


**Use of Images on Campus :
The Visual Image User Study at Penn
State (VIUS)**

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User's Meeting
May 8, 2003



Visual Image User Study
funded by the A. W. Mellon Foundation

Steering Committee

Michael Dooris
Director for Planning Research & Assessment, Center for Quality & Planning
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Senior Director, Teaching & Learning with Technology
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Arts & Architecture Librarian, University Libraries

Visual Image User Study

Departments participating:

University Libraries
Computing
Center for Quality and Planning
Teaching & Learning With Technology



Visual Image User Study

Scope:

Arts, Humanities, & Environmental Studies (70 depts.)
 All Penn State Campuses (23)
 Any form of still picture (except those in books)
 Includes "analog" and "digital"



Visual Image User Study

Internal Assessment (to date):

Survey of all faculty
 (2,134 people, 41% response rate)
 Survey of random sample of students
 (2,966 people, 20.2% response)
 Authentication logs on existing image databases
 Focus group discussions (13 so far)
 Formal & informal interviews (24 so far)
 Electronic discussion list
 Survey of "public" picture collections
 Survey of "individual" picture collections (40+)
 Transaction log analysis



Visual Image User Study

External Assessment:

Review of metadata approaches
 Review of software options
 Review of literature & related projects

Some Highlights

1. Enthusiasm for Image Delivery
2. Picture Use by Discipline
3. Hopes & Fears for a System
4. Teaching & Independent Learning
5. Individual Collections & Sharing

1. Enthusiasm for Image Delivery

Random encouragements

Good response rates

Currently picture users:
75.4% of responding faculty
55% of responding students

1. Enthusiasm for Image Delivery

“A system would be useful for my work”

More than 62% of faculty
More than 56% of students

76.8% of faculty who use pictures
79.2% of students who use pictures

1. Enthusiasm for Image Delivery

Use of Existing Image Databases

AP Multimedia Archive: Typical

AMICO Library: Low?
(1/3rd of the AP searches)
Less interdisciplinary?
Smaller? (1/10th of AP)
Too new to Penn State?

2. Picture Use by Discipline

Analog Images Used Per Semester by Faculty

	N	Mean
Arts & Architecture	93	303
Earth & Mineral Sciences	60	175
Liberal Arts	199	90
Agriculture	156	90
Communications	13	25

(Main campus only)

2. Picture Use by Discipline

Faculty Who Use Pictures (Headcount)

	N	%
Earth & Mineral Sciences	59	96.6%
Agriculture	155	91.6%
Arts & Architecture	92	80.4%
Liberal Arts	197	65.6%
Communications	23	56.5%

Overall 76.9%

(Main campus only)

2. Picture Use by Discipline

% of Images Used That Were Digital

	N	
Earth & Mineral Sciences	60	65%
Agriculture	156	63%
Communications	13	42%
Arts & Architecture	93	39%
Liberal Arts	199	33%

(Main campus faculty only)

2. Picture Use by Discipline

Importance Placed on Digital Uses

(scanning, digital cameras, downloading, burning to disc, altering and posting to web)

Greatest Importance: Earth & Mineral Sciences
Agriculture

Least Importance: Liberal Arts

(Main campus faculty only)

3. Hopes & Fears for a System

"Greatest Area of Doubt" (choose 3)

- 651 That the content of the images collected will suit my areas of interest
- 405 Other technical matters (access to good equipment, reliable networking, etc.) will interfere
- 328 Would be too hard to learn to use
- 292 Language used for the images won't match my search terms
- 249 I will still need a separate system
- 206 Documentation of the images will be insufficient
- 212 I won't be able to keep my notes and other data together with the images
- 211 Quality of the digital images will be inadequate

3. Hopes & Fears for a System

Content Is King

3. Hopes & Fears for a System

“Most Useful Aspect of a System” (choose 3)

339 / 203 More images than now
331 / 217 Reducing my labor
329 / 127 Copyright & permissions sorted out
328 / 113 It would encourage me to try digital
276 / -- Accessibility for my students
162 / 141 Easier than checking separate sources
160 / 133 Images from a variety of disciplines
-- / 94 Easier to study for tests

(Faculty # / Student #)

3. Hopes & Fears for a System

Faculty: “A system would help my...”

579 Teaching
159 Research
111 Outreach
39 Would not help

3. Hopes & Fears for a System

Yet current use of digital is prevalent for research:

	Digital	Teaching	Research	Outreach
Analog	0.16	0.88	0.25	0.15
Digital		0.38	0.45	0.23
Teaching			0.22	
Research				0.07*

Pearson's Correlation Coefficient. All significant: $p < 0.001$. Except *: $p = 0.065$

3. Hopes & Fears for a System

Should presentation tools be tied to the retrieval system?

Some of the survey data suggests no.
Some of the softer information suggests yes (& no).

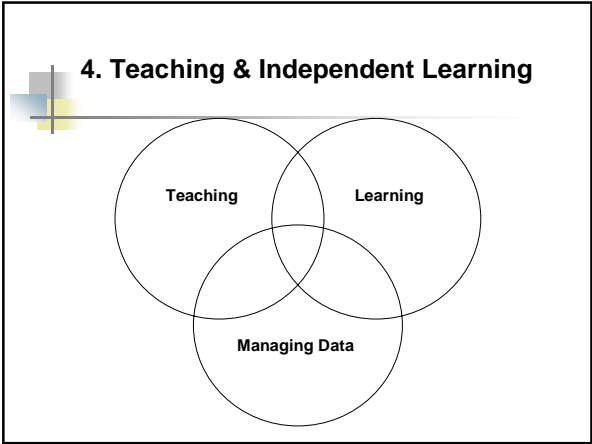
3. Hopes & Fears for a System

Faculty want to be able to use their own pictures with those retrieved from the system.

Faculty do not want to use a live connection in the classroom.

Speed worries.
Reliability worries.

(from interviews and surveys)



4. Teaching & Independent Learning

Teaching Needs:
 Faculty Teaching
 [Grad Students Teaching]

Independent Learning Needs:
 Students
 Faculty Conducting Research

4. Teaching & Independent Learning

Teaching:

Larger quantity of images

Median # of pictures used for:

Teaching	50
Research	20
Outreach	5
Other	5

(per semester)

4. Teaching & Independent Learning

Teaching:

Larger quantity of images

Independent Learning:

Larger variety of search keys

4. Teaching & Independent Learning

	Place	Chronology	Creator	Media	Name
Faculty: Teaching			+	+	+
Faculty: Research	+	+	+	+	
Faculty: Outreach		+			

+ = Chose as important more often than those not in this group.

4. Teaching & Independent Learning

Undergrads:

Use fewest images
Greater concern for "quality"
Concern for descriptive language
Greatest concern for search features
Interest in uncommon searches
e.g. visual similarity
e.g. I'll know it when I see it

5. Individual Collections & Sharing

"Public" Collections Are Few

Art History Slide Library
Palmer Museum of Art
Anthropology Museum
Libraries Special Collections
...& a few others

5. Individual Collections & Sharing

"Individual" Collections Are Common

44.1% of faculty who use pictures (n=282)
500 pictures median size

44% of students who use pictures (n=143)
50 pictures median size

5. Individual Collections & Sharing

Sharing Pictures: Issues

Rights & Permissions – how do I know
if I can show someone else's work?

Trust - will others use my original
work responsibly?

Poor descriptive information
28 of 40 collectors label pictures
3 of 40 list, catalog, or database
(this is softer information)

5. Individual Collections & Sharing

Sharing Pictures: Issues

Most faculty remain neutral on questions about sharing

Many willing to share if...

25 of 40 faculty would still maintain a personal collection
(this is softer information)

Summary

- 1. Enthusiasm for Image Delivery: Plenty.**
- 2. Picture Use by Discipline: Most use some. A few use a lot.**
- 3. Hopes & Fears for a System: Content, Content, Content. Expectations are high. Especially for teaching.**

Summary (continued)

- 4. Teaching & Independent Learning: Teachers need lots of images? Learners need more search keys?**
- 5. Individual Collections & Sharing Individual collections are important. They are poorly described. Faculty are ambivalent about sharing.**

Current Project Activities

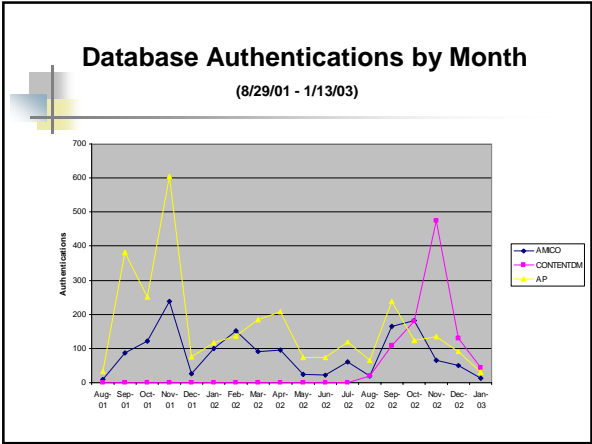
- **Prototype database service**
 - Focused subject area (landscape and architecture)
 - Content as an ongoing service
 - Multiple image sources
 - Large faculty collections
 - Commercially licensed images
 - Multiple metadata sources
 - Evaluate software?
 - Teaching/Learning uses?

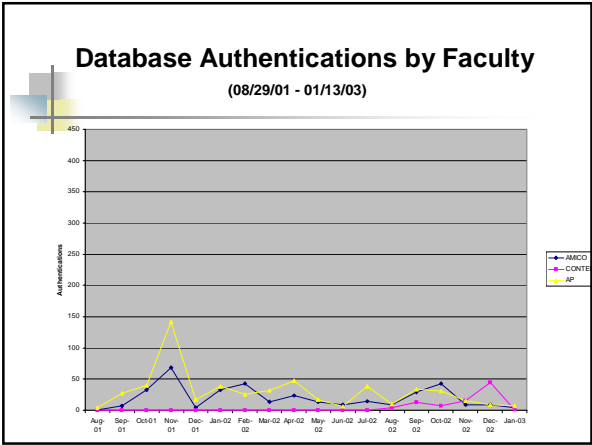
Current Project Activities

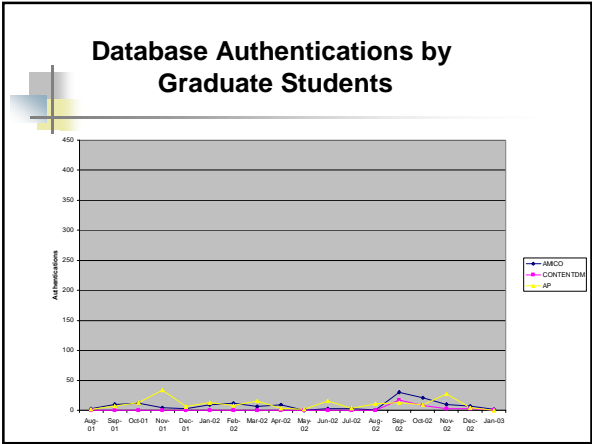
- **Prototype peer-to-peer system**
 - Explore sharing issues
 - Encouraging description
 - ID popular material for the db service
- **Design a toolkit to help individuals manage their collections and encourage description**

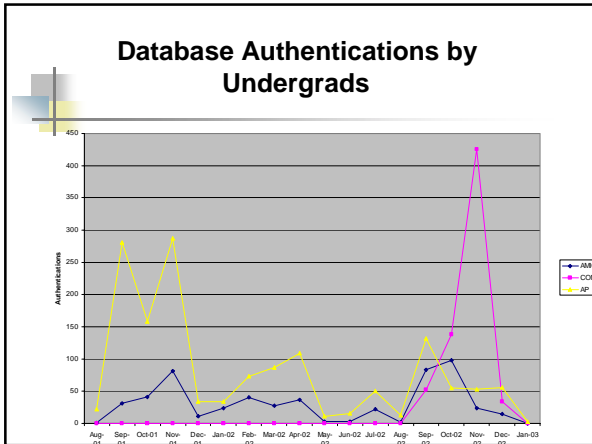
AMICO, AP Archive, Penn State Prototype Service: authentication logs

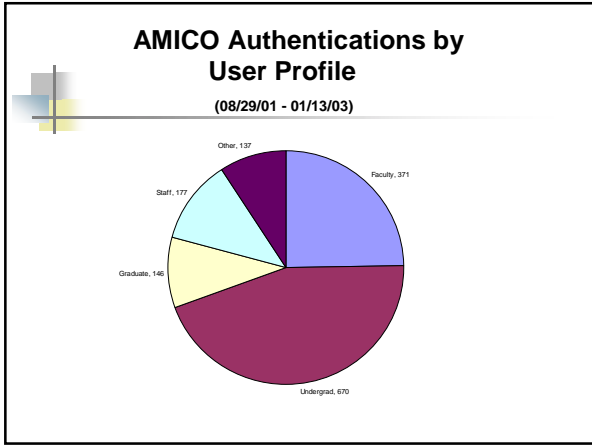
- Authentication logs on three image databases for the period, 8/29/01 - 01/13/03
- Statistics :
 - month
 - hour
 - user by month
 - User profile
 - User's at Campus locations











Visual Image User Study

Project Website:
<http://www.libraries.psu.edu/crsweb/vius>

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