DEVELOPING A DATABASE

ART HISTORICAL BEGINNINGS
From the 1950s colored slides allowed students to see works of art projected on a large screen while the teacher talked about them, a great step forward for the sets of black and white prints that had previously been used to study art history. As a young teacher I began to photograph works of art as I traveled, and I increased my knowledge of art history as I wrote the basic information about each image on the slide. The slides had to be filed so that they could be found when needed, but as collections grew, it became ever more difficult to find the precise slot for a particular image. The advent of digitization and digital databases solved that problem, now images could be catalogued and accessed according to many criteria and used for many more purposes.

CATALOGING STANDARDS, TEMPLATES & TOOLS
Images without identifying text are relatively useless, so carry a small notebook with you and write down as much information as you can about each image that you photograph. We recommend writing down the title, the artist, the date it was created, where it was created and where it is now, for example in a museum. This information will allow you to build a database, which in turn will enable you to locate and use your images.

Building a useful database involves the use of a standard vocabulary so that other users will be able to find images that will be useful to them. Various standards exist. The standard developed by the Visual Resources Association is most useful for cataloging visual images, so we have followed the VRA standard. We developed a set of fields and created so-called “legal lists” of the terms we use in those fields. You can find them, along with Excel templates for Macs and PCs, an instructional manual, and lists of keywords (http://gallery.sjsu.edu/tutorials/index.html). To get started you might wish to select the Traveler’s Template which contains fewer fields than the others.

On the same page you can find a link to a series of software tools that can be used for building databases. After a great deal of investigation we selected the EmbarK database owned by Gallery Systems (http://gallerysystems.com). We use the single user Cataloguer to create our collection and the Kiosk to mount it on the web.

SELECTING IMAGES FOR INCLUSION
When one builds a database it is important to decide on its purpose, for this will guide the way you select your images. The WorldImages database is intended as a resource for teachers and students, and so when adding images we constantly ask how each might be used in education. The database started as a collection for teaching the art history survey course, then expanded to teaching design, fine arts, humanities, anthropology, history, language studies, and other academic subjects. We wanted to cover cultures worldwide and from prehistoric times to the present day, and we are particularly interested in interactions between cultures and how people from different cultures see each other. We took photographs of art works in museums, of paintings, sculpture, applied arts, and architecture, as well as of people and objects that describe their lives. Since our images are used by students from the elementary grades through university, we have addressed the state educational subject matter standards, as well as images appropriate for college classes. We have recently added a series of biological images, which necessitated a new system of cataloging, but the question remains, how will faculty members
and students use the images?

COPYRIGHT
Since our goal was to put the images on the web, we had to be certain that we could legally use them. In general the copyright belongs to the photographer who takes it. The copyright to a work of art belongs to the creator or his or her estate for 90 years after the death of the artist, or for 95 years after publication if the creator is a corporation. After that we say that the work is in the “public domain” and can be freely used. Works still under copyright can be used under a fair use for teaching and criticism. In general, copyrighted images can be used within classrooms for teaching, but should not be put on the web without the creator’s permission. Regulations governing copyright and fair use can be found on the government site at HYPERLINK "http://www.copyright.gov/fls/fl102.html" http://www.copyright.gov/fls/fl102.html.

IMAGE SIZE AND QUALITY
It is best to scan images or take them with a digital camera at high resolution and in a large size. These images become your master images and you can batch process them to make smaller more compressed images to go on the web. You should scan your images at 300 dpi (dots per inch) and then reduce them as necessary. A digital camera should be capable of making at least 5 mega pixel images. A good size to use for your master images is 2000 pixels on the longest size, saved at the highest level with the least compression. Images for projection in class should be approximately 1400 on the longest size, while images for the web should be between 600 and 1000 pixels. Web images should be highly compressed so the file size is small.

FINDING THE IMAGES
Images can be searched in the WorldImages database using a Simple Search (typing any word into a Quicksearch box), using a more complex Advanced Search that combines several different factors, or using a series of keywords. In addition users find that the organized Portfolios are very helpful. We started by creating portfolios that were organized by medium, country and period, but then moved on to a variety of subjects. Currently there are over 500 portfolios, which are listed alphabetically. To help users find what they want more quickly, we organized these portfolios into the larger groupings, which we placed on the first page: HYPERLINK "http://worldimages.sjsu.edu" http://worldimages.sjsu.edu.

BACKUP
Backup! Backup! Backup! I make a CD or DVD of the edited images as well as backups of the entire database once the images have been catalogued. It is usually a good idea to have a valuable collection backed up on several media: DVD and a second hard drive. Keep one copy of your materials in a different location from your original.

DIRECTIONS AND HELP
If others will use your database, be sure and give them directions for its use. WorldImages includes a Help system for searching the database that can be accessed at the Help tab at the bottom of the column on the left, and additional information is available by clicking on the Tools and Tutorials tab. This section gives further instructions for searching and for exporting images to use in PowerPoint.

Kathleen Cohen
Director, CSU IMAGE Project