

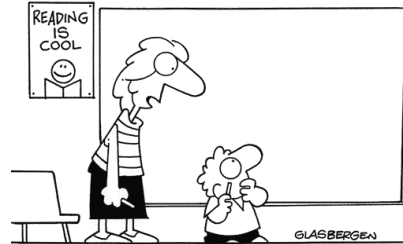


Midwest Internet Institute

Digital Cameras: Integrating Digital Photography Into The Curriculum

Net Generation

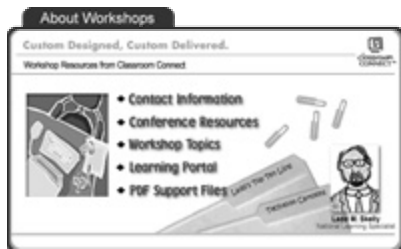
Copyright 1996 Randy Glasbergen. www.glasbergen.com



"There aren't any icons to click. It's a chalk board."

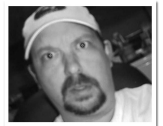
Conference Resources

- <http://twi.classroom.com/workshops/lskelly>



What's Next?

- So you're a DC hotshot...
 - What skills do I need to effectively integrate digital photography in my curriculum?
 - What tools/equipment do I need?
 - How do I begin the integration process?
 - What subjects lend themselves to integration?
 - Where do I find projects?
 - Where do I find support resources?



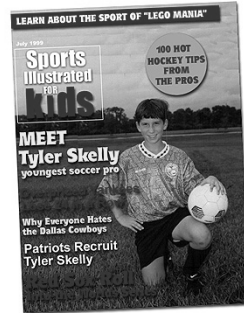
What's Your Task?

- What is your task at hand?
 - Single purpose or multipurpose?
 - Tasks
 - newsletters?
 - web pages?
 - photography class?
 - multimedia software?
 - digital presentations?
 - Project-based learning?



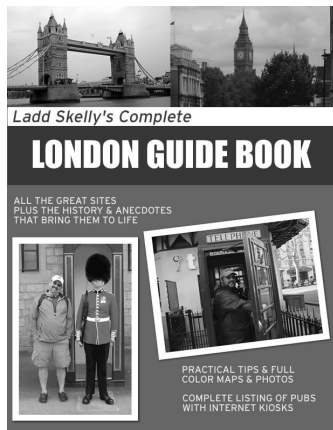
Classroom Connect

Class Projects?



Classroom Connect

Class Projects?



Classroom Connect

Know Your Camera

- General operation
- Strengths and weaknesses
 - Print or screen
 - Image storage
 - Flash photography
 - Downloading process
- Set up procedures
 - Usage
 - Downloading
 - Editing



Classroom Connect

Print or Screen?

- **Print: Are you going to print out the images?**
 - require higher resolution
- **Screen: Are you going to display the images?**
 - require lesser resolution
- **Both**



Classroom Connect

Know Your Pixels

- Cameras fall under three categories based on their resolutions:
 - **VGA** (640 by 480 pixels)-Obsolete
 - **XGA** (1,024 by 768 pixels)
 - **Megapixel** (1 million pixels or more)
 - Majority of cameras
 - Up to 7 megapixels



Classroom Connect

Print Pixels:

What You See Is Not What You Get

- **Print Pixels**
 - require higher resolution
 - ex. 1,152 by 864
 - For example:
 - 640x480
 - 3x5-inch printouts,
 - 1.2 Megapixel
 - 5x7-inch printouts



Classroom Connect

Screen Pixels:

Big Image Is Not Always Better

- **Screen Pixels**
 - require lesser resolution
 - monitors can utilize higher resolution images
 - For example:
 - 640 by 480
 - 9" by 7"
 - 1024 by 768
 - 14" by 11"



Classroom Connect

What Tools Do I Really Need?

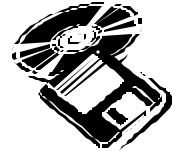
- Supply extra storage
 - SmartMedia (8 MB and up)
 - CompactFlash (8MB and up)
 - Memory Stick (8MB and up)
 - 3.5 diskette
- Have extra batteries
- Provide a high resolution printer
- Set up a station for downloading & editing



Classroom Connect

Storing Images

- Types
 - Fixed (internal)
 - Storage Card
 - Examples
 - SmartMedia
 - CompactFlash
 - Sony Memory Stick
 - Need external device for cards
 - Card reader
 - 3.5 Diskette
- Need driver software (included w/camera)



Classroom Connect

Storing Images

- Typical Storage Amounts
 - 8MB
 - 32MB
 - 128MB and higher
- Ex. 1.3 Megapixel Camera
 - Highest resolution and quality
 - 32MB: Store 55 images
- You can never have enough storage!



Classroom Connect

Downloading Images

- Options:
 - Cables
 - Connect cable from camera to computer
 - Types
 - Serial Port (cable)
 - USB port (cable)
 - Reader/Writer Device
 - Remove card from camera
 - Place card in device
 - Move 3.5 diskette from camera to computer
 - Fact: Downloading and deleting images drain the batteries
- Recommendation: reader/writer device or 3.5 diskettes



Classroom Connect

Storage Adapters: Types

- SmartMedia, CompactFlash & Sony Memory Stick
- Floppy Disk Adapter
 - \$50
- PC card adapter (laptops)
 - Approx. \$30



Classroom Connect

Storage Adapters: Reader/Writers

- Sony Memory Stick Reader/Writers
- SanDisk ImageMate 8-in-1 USB 2.0 Card Reader



Reader/Writer USB



Reader/Writer USB



Card/Parallel Port Adapter



Classroom Connect

"A Must" in Camera Options

- 3+ Megapixel
- Zoom (optical): 6x or higher
- Viewfinder and LCD screen
- 128MB or higher memory card
- Video out
- USB cable
- Extras
 - Rechargeable batteries
 - Reader/Writer device



Classroom Connect

Understanding Digital Photography

- Adobe Digital Kids Club
 - <http://www.adobe.com/education/digkids/intro/main.html>
- APTE
 - Using Digital Photography With Special Needs Students
 - <http://www.apte.com/dp/dped/special.cfm>
- AGFA
 - Beginning Course
 - http://www.agfanet.com/en/cafe/photocourse/digicourse/cont_in dex.php3
- Youth Learn
 - <http://www.youthlearn.org/learning/activities/multimedia/photo 1.asp>



Classroom Connect

Integration Tips

- Practice using the camera
 - Relating to the activity/project
- Go through the process
 - Review the steps
- Set reasonable goals
- Create a schedule for each procedure
 - Usage, downloading and editing
- Make resources readily available
 - Via desktop
 - Via the Web



Classroom Connect

Beginning The Integration Process

- ☑ Start slowly
 - One activity...not a project
- ☑ Keep it simple
 - Ex. Pasting images into a document
- ☑ Limit number of participants (in large classes)
- ☑ Become familiar with procedures and class management issues
 - Teacher
 - Students



Classroom Connect

Management Tips

- ☑ Set up a tech squad
 - Deal with tech issues
 - Downloading
 - Camera issues
- ☑ Provide a schedule
 - Camera usage
 - Downloading
 - Editing
 - DP integration
- ☑ Set reasonable goals



Classroom Connect

Lesson Web Pages & Ideas

- ✓ Classroom Applications for the Digital Camera
 - <http://k-12.pisd.edu/techs/dhitt/digital/camideas.htm>
- ✓ Kodak Sites
 - <http://www.kodak.com/US/en/digital/dlc/plus/chapter5/lessonPlans.shtml>
 - www.kodak.com/US/en/nav/digital.shtml
- ✓ Apple: Secondary Multimedia
 - <http://ali.apple.com/als/2ndmult/currsb1.html>



Classroom Connect



Lesson Web Pages & Ideas

✓ Apple: K-6 Multimedia

- <http://ali.apple.com/als/k6mult/curriculum.html>

✓ Digital Cameras: Teacher To Teacher

- <http://www.brunswick.k12.me.us/lon/lonlinks/digicam/teacher/home.html>



Classroom Connect

Clearer Picture on Projects

✓ SECONDARY

- Digital Storytelling: Tell Me a Story
 - <http://ali.apple.com/als/2ndmult/projects/3024.html>
- Digital Photography
 - <http://ali.apple.com/als/2ndmult/projects/3023.html>
- Virtual Reality: An Interactive Tour of Our School
 - <http://ali.apple.com/als/2ndmult/projects/3099.html>

✓ ELEMENTARY

- Creating a Virtual Museum (3-5)
 - <http://ali.apple.com/als/k6mult/projects/3045.html>
- A Story Around the Campfire (K-2)
 - <http://ali.apple.com/als/k6mult/projects/3004.html>



Classroom Connect

Project Sites

- Using Digital Cameras for Classroom Projects
 - <http://www.4teachers.org/tecalong/anderson/index.shtml>
- Why Should I Use a Camera in the Classroom?
 - <http://www.forsyth.k12.ga.us/sbeck/digital/goingdigital.htm>
- Adobe Digital Kids Club
 - Lesson and Activities
 - <http://www.adobe.com/education/digkids/lessons/main.html>

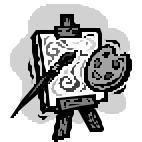


Classroom Connect

Project Sites

- Digital Cameras Enhance Education
 - www.ozemail.com.au/~cumulus/digcam.htm
- Tool Factory Digital Camera Projects
 - <http://www.toolfactory.com/cgi-bin/gencur.py?page=subject&subject=6>

Sample scrapbook:
www.euro4us.homestead.com



Classroom Connect

Dude, What is Digital Kids Club?

- a special online site created for teachers, students, and parents
 - Digital photography resources
- URL: <http://www.adobe.com/education/digkids/main.html>
- Resources include:
 - Tips
 - Tutorials
 - Lessons and activities
 - Software updates



Classroom Connect

Understand Your Image Editor

- General operations
- Strengths and weaknesses
 - Resizing
 - Cropping
 - Effects
- Know image formats
 - Jpg, gif and png
- Set up procedures
 - Usage
 - Saving
 - Printing



Classroom Connect

Getting the Most Out of Your Photo

- **Your photo is only as good as your editing.**
- **Select the best “paint” or “photo” program available.**
 - **JPEG FORMAT**
- **Look for an image editor that has “plug and play” features and effects.**



Classroom Connect

Image Editors

- **Beginner Editors**
 - Adobe Photoshop Elements 2.0
 - Ulead PhotoImpact XL
 - Microsoft Picture It! Photo Premium 9.0
- **Advanced Editors**
 - Adobe PhotoShop
 - Macromedia Fireworks MX
- **Multimedia**
 - QuickTime Pro
 - QuickTime VR Authoring Studio



Classroom Connect

Image Editing

- Adobe PhotoShop Elements 2.0
 - General info
 - Spin off of Adobe PhotoShop
 - Educational pricing: approx. \$50
 - Simple, user-friendly tools
 - Filters
 - Effects
 - Variety of options
 - Example of editing



Classroom Connect

Digital Photography Tools

- Keebook Creator
 - www.keeboo.com
- FlipAlbum.com
 - <http://www.flipalbum.com/>
- Photoshop Elements 2.0
 - Slideshows
 - Web Gallery



Classroom Connect

The Storing Process

- Before downloading/transferring your photos to your computer, create a folder/directory called "Originals_date" or Originals_project."
- Download/transfer your photos to the folder/directory ("Originals").
- When editing images, grab from the "Originals" folder and save edited version to a new folder/directory.



Classroom Connect

Photo-Sharing Sites

- Variety of services and features
 - Storage
 - Gallery/Albums
 - Sharing images
 - Ordering prints
- Web Sites
 - Ofoto.com
 - <http://www.ofoto.com>
 - Shutterfly
 - <http://www.shutterfly.com>
 - Snapfish
 - <http://www.snapfish.com>



Classroom Connect

Photo-Sharing Sites

Site	Print Quality	Print Costs (4x6/5x7/8x10) Shipping	Photo storage/Time limit
Ofoto	Good	\$.50/\$1/\$4 \$1.50	Unlimited/ none
Shutterfly	Very Good	\$.49/\$.99/\$4 \$1.49	Unlimited/ none
Snapfish	Good	\$.59/\$.99/\$3 \$2.49	60MB/ none



Classroom Connect

Editing & Managing Photos: iPhoto 2

- iPhoto 2 lets you import your pictures from your digital camera, organize them, edit and improve them, and share them in a number of different ways.
- Just plug your camera into Mac's USB port and iPhoto 2 automatically imports your photos, catalogs them, stores them and displays them on your screen.
- Print, create a slide show, make a book or order print online



Classroom Connect

Cool Tools

▪ Hardcopies

▪ HP PhotoSmart 7550 Printer

- Conveniently print digital photos from your computer, any camera card or an HP Photosmart direct printing camera

▪ www.hp.com



Classroom Connect

Cool Tools

▪ Storage: Recordable CD's

▪ MVC-CD400

- 4 Megapixel
- Stores images on directly on 156MB 8cm Recordable (CD-R) or Re-writeable (CD-RW) optical disc media
- Image Sizes: QXGA (2048x1536), 3:2 QXGA (1600x1200), SXGA (1280x960), VGA (640x480) Sizes
- 3 MPEG movie modes



Classroom Connect

Cool Tools

▪ Kodak Camera Dock

- Works w/ Kodak's *EasyShare* Megapixel cameras
 - KODAK DX3600 and DX3900 Zoom Digital Camera
- Automatically transfers pictures from your camera to your computer with the simple touch of a button.
- Quickly recharges your camera's battery pack so your camera is always ready to go.
- Plugs into USB port

The whole shebang.



Classroom Connect

Web Resources

Digital Camera Companies

- Canon
 - <http://www.usa.canon.com/productline.html>
- Nikon
 - http://www.nikonusa.com/usa_category/category.jsp?cat=1
- Sony
 - <http://www.sonystyle.com/digitalimaging/>
- Casio
 - www.casio.com
- Olympus
 - http://www.olympusamerica.com/cpg_section/cpg_digital.asp
- Hewlett-Packard PhotoSmart
 - www.photosmart.com
- Kodak
 - <http://www.kodak.com/US/en/nav/digital.shtml>



Classroom Connect

Tutorials

- Short Courses on Digital Cameras
 - <http://www.shortcourses.com/>
- DCViews
 - <http://www.dcviews.com/tutors.htm>



Classroom Connect

Web Resources

Online Magazines

- PC World
 - <http://www.pcworld.com>
- ZDNet
 - <http://www.zdnet.com>
- Computershopper.com
 - <http://www.zdnet.com/computershopper/>
- MacWorld
 - <http://macworld.zdnet.com/>
- PC Magazine
 - <http://www.zdnet.com/pcmag/>



Classroom Connect



Top 10 Signs You May Be An Obsessed Digital Photographer

1. If you've nicknamed your spouse "My Little Mavica"...
2. If you have pictures of your pet on the Web...
3. If teachers and students run away when they see you with your camera...
4. If you say, "Ya know, life was meaningless until I discovered this digital camera."
5. If your favorite picture is the the top of your feet...
6. If you color coordinate your clothing to match your digital camera...
7. If you like to take pictures of yourself...
8. If you've taken more than 500 pictures of your last classroom party...
9. If you say, "Smile!" more than five times per day...
10. If you have one digital camera for every day of the week...



Classroom Connect

For More Info

Ladd Skelly
Lskelly@classroom.com
Session Web Site:



<http://twi.classroom.com/workshops/lskelly>



Classroom Connect
