

IntelPlay™ QX3+ Computer Microscope

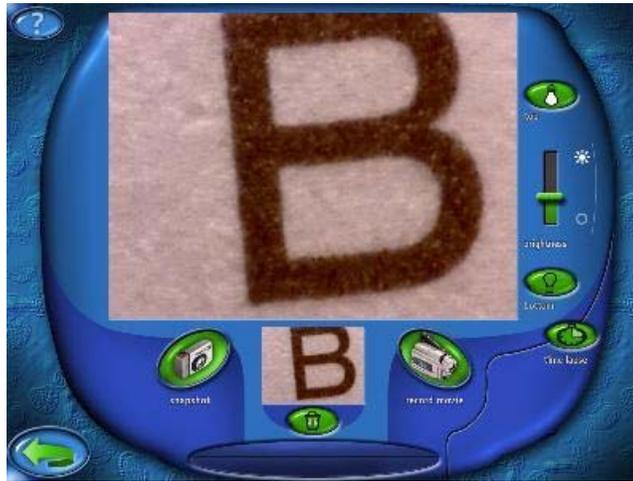
A Tutorial

IntelPlay™ QX3+ Computer Microscope

As a Consultant for the Integration of Information Technology into the curriculum, I am often asked to provide teacher workshops and short sessions on the use of technology in a variety of subject areas. Science is my greatest love, and science teachers have access to the best technological toys! One of the nicest science toys to come out in the last few years is the IntelPlay™ QX3+ Computer Microscope.

The microscope was first produced and marketed by Intel as an electronic toy for parents to purchase for their children. However, the minute teachers who were interested in science saw this item, it turned into an important educational tool for use in science classrooms. Since it is digital, it is relatively easy to set up and use, requiring much less expertise than an optical microscope would need. Since it was intended for children, the software is very easy to use, and has many features that would make it almost irresistible to students. The Department of Education purchased microscopes to send to schools. They were able to get enough to send one to each school with classes at grades 4 to 6, as well as schools with classes at grades 7 and 8. A booklet, titled “A Closer Look: Using Microscopes”, has been produced for grades 3 to 6. This booklet includes microscope activities and useful blackline masters connected to the science outcomes.





The microscope screen; this image has been magnified 60X

When you launch the software for the microscope, it will automatically open so that the microscope is active and ready for use. The light will turn on at this time, and you can alter the amount of light or change from the top light (the default) to the light which shines from below the stage of the microscope. This means that this single instrument can perform the same functions as two different types of microscopes – optical (lighted through the slide) and dissecting (lighting the objects from above). In this area, the user can make changes in the lighting, see the image in order to focus it, choose to capture a still image or a video clip, and set up time lapse studies.

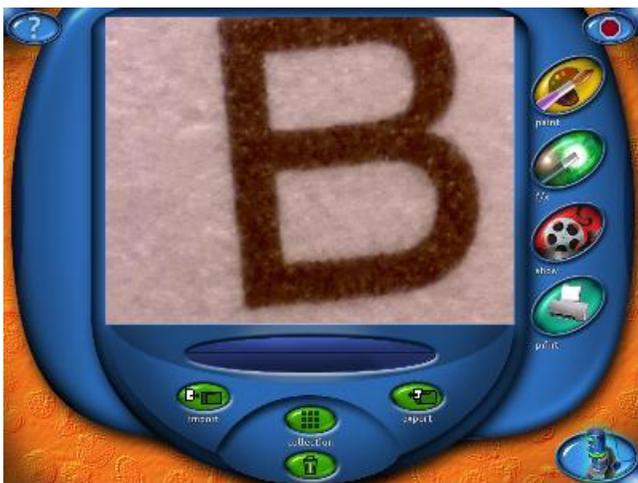
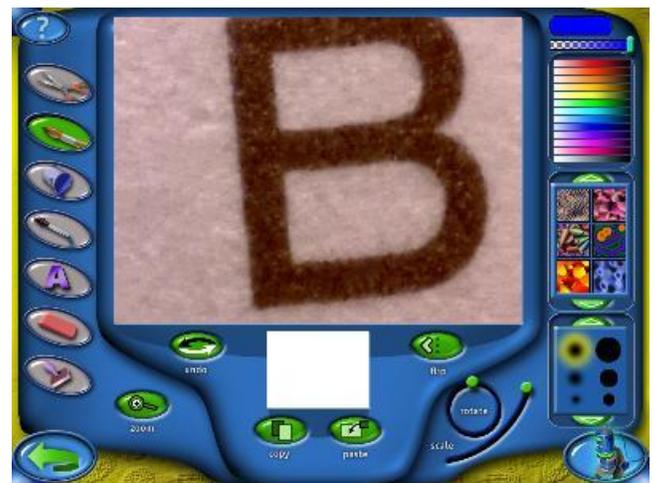


Image manipulation is done from this section of the software



Art tools allow students to add their own creativity to images

Please Note:

The software is intended for children, and has a wide variety of sound effects, which would quickly become annoying in a classroom. In order to reduce or mute the sounds on the computer, the volume must be set before launching the IntelPlay QX3 Microscope software.



An extensive collection of images is provided



Slide shows are easy to create

The second section of the software allows the user to work with images after they have been captured. The images can be manipulated, art tools allow drawings and labels to be added, slide shows can be created, special effects are available, images can be imported from other sources, exported for use in other software applications (Microsoft Word or PowerPoint, for example), or deleted from the collection.

The art tools include a text tool for adding labels to images as well as a large collection of stamps (including rocks, brains, and insects) that can be added to an image. There are many colours and patterns that can be used for decorating or embellishing an image. The special effects section includes options to make kaleidoscopic designs from an image and colorizing effects. Whenever a user makes changes to the image, the new version becomes a new item in the collection tray, and the original image captured from the microscope is not affected.

The collection tray includes a wide variety of images provided on installation of the software, and can also add any images which are imported from other programs, as well as images and videos captured through the microscope. The collection tray is used to provide the images to be used in creating slide shows, which then can have various music choices added to them.

The microscope package includes two booklets: "Grossology" and a booklet with back-to-back Activity Guides, for parents and for children. The "Grossology" booklet contains several suggested activities that are not appropriate for school use; mainly due to health concerns. Therefore this booklet should be removed from the package, and students should not be given access to it or to the activities described in it. The Activity Guide is very useful, with information on various aspects of the software, and details on how to use the microscope and the software. Used in conjunction with the Department of Education guide: "A Closer Look: Using Microscopes", a teacher will have information that will make the use of this microscope an exciting addition to the classroom.

The IntelPlay™ QX3+ Computer Microscope was originally produced by Intel Corporation, as part of a line of computer-based toys. Intel discontinued the production and sale of this line of products in 2001. They have since been acquired by Digital Blue, and are currently being marketed under this name. The software works only with PC's running Windows 98 (version 2) or higher systems. Although the microscope can be connected to Macintosh computers, the software will not run, and the microscope cannot be used, unless an alternate software title is acquired. For schools with Macintosh machines running OS 8 or 9, Digital Blue has developed software, which can be purchased directly from the company, for \$20.00 US plus shipping. For schools using Macintosh OS X, there is a free software available for download called MiXscope.

Internet addresses for additional information:

Download "A Closer Look" - http://www.ednet.ns.ca/pdfdocs/curriculum/A_Closer_Look.pdf

Digital Blue web site - <http://playdigitalblue.com/>

Digital Blue educational web site - <http://teachdigitalblue.com/>

Digital Blue Mac OS 8/9 software - http://playdigitalblue.com/tech_support/qx3/faq/ scroll part way down

MiXscope for Mac OS X - http://www.apple.com/downloads/macosx/math_science/mixscope.html - click on the little arrow in the Download Details box on the right of the screen.