

CIDC

CORNELL INSTITUTE FOR DIGITAL COLLECTIONS

Second Annual Report

1 July 1998 - 30 June 1999

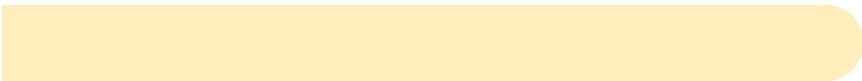


Mission

The Cornell Institute for Digital Collections (CIDC) was formally established on September 1, 1998. Its mission is to explore the use of emerging technologies to expand access to cultural and scientific sources and to support the use of these resources on campus and globally through the development and management of distinctive digital collections. This mission is being realized through academic, corporate, and public partnerships, national and international. In this critical area of educational and public concern, CIDC is contributing a unique combination of curatorial, instructional, research, and managerial expertise.

Program Goals

1. Create and maintain digital resources representing the content of Cornell University collections, in combination with visual, audio, and textual sources from around the world.
2. Foster the incorporation of these new resources into the classroom, laboratory, studio, and home.
3. Conduct applied research into the use and utility of digital technology to archive and disseminate important cultural and scientific information.
4. Educate and train in the employment of digital technologies for creating, publishing, and using electronic resources.
5. Investigate new models for administering access and use of digital collections.
6. Cooperate internationally with other universities, corporations, foundations, countries, and standards organizations in the development and administration of digital resources.



1998/1999 has been a productive year for the Cornell Institute for Digital Collections. Though remaining dynamic and entrepreneurial in outlook, the Institute has been able to stabilize and strengthen basic functions and generate new efficiencies in daily operations. Clearly articulated goals, consistent funding, effective institutional placement, a stable technical infrastructure, and administrative and staffing continuity have been important in providing dependable services and leadership. CIDC has established the professional and managerial balance necessary to meet ongoing commitments while remaining responsive to new ideas and opportunities. Although comforted by the successes of the last year, planning is underway to reshape the organizational structure, adding new leadership and expanding the capabilities and scope of the Institute. Change can be demanding and stressful for such a small program, but this willingness to adapt creatively is inherent in the mission of the Institute and is essential in today's rapidly evolving technological, educational, and economic environment.

Cornell Provost Don Randel appointed an Advisory Board, and it met in Ithaca on October 5th. The Board endorsed existing goals, but also urged CIDC to increasingly focus its limited resources on establishing CIDC as a source of expertise and education on critical issues rather than developing as a production service for multi-year projects. Important steps are underway in responding to this directive, most significantly through integrating the consulting and educational programs of the Library's Digital Imaging and Preservation Research Unit with CIDC and expanding involvement in the publication of cutting-edge literature on digital library research and development.

Thomas Hickerson was appointed Associate University Librarian for Information Technology and Special Collections in November, combining his various areas of professional leadership and giving him broad authority for integrating the management of library systems with the creation and dissemination of digital resources. Cider's entrepreneurial vision for unifying curatorial, managerial, and research capabilities in addressing broad educational needs will be more broadly incorporated into university-wide planning. Hickerson will maintain administrative oversight for CIDC and serve on the CIDC Advisory Board, but next year, operational direction will be jointly exercised by Co-Directors Peter Hirtle, previously CIDC Assistant Director, and Anne R. Kenney, Associate Director of the Department of Preservation and an international authority on digital imaging.

The creation of digital surrogates for 85% of the holdings of Herbert F. Johnson Museum of Art remains the Institute's largest commitment of resources. CIDC's direct involvement in the imaging process will end in December, but the Institute will maintain its role in supporting networked access to these images in combination with images from the slide collections of the History of Art and Architecture departments and the photographic holdings of the Library. The Museum Online Project continues to be recognized nationally as exemplary in both quality and efficiency. A similar effort has been explored in completing the first phase of a cooperation with the Frick Art Reference Library (NYC) and Cornell's Human-Computer Interaction Group (formerly the

Interactive Media Group). Most other existing endeavors have expanded or reached fruition during the past year, but the lofty aspirations for the Museum Digital Licensing Cooperative to become a nationwide image licensing enterprise have not been realized. Although the MDLC has become moribund, CIDC's involvement had been carefully circumscribed, and Cornell University is unaffected.

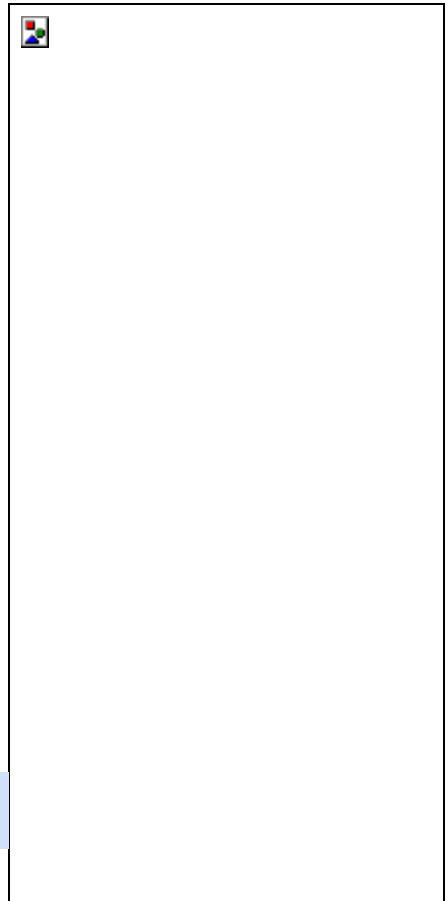
Both within CIDC and in cooperation with other campus initiatives, increased attention has been devoted to electronic publishing and new distribution and management models. Areas of concentration include: licensing, intellectual property, product development models, distribution models, branding, marketing, and e-commerce. The Institute continues to contribute to the development of high-quality, educationally-focused digital sources, employing rich content, new technical capabilities, and excellent design, and is exploring the establishment of new partnerships for the distribution and use of such resources. Peter Hirtle has been appointed Associate Editor of *D-LIB*, the leading electronic journal on digital library issues, and this publication of the Corporation for National Research Initiatives will be based in CIDC (William Arms, Editor of *D-LIB*, has recently joined the faculty of Cornell's Department of Computer Science.). The overall objective is to establish Cornell as a principal non-profit Internet "portal" for high-quality educational products and electronic publications.

Total expenditures for Year 2 (\$398,811) equaled only 58% of original projections. This in large part reflects overestimates in the areas of hardware, software, and purchased services, but staffing costs (\$272,742) only equaled 82% of projections. This reflects a pattern of involving CIDC staff in cooperative projects in which a portion of their salaries is assumed elsewhere. This is indicative of the collaborative nature of CIDC, but it does result in staffing insufficiencies in meeting a steadily expanding agenda. Staffing projections for Year 3 have been increased to \$418,535, out of a total projected budget of \$597,725. Year 2 revenues exceeded expenditures by \$285,946, but projected revenues for Year 3 (\$353,143) will fall short of projected expenditures by \$244,581. This projected shortfall presents no immediate difficulty, but increased annual revenues are essential for the future.

Museum Online

With the substantial support of an anonymous donor, the CIDC, in conjunction with the Herbert F. Johnson Museum of Art, began in January, 1998 an ambitious project to prepare digital surrogates for up to 85% of the items in the Museum. A digital photo studio was selected and installed, and two digital photographers, a part-times systems support specialist, and two catalogers were hired to capture the images, prepare derivatives suitable for delivery on the Web, and provide access points that will make searching for images possible. By putting the collection online, students, faculty, visitors, and users on the

Archive of museum master images



Internet will have access to the riches of one of the country's major university museums, only a fraction of which can be exhibited at any one time. Once converted and accessible, the digital collection can be integrated into Cornell's curriculum, and planning is underway on how the museum images could be used in local public schools.

At the end of the fiscal year, the project was well underway. Over 14,000 items from the Museum's holdings had been converted to digital form. Through constant refinement of the workflow and equipment, a daily throughput rate was achieved that to our knowledge no other museum has been able to match. In addition, the two catalogers assigned to the project have been able to add the access points needed for public access to over 10,000 records.

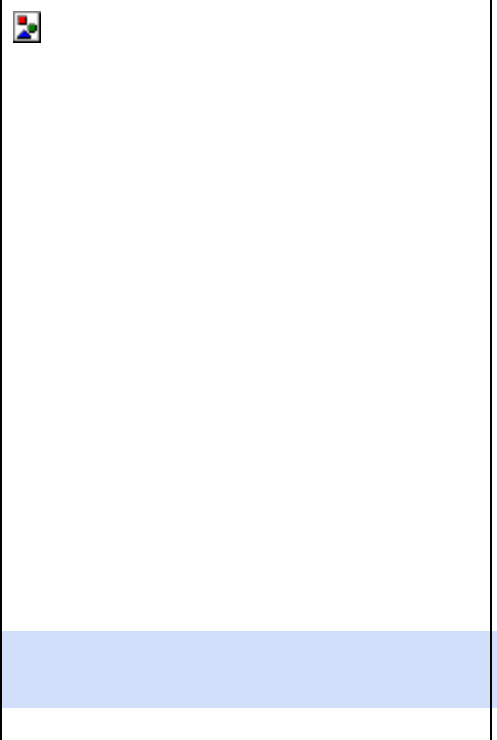
IMAG/CU

CIDC has developed and maintains a database for a shared image collection compiled from slides from the slide libraries of the College of Architecture, Art, and Planning and the Department of History of Art; the digital surrogates from the Herbert F. Johnson Museum of Art; and photographs from the Division of Rare and Manuscript Collections in the Cornell University Library. Searches conducted across all four collections will make it a valuable interdisciplinary teaching and research tool.

During this past year, CIDC has upgraded the server software and clients used by all the participants in the project. It has also worked closely with the various units to develop common descriptive practices intended to facilitate cross-unit retrieval. In September, CIDC installed in the Museum a prototype public access interface. Developed in conjunction with Luna Imaging of Santa Monica, California, the client allows users to search, select, and then manipulate images. CIDC staff developed routines for transferring information from the cataloging system to the public access system. Plans call for making the entire system available to the campus in September.

Death of the Father

This international anthropological project is a study of the closure of political authority in the 20th century and consists of a Website, databases of research materials, an audio-visual essay, and a book. Six anthropologists, led by Cornell professor John Borneman, take up the end of an authority crisis that spanned most of this century, 1917-1991, and that crystallized around four state political forms: Fascist Italy, Nazi Germany, Imperial Japan, and the State Socialist regimes of East Germany, Yugoslavia, Romania, and the Soviet Union. The Website for this international collaborative investigation of the societal effects of patriarchal dictatorships has just recently "gone live," <http://cidc.library.cornell.edu/dof/>. Noni Korf Vidal contributed to the design and construction of the site, and it is maintained by CIDC.



Frick Project

Cornell University and the Frick Art Reference Library have engaged in a collaborative project to explore the creation of compatible databases of digital images from the study collections of the two institutions. The planning phase of this project included choosing materials from the collections, identifying media types and formats, determining the scanning requirements of the materials, scanning a sample of images, choosing appropriate and compatible database fields, creating a test database, and estimating costs. Additionally, Cornell's Human-Computer Interaction Group conducted focus group sessions with scholars and staff in both New York and Ithaca. These sessions provided important information regarding the perceived value of the collections for their users and potential users. Having completed the planning phase, the next phase of this collaboration will provide access to approximately 10,000 architectural photographs from the historic Andrew Dickson White collection and 15,000 images of art from the Frick's Anonymous American School collection.

Making of America II

CIDC continued its involvement in the Making of America II (MOA2) project. MOA2, with funding from the Digital Library Federation and the National Endowment for the Humanities, is attempting to develop standards for the encoding of intellectual, structural, and administrative data about primary resources housed in research libraries. Centered at the University of California at Berkeley, other participants include Stanford University, Pennsylvania State University, and the New York Public Library. During this past year, CIDC advised the project on the design and implementation of a database intended to support the project. In addition, digital conversion of Cornell holdings for use in the testbed of data and images began. MOA2 is built around the theme of transportation in the late nineteenth century, and CIDC (in conjunction with staff from the Preservation Division) will convert material from three different transportation-related collections. In addition, Robert Rieger and other staff in the Human-Computer Interaction Group will be conducting an evaluation of the entire project.

Making of America I

The Making of America I (MOA1) project was a pioneering collaboration between Cornell and the University of Michigan to digitize a broad spectrum of popular nineteenth century serials and monographs. For several years Cornell has provided access to the volumes via its prototype digital library. Several tests conducted in 1999 proved that it was technically and economically feasible using optical character recognition software to convert to machine-readable form the full text of some 900,000 pages of journals. David Ruddy (CIDC) has been responsible for the encoding of the machine-readable texts in SGML. Once encoded, it will be possible to conduct a search for any word in the text of the journal and be able to connect immediately to the image of the page containing that text.

Extensible Markup Language (XML)

During 1999, CIDC undertook a number of experiments on the potential of Extensible Markup Language (XML) for the organization and presentation of archival materials. CIDC staff modified an encoding standard for manuscript materials known as Encoded

Archival Description (EAD) to be compatible with XML and then proceeded to encode several archival finding aids in it. Through the innovative use of free software, CIDC staff have also been able automatically convert the files to HTML for presentation on the Web to users without XML browsers. Other experiments explored the use of XML schemas for the presentation and manipulation of tabular data, and tested the possible use of EAD-encoded finding aids at the root of a digital image delivery system.

Hana

CIDC, in conjunction with Karen Brazell, a faculty member in the East Asian Studies Program, the Gertrude Stein Repertory Theater in New York City, and Ann Ferguson, the Burgunder Curator for Shaw and Theater Arts in the Cornell Library, has begun to explore how one can document theatrical performance. As part of this investigation, CIDC developed a Web-accessible prototype database containing digitized slides and documents, and information about those documents. This initial testbed focuses on Japanese Noh Theater and will be used in classroom instruction by Professor Brazell this fall. The project is known as Hana and is intended to test core database categories for theater from around the world.

SagaNet

CIDC continued to provide support to the SagaNet project, an international collaboration between Cornell University and the National Library of Iceland. SagaNet is intended to provide digital access to the central corpus of the Icelandic Saga literature. During the year, students working for CIDC refined the database structure, contributed to the interface of the system, and developed mechanisms for combining records from three different library catalogs in two different languages and two different bibliographic formats. In addition, CIDC created some tools for use by the Preservation Division to assist them in the digital scanning of microfilm for some of the titles to be included in the project.

Internet Publishing Initiatives

As reported in the 1998 CIDC Annual Report, CIDC hoped in 1999 to begin a new initiatives in what the report called INTERNET PUBLISHING. Several important steps were taken in this direction. They include:

Project Euclid

Project Euclid <<http://euclid.library.cornell.edu>> is a library-wide initiative to explore new ways libraries, scholarly societies, and publishers can work together to disseminate literature on mathematics. David Ruddy, CIDC's electronic publishing specialist, has been a key contributor to the Project Euclid initiative since its inception.

Cornell East Asia Series Publishing Investigation

CIDC engaged in extensive discussions with the editors of the Cornell East Asia Series about the possibility of providing electronic access to the backfiles of the journal. CIDC undertook a series of investigations to see if it was possible to create from older volumes in the series electronic versions that could be delivered via the Web or as printed volumes, produced on demand from the digital files.

Other publishing initiatives

CIDC is continuing to explore with commercial publishers the possible distribution of Cornell content. One such publisher, Prime Sources Media, began to offer subscription access to digitized versions of a part of Cornell's witchcraft collection, and CIDC is in discussion with them about other possible collections.

CIDC was fortunate to be able to secure the talents of a John Anzalone, a Visiting Scholar at Cornell to begin work on the development of a digital curriculum unit devoted to the fantastic in art and literature. The project promises to be a model for new and unusual ways of incorporating digitized resources into teaching.

Significant administrative and organizational changes are being implemented. The founding director of CIDC, Thomas Hickerson, was appointed Associate University Librarian for Information Technology and Special Collections in November, combining his various areas of professional leadership and giving him broad authority for integrating the management of library systems with the creation and dissemination of digital resources. He will maintain administrative oversight for CIDC and serve on the CIDC Advisory Council, but next year, operational direction will be jointly exercised by Co-Directors Peter Hirtle, previously CIDC Assistant Director, and Anne R. Kenney, Associate Director of the Department of Preservation and an international authority on digital imaging.

In responding to Advisory Council's directive to establish CIDC as a source of expertise and education on critical issues and to achieve expanded efficiencies, the Digital Imaging and Preservation Research Unit of the Department of Preservation and Conservation will merge its programs with CIDC. This pioneering program has been a world leader in setting imaging standards and best practices for nearly a decade. Their guidelines for capturing printed text have been adopted by such important initiatives as JSTOR, the Making of America Project, Yale's Project Open Book, and by institutions across the nation and other countries including Canada, Sweden, Germany, Australia, and the UK. The staff have served as advisors to the Library of Congress, the National Archives, the Museum of Natural History, JSTOR, and the Frick Art Reference Library, and have influenced programs at other institutions through publications and educational offerings. The 250 page book, *Digital Imaging for Libraries and Archives*, published by the program in 1996, won the Society of American Archivists' Best Book Award, and has sold nearly 2,000 copies worldwide. The staff are currently working on a second monograph, to be published by the Research Libraries Group in early 2000, entitled: *Moving Theory into Practice, Digital Imaging for*



Engraving digitized for the Fantastic in Art and Literature project

Libraries and Archives. The program also edits and produces under contract with the Research Libraries Group the bi-monthly electronic journal *RLG DigiNews*, which is read by over 3,000 individuals. The program has also offered intensive one-week seminars on digital imaging several times a year, which have attracted participants from around the world.

Continued investigation of issues associated with digital conversion, and has just resulted in a report to the Library of Congress on digitizing book illustrations. Oya Rieger (coordinator of the Digital Imaging and Preservation Research Unit) has participated in the invitational Technical Metadata Elements for Image Files Workshop sponsored by the National Information Standards Organization, Council on Library and Information Resources (CLIR), and the Research Libraries Group (RLG). Ms. Rieger will represent Cornell (along with Peter Hirtle) in the Joint RLG/CLIR task force on digital archiving. By combining the Digital Imaging and Preservation Research Unit with CIDC, the Institute will achieve expanded prominence and establish new synergies in addressing today's critical issues.

Staffing

The success of CIDC is to a large part dependent on its ability to gather and utilize curatorial, instructional, research, and managerial expertise. A principal task is gather and retain a talented staff. In some cases, specialists who had worked on the grant-funded projects of the Digital Access Coalition were available for hire; in other cases new staff had to be found. Short descriptions of primary staff involved with the Institute follow:

H. Thomas Hickerson

Director

Thomas Hickerson is Associate University Librarian for Information Technologies and Special Collections in the Cornell University Library. His special collections responsibilities include oversight for the Library's principal rare book and manuscript programs, and he directed the Division of Rare and Manuscript Collections from 1992 through 1998. His information technologies role includes direction of the Division of Digital Library and Information Technologies, with general responsibility for library systems operation, digital library development, and electronic publishing. He was founding director of the Cornell Institute for Digital Collections (CIDC) and continues to oversee its activities. The Institute was formally established with private funding in September 1997, and succeeds the Digital Access Coalition, which he organized in 1992. CIDC is an interdisciplinary unit with a campus-wide mandate to explore and promote the use of emerging technologies to expand access to cultural and scientific collections and to support the development and use of such resources through academic, corporate, and institutional partnerships. Tom is presently Vice President/President-elect of the Society of American Archivists and was honored for his professional contributions by being named a Fellow of the Society in 1987. He has also served on the Executive Committee of the ACRL Rare Books and Manuscripts Section. In 1993, he was the recipient of an Andrew W. Mellon Research Fellowship, "Digital Access to Research Collections on College and University Campuses," and he has written and spoken extensively on archival and library automation and digital library development.

Peter B. Hirtle**Assistant Director**

Peter B. Hirtle manages many of CIDC's projects. Prior to his arrival at Cornell, Hirtle worked at the National Archives and Records Administration (NARA) in the Technology Research Staff (where he helped complete their most recent digital imaging report), and as coordinator of electronic public access for the agency. Before beginning work at NARA, he served as curator of modern manuscripts at the National Library of Medicine. Hirtle has an MA in History and MLS with a concentration in archival science. He is a frequent speaker at professional meetings and has played a leadership role in the Society of American Archivists, currently serving as member of its governing Council. He also was a member of the Commission on Preservation and Access/Research Library Group's Task Force on Digital Archiving and the Research Library Group's Working Group on Digital Archiving.

Oliver B. Habicht**System Support and Design Specialist**

Oliver B. Habicht ('97) has extensive experience working in the university's central computing organization, Cornell Information Technologies (CIT), for seven years. With a strong background in Internet multi-media technologies and production client-server systems, Oliver has focused on supporting CIDC's current Windows NT environment and associated applications.

Noni Korf Vidal**Interface Design Manager**

Noni Korf Vidal ('84, '95 M.S.) promotes and enables the use of visual images in humanities education and research. She created the CIDC online image databases currently in use by students, professors, and the general public (Utopia, Fuertes, and Cornell's implementation of the MESL project). She is currently working to make a selection of the photographic holdings of the Division of Rare and Manuscript Collections (where she is the Curator for Visual and Electronic Collections) available online.

David Ruddy**Electronic Publications Specialist**

David Ruddy joined CIDC in September 1998 to explore and develop a prototype networked publication system. He has extensive experience with SGML applications such as the Text Encoding Initiative (TEI). He holds a Ph.D. in English Language and Literature and an M.S. in Library and Information Services. He has worked on several major lexicographic projects, including the American Heritage Dictionary, 3rd Edition, the Middle English Dictionary, and the Middle English Compendium project at the University of Michigan, an NEH-sponsored effort to convert, encode, and electronically deliver the Middle English Dictionary and other Middle English language resources.

Jennifer Conklin,
Electronic Projects Technician

Jennifer Conklin works with faculty and staff in digitizing historic materials and creating online access to these resources. She recently completed *Beautiful Birds: Masterpieces from the Hill Ornithology Collection* (<http://rmc.library.cornell.edu/ornithology/>) and is currently working with John Anzalone on *The Fantastic in Art and Literature*. Conklin holds a B.S. in studio art from Skidmore College ('98).

Bjorn L. Thordarson
Graduate Student Assistant

Bjorn Thordarson ('99 M.S.) began his career in the National and University Library of Iceland working on several Web-based projects. He worked there while finishing his undergraduate in Computer Science at the University of Iceland, from which he also received his B.S. in BioChemistry in 1996. He began work on the SagaNet Project in Iceland and continued his involvement in this collaborative endeavor while a graduate student in computer science at Cornell.

Sigrun Ragnarsdottir
Graduate Student Assistant

Sigrun Ragnarsdottir ('99 M.S.) received her B.S. in Computer Science from the University of Iceland in 1998. While an undergraduate, she was worked at the National Bank of Iceland as a software engineer. She began working for CIDC in 1998 when she came to do to Ithaca to do graduate work in computer science at Cornell.

Professional Activities

CIDC staff have established a strong reputation for excellence and are frequently called - upon to write, speak, or consult. A partial listing of some of the CIDC staff professional activities during this past year follows:

Peter B. Hirtle

Publications and Presentations:

“User Access to Digital Collections: The Cornell University Experience,” EVA '99:
Electronic Imaging and the Visual Arts, New York, NY.

Closing Plenary Panel Presentation, Research Libraries Group's Primary Sources Forum,
New Haven, Conn.

“Recent Changes to the Copyright Law: Digital Millennium Copyright Act,” **Archival
Outlook** March/April 1999: 6-7.

“Recent Changes to the Copyright Law: Copyright Term Extension,” **Archival Outlook**
January/February, 1999, special insert.

(with Carol DeNatale) “Selecting a Digital Camera: the Cornell Museum Online Project”
RLG DigiNews, 2:6 (15 December 1998) <[http://www.rlg.org/preserv/diginews/
diginews2-6.html](http://www.rlg.org/preserv/diginews/diginews2-6.html)>

“Government Records in the Digital World,” invited speaker at the Kanazawa Institute of Technology 1998 Library Roundtable, Kanazawa, Japan.

Workshops Taught:

"Selection for Digitization," Western New York Regional Library Council, Buffalo, New York.

"Advanced Issues in Copyright for Archives and Manuscripts," Western New York Regional Library Council, Buffalo, New York.

“Digital Imaging Project Management” (with Carol DeNatale), Museums and the Web Conference, New Orleans, Louisiana.

"Digital Imaging for Library and Archives" course instructor, Cornell University.

Recent Appointments:

National Initiative for a Networked Cultural Heritage (NINCH) Working Group on Best Practices.

Research Libraries Group/Digital Library Federation Task Force on Long Term Retention. Institutional Records Working Group.

Society of American Archivists Program Committee.

Grant Reviewer for the Institute for Museum and Library Services and the National Historical Publications and Records Commission.

David Ruddy

Library of Congress/Ameritech Awards Technical Evaluation Panel member, Feb 11, 1999, Wash. DC

Robert Rieger

Publications

Gay, G., Rieger, R. and Martin, W. (1999). Global digital museum prototype evaluation. In *Senri ethnological report, global digital museum for museum education on the Internet*. Sugita, S., Hong, J-K., Reeve, J. and Gay, G. (eds.). Osaka, Japan: National Museum of Ethnology.

Martin, W., Gay, G., Rieger, R., and Korf, N. (1999). GDM use interface design. In *Senri ethnological report, global digital museum for museum education on the Internet*. Sugita, S., Hong, J-K., Reeve, J. and Gay, G. (eds.). Osaka, Japan: National Museum of Ethnology.

Takahashi, J., Kushida, T., Hong, J. K., Suguta, S. Kurita, Y., Reeve, J. Loverance, R., Gay, G., Rieger, R. & Martin, W. (1998). Multimedia information access on the Internet:

An approach in global digital museum. In *Proceedings of the ACM International Conference on Digital Libraries*, Pittsburgh, PA, USA.

Gay, G. Rieger, R. and Sturgill, A. (1998). Findings of the MESL casual user survey. In Getty Information Institute (Ed.), *MESL: Delivering digital images* (pp. 122-132). Los Angeles: Getty Information Institute.

In the summer of 1998, Cornell Provost Don Randel appointed an Advisory Board to provide guidance to the Institute. The Board is chaired by Arthur S. Penn, President of Elmrock Capital, Inc. (NYC), In addition to the Provost, the Board initially included: Sarah Thomas, University Librarian; Assoc. Prof. Geri Gay, Communication and the Human-Computer Interaction Group; Prof. Donald Greenberg, Computer Graphics and Johnson School of Mgmt.; Prof. Peter Martin, School of Law and Legal Information Service; Philip Lewis, Dean, Arts and Sciences; Francille Firebaugh, Dean, Human Ecology; and Thomas Hickerson. The first meeting of the Board was held in Ithaca on October 5th. The Board endorsed existing goals, but urged CIDC to increasingly focus its limited resources on establishing CIDC as a source of expertise and education on critical issues rather than developing as a production service for multi-year projects.

It is envisioned that the Board will meet once each year, but that members will be available for consultation as needed. Present members are continuing, and Douglas Rowan has recently been added to the membership. Mr. Rowan is currently President and CEO of Imaging Solutions and was formerly President of Corbis, Inc., the county's largest digital image licensing initiative. It is the Provost's intention to add two or three more outside advisors who can provide critical advice on technology trends, evolving standards, and market developments. Thomas Hickerson meets with Arthur Penn in New York on a regular basis and met recently with Douglas Rowan. Although some Board members have regular interaction with CIDC staff and Sarah Thomas provides ongoing administrative oversight, more frequent reporting to all members is needed.

Proposed priorities for 1999/2000 are:

Internet Publishing – This effort focuses on the compilation of digital products based on unique research collections and services. Principal issues include: licensing, intellectual property, product development models, distribution models, branding, marketing, and e-commerce. The Institute will continue to participate in the development and dissemination of high-quality, educationally-focused digital sources, employing rich content and excellent design, and to explore the establishment of effective partnerships (non-profit and commercial) for the distribution and use of such resources. Additionally, CIDC will play a principal role in the University Library's effort to develop new technical and economic models for scholarly publishing. This area is of critical interest to scholars and universities worldwide. Cornell recently received a planning grant from

The Andrew W. Mellon Foundation to focus attention on the field of mathematics and major initiatives are being designed.

Digital Library Research, Consulting, Publishing, and Teaching – Although this is an area in which CIDC staff have participated actively, the merging of the Digital Imaging and Preservation Research Unit with CIDC will substantially expand the Institute's capacity to exercise national and international leadership. While previously these two programs had worked closely together, there was increasingly potential for them to compete in certain arenas. The rationale for this consolidation of resources is compelling. With editorial responsibility for both *D-LIB* and *RLG DigiNews*, authorship of the forthcoming *Moving Theory into Practice, Digital Imaging for Libraries and Archives*, and expanded imaging workshops, CIDC will be a leading participant in digital library research publication and training. Ms. Kenney is also the Library's lead investigator in Cornell's joint Library/Computer Science Digital Library Initiative II Project, recently funded by the National Science Foundation, the National Endowment for the Humanities, and others (\$2.2 million over four years). In order to exploit these combined strengths, CIDC will establish and promote a non-profit consulting program in the areas of imaging, digital libraries, and digital archiving.

CIDC Website – The redesign and upgrade of the CIDC Website will be accelerated in order to: facilitate classroom and research access to CIDC resources; explicate goals, programs, and staffing; and promote CIDC products and services.

As reflected in the accompanying statements of Expenditures, Projections, and Revenues, total expenditures for Year 2 (\$413,561) equaled only 60% of original projections. This in large part reflects overestimates in the areas of hardware, software, and purchased services, but staffing costs (\$272,742) only equaled 82% of projections. This reflects a pattern of involving CIDC staff in cooperative projects in which a portion of their salaries is assumed elsewhere. This is indicative of the collaborative nature of CIDC, but it does result in staffing insufficiencies in meeting a steadily expanding agenda. Staffing projections for Year 3 have been increased to \$418,535, out of a total projected budget of \$597,725. [Neither projected expenditures nor revenues incorporate potential adjustments resulting from the integration of the Digital Imaging and Preservation Research Unit. These effects may not be fully evident until Year 4.] Year 2 revenues exceeded expenditures by \$271,196, but projected revenues for Year 3 (\$353,143) will fall short of projected expenditures by \$244, 581. This projected shortfall presents no immediate difficulty, but increased annual revenues are essential for the future.

The University Library has continued to provide vital support for the direction, administration, and space needs of the Institute. This has included the salary of the director, the support of the Library's financial and human resource management systems and personnel, and office space in the Carl A. Kroch Library (c. 700 sq. ft., plus regular use of meeting and conference areas). The Department of Communication and the Herbert F. Johnson Museum of Art provided additional space for CIDC activities. Further expansion within the Library is expected.