Summary

This has been a transition year for Information Services (IS), both in terms of leadership for the organization and in terms of the nature and focus of the year’s work. An important element of the year has been focus on shared investment in building on our strengths and discovering ways we can transform ourselves to meet the evolving demands of the College community and the fast-changing requirements of higher education information technology and libraries. We have focused significantly this year on deferred investments in infrastructure and systems, on delivering successfully on SEADS commitments and paving the way for enhanced BiCo and other peer institution collaborations, on bring the Digital Bryn Mawr Task Force process to fruition, and on building organizational practices that will enable us to manage our resources effectively and to support innovation at the College going forward. This annual report is a tribute to the talent and dedication of IS staff, who work generously and competently across a diverse range of disciplines to enable and produce phenomenal results for the Bryn Mawr community. This report includes the following sections:

**IS Top 25 Highlights for the Year** - the IS endeavors with most significance and/or scope of effort and impact for AY2013-14 (pp. 2-4)

**Focus on Students’ Contributions & Student Success** – how the 169 students working with IS in 2013-14 helped our organization and the College, and how their experiences with IS matter for them (pp. 5-7)

**Making Positive Change** – examples from across IS of change agents who are noticing that they can create positive change and bringing their initiatives into being for the community (pp. 8-10)

**Appreciations from Clients and Partners** – a sampling of the kinds of kudos sent regularly to IS staff and their managers in appreciation for helpful and meaningful work and interactions (p. 11)

**Highlights by IS Directorate** – fuller summaries of the major accomplishments this year by each directorate within the organization (p. 12-23)

- Administrative Information Services (AIS) – p. 12
- Client Services and IT Procurement – pp. 12-13
- Collection Management & Discovery (CMD) – pp. 13-14
- Planning & Communication – p. 15
- Research Support & Educational Technology (RSET) – pp. 16-18
- Special Collections and Rhys Carpenter Library – pp. 18-20
IS Top 25 Highlights for AY2013-14

1. IS has been resilient through its transition year with staff steadily moving forward in accomplishing organizational goals, first under the able leadership of Eric Pumroy as Interim CIO & Director of Libraries in first four months of the year, then with Gina Siesing as new CIO & Director of Libraries beginning in October 2013.

2. We have made important progress this year on organizational design work: creating a culture of learning and continuous development; focusing on budget and project portfolio management; paving the way for service portfolio assessment; creating the IS Assessment Working Group; moving toward reduction of risk and increased capacity for innovation; and establishing more robust prioritizing and strategic advisory mechanisms.

3. IS played a supporting role in the high-profile Women in Public Service Project Institute (https://wpsp.blogs.brynmawr.edu/).

4. The Digital Bryn Mawr Task Force completed the work it began in Fall 2011. The Board of Trustees approved Task Force recommendations in April 2014.

5. Open Access Policy passed by the faculty this winter, facilitated by a partnership between CLIC and IS with robust faculty dialogue. (http://www.brynmawr.edu/openaccess/)

6. In partnership with Haverford colleagues, IS and Bryn Mawr colleagues completed three SEADS projects: PeopleSoft Student, Identity Management with Fischer, and OneCard access and debit services. We completed Service Level Agreements (SLAs) for these three new shared services and established regular BiCo IT service coordination meetings. We reframed the BiCo collaboration model to ensure better outcomes for future projects and exercised that new model with the Scheduling system discovery process and with the HR/Payroll system discovery and evaluation project.

7. The new College website launched in early July. We partnered with Communications to deploy the new Drupal-based content management system (CMS) and to enable the redesign and migration of the College website.

8. The IS Teaching, Learning, and Research (TLR) Design Initiative is underway, facilitated by Dave Consiglio, Eric Pumroy, and steering committee. Recommendations will guide steps in enhancing our ability to support academic innovation and meaningful integration of technology and information resources into scholarship and the curriculum.

9. We upgraded Moodle from version 1.9 to version 2.5.3.

10. We are partners with the Provost’s Office on the Steering Committee for the Mellon grant on “Developing a Liberal Arts Curriculum for the Digital Age,” and IS staff are participating with faculty and students on several funded projects. Also in partnership with the Provost’s Office, we are converting the former slide collection project at Carpenter Library to a Digital Design & Collaboration Space and shaping services to enable expert staff support for student and faculty digital media projects.

11. In August of 2013, Olivia Castello, in collaboration with other members of the community, received a grant for the "Created Equal: America’s Civil Rights Struggle" series. Over the
course of two years, films and other events encourage community discussion of America’s civil rights history. The first year’s films and panel discussions have been warmly received, and additional events are scheduled for the coming academic year.

12. We received a **$40,000 NEH grant this year to develop a pilot program for searching the digital collections of the Seven Sisters Schools**. That project is now underway, with the goal of having a working pilot portal by next spring. As this project proceeds, we are also likely to use it as a springboard for a much larger grant proposal to build the collections to which the portal will provide access.

13. The **LOTIS (Library Outreach to International Students) Project**, initiated by Christine Boyland, was launched this academic year in partnership with the Dean’s Office in order to improve services and support for international undergraduates, including making library resources more accessible for international students.

14. IS facilitated **nine classroom technology renovations** last summer in Thomas and Carpenter. Plans were put in place to handle the high cost associated with upgrading classrooms in Dalton for the summer of 2014, and those upgrades are underway.

15. **Special Collections met with forty-two classes** throughout the year, and demand for integration of primary sources into courses continues to grow.

16. We produced **two major and two minor art exhibitions**. The fall exhibition, "Beneath the Printed Pattern: Display and Disguise in Ukiyo-e Bijinga," curated by History of Art graduate student Anna Moblard Meier; and the spring exhibition, "A Century of Self-Expression: Modern American Art in the Collection of John and Joanne Payson," curated by the students and faculty in the 360 "Exhibiting Modern Art" course, taught by Steven Levine and Brian Wallace. We also assisted with the installation of "Disasters and Rebuilding in Japan: Perspectives and Testimonies from the Tri-Co Collection," curated by the students in the 360 course “Perspectives on Sustainability” in the fall, and "The Curious Group," curated by recent History of Art Ph.D. Carrie Robbins for the 10th anniversary of the Graduate Group.

17. **Tri-Co Library collaboration remained vibrant this year**, including digital preservation and digital scholarship areas of focus, as well as a successfully researched and implemented strategy of changing our Elsevier subscription model in order to manage rising costs and reallocate to other knowledge collection acquisition demands. As a result of this approach, we were able to re-allocate $250k to other areas of collection development, and all three colleges benefitted.

18. We completed one year of **Local Learning Support** program and hosted a well-appreciated **In-Service Day** for staff members to learn technology skills from one another. We are now shifting to new staff education model that leverages lessons learned over the past year.

19. We **upgraded PeopleTools**, a multi-month project improving the infrastructure and stability of PeopleSoft services, as well as keeping us within support guidelines from Oracle.

20. We implemented the **faculty/staff photo directory** allowing online viewing within PeopleSoft of photos with a photo opt-out feature.

21. We upgraded the **network core** for the College.
22. All wireless access points have been upgraded to support the 802.11n wireless standard. Total access point count on campus is now 697 and rising as we continue improvements for Thomas.

23. We replaced the Bryn Mawr and TriCo VMWare server virtualization infrastructure.

24. We implemented new storage area network (SAN) and backup systems.

25. Through eduroam, which provides more seamless logins at institutions beyond your own, we made improvements for cross-campus student and faculty travelers.
Focus on Students’ Contributions & Student Success

137 undergraduates and 32 graduate students held jobs and internships in IS this year. Staff highly value the relationships they have with students working in IS and do their best to encourage and support the students in their work, their studies, and their broader goals. There are myriad ways students contributed to IS services and projects this year, and rich ways that the students’ IS work and project experiences contribute to their academic, professional, and life paths.

Range of Jobs & Contributions:

The students contributed to the success of operations, to a diverse and creative array of projects, and to a positive atmosphere in IS by working with full-time staff, with faculty, and with fellow students in dedicated ways to support individual and community goals.

The range of jobs and contributions this year includes reference support, Media Lab support, Collections Assistant, educational technology interns, Mellon grant project team members, Pensby interns, TriCo Digital Humanities interns, circulation, help desk, and shelving, student supervisors who assist also with training of new student employees; trouble-shooting problems in the computing lab and answering questions about our collections and resources; general administrative assistance including helping with events, internet research, faxing/copying/filing, proofreading, calendaring and web editing, opening and closing the libraries and staffing the libraries in the evenings and on weekends.

Special Collections students help with reception in our reading room, overseeing use of the collections by students and visitors, sorting inquiries to refer them to regular staff, retrieving materials that are needed for researchers or classes, and returning the materials to storage. Students in Special Collections also worked on a conservation project for our books, housing them in protective cases. They do a lot of scanning and image handling, providing copies for researchers and also making complete scans of public domain books we mount on our sites or databases, or supply to the Internet Archive. They process manuscript collections and create finding aids; they are participating in the migration of our manuscript collection finding aids to an EAD-based format that we contribute to the PACSCL website and which we will add to ArchiveGrid this summer.

Students performed a full range of acquisitions support tasks, including bibliographic searching and placing of orders in English or foreign languages in book vendor databases or on the web, help in funding, loading and FTP-ing TriCo approval and monographic firm orders, email inquiries regarding availability and delivery schedules for hard-to-get or out of print material, follow-up email claims on non-received items, check-in of library materials in Tripod, and mailroom receipt of orders.

Students contributed by identifying gaps or confusions in our holdings and TriPod records for the college news and by researching and documenting the history of LGBT communities at Bryn Mawr between 1970 and 2000. They were involved in facilitating class-use of collections, tours, installation of exhibitions, cataloging objects, making improvements in storage, preparing Deanery objects for...
relocation, putting objects away in storage, cataloging collections, dealing with artist copyright permissions for our online database, art installation, interpretive texts, press and promotion, opening event logistics, campus and community relations, and follow-ups with core and peripheral discipline faculty and staff for an exhibition.

Students helped organize IS project management and communications resources for access and use; assessed and contributed to ongoing dialogues about the recent history of racial diversity at the college: conducted a survey of students and alums, performed several oral history interviews, and researched in the archives; participated in scanning and digitization projects that make Bryn Mawr's collections openly accessible, helped with the Open Access repository and policy, maintained the Pinterest page for Carpenter Library, and gathered books for mending (a collaboration with Haverford, which rebinds and provides boxes for damaged books). They participated in scanning and editing images for teaching and for ARTstor, and scanning Special Collections and Collections archival materials.

A graduate student in archaeology researched and prepared metadata for a collection of images (archaeological site photography of Professor Emeritus Richard Ellis) for the ARTstor digital library. Another graduate student in archaeology worked with Shared Shelf on faculty requests for digital images and transferring slide metadata to Shared Shelf. She also played a major role in consolidating slides for the new Digital Design & Collaboration Space that is being developed now. Both students have made full use of their research skills. A graduate student assisted in preparing for initial work on the Visual Resources redesign to create the Digital Design & Collaboration Space. A graduate student in classics researches faculty publications for upload to the OA repository through Web of Science alerts and more specialized database searches. She communicates with faculty directly about their publications, and helps them to understand the complicated nuances of OA (gold and green OA, postprints and PDFs, etc.). She prepares metadata and uploads publications to the repository.

Outcomes for the Students Working with IS: This year two of the graduating seniors in Special Collections went on to graduate school in classics and archaeology, and both of their applications were helped by their experience with collections. One of our undergraduates will be a Mellon Digital Curriculum Assistant in the Provost’s Office, and that application was also forwarded by her experience with IS Special Collections.

Several students who have worked in Carpenter have recently gone on to earn masters' degrees in library/information science (including the social sciences librarian at Swarthmore). Acquisitions students have gone on to library school, and a rising senior working in another area of IS wants to become a librarian. Another who worked on a variety of collections management projects over two years is going to graduate school this coming fall in collections management. A Haverford student did a research project with coins as a volunteer to gain collections management experience.

Another student plans to pursue graduate work in anthropology to study how individuals and groups interface through technology. A student with an interest in management and who is studying
economics was particularly engaged in a toolkit development project she worked on with an IS manager over winter break. Interns learned how to process a new collection, perform research in and outside of the archives, and built an exhibit that they can now use as an item in a personal digital portfolio showing a range of academic accomplishments and contributions to their community.

One student proposed a follow-on Praxis III course so that she can continue the oral history component of her project this coming spring and count it towards her independent major in Gender and Sexuality Studies. By the end of the summer she will publish a digital exhibit showcasing the wide variety of work she has done on the topic, drawing on her first hands-on experience with conducting archival research and oral history interviews, and she has reported learning many new and useful things in these realms. One student learned to do photography. Another student gained experience with photography and cataloging.

At Carpenter, graduate and undergraduate student employees work together, and both groups report that this enhances their academic experience. Through serving as slidefiler for faculty still using slides, an undergraduate student reinforced her knowledge of the art covered in a class in which she was enrolled. Student workers tell their supervisors that they really love this job because learning about how the library and our various resources work helps them with their own studies. Students learn about how distinct tasks are integrated holistically into operations. They gain practice in a shared environment where one can cover for another, allowing balancing of priorities for all who work in the department. They learn courtesy and early professionalism, how to work in a team, and how to teach one another new skills.

Importantly, students working in IS report discovering that repeated practice strengthens their learning and teaching talents, that you can’t master a skill the first time you try it. They feel a sense of achievement in their work both individually and collectively. There is a sense of group identity, shared purpose, creative desire to improve on performance, and the delight of a job well-done that keeps us functioning.
Making Positive Change

The RSET group organized IS’s first-ever Academic Technology Fair in the Campus Center. The goal was to introduce the College community to our menu of educational technology tools and support services. The Campus Center venue was chosen in order to get IS staff out of their usual locations to reach users where they are, and it was an opportunity to bring together colleagues engaged in allied work, including Jenny Spohrer from the Provost’s Office and the Serendip team. The event was also an opportunity for community members to personally “Meet the New CIO.” See our Facebook photo album for pictures: https://www.facebook.com/media/set/?set=a.604565109606468.1073741827.102035469859437&type=1

Led by Chris Boyland, members of the RSET group (and the CMD group) founded the Library Outreach to International Students project in order to improve services and support for international undergraduates.

The Reference Desk at Canaday implemented Springshare’s LibChat in order to give community members a way to get immediate online help from a librarian. The chat widget appears on the library homepage and in Moodle courses when the librarians are online, afternoons 1-5pm during the academic year. IS blog post with more info: http://is.blogs.brynmawr.edu/2014/01/23/new-service-ask-a-librarian-chat/

In order to reduce their sedentary sitting time and increase our energy levels and well-being, two staff members have installed standing desks in the Canaday Reference Office. See pictures on Facebook (https://www.facebook.com/BMCLibraries) and Twitter (https://twitter.com/BMCLibraries/status/484714794327769088/photo/1). They hope their example will encourage a healthy office environment in Information Services and in other College offices.

2013-2014 was the first year of Information Services’ two-year film series, Created Equal: America’s Civil Rights Struggle. The purpose of the series is to increase public awareness and discussion of the complicated legacy of America’s civil rights struggles. The series is supported by a grant from the National Endowment for the Humanities secured by Olivia Castello, and by local Bryn Mawr co-sponsors: Africana Studies Program, Bi-Co Education Program, Graduate School of Social Work and Social Research, History Department, The Pensby Center & the Bi-Co Program in Gender and Sexuality. For more information, including event pictures and video: http://www.brynmawr.edu/library/createdequal/

The "One Desk to Rule Them All" project led by Katie Feno is an important one. It is challenging to operate as a merged organization when we are clearly and visibly segregated in terms of location and work across help and circulation desks, even at the student level. To counteract this segregation, the manager of the service desks ensures that all student workers at our Canaday service points are able to perform a number of basic tasks (filling printers, answering basic "how do I change my password or renew my books?" questions, and checking out library materials). There is quite a lot of work to do in this arena, but the service desk manager is rightfully proud of the progress her team has already made.
Andrew Mantuano took great initiative in planning and gathering feedback from the first ever Staff In-Service Day. The decision to host this event was based on the work that he and the Local Learning Support team were engaged in with their departments. It was in direct response to clearly expressed needs, and was well attended and very well reviewed.

Melissa Cresswell has facilitated significant progress for the IS senior management team towards portfolio management practices.

A group of staff in Special Collections is working to revise the policy on collecting materials related to student life on campus. The aim over the course of the coming year is to significantly revise the approach to this important aspect of our collections and our responsibility to past, present, and future students and community members.

Visual Resources redesign: while maintaining collections necessary for the faculty still using slides, Camilla MacKay Head of Carpenter Library took initiative in building a partnership of IS and the Provost’s Office to repurpose the room to provide needed collaborative work space and individual scanning stations, and to take better advantage of skilled staff who can now play a more active role within the Bryn Mawr community, moving beyond primarily working with the “Carpenter departments” to enable projects for the full community.

Several staff members were involved in creating significant positive change through the Tri-Co committee that met with Elsevier, then decided to switch from our standard Science Direct journal package to a Pay-Per-View model. Once the Tri-Co group made the decision, Berry Chamness, Terri Freedman, Iliana Chaleva, and others worked hard to make sure we could provide the best experience possible for our patrons. This was a big decision and turned out very well.

As for small yet meaningful positive changes, this spring Terri Freedman set up a comment board and asked for feedback about changes people would like to see at Collier. Terri and her team were able to act on a few of the comments right away (for example, replacing a number of chairs in the library). Other feedback will inform the Park Science renovation planning.
Figure 1: Comment Board at Collier Library
Appreciations from Clients and Partners

Staff member (Treasurer’s Office): “One of the strengths of Info Services is the staff, which is overall an intelligent, inquisitive, and collegial group.”

Staff member (Dining Services): “Information Services on a whole does an amazing job on the campus. Thank you all for your hard work and support.”

Undergraduate: “[T]hank you for all the great service and especially the very loyal and devoted Tech Desk for always being there to help, especially during Finals week!!”

Undergraduate: “The computer desk was so helpful when I had problems with my computer- thank you!”

Community member: “I very much appreciate the help offered at the BMC libraries.”

Community member: “Thanks to the very efficient Multimedia Team.”

Multiple appreciations for Desktop Support and Web Services staff.

Staff member (CEO Office/LILAC): “I really enjoy working with the professional staff members from the IS department.... I am a new Moodle user and have been very happy with the online training resources and the user support provided. I was also part of the fall semester embedded support program.... That program enabled our entire department to focus on making tech learning a priority and I observed all of us--including myself--improve our skills thanks to Andrew’s presence in our office.... Having Andrew in the office helped us identify what we needed to learn and encouraged us to seek solutions to problems rather than just ignore them or stumble along.”

Development wrote in appreciation for an automated gift and receipt process IS implemented using Communication Generation in PeopleSoft. The Treasurer’s Office helped us conduct a business process audit that enabled us to automate some of the time-consuming manual processes for reconciling and documenting recurring monthly gifts/payments through PayPal:

“Last spring the Development Office automated its gift and pledge receipting process. Last year, approximately 11,000 receipts were processed. Before automation, each receipt would be printed on paper, folded, stuffed into envelopes and mailed, with a duplicate attached to the gift backup. Certain receipts required ‘special’ handling or customized letters, which could entail a delay. After automation, we were able to send 62% of those receipts electronically, saving time, postage, paper, printing, and file space. In addition, receipts are generally mailed almost immediately after entry in the PeopleSoft system.... We were pleasantly surprised to receive very few bouncebacks, a testament to the cleanliness of our data. In addition, very few donors called for a duplicate receipt during the tax filing season.”
Highlights from Administrative Information Services (AIS):

Director: David Sturgis

1. SEADS - Improved student experience with registration, academic advising, One Card, Identity Management.

2. PeopleTools upgrade - Improved infrastructure and stability as well as keep us within support guidelines from Oracle.

3. New career project - Follow up to SEADS project to allow Haverford and Bryn Mawr to better segregate their academic careers and programs for purposes of creating transcripts.

4. Identity Management - Improved and streamlined automatic provisioning and de-provisioning for data driven constituent security within PeopleSoft, Moodle, Zimbra, and Active Directory.

5. OneCard interface - data exports to OneCard and data imports from OneCard (photos, barcodes, prox numbers) every 15 minutes.

6. Faculty/staff photo directory - Online viewing within PeopleSoft of photos with a photo opt-out feature.

7. Self-service 1042-S forms - 1042-S forms available to students electronically via Glacier.

Highlights from Client Services and IT Procurement:

Director: Amy Pearlman

1. We executed a new Adobe agreement with advantages for the community: [http://is.blogs.brynmawr.edu/2013/08/05/changes-to-image-and-media-software-including-adobe-products/](http://is.blogs.brynmawr.edu/2013/08/05/changes-to-image-and-media-software-including-adobe-products/).

2. Through eduroam, which provides more seamless logins at institutions beyond your own, we made improvements for cross-campus student and faculty travelers: [http://is.blogs.brynmawr.edu/2013/08/27/haverford-students-use-your-quaker-login-and-eduroam/](http://is.blogs.brynmawr.edu/2013/08/27/haverford-students-use-your-quaker-login-and-eduroam/).

3. We suspended pay-for-print to improve the service experience for students.

4. We created a new Password site as part of SEADS, IdM.

5. We played a supporting role in the high-profile Women in Public Service Project Institute ([https://wpsp.blogs.brynmawr.edu/](https://wpsp.blogs.brynmawr.edu/)), facilitating laptop procurement, handout and setup and working with program administrators concerning curriculum. Web Services provided
significant support for the original program concepting and its Web presence.

6. We joined purchasing to the existing support group and renamed to Client Services, made 2 staff members permanent (one in a new position), added one temporary at Help Desk, and welcomed another back from a year doing outreach and education work. We successfully end-of-lifed Win XP (with no emergency or last minute rush, though most of the work was done well over a year ago) and a couple of OS X variants.

7. The "One Desk to Rule Them All" project is an important one. It is challenging to operate as a merged organization when we are clearly and visibly segregated in terms of location and work across help and circulation desks, even at the student level. To counteract this segregation, the manager of the service desks ensures that all student workers at our Canaday service points are able to perform a number of basic tasks (filling printers, answering basic "how do I change my password or renew my books?" questions, and checking out library materials). There is quite a lot of work to do in this arena, but the service desk manager is rightfully proud of the progress her team has already made.

8. In addition to making significant internal process refinements, Client Services has provided support for refreshing and updating existing infrastructure for the College, including moving several back-end services to VMWare, making them more robust, and supporting other groups across IS in projects they have listed.

Highlights from Collection Management & Discovery:

Director: Berry Chamness

1. Collection Development—The TriColleges’ 3-year contract with Elsevier for ScienceDirect was ending in December 2013. The negotiations with them did not yield a new contract we were happy with. We therefore chose to negotiate separate contracts with Elsevier, severely curtailing the number of titles subscribed. This created an opportunity for a pilot to test pay-per-use access for the entire stable of ScienceDirect offerings, which also ended up saving us in FY2014 over $250,000. This allowed us to make end of year purchases in a variety of disciplines, including Archaeology, Film & Media Studies, Classics, East Asian Studies, Geology, and Social Work. We will continue the pilot into FY2015, as we monitor usage and pricing.

2. Collection Development—We instituted a book rental program through McNaughton for “popular titles” residing in the Quita’s Corner Collection. This allows us to pay less for popular titles we may or may not wish to keep permanently in the collection. Any titles we choose to purchase after the rental have only a nominal additional purchase charge.

3. Space saving—To make space available for new programs for any future building renovation, we withdrew the majority of our JSTOR titles that were housed in Canaday. These titles are represented in on the stable JSTOR platform, and we believe will be available long-term.
Should community members feel the need to see the print, we are an affiliate partner in the Five Colleges Library Depository (https://www.fivecolleges.edu/libraries/depository/) whereby volumes from JSTOR titles held there can be sent to us for perusal.

Additionally, we spent much of FY2014 moving the Dewey collection to the UPenn off-site storage facility, LIBRA, with whom we have a 20-year contract, initiated in the summer of 2012. Moving those materials now is giving us a sense of what kind of time it will take to move any other items to off-site storage in the future; for example, we may wish to house some Collier items at LIBRA when they downsize the physical space for that library.

4. Metrics—“E” has become the majority or sole format for journals and our subscription to databases continues to increase its share of the overall knowledge collection budget. E-book adoption is slower at least in part because of the difficulties with DRM, printing, platform usability, etc. At the 2014 PALCI annual meeting which took place June 11-12, data was presented from a faculty and library director survey showing libraries in general are adopting e-books at a slower pace than they did e-journals, though a small but growing minority think that within 5 years it will not be necessary to purchase print monographs. Additionally, recently Haverford participated in a multi-school e-book study for students and faculty that showed that print is still the preferred book format there overall, especially with students.

The transition from print to electronic has had implications and will continue to have implications for the workflow in the CMD department. The prevalence of online journals has allowed us to greatly reduce the space used by the remaining print journal subscriptions and has reduced the student worker hours needed to check in those materials. Space in the stacks is saved because we do not have many print journals to bind anymore. The transition to e-books, whether it happens fairly fully within 5 years or 20 years, will necessitate different work patterns for the staff. We are likely to have fewer individual records to touch and instead have more batch loads of records where staff use software tools to edit the data as necessary en masse. I suspect, though cannot be certain, that some staff hours will be able to be redeployed to other tasks and functions.

5. Organizational enhancement—We have implemented cross-training for InterLibrary Loan so that more than one person knows how to run that part of our operations. This is especially important when the ILL coordinator is on vacation; Berry does not have time to consistently be the backup person. This summer we will have a cataloging staff member be cross-trained on processing our standing orders (serial items that are published annually or less frequently).
Highlights from Planning & Communication:

Director: Melissa Cresswell

1. Completed SEADS project to document service and support agreements between Bryn Mawr and Haverford for Student System, OneCard and Identity Management

2. Completed one year of Local Learning Support program, with Staff Education specialists embedded in Bryn Mawr (and one Haverford) departments; significant experimentation with and reflection on new modes of technology education, and Staff Education at the college more broadly.

3. Hosted In-Service day for staff members to learn technology skills from one another - staff who participated were very enthusiastic and have asked for more such events. The Coordinator of Staff Education is looking at ways to make the planning more routine so that we can sustain these activities. Andrew Mantuano took great initiative in planning and gathering feedback from the first-ever Staff In-Service Day. The decision to host this event was based on the work that he and the Local Learning Support team were engaged in with their departments. It was in direct response to clearly expressed needs, and was well attended and very well reviewed.

4. Significant progress toward project proposal, approval and prioritization among senior IS staff, including resources and guidance for initiating projects; working towards communicating strategic initiatives to the community in the coming year. Melissa Cresswell has been a key facilitator of the significant progress that the IS senior management team has made this year towards portfolio management practices.

5. Established IS Assessment group in Office of the CIO with participation from across IS - The IS Assessment group was formed in the spring of 2014 and is chaired by Melissa Cresswell. The first assessment projects to be commissioned by the group include an assessment of Collier Library space use, and an analysis of Bryn Mawr’s MISO Survey data. The Collier assessment project will be used to inform the redesign and renovation of the Park Sciences building and Collier Library. Bryn Mawr's MISO data is currently being analyzed to identify service trends, service gaps (services that have higher importance than satisfaction), and comparing Bryn Mawr's library and technology services to peer institutions.
1. Moodle transition - Helen Chang and Christine Boyland, working closely with Andrew Lacey, led the transition from Moodle 1.9 to Moodle 2.5.3. This was a significant upgrade to a core academic service which required a full migration of data, the establishment of parallel systems to accommodate the needs of "live" courses in the old version while providing course space in the new system for courses launching in the future, coordinating both versions of Moodle with our TriCo partners, and managing the live switching of domains to launch the new version as the primary version of Moodle. All aspects of the transition worked flawlessly from an administrative perspective. Early interactions with faculty indicate a positive reception to the new version.

2. 2013-2014 was the first year of Information Services’ two-year film series, *Created Equal: America’s Civil Rights Struggle*. The purpose of the series is to increase public awareness and discussion of the complicated legacy of America’s civil rights struggles. The series is supported by a grant from the National Endowment for the Humanities secured by Olivia Castello and by local Bryn Mawr co-sponsors: Africana Studies Program, Bi-Co Education Program, Graduate School of Social Work and Social Research, History Department, The Pensby Center & the Bi-Co Program in Gender and Sexuality. For more information, including event pictures and video: [http://www.brynmawr.edu/library/createdequal/](http://www.brynmawr.edu/library/createdequal/)

3. LOTIS (Library Outreach to International Students) Project - The LOTIS Project, initiated by Christine Boyland and involving RSET and CMD colleagues, was launched this academic year to make library resources more accessible to international students. Significant research has been undertaken to determine the unique needs of this growing subgroup of Bryn Mawr's student body. Focus groups of various international students have been engaged to enhance our understanding of their experiences. An oversample of all international students was included in this year's MISO Survey to help determine the differences in the way international students use IS resources and services. New IS materials have been produced as a result of some of these conversations. In the coming year, more analysis and ways to improve the IS services will result from this project.

4. The RSET group organized IS’s first-ever Academic Technology Fair in the Campus Center. The goal was to introduce the College community to our menu of educational technology tools and support services. The Campus Center venue was chosen in order to get IS staff out of their usual locations to reach users *where they are*, and it was an opportunity to bring together colleagues engaged in allied work, including Jenny Spohrer from the Provost’s Office and the Serendip team. The event was also an opportunity for community members to personally “Meet the New CIO.” See our Facebook photo album for pictures: [https://www.facebook.com/media/set/?set=a.604565109606468.1073741827.102035469859](https://www.facebook.com/media/set/?set=a.604565109606468.1073741827.102035469859)
5. Classroom renovations - This past summer nine rooms in Thomas and Carpenter were upgraded. Plans were put in place to handle the high cost associated with upgrading classrooms in Dalton for the summer of 2014. In particular, plans were developed in conjunction with all of the major campus stakeholders to upgrade the A/V equipment in Dalton 300. The upgrade is currently in progress.

6. MISO - The MISO Survey continues to be a successful project. First launched in 2005 under the management of David Consiglio, the MISO Survey, which measures the effectiveness of library and technology services, saw its largest cohort of institutions this year with 42 higher education schools participating in the survey. To date more than 60% of the top Liberal Arts Colleges have participated in the survey. The type of school participating has expanded to include larger research institutions. The exposure of the survey is expected to increase in the coming year with high profile institutions, such as Harvard University, preparing to use the survey to evaluate library and technology services.

7. TRIG group formed - The TriCo Research & Instruction Group was formed in the fall of 2013. The group leads coordination of TriCollege library research instruction. The group is currently working to develop online video modules for research instruction in order to "flip" some of the bibliographic instruction sessions they conduct each academic year.

8. The Reference Desk at Canaday implemented Springshare’s LibChat in order to give community members a way to get immediate online help from a librarian. The chat widget appears on the library homepage and in Moodle courses when the librarians are online, afternoons 1-5pm during the academic year. IS blog post with more info: 
   http://is.blogs.brynmawr.edu/2014/01/23/new-service-ask-a-librarian-chat/

9. This spring Terri Freedman set up a comment board and asked for feedback about changes people would like to see at Collier Library. Terri and her team were able to act on a few of the comments right away (for example, replacing a number of chairs in the library). Other feedback will inform the Park Science renovation planning.

10. In order to reduce their sedentary sitting time and increase our energy levels and well-being, two staff members have installed standing desks in the Canaday Reference Office. See pictures on Facebook (https://www.facebook.com/BMCLibraries) and Twitter (https://twitter.com/BMCLibraries/status/484714794327769088/photo/1). They hope their example will encourage a healthy office environment in Information Services and in other College offices.
11. New staff member Alex Pfundt was added to the RSET group in the early part of the fiscal year. In the brief time he has been with the group, Alex has made a significant positive impact for the Bryn Mawr community.

12. Publication, presentation, and successful grant activity:
   
a. Bridging Cultures Initiative Grant (National Endowment for the Humanities & Gilder Lehrman Institute of American History, August 2013), $1200 (plus ~$3000 in local fundraising): “Created Equal: America’s Civil Rights Struggle”, submitted by Olivia Castello & Eric Pumroy

b. Mellon Digital Curriculum Enhancement Grant (Bryn Mawr College, April 2014), $5500: “Flipping the Library Classroom at Bryn Mawr College: A Pilot Project for Humanities and Social Science Information Literacy Instruction” submitted by Olivia Castello, Christine Boyland, Alex Pfundt & Arleen Zimmerle


Highlights from Special Collections & Rhys Carpenter Library:

Associate CIO & Director: Eric Pumroy

1. Our most publicly visible activities were the series of exhibitions that we directed, all with significant involvement of students. The two major ones were the fall exhibition, "Beneath the Printed Pattern: Display and Disguise in Ukiyo-e Bijinga," curated by History of Art graduate student Anna Moblard Meier; and the spring exhibition, "A Century of Self-Expression: Modern American Art in the Collection of John and Joanne Payson," curated by the students and faculty in the 360 "Exhibiting Modern Art" course, taught by Steven Levine and Brian Wallace. We also assisted with the installation of "Disasters and Rebuilding in Japan: Perspectives and Testimonies from the Tri-Co Collection," curated by the students in the 360 course Perspectives on Sustainability last fall, and "The Curious Group," curated by recent History of Art Ph.D. Carrie Robbins for the 10th anniversary of the Graduate Group.

2. In addition to Brian Wallace's 360 course, the department met with 42 classes throughout the year.
3. In partnership with the Provost’s Office, we are converting the former slide collection room at Carpenter Library to a Digital Design & Collaboration space and shaping services to enable expert staff support for student and faculty digital media projects. The analog slides that represent unique collections and that are still actively used in teaching are moving to a quieter space within the Visual Resources suite so that faculty using those collections can work closely with the Visual Resources Center Image Cataloger to select and prepare slides for courses and scholarship.

4. Open access to the academic scholarship of the Bryn Mawr community is very important; it was a long process working with CLIC to get to the passage of the Open Access (OA) policy in December and there is a long road ahead, but increasingly younger faculty are aware and supportive of the OA movement.

5. Carpenter completed a year-plus-long project to reorganize the entire library that was made possible by installation of new compact shelving in summer 2013. With the help of the Collection Management & Discovery team, the staff were able to relabel and move several thousand classics books still in Canaday over to Carpenter in order to create a more coherent and comprehensive collection in that library.

6. We have begun several collection assessment initiatives designed to evaluate both our existing storage and the collections we are maintaining. The major efforts are 1) the evaluation of the rare book collection, which will result in the reduction of the number of books stored in the secure area; 2) an evaluation of the furniture collection and an anticipated discussion this fall of the amount of it to be kept; and 3) the engagement of an outside consultant to evaluate our storage conditions.

7. We received a $40,000 NEH grant this year to develop a pilot program for searching the digital collections of the 7 Sisters Schools. That project is now underway, with the goal of having a working pilot portal by next spring. As this project proceeds, we are also likely to use it as a springboard for a much larger grant proposal to build the collections that the portal will provide access to.

8. Carpenter Library staff enhanced coordination and collaboration with Special Collections colleagues. As faculty requests for scanned images have decreased in general, Del and Nancy in particular have worked with SC staff to maintain work for VR students and help to digitize the Bryn Mawr collections by providing scanning for archival material in Canaday, from photographs to M. Carey Thomas's letters.
9. Using a TriCo Digital Humanities grant, Camilla MacKay as editor of Bryn Mawr Classics Review (BMCR) is working with a consultant to implement schema.org metadata to increase BMCR’s exposure online, and to plan for a new platform for the journal.

10. This was a transitional year for the department, as two key people left, and Eric as Interim CIO & Director of Libraries spent most of the first half of the year only nominally involved in its work. We have now filled the two key vacancies -- the director of the Greenfield Center and the Digital Collections Librarian, and Eric is now able to be an active part of the department again, so the group is looking for a very active coming year.

Highlights from “Systems” – a group comprising Networking & Telecommunications, Systems, and Web Services:

Directors: David Bertagni/Vince Patone

Over the past year, David Bertagni as Chief Technologist has led IS in re-envisioning and stabilizing our computing infrastructure. Building on this new foundation, staff in our integrated Systems group have been able to actively develop more supportive and effective partnerships with those who depend on our core computing resources.

Following from these improvements, Systems staff continue to move beyond reactive work patterns required by the high demand of managing a complex infrastructure and service portfolio; they are investing more time developing their systems administration competencies, and overall they are better able to perform critical daily responsibilities in support of the College’s mission. As an operational improvement example, colleagues in AIS used to wait several months for new servers to be built to enable their work. That time has been reduced to one business day.

Complementing this foundational infrastructure work, significant progress has been made at the project planning level. With greater clarity provided on expectations and responsibilities for new projects, staff now feel safe to embrace new work with enthusiasm. Through this culture change and operational efficiencies such as the example above, the Systems group is turning its attention more proactively to planning and development of roadmaps essential to Digital Bryn Mawr and our technology-enabled future at the College.

Specific accomplishments in each area:

Networking & Telecommunications:

Director: David Bertagni

1. Network Core upgrade

Bryn Mawr’s Cisco based centralized networking core has been completely replaced with a new modular distributed Juniper core split between Guild and Canaday. While the majority of
fiber is still only installed to Guild, we have completed the first step in creating a more robust networking infrastructure. In the coming years, as we replace our existing multi-mode optical fiber infrastructure with single-mode optical fiber, we will install connections to both Guild and Canaday. Park and Brecon will be the first buildings to be “multi-homed” as single-mode fiber is now in place for both locations.

2. Wyndham Rewiring & Network Upgrade
Wyndham has been completely rewired to CAT5e standards bringing it up to the campus standard. The wiring closet for the Alumnae & restaurant side was relocated to the basement, returning space to the office. The network equipment was upgraded to Juniper switches providing 1G Ethernet to the desktop and to the wireless infrastructure. Wireless coverage was expanded to bring the building to current campus standards. UPSes were installed in both networking closets and emergency power has been extended to our equipment. The network in Wyndham will now remain operational so long as emergency generators are operational.

3. Canaday Rewiring & Network Upgrade
Canaday’s cable plant and network design were completely overhauled. The building was brought up to CAT5e standards with wiring now terminating in the new telecomm closets on each floor. The network electronics were upgraded to Juniper switches with 10G Ethernet connecting the closets to the network core. 1G Ethernet was deployed to all desktops and wireless access points. Canaday was the first building on campus to be brought to 10G/1G. Client Services reports significant improvements in lab imaging and all previously reported network issues have been resolved.
A large UPS and new cooling have been added to the Canaday Server Room. The cooling system and the UPS are on emergency power. All networking closets in Canaday are on emergency power. The network in Canaday will remain operational so long as emergency power in operational.

4. Deploy Emergency Power to Park Networking Closets & install single mode fiber
We were able to take advantage of a large electrical upgrade project in Park to replace the electrical service to all our networking closets. Power is now fed from a single panel in Chem/Geo wing and UPSes were installed. All our closets are now on emergency power. Wired and wireless networking will remain operational along with other emergency equipment throughout the building. We also took the opportunity to install single mode fiber optic cables from the demarcation point, the Chem/Geo location, to the Biology and Math/Physics locations. When complete, Park will have 10G Ethernet connecting all closets and dual 10G Ethernet redundant connections to the network core in Guild and Canaday.

5. PBX Inventory and Cleanup
To my knowledge a full inventory of our PBX system had never been previously performed. Working with PABEC Systems, we have been able to identify over 1000 telephone lines that
have now been retired. This reduces our active port count in the PBX from a high of about 2600 to just below 1600. We are now in the process of moving the remaining analog and digital lines to consolidate card. Once this is complete we will begin removing cars to reduce the number of available ports. This will significantly reduce the cost of procuring a support contract for the system, which is necessary in order to restore our ability to manage the system. Avaya charges a per-port monthly charge to provide “craft” level access to customers. Without this level of access, we have little ability to do diagnostics and maintenance.

6. Wireless 802.11n Wireless Upgrade
   All wireless access points have been upgraded to support the 802.11n wireless standard. Total AP count is now 697. This number will grow by approximately 100 devices as we complete the Thomas wiring project. Expansion to outdoor spaces is our next objective.

Systems:

Directors: David Bertagni / Vince Patone

1. Replaced Bryn Mawr and TriCo VMWare infrastructure
   Retired all old stand-alone VMWare servers for Bryn Mawr and the TriCo. Installed 10 new Dell R320 servers for Bryn Mawr stack. Installed 3 new Dell R620 servers for TriCo stack. Upgraded licensing for VMWare from Standard to Cloud Suite Standard. Migrated all old VMs to the new stack. VMWare clusters now house over 100 servers between them. Expansion plans for PeopleSoft and TriCo development will see that number rise by another 10-12 servers.

2. Implemented new storage area network (SAN) & Backup Systems
   Installed new EMC Storage Area Network. The new SAN consists of 2 EMC 5300 chassis with 100TB of usable space each. The system is configured to provide 100TB of total usable space with replication for redundancy. The Guild half is dedicated to Bryn Mawr servers. The Canaday half is dedicated to TriCo servers. The system was specified with 100TB to accommodate current need and is not intended to be our long-term solution. We anticipate requiring additional storage in the very near future. We are investigating lower priced shared storage options.
   Installed new EMC Networker and DataDomain backup solution. The new system relies heavily on data de-duplication technologies to store more data in a smaller package. We are still learning the new system and have not moved all our existing services yet. Like the SAN, this system was intended to meet our immediate needs. Additional storage space will be required and this may include the use of alternative backup solutions. We are still investigating adding cloud storage to the system as well to provide off-site backup of critical data as the backup system itself is housed in Canaday Library. This offers no physical redundancy to the TriCo and Web Services that are also housed in Canaday.
3. Partnered with others in IS to deploy Fischer
   The Fischer deployment required a considerable amount of time from the Systems group as most of the heavy lifting for implementing the project fell to AIS and Systems. The automation of our complex rules required many interactions and still requires considerable effort between the 2 groups to maintain the service.

4. Installed central systems logging software
   We continue to add servers and services to our central logging and monitoring systems. The majority of our services now record 90 days of logs in the central system. This provides a single repository when searching for events for diagnostic or legal purposes.

5. Installed new Beowulf Cluster (Sciences)
   We played a key part in the successful deployment of the new computing cluster. The cluster is a shared resource in the sciences and coordinating and consulting with the various interested departments on the purchase and installation of the new system was no small task. Ongoing administration and maintenance of the cluster is underway.

Web Services:

Director: Vince Patone

1. College Website Revamp project – We partnered with Communications to deploy new Drupal-based content management system (CMS) and to enable the redesign and migration of the College website. As part of this project, we overhauled the legacy site templates to mirror the new design, implemented a proxy server to allow for a coordinated CMS launch between old and new sites, and upgraded the hardware infrastructure of the older non-Drupal portions of the site (re-using hardware from elsewhere). Launch of the new website is scheduled for July 8, 2014.

2. We upgraded Moodle to the latest version and migrated it to new hardware.

3. Web Services provided significant support for the original program concept development and creation of the web presence for the Women in Public Service Project Institute (https://wpsp.blogs.brynmawr.edu/).

For additional highlights, please peruse the IS blog: http://is.blogs.brynmawr.edu/. 