



Rutgers
University
Libraries

Technical and Automated Services Annual Report

July 2005-June 2006

Introduction

The 2005-06 year was a critical transitional year for Technical and Automated Services. The department has developed new workflows and is playing a pivotal role in the development of a significant new service for the Rutgers University Libraries—the development of the institutional repository, RUcore. Faculty and staff alike have had to examine their changing roles at the libraries, review and revise long-standing workflows and responsibilities, and expand their job descriptions to accommodate new services, even as existing responsibilities continue to require time and attention. To a large extent, the grant-funded *New Jersey Digital Highway* has provided a significant opportunity to develop new workflows and a nascent organizational structure to support the digital repository as a platform for digital collections unique to Rutgers University and to New Jersey. Changes to support RUcore, in particular, have been rapid and far-reaching, but the department has supported the changes, and increased their repertoire of skills and abilities, with remarkable panache. Significant achievements in each strategic area for the libraries are provided in this report.

Collection Development and Management

Luna Insight continues to successfully meet the needs of the Art History Department and several other users. There are now more than 69,000 images available in public and restricted collections, and they are being used for instruction and research. Several new collections are in the planning and implementation stages: the Classics Department has a grant-funded project to digitize and load over 1,000 lantern slides from the 1930s, a student with an Aresty Research grant is working on a project for the Italian Studies Department, and a discussions are ongoing to add a collection of images of Rutgers' outdoor sculpture. Providing these collections involves digitizing and loading images into Luna Insight as well as designing and implementing metadata to describe them. Elizabeth Leister, Serials Unit Head in the Cataloging Department, is collaborating with Chad Mills of the Systems Department to develop and implement workflows for Luna Insight collections.

Considerable progress was made this year in support of foreign language materials at the libraries. Acquisitions reviewed the status of the LC cooperative acquisitions program to purchase materials from South Asia, and they continue to coordinate the libraries' participation

in this program. Acquisitions is revising departmental workflow to support the smooth integration of East Asian library orders into regular workflow. In addition, Acquisitions has improved communication and services with foreign vendors. Selections are now done online with Aux Amateurs and Puvill.

The hiring of Non-Roman Languages Catalog Librarian, Li Sun, has enabled significant advances in cataloging and access to Asian language materials. To date, Ms. Sun has reduced the backlog at the East Asian Library from 3,000 to 1,000 and has coordinated efforts with the Acting East Asian Librarian to select useful backlog books for cataloging and to discard books in the backlog that are not useful. Ms. Sun has worked to rectify the issue of uncataloged Asian language books that have circulated without the benefit of an IRIS record. She has provided full-level catalog records for about 1,000 books. She is also helping Acquisitions with the order and receipt of Asian language materials, cataloging newly purchased books and gifts of Asian language books, proved database maintenance for Asian language records in IRIS, and has cataloged more than one hundred old serials for a binding project.

Hala Issa has begun working part-time for Li Sun, while continuing to also work part-time in Database Management. As part of the Non-Roman Languages Unit, Hala has worked on Hebrew and Yiddish books and a gift of Egyptian books.

Sharon Favaro, Gifts Cataloging and Special Projects Coordinator in the Catalog Department, has extensively revised the libraries' processes for gift collections to enable a smoother workflow and insure that gift collections are in good condition and do not substantially duplicate the libraries' existing collections. She refined the process for receiving and cataloging gifts, particularly large gift collections. She has coordinated the efforts of catalog staff, particularly Nancy DeNicola, Bonnie Spaventa, and Mary Steever, who have all contributed to the cataloging of gifts. Ms. Favaro maintains ongoing communication with selectors, working with them to prioritize processing of gift collections. She has developed an online form for selectors to use when assessing a collection for cataloging. The form makes provision for cataloging treatment, special notes, and preservation needs. Ms. Favaro has also developed procedures to formulate a 590 virtual bookplate for gift collections. She regularly consults with Ian Bogus, the Libraries Preservation Specialist, regarding fragile materials and materials that may require other types of preservation treatment. This collaboration has resulted in a future proposal to the Councils and possibly IPAC to implement a 583 MARC action note to record preservation information, including type, date of treatment, vendor, and the party responsible for authorizing the treatment. As part of this process, the Cataloging Department hosted a workshop on handling fragile materials for Acquisitions and Cataloging staff. Ian Bogus and Tim Corlis, the Head of Preservation for SC/UA, provided the training.

The addition of a catalog librarian, Melissa Defino, to serve as liaison and catalog librarian for Special Collections has resulted in significant progress in cataloging special collection materials. Ms. Defino and Lida Sak (former head of Serials Cataloging who now works as a part-time voucher cataloger) began creating item-level records for trade catalogs. The former policy was to add these materials to a collection level record created in 2000. The items will now be individually cataloged to provide greater name and subject access.

More than forty new online databases were added to the RU-Online collection this year (in addition to numerous individual journal titles). In almost all cases, each title requires license and pricing negotiation and a closely coordinated process that involves Acquisition, Systems, and Cataloging departments, as well as selectors and librarians from WAC and public services, and finally, the webmaster, who announces availability of the new resource to the RUL community. Cathy Pecoraro coordinates this complex implementation and access process. Appendix A of this report provides the complete listing of databases and other online resources added this year.

Thousands of bibliographic records were loaded into the catalog for new or modified titles included in the Early English Books Online collection. A sample set of bibliographic records has been added to the test catalog for the Eighteenth Century Collections Online and Literature Online (LION) resources. Following cataloging review, these records will be loaded into Unicorn, adding over 100,000 new bibliographic records. Also being reviewed are nearly 60,000 MARC records for the titles available through Serials Solutions' OpenURL product, Article Linker.

Services and Service Enhancements for Users

The customized implementation of the iLink catalog interface in the summer of 2005 was a major improvement in user access to the libraries' bibliographic records and holdings. This enhanced interface, which replaced Webcat, has increased the functionality of the catalog and provided easier access to materials. Decisions about the look and feel of the implementation were made by IPAC. Bob Warwick in the Systems Department implemented all of the code and programming changes needed to design and present the new interface.

Several years ago RLG converted all of the CJK records in their database from Wade-Giles to Pinyin. Rutgers had nearly 37,000 records that needed to be converted in SirsiDynix Unicorn. Under the guidance of Li Sun, the Non-Roman Languages Unit Head, the records are in the process of being reviewed, corrected, and converted to Pinyin. To date, seven thousand records have been fully converted to Pinyin. This change will greatly improve searching and retrieval for users as now all CJK records will use the same transliteration scheme, which is also the transliteration in use among most other libraries, particularly our peer institutions.

State law mandated that the University stop using students' Social Security Number for identification and instead assign a unique student identification number. The SSN had been the basic matching element for all student and staff records used in the circulation system user database. Many months of work were devoted to the planning, testing, and converting of student SSNs to the new Rutgers ID. In the process, problem user records were identified and corrected, alternative fields within the Unicorn record were used, and the conversion was successfully completed on time and met both the state and the University deadline. This change also required subsequent adjustments and testing to the patron loader procedures and processes.

The libraries currently offer an a serials listing service to link to the serial titles provided by aggregators and an OpenURL linking service to provide direct access to full-text articles from indexing and abstracting services. In this fiscal year, the libraries greatly extended services for users for online subscriptions through a deeply discounted purchase of an electronic

subscriptions service suite, the Serials Solutions products from SirsiDynix.. This service suite will include federated searching, allowing users to search multiple databases with a single search, in addition to the serials listing service, a serials management system, and an OpenURL service.

Because of Serials Solutions' knowledge base it will be possible to use one source of data for OpenURL and federated searching. The purchase of this service suite from SirsiDynix will provide integrated access with acquisitions and catalog records to provide improved management of electronic serials. It will be easier to analyze duplication across serials packages, to integrate embargo information into catalog records and to improve workflow to provide faster access to purchased subscriptions. The libraries will be able to "work smarter" in the selection, description and access to resources that are not only most critical to users but also represent the largest portion of the libraries' collection budget. Article Linker has replaced Link Source as the OpenURL product, and work is in progress to implement federated searching using Central Search. Much of the summer was spent by the Acquisitions, Systems and the Serials Cataloging Unit in converting from the EBSCO serials list and OpenURL product to the Serials Solutions product, resulting in a seamless transition for this critical service. It is doubtful that anyone will notice the transition, which is often the best sign of success for the "behind the scenes" activities of Technical Services!

A very significant service in development by Technical Services is the electronic theses and dissertation service (ETDS), which will result in a significant collection, representing a substantial and unique part of the intellectual property for the university. The electronic theses and dissertation service is being developed in collaboration with the Graduate School-New Brunswick, with the intent to roll out the service to other graduate schools over the next few years. Under the leadership of Ann Montanaro, Systems Department Head, and programmer Shaun Ellis, the ETD system integrates the current workflow for graduate students and for the graduate school from submission to final publishing of a thesis or dissertation. The ETD system is a collaboration of many RUL departments, but particularly Systems and the Cataloging Department, which developed a simple cataloging format that will enable cataloging provided by students to be shared with the RUcore repository and the IRIS online catalog. The ETD system will have a significant impact on TAS work, particularly in terms of cataloging, since theses and dissertations will be released for cataloging throughout the year rather than all at once, when received from the bindery, and of course, the impact on binding and on shelving in Special Collections and the open stacks will be enormous.

The system is designed for intuitive simplicity for participating graduate students as well as to automate significant parts of the Graduate School-New Brunswick's workflow. It is also designed to provide reports that enable the Graduate School-New Brunswick to track dissertations and theses by graduate program, by country or state of origin for the student, and other factors that enable trends analysis for graduate degrees. It also is designed for flexibility in customizing to the requirements and terminology of other graduate schools within Rutgers University. Other features of the service include a complete preservation strategy to insure that theses and dissertations will be available for future generations of users despite changes in technology, and a searchable database as part of the RUcore repository architecture that enables

researchers to identify and retrieve theses and dissertations by subject, school, degree program, author, etc.

The ETD system will be used voluntarily for theses and dissertation submissions for December 2006 graduation, with full rollout in collaboration with the Graduate School-New Brunswick for the May 2007 graduation. As Barbara Bender, Associate Dean of Academic Support and Graduate Student Services at the Graduate School-New Brunswick remarked, “after May 2007, there will be no reason to ever again receive paper submissions of a thesis or dissertation. It’s the end of an era.”

Technical Services/Technical Infrastructure

The development of RUcore is perhaps the most complex and far-reaching of the many technical infrastructure accomplishments in the Technical and Automated Services Department this year. Among the significant milestones for this project are:

- The implementation of RUcore version 1.0, the first stable production version of the software. This involved transferring the Fedora repository test bed from a Windows server in SCC to a Unix server in the Systems Department. Procedures for testing and documenting and transferring files were also developed, which is already resulting in a smoother upgrade to version 1.1.
- The transition to RUcore 2.0, which incorporated significant new enhancements with the Fedora 2.1 application software. This upgrade implemented new, rigorous processes for staging the transition and testing all components, resulting in the smoothest and most efficient repository upgrade to date.
- The development, testing and implementation of the Workflow Management System, the web-based utility for adding resources and metadata to the repository. This significant product has been developed under the leadership of Yang Yu, the technical architect and Kalaivani Ananthan, the WMS project manager. The software was developed, tested and extensively debugged. The WMS implements an innovative event-based data model and a complete METS metadata implementation. An extensive testing plan included staff from the SCC and TAS, and also students in Dr. Sherry Vellucci's SCILS metadata course. Interest in using the WMS has been strongly expressed by such diverse organizations as the Library of Congress, NJN, RUTV, the Colorado Research Alliance and the Princeton University Library. A friendlier user interface is currently being designed, and a plan for documentation and support as an open source product is under development.
- A training manual and users guide for the Workflow Management System and the RUcore data model and metadata implementation were written by Kalaivani Ananthan and Rhonda Marker, respectively, and posted to the RUcore and New Jersey Digital Highway websites.
- A digital collection development guide, covering all aspects of digital collections from project planning to sustainability has been developed under the guidance and substantial authorship of Grace Agnew, and posted at the New Jersey Digital Highway website under the title, the *Digital Collections Roadmap*.
<http://www.njdigitalhighway.org/librarians.php>
- Considerable work has been done to develop a workflow and identify the staffing needed to support adding collections to the repository. A workflow involving a team consisting of, at a minimum, the collection curator, a project manager and a metadata manager, has

been developed. Forms and procedures for metadata development have also been developed.

- Procedures for the mass storage system were designed, tested and implemented.
- Digital preservation formats were developed for still images, text, digital camera images and digital audio files. Digital video standards are currently under development.
- A plan for organizing and staffing a programming unit was developed, to add robustness to programming practices through more rigorous oversight, testing and review, and to foster collaboration and cross training for this critical unit.

A change to the supported mail client and browser was implemented on all staff computers. The Netscape mail client was changed to Mozilla's Thunderbird, and the Netscape browser was replaced with Firefox. Additionally, the "send mail" protocol used by OIT required changes for all users. While there was some user discomfort with these upgrades, they were accomplished successfully and on schedule.

A large-scale video encoding platform, Matrox Axio, was selected to create uncompressed digital master files from analog videos, such as VHS videotapes, and proprietary digital files, such as mini-DV and DigiBeta.. The Matrox Axio digital video encoder was selected, purchased and installed in the Institute of Jazz Studies at the Dana Library, Newark. The audiovisual working group, a cross-departmental team of specialists in video technology, preservation and digital project management, chaired by Isaiah Beard in the Scholarly Communication Center, has received training and is currently testing the encoder and developing processes and procedures for its use. Team members are: Isaiah Beard, Bob Nahory, Nick Gonzaga, Ian Bogus and Erika Gorder.

An upgrade to the payroll ClockTrak software has been in process for several years and was finally completed in March. The upgrade was complicated and required a coordinated effort of many departments and individuals. A new Windows server was purchased and installed to meet all of the University network security requirements. Additionally, the payroll software is in compliance with the University security requirements for identifying part-time employees, and the libraries now distribute supervisory access and sign-off. Systems staff installed and currently maintain the server and worked closely with the Budget Office, the vendor, and University Payroll Department to implement the upgraded software. These changes should complete the requirements from the internal audit that has been in progress for several years. All of the computers used by voucher employees and supervisors had to have new client software installed during the short cutover period.

Software upgrades for both Ariel and the OCLC client were installed this year .

OIT announced a change in license agreement for virus protection software during the summer 2006. As a result, in a very short time frame, all public and staff required the installation of new software. A project is currently underway to upgrade all of the public printing hardware in the libraries.

The library servers were moved off the RU legacy network onto the RUNet network, which has increased response time and improved support. In TAS the building security was upgraded with new monitoring hardware and software.

Ongoing problems with the videoconferencing equipment resulted in system-wide testing, monitoring, and improvements. New networks were procured for the sole purpose of providing videoconferencing, and the clients were upgraded. Standardized troubleshooting and reporting procedures were implemented.

Director's Station was purchased to facilitate the compilation and interpretation of SirsiDynix use data and trend analysis by librarians and staff. The software has been installed, tested, and demonstrated. A system wide training program has begun.

When the SirsiDynix Unicorn system was first installed, the implementation was done quickly and was facilitated by forcing characteristics from the previous system into the SirsiDynix software rather than changing local procedures to incorporate features in the new system. Over time it has become obvious that a major change is needed in the way SirsiDynix Unicorn database fields are used if Rutgers is going to use the system to full advantage. A position paper "The Use of Item Types in Unicorn: A Suggestion for Change" was prepared by Bob Warwick and has been approved by the LIS Implementation Committee. This major structural change requires review by library councils and administration to discuss the full impact of the proposal. Implementing this change would require downtime and have work implications for everyone who adds, modifies, or uses Unicorn bibliographic records.

The implementation of unattended back-ups may not appear to be a major accomplishment but its recent implementation has had a significant impact in the Systems Department. Working out the procedures, testing the methodology, and verifying the process has been in the works for years, but it has always been low on the list of departmental priorities. Before this change, the full SirsiDynix Unicorn backups required 2 hours of downtime each week. The catalog had to be down and the backup was scheduled when the libraries were closed. (Several times during the year, when library hours were extended, that meant a staff member was doing on-site backups working Friday night into Saturday morning.) Now the full backup takes only 2 minutes of downtime each day to make a read-only snapshot of the Unicorn database files onto separate areas on disk. This snapshot is then backed up daily. Should a restore be required, it can be done from the most recent full backup rather than from incremental tape backups.

In the Cataloging Department, under the guidance of Fay Austin, head of the Monographs Cataloging Section, a review of the monographs cataloging workflow took place in April 2006, resulting in some significant process changes. Prior to April, all items arriving from Acquisitions that could not be cataloged as FastCat materials in Acquisitions, were shelved in the backlog. All books, with the exceptions of Priority 1 and 2 items and patron requests, waited in the backlog for an average of one year. The new procedures, instituted in April of 2006, now require that a cataloger review each batch received from Acquisitions, and the following categories are then removed for current and immediate cataloging:

- Annuals, which are forwarded to the Serials Cataloging Section
- Reference books not formerly tagged for priority treatment
- 2nd and all subsequent editions of a title.
- Series
- Books for which there exists a full bibliographic record in SirsiDynix Unicorn.
(Acquisitions staff now indicate the presence of a full bib record on the processing slip that accompanies the book.).
- Current imprints with CIP (“cataloging in process”) data

Book trucks of new acquisitions are also screened for possible serials that have been overlooked in the receiving process. These are removed and routed to the Serials Cataloging Section. The only items now sent routinely to the backlog are those for which there is only a brief record in Unicorn.

In addition, so that problem books do not remain indefinitely in the backlog, each cataloger is asked to insure that at least 25% of the cataloging they produce each week is from the backlog.

The Monographs Cataloging Section staff is also making better use of the records already in Unicorn. Formerly, each title was automatically searched in OCLC and then the record in Unicorn was overlaid with the OCLC record. The record in Unicorn is now reviewed first, and catalogers use the record if it contains no significant errors. Catalogers have also been asked to utilize any accompanying vendor slips as the starting point for assigning call numbers and subject headings. These slips usually contain LC call numbers and subjects.

Fay Austin is also working closely with the Acquisitions Department to evaluate receipts and insure that all items that can benefit from fast cataloging (“FastCat”) are completed in Acquisitions. She is also working with Acquisitions and Systems to ensure that the vendor-supplied catalog records are appropriate, that they meet our needs, and that they enhance (rather than impede) our ability to expedite the cataloging process.

During the new fiscal year (2006/07) Monographs Cataloging plans to continue working to refine the changes cited above and will:

- Limit the number of items sent to the backlog.
- Improve the ease with which titles move through the cataloging workflow
- Reduce the time spent in OCLC searching for a “better” record
- Document new procedures

The section recognizes that if the backlog is to be contained and to prevent further growth, the cataloging workflow must continue to improve, without sacrificing the quality of the records. To this end, staff have been asked to monitor their daily and weekly production. Fay Austin is currently working with staff to set realistic goals for production, both personal and unit wide. She will monitor production closely to ensure that progress is being made towards these goals.

The Acquisitions Department implemented a new workflow for monographic series in online only format, as well as print plus online format. Kati Ritter led this effort, which streamlines the process and ensures that links to online content are accurately reflected in IRIS.

The department continues to modify workflow to integrate resources available in both paper and electronic versions. Acquisitions developed procedures for adding URLs for full-text versions of print monographs, thus avoiding the cataloging backlog for many monographic titles.

Acquisitions also developed better procedures for processing print monographic series titles that come with electronic access. Acquisitions staff recommended and saw through to completion new red priority slips to identify titles where electronic access is established. The red slips notify catalogers to pay special attention to e-access when cataloging a title.

Three Cataloging Department members, Elizabeth Leister, Steve Zahorbenski, and Charlotte Toke assumed responsibility for cataloging all integrated (analog and digital) resources. The Cataloging Department hosted a PALINET workshop on integrating resources that was conducted by nationally recognized expert Gene Dickerson of the National Library of Medicine.

New procedures and workflows for handling electronic subscriptions were developed in the Acquisitions and Cataloging Departments for two important electronic series:

- *SPIE Proceedings* are no longer purchased in print form but instead are purchased exclusively as an electronic subscription. This will free up valuable space in the Math Library, as well as providing expanded access to this resource. The Acquisitions Department coordinated the cancellation of SPIE proceedings in print in order to switch the access to an electronic only subscription and developed a notification method of sending newly available e-volumes to monograph catalogers to ensure individual title access in IRIS. Charlotte Toke in the Cataloging Department, worked with Cathy Pecoraro, the Networked Resources Coordinator, to develop a workflow for cataloging these materials. In addition, Charlotte Toke cataloged all SPIE print titles that were in the Monographs Cataloging Section backlog.
- A workflow for handling the electronic version of *Lecture Notes in Computer Science* series has also been established. Science selector Mei Ling Lo worked with Mary Beth Weber, Elizabeth Leister, Cathy Pecoraro and Kati Ritter to make the transition from paper to a completely electronic format for this resource. Cathy Pecoraro, Kati Ritter and Charlotte Toke (who catalogs these resources) coordinate the current workflow.

Rhonda Marker assumed responsibility as the NACO Coordinator for the Cataloging Department. As a NACO library, the Rutgers University Libraries are tasked with providing authoritative headings for unique authors and series that are identified by the Cataloging Department. This collaborative endeavor insures that users in any library worldwide can consistently find and select works by authors and titles in series.

The department sharply increased its contributions to the Library of Congress/Name Authority Cooperative Program (LC/NACO) of the Program for Cooperative Cataloging (PCC). This year, 592 new or changed headings were contributed to the authoritative file of names used by libraries worldwide. The majority of these were personal names (399 new records, 38 changes to

existing records), although there were also 119 new corporate names submitted to the program. Rutgers also contributed 17 new series authority records. There are two reasons for the dramatic increase in records submitted. NACO records are now contributed using the OCLC Connexion Client, which has a simple-to-use interface. Rhonda Marker conducted a series of four training sessions for the NACO contributors. The training focused on the cataloging rules for headings and actual NACO record construction.

Virgia Miller, Nancy DeNicola, Brenda Carter, Hala Issa, Susan Graham, and Bonnie Spaventa completed the bulk of the Alexander Library conversion project. The work that remains to be done are theses and dissertations, original transcription for items lacking records in OCLC or RLIN, and a few drawers of shelf list cards. Sharon Favaro, Nancy DeNicola, and Brenda Carter are working to complete the original transcription and conversion of the remaining shelf list cards. Harriet DeCeunynck is handling the theses and dissertations. Roman Frackowski is cataloging the monographs, and Steve Zahorbenski is handling the serial items in the remaining Alexander New Jersey documents that require assignment of LC classification numbers. It is expected that the Alexander Library retrospective conversion project will be completed in 2006-07, if the libraries' budget reduction, which has affected staffing for this critical task, will allow.

Brenda Carter completed a brief record upgrade for the Art Library's Folio collection. Working from publication year 1974 and back, records were imported from OCLC to overlay brief IRIS records. The records were matched against shelf list cards. Records for which there are no shelf list cards remain as brief records. A total of 1,028 records were upgraded to full-level cataloging.

Acquisitions workflow has been transformed through the selection of YBP for approval orders and the use of GOBI software for the selection and ordering of materials. GOBI has considerable flexibility for integrating with the SirsiDynix Unicorn library system, particularly its Acquisitions module. GOBI also provides strong reporting features to assist collection development librarians in monitoring their budgets and analyzing their selections. This year, Acquisitions has resolved the technical issues that arose with initial implementation in the previous year and integrated GOBI selection into the standard Acquisitions workflow. Virtually all RUL selectors use YBP's GOBI system for firm orders. Acquisitions also implemented YBP GobiExport ordering for Camden and Dana selections and developed a workflow to add selector's initials to GOBI orders, which enables Acquisitions to send email confirmations to selectors when GOBI orders are placed. Double keying in Unicorn and a vendor system is now a rarity instead of the norm, as it was just two short years ago.

The Acquisitions statistics appended to this report reflect how the department's workload corresponds to budget and allocation cycles. The department typically orders and receives the majority of all firm orders within the last four months of the fiscal year. FastCat now encompasses YBP record loads for approval materials, PromptCat shelf-ready cataloging and OCLC batch record loads. FastCat at Rutgers now includes any cataloging that happens either at the point of order or receipt. For the year, Acquisitions was able to FastCat 63% of all receipts, which means these items were delivered to the stacks within one week of their arrival at RUL. FastCat typically falls off during the spring, when the department deliberately focuses on ordering and invoice processing to expend funds before the end of the fiscal year. A more

balanced ordering and receiving cycle would allow the libraries to take advantage of speedy FastCat processing throughout the year.

A significant milestone in Acquisitions workflow was achieved when shelf-ready services for Camden approval materials was implemented. In consultation with Cataloging and Systems staff, Acquisitions staff worked through the complex specification process and implemented OCLC PromptCat with shelf ready service for Camden approval materials, developed, documented and tested the shelf-ready process, with Camden staff. This is the first step toward large-scale implementation of shelf-ready processing through YBP, which is scheduled for the new fiscal year, beginning July, if the libraries' budget allows. The department had intended to roll out shelf-ready services to all library branches in FY2006-07, but this efficient service, which would streamline book delivery to branches by several weeks, was postponed to another year as part of the libraries budget reduction strategy.

Acquisitions also revised and optimized the workflow for Reserve orders, and improved communication with Reserve staff. Changes have resulted in faster turnaround time.

As noted elsewhere in this report, success in Technical and Automated Services is often based as much on what we don't do, as on what we do. As Appendix D-3 shows, trouble ticket requests for repairs to workstations have dropped to half of what it was formerly for the past two years. Systems attributes this largely to the success of the PC replacement program, which tries to replace one third (or in bad budget years, one fourth) of all PCs, with newest PCs going to areas of greatest need and utilizing the "trickle down" methodology to replace older PCs with newer PCs for other staff. The cycle generally takes about three years to remove the oldest and most worn PCs. Systems believes that last year and this year have moved us far enough along the replacement cycle that we are seeing real benefits in terms of performance, as reflected by the 50% reduction in service calls. This not only benefits the users of those PCs, who now have a reliable platform for their workflow, but also Systems staff, who can do other activities rather than focusing on PC repair. This is particularly critical in the coming fiscal year, when student labor has been sharply reduced to support the libraries' budget reduction.

Outreach and Statewide Collaboration

Technical and Automated Services has continued its leadership in strategic collaborations at the local, state and national levels.

Faculty and staff continue to provide considerable technical and administrative leadership to the grant-funded New Jersey Digital Highway (NJDH). This project provides a collaborative collection of primary source materials from the state's libraries, museums, and archives as well as a sophisticated repository architecture to provide long-term preservation and access to the resources of the collection. Now in its fourth year, NJDH enjoys wide support among libraries, museums and archives in New Jersey, with fourteen active collection partners, and more awaiting participation. The collection currently consists of almost three thousand primary source materials, including state records, books, photographs, postcards and memorabilia, and oral histories. In addition, the attractive and engaging website, developed by Chad Mills and hosted by the Rutgers University Libraries, includes many resources about New Jersey as well as

professional development resources for librarians, archivists, curators and social studies educators.

NJDH has enabled the libraries to develop workflows and a staffing strategy for the implementation of RUcore, the Rutgers institutional repository, as well as to continue support for the New Jersey Digital Highway after the grant expires. A team consisting of the digital project manager, the metadata manager and the collection curator work collaboratively to develop the digitization plan, metadata template and cataloging workflow for each unique collection. The impact on the Cataloging Department has been particularly transformative. The department has assumed responsibility for the metadata implementation that describes and makes accessible all digital materials available via the repository, whether New Jersey primary source materials or Rutgers University collections and intellectual property assets. The data model and metadata implementation is a flexible architecture that provides for both the description and long-term preservation management of digital resources. The event-based data model supports maximum flexibility in describing resources by recognizing that description at any level is, at its core, the intersection of agents and resources in a specific space and time. This event-based data model represents the future of cataloging and can accommodate a simple description, such as that used for Electronic Theses and Dissertations, a complex ontology, or a digital audit trail for complete versioning of a curated data set.

Mary Beth Weber, Sharon Favaro, Rhonda Marker, Li Sun and Elizabeth Leister in the Cataloging Department are serving as metadata managers for digital projects both for the New Jersey Digital Highway and RUcore, the Rutgers institutional repository. Grace Agnew, Associate University Librarian for Digital Library Systems, is also serving as metadata manager for selected collections. In this capacity, they advise NJDH project partners and Rutgers colleagues on metadata to describe their projects, and provide an overview of using the WMS, serving as a resource persons to guide participants through the process:

- Rhonda Marker is the metadata manager for the following digital projects: Jersey City Public Library, the Dutch Immigration Experience, the New Jersey Network Digital Video Project, the Newark Museum photographs project, the Griffis Collection (Special Collections and University Archives), WNET Videos for Channel 13, Seabrook Educational and Cultural Center, Edison Papers, Motion Picture Catalogs, and Latin American Pamphlets (a Rutgers project). Additionally, Rhonda is the Cataloging Department liaison to the Scholarly Communications Center, and mentors student assistants who provide metadata for projects.
- Li Sun is the metadata manager for a project with the Hoboken Public Library and is co-managing this project with Rhonda Marker. This project was used to test the batch import and metadata-mapping feature available in the WMS.
- Sharon Favaro is the metadata manager for several projects. The Newark Library's collection "Remembering Newark's Greeks: An American Odyssey," consists of 400 digital images, including photographs, diaries, passports, and marriage certificates. She supervised the work of Nancy DeNicola, who created many of the metadata records for these resources. Sharon also provided metadata for many of the objects in

the collection. This is the largest hands-on project that the Cataloging Department has undertaken, and also the first project coordinated through the Cataloging Department to be ingested into Fedora and made available in NJDH. Sharon Favaro also managed a project for the American Hungarian Foundation, located in New Brunswick. This involved the John Albok Collection of thirty digital images of Hungarian immigrants, businesses, etc. taken by photographer John Albok. Under Sharon Favaro's guidance, Debbie Apgar created metadata for this collection.

- Mary Beth Weber and Sharon Favaro are co-metadata managers for a joint project between the Paterson Public Library and the Paterson Museum that features digitized images of about 400 historical post cards of Paterson. They are advising the participants on metadata for their projects, and will provide a refresher training session for using the WMS.
- Elizabeth Leister is the metadata manager for the *Chronicle* weekly magazine, a Paterson, New Jersey newspaper-style magazine that provided local news and wedding announcements as well as television listings from the 1930s to the 1960s. Debbie Apgar, Steve Zahorbenski and students in the Scholarly Communication Center are providing metadata cataloging.
- Grace Agnew is the metadata manager for the RUcore collections, Jazz Oral History Project and the Eagleton Governor Byrne video oral history project
- Grace Agnew and Kalaivani Ananthan, the Workflow Management System project manager, provided a training workshop, together with Sherelene Schatz and Deborah Mercer of the New Jersey State Library, on metadata and using the WMS for libraries around the state that were awarded New Jersey State Library digitization grants for creating digital collections to add to the New Jersey Digital Highway.

RUcore, the Rutgers University repository, has also enabled a growing collaboration with the SCILS library science program, specifically in metadata. Dr. Sherry Vellucci, a noted audiovisual metadata authority at SCILS, participates as a member of the Metadata Working Group, chaired by Mary Beth Weber, Cataloging Department Head. In October 2005, Mary Beth Weber and Sharon Favaro lectured to the SCILS Master Level Course "Metadata for Information Professionals" on the Workflow Management System (WMS, the web-based content management system for uploading digital images and creating metadata for export into NJDH or RUcore. Together with Kalaivani Ananthan, they provided a hands-on training session that required the students to create metadata records in the WMS in fulfillment of their class project. Grace Agnew, Associate University Librarian for Digital Library Systems, lectured to the SCILS Metadata class on the Metadata Encoding and Transmission Standard (METS) and the RUcore data model.

The New Jersey Digital Highway and RUcore utilize the same open source repository infrastructure, FEDORA. FEDORA is unique among repository applications as the only true "service oriented architecture" for repositories. FEDORA utilizes Web Services Definition

Language (WSDL) to create a tightly structured core architecture providing minimal features for management and access that is completely “porous” to layered services and applications that can then integrate tightly to the core architecture. The libraries have proven the success of this concept through the development of the award-winning Workflow Management System, which integrates seamlessly with the core architecture. The service-oriented architecture provides maximum flexibility for adding or revising functionality as technologies change and for customizing the repository for new partners and uses, without requiring repository re-design. FEDORA is also noteworthy for its rigorous approach to digital preservation, including a customizable audit trail for documenting changes and versions to resources.

The Rutgers University Libraries hosted the first FEDORA Users’ Group in 2005, where RUL was quickly recognized as a leader and innovator in the development of FEDORA services. The libraries continue to provide leadership and to participate actively in FEDORA’s ongoing development. Ron Jantz, the digital library architect in the Scholarly Communication Center, chairs the FEDORA Preservation Services Working Group. Grace Agnew serves on the FEDORA Advisory Board, Preservation Services Working Group and Workflow Working Group.

The Acquisitions Department hosted New York University librarians and staff to demonstrate how we use GOBI.

Roman Frackowski, in the Cataloging Department, was invited back for a second year to teach a cataloging class in India in December 2005 for Marcnow Innovative Solutions, a company that provides cataloging and IT services.

Grace Agnew served on the National Information Standards Organization working group (2004-2005) to develop the NISO metasearch standards suite. She participated in the subgroup that developed the collection level metadata standard.

Grace Agnew also reviewed grant applications for the National Science Foundation’s National Science Digital Library in May 2006.

Personnel

A significant issue for Technical and Automated Services this year, requiring considerable planning and coordination, is the integration of the Scholarly Communication Center and the Collection Services Department (to be renamed Distributed Technical Services) into the Technical and Automated Services Department. This merger, part of the libraries’ overall reorganization, more than doubles the size of the Technical and Automated Services Department, as well as expanding its geographic location to the Busch and College Avenue campuses. The reorganization was informally “kicked off” with a departmental picnic at the Rutgers Gardens log cabin in June, with members of all departments attending.

Two new positions were added to the Systems Department this year to support digital projects. Shaun Ellis moved to Systems in February as a Web Developer. He has been involved in

repository development and also the electronic theses and dissertations service. The second position, also a Web Developer, will be filled in the fall.

Systems staff members have taken advantage of training opportunities provided by vendors, the library, and the University. Four people from Systems are enrolled in the newly initiated, University-sponsored IT Certification Program.

The Cataloging Department and Special Collections/University Archives worked together to design and test a librarian V position that would report to the Cataloging Department but spend the majority of time in the Special Collections Department, providing cataloging, overseeing the cataloging efforts of voucher staff, and serving as liaison to articulate the needs of Special Collections and archival materials to the Cataloging Department. Melissa Defino, who was appointed to this position, has acted as a resource person to Cataloging and Acquisitions regarding questions about cataloging and handling SC/UA materials. The arrangement has worked well, and Ron Becker, Head of SC/UA, reported that his unit has had its most productive year in many, due in large part to Melissa's work. Additionally, she has helped to reduce a backlog of legal materials that had accumulated in the Monographs Cataloging Section

Sharon Favaro joined the Cataloging Department in August 2005 as the Coordinator of Gifts Cataloging and Special Projects. In this capacity, she works with selectors system wide as well as with Distributed Technical Services to coordinate the receipt and cataloging of gifts, including large collections. Ms. Favaro is also a metadata manager and is coordinating projects for the New Jersey Digital Highway (NJDH) and RUcore, the Rutgers institutional repository.

Li Sun joined the Cataloging Department in November 2005 as the Non-Roman Languages Catalog Librarian. She coordinates cataloging of CJK materials, as well as for all other non-Roman scripts. Ms. Sun is also a metadata manager and is coordinating projects for the New Jersey Digital Highway (NJDH) and RUcore, the Rutgers institutional repository.

Fay Austin joined the Cataloging Department in March 2006 as Head of the Monographs Cataloging Section. Her emphasis has been on achieving zero backlog growth for newly purchased monographs, serving as a liaison to Acquisitions for the shelf-ready workflow, and streamlining workflow between Acquisitions and Cataloging.

Jane Johnson has renewed her appointment as a visiting faculty member in Technical and Automated Services. She continues to provide technical leadership to the Women Artists Archives National Database (WAAND), a grant-funded project co-managed by Ferris Olin, Director of the Marjory Somers Foster Center and Professor Judith Brodsky, retired director of the Rutgers Center for Innovative Print and Paper (RCIPP).

Bonnie Spaventa retired from the Libraries in February 2006 after twenty-four years of service.

Mary Steever left the Cataloging Department after nine years of service as a part-time voucher employee. Her departure was the result of budget cuts. Ms. Steever's main responsibility was to oversee the requests routed to TAS from the Rutgers Request Service. She also provided copy cataloging for gift materials.

Kate Slisky left the Cataloging Department after nine years of service as a part-time voucher employee. Her responsibilities included coordinating the order and receipt, binding, and brief record creation for Rutgers theses and dissertations. She was also part of a team that handled the Rutgers Request Service. Her departure was also the result of budget cuts.

After a long battle with cancer, Angelina Barbara in the Cataloging Department passed away in December 2005.

To fill the gap in Database Management (DBM) supervision created by Ruth Bogan's departure in June 2005, there have been some temporary changes in the reporting structure until the Special Formats Catalog Librarian position can be filled. Brenda Carter and Nancy DeNicola report to Sharon Favaro. Ms. DeNicola has been assisting with gifts cataloging and digital projects, in addition to her regular DBM responsibilities. Susan Graham is reporting to Fay Austin and is providing copy-cataloging treatment for items in the Monographs Cataloging backlog, in addition to her regular DBM responsibilities. Virgia Miller is reporting to Elizabeth Leister. Hala Issa works part-time for Li Sun since November 2005, while continuing to work part-time in DBM.

The budget crisis forced the Acquisitions Department to let one long time voucher staff person go, along with all student assistants. The department relied on students to open boxes of materials and to organize items on book trucks for processing. Full-time Acquisitions staff will now take on the physical labor required for these basic services, and this change will significantly slow the delivery of materials to the libraries.

Judit Hajnal Ward in the Acquisitions Department received the Master of Library and Information Science degree from SCILS (May, 2006).

Librarian and Staff Publications/Presentations/Awards

Journal Articles (Refereed)

Published:

Grace Agnew. "Developing a Metadata Strategy: a Road Map" in *Journal of Digital Asset Management*. Vol.1, no. 6 (November 2005)

Jane Johnson. "MIC Metadata Strategies: Thinking Beyond Asset Management," in *Journal of Digital Asset Management* Vol. 2., no. 1 (January 2006)

Accepted/In Press:

Grace Agnew, Dan Kniesner and Mary Beth Weber. "Integrating MPEG-7 into the Moving Image Collections Portal" in *Journal of the American Society for Information Science and Technology Perspectives, MPEG-7Metadata for Multimedia*. (2006, forthcoming)

Journal Articles (Not Refereed)

Jane Johnson. "MIC: Moving Image Collections: an Innovative Partnership" in *RLG DigiNews* 10, no. 2 April 15, 2006. http://www.rlg.org/en/page.php?Page_ID=20916#article1

Linda Langschied and Ann Montanaro. "The New Jersey Digital Highway: A Next-generation Approach to Statewide Digital Library Development" in *Microform & Imaging Review* vol. 34, no. 4 (2005)

Judit Hajnal Ward. "Digitization with DjVu in Hungarian." [In Hungarian] in *Könyvtári Figyelő [Library Review]*(52)1 (2006): 129-137.

Judit Hajnal Ward.. "Fifteen years of Hungarian Studies at Rutgers." [In Hungarian]. in *Hungarian Studies Yearbook* v. 7. (2006) Ed. Szücs Tibor, pp. 187-201, University of Pécs, Hungary.

Notes, book reviews, abstracts

Judit Hajnal Ward. Review. *Imre Kertész and the Holocaust literature*. Edited by Louise O. Vasvári and Steven Tötösy de Zepetnek. Purdue University Press. *Choice Reviews*. 2006, February.

Conference presentations, lectures, demonstrations

Grace Agnew. "Metasearch Collection Description" at the *NISO OpenURL and Metasearch: New Standards, Current Innovations, and Future Directions Workshop*, Washington, D.C., September 2005.

Grace Agnew and Jane Johnson. "Developing a metadata strategy" preconference workshop at the *Library Information Technology Association Biennial Conference*, San Jose, CA, November 2005.

Grace Agnew "Understanding Metadata" pre-conference workshop. *3rd annual NJEdge.Net Conference*, Princeton, NJ, November 2005.

Jane Johnson, Linda Langschied and Nicole Plett. "From Common Ground to Virtual Community: Building Strategic Alliances across Disciplines and Institutions (MIC, WAAND and NJDH)" at *The Museum Computer Network Annual Meeting*, Boston, MA, November 2005.

Jane Johnson. "MIC Moving Image Collections: an AMIA-Library of Congress Collaboration," presented to the *Access to Moving Image Collections Course*, New York University, New York, NY, November 2005.

Jane Johnson. "Online Mapping for Sharing Records on the Web" at the *Annual Conference of the Association of Moving Image Archivists*, December 2005.

Rhonda Marker, "MARC, MODS, Dublin Core, and More: What You Need to Know about Metadata for Your Digital Project" at the *2006 Vale Users' /NJ ACRL/NJLA CUS Conference*, Piscataway, New Jersey, January.2006.

Chris Sterback. "So, You Want to Inventory Your Collection?" at the *SirsiDynix Super Conference*, Nashville, TN, March 2006.

Grace Agnew. "Moving Image Collections (MIC) as a Digital Preservation Platform," at the *6th Annual SURA/ViDe Digital Video Conference*, Atlanta, GA, March 2006.

Grace Agnew. "RUcore, Rutgers Community Repository" at *The Impact of National Directions in Cyberinfrastructure Workshop*, Rutgers Office of Instructional and Research Technology, Piscataway, NJ, April 2006.

Grace Agnew. "Developing a Metadata Strategy" presentation for the Disney Corporation and affiliates, Burbank, California, April 2006.

Grace Agnew. "The Architecture of the New Jersey Digital Highway" at the *New Jersey Library Association Annual Conference*, Long Branch, NJ, April, 2006.

Rhonda Marker and John King. "Developing Workflow for Participation in the New Jersey Digital Highway" at the *New Jersey Library Association Annual Conference*, Long Branch, NJ, April, 2006.

Jane Johnson. "Digital Infrastructure and Preservation: Challenges and Solutions" at the *Internet2 Spring Member Meeting*, Arlington, VA, April 2006.

Judit Hajnal Ward. "Integrating culture in the Hungarian language course at college level." At the *Conference of the American Hungarian Educators Association*, Indiana University, Bloomington, IN, April 27-30, 2006. (with Gábor Molnár, visiting Hungarian professor at Rutgers).

Jane Johnson. "MIC as a Preservation Tool" at the *American Institute for Conservation of Historic and Artistic Works Annual Meeting*, Providence, RI June 2006.

Rhonda Marker. "The Rutgers Community Repository (RUcore) and Technical Services." Presenter, *Association for Library Collections and Technical Services (ALCTS) Scholarly Communication Discussion Group at American Library Association (ALA) Annual Conference*, June 26, 2006, New Orleans, LA.

Works in Progress and/or items not yet accepted

Journal Articles (refereed)

Li Sun, "Shelf Browsing in Chinese Collections: An Observation On Incorrect Bibliographic Records," submitted to *Library Resources and Technical Services (LRTS)*.

Prizes and awards

The Rutgers University Libraries were selected as a SUN Center of Excellence for Digital Preservation by Sun Microsystems, Inc. This award provides substantial discounts for equipment purchased to support digital preservation, travel stipends and favored status consideration for grants from SUN.

The Workflow Management System received honorable mention in the New Jersey Library Association ACRL College and University Section Technology Innovation Award Competition. The award was presented at the New Jersey Library Association annual meeting in April 2006. Yang Yu and Kalaivani lead the cross-departmental development team for this project.

Judit Hajnal Ward as the recipient of the Library and Information Science Scholarship Award from SCILS, which is awarded to the graduate with the most distinguished academic record

Appendices (Attached in Excel)

Appendix A:	RU-Online resources added FY2006
Appendix B1:	Orders Placed FY2006
Appendix B2:	Orders Received FY2006
Appendix B3:	FastCat by Month FY2006
Appendix B4:	Orders/Receipts by Month FY2006
Appendix C1:	Cataloging by Library/Department FY2006
Appendix C2:	East Asian Languages Cataloging FY2006
Appendix C3:	Cataloging Statistics by Material Category FY2006
Appendix C4:	Serials Database Maintenance FY2006
Appendix C5:	NACO Statistics FY2006
Appendix D1:	Annual Holdings Comparison, by Library/Department
Appendix D2:	Annual comparison of IRIS holdings, by format
Appendix D3:	Troubleshoot Requests, Annual Comparison