



AMICO University Testbed Meeting

**June 3 - 4, 1999
Carnegie Mellon University**

Meeting Report



AMICO University Testbed Meeting Summary
June 3 - 4, 1999
Carnegie Mellon University

Meeting Report

Contents

Executive Summary..... 2
Lessons from the AMICO University Testbed..... 3
Teaching with the AMICO Library 4
 AMICO in a Classroom Setting
 University of Alberta, Michael May..... 4
 Integrating the AMICO Digital Library into the Fine Arts and Honors Program Curriculum
 Boston College, Jeffery Howe & Mark O'Connor 4
 Challenges of Accessing and Collecting Digital Image Libraries
 Rochester Institute of Technology, Michael Robertson & Samantha (Sam) Powell 5
 AMICO at the University of Leiden
 Eelco Brunisma, University of Leiden, The Netherlands 6
User Studies..... 8
 Who's Who Among Carnegie Mellon AMICO Users?
 Carnegie Mellon University, Tracey DePellegrin Connelly, Henry Pisciotta & Denise Troll 8
 Results of an Online Survey of AMICO Users
 Interactive Multimedia Group, Cornell University, Robert Reiger & Geri Gay 8
 Art Historians and Visual Resources Curators: AMICO's Focus Groups
 AMICO, Jennifer Trant & David Bearman 10
Organizational Structure..... 11
 COLUM: A Community of Learners for Universities and Museums
 University of Toronto, Lynne Teather & Kelly Wilhelm..... 11
 Digital Image Technology in the Classroom: A Model for Implementation
 Washington University in St. Louis, Dana Beth & Deborah Utlan..... 11
Training..... 13
 Looking at Images and Information: Teaching AMICO to Library Patrons
 Western Michigan University, Miranda Howard Haddock 13
 Challenges of Accessing and Collecting Digital Image Libraries
 Rochester Institute of Technology, Michael Robertson & Samantha (Sam) Powell 13
Infrastructure..... 15
 Design Considerations and User Feedback on the RLG User Interface
 Arnold Arcolio, Research Libraries Group (RLG) 15
 Data Processing at AMICO
 Brad Dietrich, AMICO 15
 Contributing to AMICO: Members' Perspectives..... 16
 National Museum of American Art, Rachel Allen..... 16
 J. Paul Getty Museum, Ken Hamma..... 16
 Training K-12 Teachers
 IUPUI, June Ward 16

Executive Summary

The Art Museum Image Consortium was formed in October 1997 after six months of planning by the staff of its twenty-three founding member museums. In the same month, AMICO issued a call-for-proposals from Universities interested in becoming test sites for research on the prototype AMICO Library which was scheduled to be available for the 1998-99 academic year. In January, 1998, the AMICO Board, acting on recommendations from its Users and Uses Committee, accepted research proposals from 16 universities to take part in the "AMICO University Testbed".

The University Testbed AMICO Library when released in July 1998 consisted of documentation for almost 20,000 works of art. University Testbed participants each made different kinds of uses of the AMICO Testbed Library, and conducted different types of research on its uses. In the spring of 1999, they were invited to propose papers on their experiences for a research conference capping the testbed year. Papers were accepted from eight Testbed Universities, and combined with a paper from AMICO on its data processing, one from members on their methods, one from AMICO's testbed Library distributor, the Research Libraries Group, and one from a research team at Cornell University which had been hired by AMICO to conduct an independent analysis of Library use. The conference program was announced to coincide with the day before, and first day of, the AMICO members meetings so as to encourage AMICO members to attend the meeting in order to help shape the agenda for AMICO in 1999 and beyond.

Papers were delivered in six sessions over two days. The first day was designed to give everyone a common sense of what had occurred in the Testbed year on campus, online, and in the trenches where the AMICO Library was made and delivered. In the first session, on Teaching with the AMICO Testbed Library, Michael May (University of Alberta) and Jeffrey Howe and Marc O'Connor (Boston College) illustrated two highly successful uses of relatively small selected subsets of the AMICO Library in art history (Canadian art) and general humanities (honors seminar) teaching by highly motivated instructors. In the second session on Who Uses the AMICO Library, researchers at CMU, Cornell University and AMICO reported on qualitative interviews, quantitative surveys and focus groups that sought to find out why users were using the Library and what they hoped to achieve. In the third session, museum participants in AMICO reported on how they created their AMICO contributed data, AMICO staff discussed the processing steps, and Arnold Arcolio of the Research Libraries Group discussed the RLG delivery system.

The second day began with a session on how Rochester Institute of Technology, Washington University, Western Michigan University and the University of Toronto encouraged faculty use of AMICO. The strategies were different but the underlying problem was the same - faculty needed considerable hands on help and even examples of uses, in order to participate. In the fifth session, other uses beyond the classroom were discussed. Eelco Bruinsma reported on the widespread effect of AMICO on imaging and print work at the University of Leiden. Tammy Sopinski reported on plans to integrate the AMICO Library into museum education in the state of Minnesota. And June Ward reported on a project to exploit the AMICO Library in K-12 education in greater Indianapolis. The day ended with an open discussion of lessons learned and suggestions to AMICO members about ways to strengthen the Library and its delivery.

The Presentation Slides used by many of the speakers can be found on the AMICO Web site, linked to the formal meeting program. See <http://www.amico.org> This summary highlights the issues discussed and themes explored.

Lessons from the AMICO University Testbed

- ◆ **Teaching**
 - ◆ Interest in/uses for digital art images is strong beyond art history
 - ◆ Focused study, using AMICO in assignments or projects is most effective
 - ◆ Adequate local technological infrastructure is essential
 - ◆ Publicity and administrative buy-in assist in AMICO adoption
 - ◆ Technological training for faculty overcomes resistance to use
 - ◆ When used, teacher and student response is positive - they want more.
- ◆ **User Studies**
 - ◆ AMICO adoption is slow within the University community as a whole
 - ◆ Enthusiastic individuals made use of AMICO in many disciplines
 - ◆ Users find it useful, like the functionality and information
 - ◆ Art professionals want to integrate AMICO/content from other sources
 - ◆ Non-art professionals more likely to use AMICO in classroom
- ◆ **Organizational Structure**
 - ◆ Cross-functional teams aid in establishing AMICO in a university
 - ◆ Librarians, faculty from many departments, administration, technical resources contribute to successful instructional use
 - ◆ To insure success institution administrations need to:
 - ◆ make a commitment to curriculum that uses resources like AMICO
 - ◆ recognize faculty who invest in innovative teaching (esp. tenure)
 - ◆ provide time and training to faculty
- ◆ **Training**
 - ◆ Step by step training is essential for faculty adoption
 - ◆ Documentation is important for self-tutoring and referral
 - ◆ Students benefit from hands-on workshops and search criteria advice
 - ◆ Need to tailor training to user needs
- ◆ **Perspectives**
 - ◆ AMICO members are still learning about effective multimedia documentation of art
 - ◆ AMICO members working to establish "best practices" to improve data
 - ◆ Members want to incorporate AMICO into day-to-day processes
 - ◆ K-12 curriculum development with AMICO is an exciting opportunity
 - ◆ Opening up potential users of AMICO to a really wide population
 - ◆ Different set of teacher and student requirements in the K-12 sector
 - ◆ IUPUI project will look to set "best practices" for K-12 use of a digital image resource

Teaching with the AMICO Library

AMICO in a Classroom Setting

University of Alberta, Michael May

Web References: Two University-level art history courses taught in 1998-9
<http://www.archimuse.com/mw99/papers/dowie/dowie.html>

Highlights

- ◆ Used a computer lab to teach classes
 - ◆ class size reduced from average of 72 to 40 students
- ◆ Ability to display side by side images seen as important in class setting
 - ◆ special presentation tools (“image presentation tool” & “course reserve”) were developed to execute side by side image display using a software plug-in called Prizm that automatically scales TIFF files
- ◆ Librarian integrated University’s digital image holdings w/ AMICO to enhance depth of resources

Positives vs. a regular course w/ slides

- ◆ More engaged, more alert, more enthusiastic students
- ◆ Computer viewing of images allowed students
 - ◆ to be more hands-on / active in class
 - ◆ to study details of the works more closely
- ◆ Professor enjoyed new way of working
 - ◆ liked the excitement of the students

Hurdles vs. a regular course w/ slides

- ◆ Need a technical assistant on hand during the course
- ◆ More time required to prepare for class
- ◆ A critical mass of images not yet available; some major works missing
- ◆ Professor was pleased at AMICO response to requests for 1999-2000
- ◆ School needs a solid technical infrastructure for AMICO use to be viable

Desired enhancements

- ◆ Way to get MARC records from AMICO database for easier integration into local system
- ◆ Mechanism to suggest additions to the AMICO Library
- ◆ Side by side presentation of images as viewing option in distributor interface

Integrating the AMICO Digital Library into the Fine Arts and Honors Program Curriculum *Boston College, Jeffery Howe & Mark O’Connor*

Web References:

Art History site: http://www.bc.edu/bc_org/avp/cas/fnart/fa257/fa257.html

Honors site: http://www.bc.edu/bc_org/avp/cas/ashp/oconnor/freedom/

Humanities House site: http://www.bc.edu/bc_org/avp/cas/ashp/humanities_home.html

Art History Department

- ◆ Used in two courses
- ◆ Students encouraged to
 - ◆ review the AMICO Library on own
 - ◆ include works found there in research papers
 - ◆ visit course websites with AMICO images for study
- ◆ Images used in class lectures

Honors Program

- ◆ “Cultural Tradition” sequence
- ◆ Web page study aid
 - ◆ enhance learning through multimedia
 - ◆ AMICO images by Durer and sound files of Bach music provided to further nuance the understanding of Martin Luther’s writings.

Pros of Using AMICO in teaching

- ◆ Images more persistent than “web”
- ◆ Images constantly available to students
 - ◆ aids in memorization and, ultimately, testing
- ◆ Access to visual resources for “different” faculty
 - ◆ Faculty who don’t normally visit the slide library or are not largely welcomed there.
- ◆ Supplement to professor’s existing image archives
- ◆ Searches less arduous than picking through slides and could be done remotely
- ◆ Students became educated consumers of images
 - ◆ Students developed a knowledge of different museums’ collection makeup from AMICO holdings
- ◆ Students noticed actual location of works of art
 - ◆ Gave impetus to students to visit local museums to see the genuine article

Cons of Using AMICO in teaching

- ◆ Professors with low technical skills found AMICO daunting
- ◆ Faculty saw AV cart as unwieldy to use in-class
- ◆ Using digital images forces professors out of their slide “comfort zone”
- ◆ Growth in part-time faculty means little reward for investment
 - ◆ Part-time faculty growth makes creation of labor-intensive course materials using AMICO images problematic because staff could potentially move on to a school without access to the AMICO Library.

Other AMICO use outcomes

- ◆ Sharing of curricular materials developed by universities with AMICO Member Museums
- ◆ Members could then be more responsive to Web requests for particular works by the universities

Challenges of Accessing and Collecting Digital Image Libraries

Rochester Institute of Technology, Michael Robertson & Samantha (Sam) Powell

Web Reference: <http://wally.rit.edu/special/amicotestbed/call.html> (is password protected)

Profile of Testbed participation very high

- ◆ Known about by University Provost
- ◆ Cover story on Campus Newsletter
- ◆ One overview session was held and 8 hands-on seminars
- ◆ Many campus-wide emails and flyers about AMICO were sent to various key departments
- ◆ Teaching Presentations -Rochester Institute of Technology

Testbed participation by faculty in varied departments

- ◆ Imaging Science
- ◆ Photography
- ◆ Fine Arts
- ◆ Liberal Arts
- ◆ School of Printing

AMICO in Studio Art Department

- ◆ Course: 3-D Design (undergraduates)
 - ◆ two assignments based on using AMICO in Design class
 - ◆ Students had AMICO training sessions in the Library
 - ◆ Students asked to find examples in AMICO of a design concept, print them out, and then use them in storyboarded “concept” displays
- ◆ Course: Graduate Seminar in Installation Art
 - ◆ one assignment based on using AMICO
 - ◆ Students had to find two images for comparison purposes in the AMICO Library, print them out, and the write a comparative critique
- ◆ Professor used AMICO searches in class for “on the fly” lecturing with the results

AMICO in School of Printing

- ◆ Courses: Color Perception and Measurement & Color Separation Systems
- ◆ Printing courses used AMICO for:
 - ◆ general art appreciation review
 - ◆ observation and discussion of artwork reproduction
 - ◆ analyzing high resolution TIFF files
 - ◆ comparing file consistency from one source to the next

AMICO in School of Art

- ◆ Course: Art and Civilization
 - ◆ Students used AMICO images for in-class presentations

AMICO in School of Photographic Arts and Sciences

- ◆ Course: Gallery Management Class
 - ◆ Students used AMICO images to create virtual exhibitions

Student Feedback

- ◆ Gave intro to information literacy skills in library
- ◆ Allowed for individualized learning
- ◆ Tested the proposed concepts
- ◆ Able to virtually tour many museums
- ◆ Expanded their interest in specific artists and showed students works previously unknown and not reproduced elsewhere

Faculty Feedback

- ◆ Excellent resources for studio experience
- ◆ Saved a great deal of time finding images via AMICO, rather than searching books and magazines
- ◆ Broader range of work able to be used with AMICO
- ◆ Students created better class work in many cases

Points to consider

- ◆ For general studies quality of projected image is fine
- ◆ For Art History Faculty current quality is not as good as 35mm slides
 - ◆ In many instances it could be the projection system rather AMICO's quality
- ◆ Need to have AMICO members submit high resolution files in consistent manner to be used in some circumstances (like printing class)
- ◆ Technology infrastructure in school and faculty training in use of technology critical for success
- ◆ Educational uses for very rich files exist
 - ◆ Things like image capture information or artist statements or exhibition placement and design information
- ◆ Exposure to AMICO resource at high level in PR efforts is very helpful
- ◆ Administrative buy-in very important to overall participation and success
- ◆ Ways for faculty to share AMICO experiences and materials created will overcome learning curve and fear factor
- ◆

AMICO at the University of Leiden University of Leiden, The Netherlands, Eelco Brunisma

Web Reference: <http://www.let.leidenuniv.nl/kennismedia/ip/ip.html> (site is in Dutch)

Dutch approach to cultural resource digitization

- ◆ Dutch Digital Heritage Association (DDHA)
 - ◆ countrywide initiative
 - ◆ sets standards for digitization
 - ◆ provides training and education to museums
 - ◆ Ministry of Education will provide all museums funds for digitization provide they meet DDHA standards
 - ◆ Dutch museums excited by global access provided by this project and potential tourism

Use of AMICO at the University of Leiden

- ◆ Print collection of over 120,000 works
 - ◆ Converting database and using the same data structure as AMICO to provide future consistency
- ◆ Varied teaching approaches
 - ◆ Theatrum Biblicum: A course to provide a biblical foundation to students studying Western Culture used the AMICO Library as a study tool
 - ◆ Multimedia for Seniors: Senior learners (aged 60+) using AMICO images in multimedia coursework
- ◆ Hypericonics Project
 - ◆ A study of the formal attributes of iconography and explication of them in a multimedia format
 - ◆ Project explanation: In heterogeneous teams of 4-5 students (varied disciplines like Computer Science, Educational Technology and Psychology, Art History, Comparative Linguistics) looked for paintings that showed canonical examples of formal characteristics using atypical, non-precoordinated searches.
 - ◆ These teams found sets of images which were included in small educational “modules” which these students were building in a course on “Intermittent Programming

Difference at Leiden is students are using the AMICO Library to learn something about multimedia production.

User Studies

Who's Who Among Carnegie Mellon AMICO Users?

Carnegie Mellon University, Tracey DePellegrin Connelly, Henry Pisciotta & Denise Troll

Web Reference: <http://www.library.cmu.edu/Research/Online/DB/amico.html>

Overview

- ◆ Three month AMICO Library usage assessment
 - ◆ Used IP-address authentication and login screen
 - ◆ Compared AMICO usage to Slide Library (132,000 slides) visits during same period

AMICO publicity

- ◆ Email announcements to undergraduates and faculty
- ◆ Flyers which explained the AMICO Library at Library Reference Desk
- ◆ Posters created by design students

Findings during period:

- ◆ 82 unique users of AMICO
- ◆ AMICO usage across all disciplines of study
 - ◆ 44% Fine Arts
 - ◆ 17% Humanities and Social Sciences
 - ◆ 12% CIT (Engineering)
 - ◆ 7.2% Computer Science
- ◆ Slide Library usage predominately Fine Arts and Humanities faculty
- ◆ Slide Library had 137 borrowers (60 faculty and 77 students)
- ◆ Higher overall traffic to Slide Library than the AMICO Library
- ◆ Students more likely to access AMICO than faculty
- ◆ More students than faculty used the Slide Library, but faculty were more frequent users
- ◆ 80% of the University community had heard of the Slide Library, but only 7% had used it
- ◆ AMICO users averaged three visits to the database
- ◆ Slide Library visitors used a higher number of images than AMICO users

Impediments to AMICO usage

- ◆ Courses planned too far in advance to incorporate AMICO images (available in Fall)
- ◆ Training needed on how to incorporate AMICO images into course web sites technical innovations in teaching are encouraged

Take-Aways from Testbed

- ◆ Higher PR profile will help user penetration
- ◆ Must get Faculty participation in order to stimulate (and require) student usage
- ◆ Faculty training and future planning essential in adoption

Results of an Online Survey of AMICO Users

Interactive Multimedia Group, Cornell University, Robert Rieger & Geri Gay

Data Collection Background

- ◆ Jan. - Apr., 1999
- ◆ Human-Computer Interaction Group at Cornell University
- ◆ Research commissioned by AMICO
- ◆ A web-based survey
- ◆ Links from the AMICO Library site at RLG

Objectives

- ◆ Primary: Gather feedback from representative group of users who are accessing the AMICO database
- ◆ Secondary: Perform a longitudinal comparison between user impressions with Museum Education Site License (MESL) Project and AMICO

Selected Results (based upon 71 responses)

- ◆ Respondent Make up: 69% of respondents were with universities, the rest were affiliated with museums
 - ◆ just over a third were undergraduates
 - ◆ 22% were museum staff
 - ◆ 17% were faculty
 - ◆ 8% were grad students
 - ◆ 8% were library personnel or visual resources curators
 - ◆ 11% were other professionals
- ◆ Respondent Background:
 - ◆ 47% identified their major field of study as Fine Arts
 - ◆ 10% considered their focus Humanities
 - ◆ 38% gave Other as their academic focus
- ◆ Respondent AMICO Exposure:
 - ◆ 38% learned about AMICO from a class assignment
 - ◆ 25% learned about AMICO through a library recommendation
- ◆ Respondent Demographics:
 - ◆ 60% of respondents were female, 40% were male
 - ◆ 40% were 31-50 years of age
 - ◆ 35% were 18-22 years old
- ◆ Respondent Visitor Frequency:
 - ◆ one third had visited AMICO 2-3 times
 - ◆ 27% had used AMICO 4-6 times
- ◆ Respondent Reason for AMICO Use:
 - ◆ 35% used for a class assignment
 - ◆ 28% used for research purposes
 - ◆ 14% used for entertainment or curiosity
- ◆ Average Usefulness Rating
 - ◆ 3.99 on a scale of 1-5 (5 being very useful).
- ◆ Top ratings regarding appeal
 - ◆ “Quality of images” at 4.3 and “Overall appeal” at 3.95.
- ◆ Respondent Results:
 - ◆ 35% said they found what they were looking for
 - ◆ 31% found something that interested them
 - ◆ 8% were unable to find what they were looking for
- ◆ Respondent Planned Image Usage:
 - ◆ 35% had no plans to use the images they found
 - ◆ 17% said they would copy and paste it into another program
 - ◆ 11% planned to use it in a report, research, etc.
 - ◆ 8% were going to print it out
 - ◆ 8% were going to use the image in a presentation
 - ◆ 4% planned to refer or link other users to the image
- ◆ General Image Usage:
 - ◆ Before AMICO & other Web sites delivered digital images via computer
 - ◆ 23% never used images in class assignments, teaching, or research
 - ◆ 23% seldom used them
 - ◆ 26% said they occasionally used images
 - ◆ 28% said they frequently used them
- ◆ Respondent AMICO Value Rating:
 - ◆ 32% felt the Library was excellent
 - ◆ 42% gave it a good rating
 - ◆ 22% found the Library satisfactory
 - ◆ only 4% gave AMICO an unsatisfactory rating

Art Historians and Visual Resources Curators: AMICO's Focus Groups
AMICO, Jennifer Trant & David Bearman

Two Focus Groups

- ◆ Held in February 1999
- ◆ College Art Association (CAA) meeting
 - ◆ 6 respondents with a low degree of familiarity with AMICO
- ◆ Visual Resources Association (VRA) meeting
 - ◆ 8 respondents with a fairly high degree of familiarity with AMICO

Summary Points

- ◆ High ratings for RLG's interface and functionality
- ◆ Saw AMICO primarily as a library reference tool
 - ◆ Go get information out of AMICO and leave, rather than seeing a collaborative or additive approach
- ◆ Image delivery and quality of AMICO fine
 - ◆ Were willing to have watermarks placed on higher resolution images
- ◆ Willing to accept item-level rights limitations
- ◆ Text without images not interesting or of value
- ◆ Interested in having more contemporary art included
- ◆ Enjoyed the ability to find unknown works, there are no other resources for this
 - ◆ The "greatest hits" of art were seen as less essential because they were available elsewhere
- ◆ Very keen to have images from AMICO persist even after a Library subscription had ended
- ◆ Willing to pay for image persistence and more contemporary artworks
- ◆ CAA respondents not willing to report on use of the AMICO images
- ◆ VRA respondents would report modification of images, but not other uses
- ◆ CAA respondents did not see AMICO use in the classroom
 - ◆ AMICO was a library resource foremost in their minds.
- ◆ Link priorities for AMICO were to:
 - ◆ local slide libraries
 - ◆ art history texts
 - ◆ course web sites

Organizational Structure

COLUM: A Community of Learners for Universities and Museums
University of Toronto, Lynne Teather & Kelly Wilhelm

Evaluation of AMICO usage implementation within the university structure

- ◆ Museological approach used
 - ◆ Evaluation led by Museum Studies department

Results from evaluation

- ◆ Difficult to integrate the resource at a multi-campus university
- ◆ Need to pass a technology infrastructure benchmark at the university to allow easy adoption
- ◆ Need to have the university administration support the development of lectures/assignments using technology
 - ◆ Deans advised non-tenured faculty to focus on traditional means of advancement, like publishing, rather than trying to create innovative curriculum using AMICO
 - ◆ Without administrative buy-in for the use of AMICO it was difficult to recruit faculty into focus groups or training sessions
- ◆ Need a longer period than 1 year (Testbed length) to implement
 - ◆ Professors needed time to familiarize themselves with AMICO capabilities
 - ◆ Then, time to develop lectures and assignments that leveraged the strengths of this type of resource was also needed
- ◆ Need to raise comfort level of faculty with technology in general and, more specifically, digital resources like AMICO
 - ◆ Raising Professorial comfort level through training on general computer use, clear user documentation, simple templates to emulate, etc
- ◆ Need to train library personnel on the uses of the AMICO Library for faculty and students, so that they may make referrals to its use
 - ◆ The University of Toronto Library system provides over 11,500 digital resources and the AMICO Library was placed among them without any differentiation of its purpose

Digital Image Technology in the Classroom: A Model for Implementation
Washington University in St. Louis, Dana Beth & Deborah Utlan

Web Reference: <http://library.wustl.edu/~amico/>

AMICO Library Project

- ◆ Coordination amongst various schools and departments
- ◆ Excellent catalyst to coordinate these groups
- ◆ New Visual Arts & Design Center (VADC) comprised of:
 - ◆ School of Architecture
 - ◆ School of Art
 - ◆ Department of Art History
 - ◆ Gallery of Art
 - ◆ Art & Architecture Library
- ◆ AMICO Library Project Team
 - ◆ Library personnel
 - ◆ VADC personnel

Communications Plan

- ◆ Hosting an Open House in the Art & Arch Library to demo AMICO.
- ◆ Giving all freshman art students an AMICO demo and training presentation.
- ◆ Training all librarians on the uses and presence of AMICO as a library resource.
- ◆ Creating a web site with links to courses using AMICO and an online feedback mechanism.
- ◆ Making a hard-copy brochure discussing the AMICO Project, placing this in the Art & Arch Library and distributing it to interested campus constituencies.

Technical Requirements Review

- ◆ Team approach allowed proper planning
- ◆ Computers and color printers were purchased and placed in correct locations

Course Development

- ◆ Invited to participate
 - ◆ 2 professors from Art History & Archaeology
 - ◆ 3 from the School of Art
 - ◆ 1 professor from the Architecture School
- ◆ Three courses integrated AMICO
 - ◆ 2 art history classes
 - ◆ “Realism and Impressionism” had students curate online exhibitions using AMICO images.
 - ◆ “Gianlorenzo Bernini and the Development of Baroque Sculpture” required students to apply analysis skills and connoisseurship to a particular sculpture in the AMICO Library.
 - ◆ 1 class that was cross-listed with art, architecture, and comparative literature
 - ◆ “Visualizing Experience: Body and Space” asked students to search the AMICO Library for artists whose work addresses a public or community issue, and then create a poster or book with AMICO images to illustrate that artist’s public issue.

Issues encountered

- ◆ Lack of readily available technical assistance dedicated to the School of Art
- ◆ Student fear of computer work (html) required for online exhibition component and so, some dropped the class

Training

Looking at Images and Information: Teaching AMICO to Library Patrons
Western Michigan University, Miranda Howard Haddock

Web Reference: <http://www.wmich.edu/library/lac.html>

Two objectives of AMICO Project at WMU were

- ◆ Identify the AMICO users
- ◆ Determine how they use AMICO

User Segmentation

- ◆ Beginner: limited or no experience w/ library databases, no college-level art or material culture course (undergraduates)
 - ◆ Beginners were just given the basics of database searching, suggestions on how to use images as source material, AMICO overview, etc.
- ◆ Intermediate: some library database experience, one or more art course at college level (upper-level undergraduates, grad students, some faculty)
 - ◆ Intermediate users had similar training but at a deeper level.
- ◆ Expert: very experienced with library databases, extensive art or material culture coursework (professors, librarians)
 - ◆ Experts were given techniques for using AMICO with research projects, in class lectures and assignments, and to answer art reference questions.

Training Approaches

- ◆ right brain & image-based
- ◆ left brain & word-based
- ◆ Training objectives based on user skill-level
- ◆ Training by Visual Resources Librarian

AMICO User Guidelines

- ◆ 8-page hard-copy document
- ◆ Distributed to all training participants
- ◆ Available to all library visitors

Challenges of Accessing and Collecting Digital Image Libraries
Rochester Institute of Technology, Michael Robertson & Samantha (Sam) Powell

Web Reference: (is password protected) <http://wally.rit.edu/special/amicotestbed/call.html>

AMICO Training and Documentation

- ◆ Major initiatives enhanced project success
- ◆ Faculty and Training Pairs
 - ◆ Dedicated personnel (from the Library and the Educational Technology Center)
 - ◆ One-on-one AMICO introductions
 - ◆ Joint study of curriculum integration prospects
- ◆ Student Training
 - ◆ Same as faculty partners
 - ◆ gave AMICO orientation sessions to students in professors' classes
- ◆ Documentation
 - ◆ 23-page User Instructions document created
 - ◆ available online on the university-created gateway page
 - ◆ as a downloadable .PDF file
 - ◆ This User document walks users through finding the AMICO Library on the campus library web site, searching for images, setting options, using the Notebook feature, downloading images into other software or saving onto a disk, and more.
 - ◆ Searching Tips document created (available online and as a .PDF file)
 - ◆ This document describes and illustrates simple and advanced searching with AMICO.

Infrastructure

Design Considerations and User Feedback on the RLG User Interface Research Libraries Group (RLG), Arnold Arcolio

Interface Upgrades

- ◆ Notebook persistent from session to session
- ◆ Image stationary with description scrolling

Search Upgrades Coming

- ◆ Comparison of artist name results with ULAN list

User Behavior

- ◆ Options rarely used
- ◆ Searches dominated by keyword and creator
 - ◆ Possibly indicate need for more documentation of Library functions

Data Support

- ◆ Request for rich records from members to test multimedia delivery
- ◆ Weekly additions of records to Library

Data Processing at AMICO AMICO, Brad Dietrich

AMICO Data Management System allows

- ◆ Submission of data
- ◆ Withdrawal of works
- ◆ Editing/normalization of data

AMICO Library growth in a year

- ◆ 19,000 unique works from 23 institutions in '98
- ◆ 55,000 unique works from 26 institutions in '99

Benefits of AMICO Data Management

- ◆ Independent Data Validation
- ◆ Value-added Processing
 - ◆ Individual record editing
 - ◆ Parsing of free text fields
 - ◆ Data normalization
 - ◆ Data enrichment:
 - ◆ matching to artist authorities
 - ◆ extending artist authorities/ARS
 - ◆ AAT & TGN Plans
 - ◆ using hierarchy
 - ◆ Enriching search through authorities
- ◆ Image Handling
 - ◆ Image validation
 - ◆ Image "branding"
 - ◆ TIFF headers - copyright, owner, artist, and work info.
 - ◆ Thumbnail creation
 - ◆ External metadata creation
 - ◆ Record matching
- ◆ Distribution Management
 - ◆ Keeping distributors' library current (weekly updates)
 - ◆ Tracking changes
 - ◆ User permissions
 - ◆ Public thumbnail web site

Future AMICO Data Management Additions

- ◆ Editorial decisions about standard terms
- ◆ Artist biography authority
- ◆ Parsing of other free text fields
- ◆ Publish XML/RDF

Member Data Management Tools

- ◆ Web-based, ease of use
- ◆ Enhanced ownership of data
- ◆ Ability to stagger submissions

Other Perspectives

Contributing to AMICO: Members' Perspectives
National Museum of American Art, Rachel Allen

Current Practices

- ◆ Submission Decisions - made pragmatically
 - ◆ based on availability
 - ◆ based on copyright clearance
- ◆ Digitization is project-driven

Future Practices

- ◆ Develop ongoing systems
-
- ```
graph LR; A[acquire work] --> B[catalogue work]; B --> C[research work]; C --> D[]; P[photograph work] --> Q[clear rights & reproduction]; Q --> R[submit to AMICO];
```

### Observations

- ◆ AMICO is a service, dynamic & changing
- ◆ AMICO must solve problems, rather than add to work
- ◆ With AMICO growth “face to face” aspect of one-on-one dialogue will lessen; but different kinds of dialogue are possible

*Contributing to AMICO: Members' Perspectives*  
*J. Paul Getty Museum, Ken Hamma*

### Main Concerns

- ◆ Data Integrity (consistency and accuracy)
- ◆ Cataloguing (having the information to contribute)
- ◆ Evolving state of electronic copyright (Bridgeman Case) and licensing

### Administrative Issues

- ◆ Departmental restructuring at Getty to make workflow more efficient
- ◆ Changes in resource allocation, but no dedicated AMICO staff

*Training K-12 Teachers*  
*IUPUI, June Ward*

Web Reference: <http://www.ulib.iupui.edu/impls>

### Project Structure

- ◆ Joint effort of IUPUI School of Education & AMICO
- ◆ IMLS funding for 1999-2001

**Project Goals**

- ◆ Create curriculum to enable K-12 usage of AMICO
- ◆ Develop “best practices” for K-12 use of a digital image resource
- ◆ Target lifelong learners and distance learning

**Teacher Training**

- ◆ Summer curriculum workshops in Indianapolis
- ◆ 6 pairs of K -12 teachers at institute in summer from range of school types
- ◆ Summer curriculum workshops in Indianapolis
- ◆ Mini-grants to teachers to support efforts
- ◆ Graduate education credits earned through participation

**Technology Infrastructure**

- ◆ State legislature of Indiana has made technology in education a priority
- ◆ 85% of all Indiana classrooms have access to the Internet
- ◆ 2-way video & audio installed for distance learning