Teaching with Digital and Display Technologies

- The Internet
  - Images, photographs and video files

- The Document Camera
  - Physical images, documents, 3-D objects

- The Smart Board
  - Interact, manipulate, create, store & share material
How to Find Material

- Searching for material
  - Images (photographs, drawings, pictures, etc.)
    - Google Images
    - Alta Vista Image Search
    - Bing Images
    - Search-22
    - Dogpile
    - Zuula Search
    - Imgur
    - Flickr
    - Photobucket
    - TinEye
    - PanImages
How to Find Material

- Washington University sources
  - ArtStor-a nonprofit digital image library for education and scholarship
  - Luna-digital images, video and sound files
    - organized, stored and retrieved
    - zoomed, scaled, panned and tiled
      - Washington University collection
How to Find Material

◦ Video (with great caution!), audio or animation
  • Blinkx - world’s largest video search engine
  • Bing
  • YouTube - “Broadcast Yourself”
    • Google Videos, Yahoo Video
    • Truveo Video Search

◦ Video-University Videos
◦ National Geographic Video
◦ PBS Nova
◦ Public Television Videos
◦ Best online Documentaries
◦ History Channel Videos
◦ OnLine Lectures
◦ And more….

The Teaching Center
Who Can Help You...

- **Arc Library Technology Center**
  - Librarians can help locate resources
  - Digitizing and editing images, text and video
  - Preparation of interactive tutorials and course modules
  - Develop multimedia presentations incorporating sound, video, animation, images and text

- **Humanities Digital Lab**
  - Multimedia digitization
  - Production
    - Document, image and slide scanning
    - Image editing
    - Video editing
    - Audio recording and editing
University-managed Classroom

- University-managed Classrooms
- University-managed Classroom Software
  - **Tra’Mel Harrell** — The Teaching Center Computer Support Specialist
    - Save Images as
      - jpeg, gif, bmp, tiff and pdf
    - Videos with these extensions
      - .avi, .mov, .mpeg, .wmv
        - will play on our computers using these programs
          - Windows Media Player
          - Quicktime
          - Real Player
    - Audio with these extensions
      - MP3, WAV, WMA
    - Save Websites on a jump drive, Powerpoint or in bookmarks in your laptop
Best Practices

TED: Ideas worth spreading
Speaker: Hans Rosling, Professor of Global Health at Sweden’s Karolinska Institute
Lecture: Debunking Myths about Developing Countries

TED: Ideas worth spreading
Speaker: Andrea Ghez, Professor of Astronomy and Physics at UCLA
Lecture: The Hunt For A Supermassive Black Hole

TED: Ideas worth spreading
Speaker: James Geary, Author & Journalist
Lecture: Metaphorically Speaking

MIT OpenCourseWare
Speaker: Donald Sadoway, Professor of Materials Chemistry, MIT Department of Materials Science & Engineering
Lecture: Introduction to Solid State Chemistry
Best practices at Washington University

- **Teaching Commentaries**
  - Kathryn G. Miller, Department Chair of Biology, Professor of Biology
  - William E. Buhro, George E. Pake Professor in Arts & Sciences, Professor of Chemistry
  - And more....

- **Faculty Teaching Anthology**
  - Jennifer R. Smith, Associate Professor of Earth and Planetary Sciences
  - Carl M. Bender, Wilfred R. and Ann Lee Konneker Distinguished Professor of Physics
  - William E. Wallace, Barbara Murphy Bryant Distinguished Professor of Art History
  - And more....
What is a Document Camera?

- 65 classrooms
  - The Teaching Center Website
    - Classrooms
    - Directory
  - Kinds of doc cameras
    - Ceiling – like Seigle Hall (55)
    - Desk or tabletop (10)
      (installed in most classrooms seating over 100 students)
Table top Document Camera
Why use a Document Camera?

- **Ceiling**
  - Last minute find in a book, magazine, or journal
  - Can’t find it digitally
  - Blow up print quickly
  - 3-D objects
  - Group editing
  - Mark up documents “live”
  - Share material without making copies
  - Demonstrate how to do something
  - Can still use transparencies!

- **Desk (all of the above and…)**
  - Camera can see outside the work surface
  - 35mm slides can be shown
What is a Smart Board?

- Interactive whiteboard
- Connects computer to data projector
- Your finger is the mouse
  - 8 classrooms
    - must request during scheduling process