was held in Mexico in September 2007.
http://boinx.com/istopmotion/articles/mexico/

The process of making one of the animated films was documented in the following video.

http://boinx.com/istopmotion/articles/mexico/movies/makingofmaiz.mov

A training workshop specifically for teachers was held in 2006 in Borzee, Belgium and again in October of the same year in Bruxelles, Belgium.

http://www.boinx.com/chronicles/2006/10/16/educ-oct-18th-22nd-2006-bruxelles-belgium/

Trial use of iStopMotion is free for five days. The program is available for download from the Boinx website.
http://www.boinx.com/download/

Tutorials are available online. A Google search can help retrieve the latest materials. By clicking the link below you may initiate this search.

http://www.google.com/search?client=safari&rls=en&q=iStopmotion+tutorials&ie=UTF-8&oe=UTF-8

References
http://www.boinx.com/chronicles/
http://www.istopmotion.com/
http://www.istopmotion.com/pro/
http://www.boinx.com/contact/

http://www.saloneducation.be/
http://www.kenstone.net/fcp_homepage/review_istop_motion.html
http://edcommunity.apple.com/ali/item.php?itemID=11205
http://www.google.com/search?client=safari&rls=en&q=iStopmotion+tutorials&ie=UTF-8&oe=UTF-8

External Links

Student Films Mexico 2007 Workshop
http://boinx.com/istopmotion/articles/mexico/movies/maizenglish.mov
http://boinx.com/istopmotion/articles/mexico/movies/estipacflip.mov
http://boinx.com/istopmotion/articles/mexico/movies/estipacpheno.mov

Boinx iStopMotion 2.0 download
http://www.boinx.com/download/

Boinx iStopMotion homepage
http://www.istopmotion.com/

Archive of articles from Boinx website
http://www.boinx.com/chronicles/

iStopMotion tutorial
http://213.232.94.135/dv/download.php?view.23

Third party review of iStopMotion 1.0
http://www.kenstone.net/fcp_homepage/review_istop_motion.html

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