Digital Bryn Mawr Task Force Final Report
April Board Meeting 2014

Executive Summary:

The Digital Bryn Mawr Task Force process has served the institution well. The process catalyzed broader understanding of the fast-evolving technology terrain, helped to raise awareness of things that were underway already on campus, and facilitated movement toward more agile practices, where members of the community are continuously learning and experimenting in order to keep pace with the opportunities and challenges represented by technological advances. As we shift to operationalizing the Digital Bryn Mawr priorities, we have achieved strong momentum on campus for pursuing the goals articulated in the Task Force report.

Three high-level goals inform the Digital Bryn Mawr priorities and the metrics we will use to assess progress toward realizing the Digital Bryn Mawr vision:

1. Enable digital fluency for students, faculty and staff
2. Continue to develop appropriate uses of technology for the liberal arts context
3. Experiment, assess, learn, iterate – strive to be agile

The specific Digital Bryn Mawr objectives are focused in these areas of priority:

1. Academics
2. Digital External Relations
    a. Undergraduate Recruitment
    b. Alumnae/i Engagement
    c. Marketing & Communications
3. Foundations for Digital Bryn Mawr

The report includes three tables:

1. Specific goals related to each priority area
2. Recent accomplishments and current initiatives underway in each priority area
3. Future recommendations toward realizing the Digital Bryn Mawr goals across priority areas

In the second and third tables, we have indicated costs and funding sources (where known) for each of the major projects or recommendations, and we have listed outcomes or metrics for assessing success as we move forward. The Academic goals are partially funded through the current Mellon grant on "Developing a Liberal Arts Curriculum for the Digital Age" and dedicated endowment funding to follow; the proposed new positions are not funded. Through the faculty Committee on Libraries, Information, and Computing, we have had excellent conversations about how we begin to realize these goals, and how we broaden from seed funding and early adopters to programmatic integration across the curriculum. The External Digital Relations goals are funded and

on track for success. The area that has expanded most significantly since the last interim report is Foundations for Digital Bryn Mawr. Most of the projects in this area are funded through the existing IS budget or through dedicated project budgets allocated via the College budget. This area includes some newer recommendations that will require additional planning in order to develop future funding proposals, including capacity planning and provisioning of storage and server hosting internally and for BiCo and TriCo, developing an information security/stewardship program for the College, and future steps in business/academic continuity and disaster recovery planning. The known additional operating needs articulated in the report are on the order of $600k-$750k annually.

Major accomplishments on the path to Digital Bryn Mawr:

- This year we have extended awareness of the Digital Bryn Mawr terrain and recommendations to a broader group. This report is part of education and information sharing for ourselves and for the broader community across campus. Co-ownership of the priorities is growing, and we will continue to build awareness and engage constituents across campus as we move forward on particular goals.
- We have built into our campaign plans fund-raising goals related to the Digital Bryn Mawr priorities.
- Academic innovation and leadership in the liberal arts sector is happening through the recent NGLC grant on blended learning, the current Mellon grant on "Developing a Liberal Arts Curriculum for the Digital Age," and future endowment funding for operations beyond the grant period to enable continued academic technology integration, instructional design, and faculty development and support.
- IS is participating in building renovation planning in a more integral way beginning with Park Science to help design for 21st-century academic library spaces and services, infrastructure to enable research and collaboration, classroom technology planning, etc.
- For the first time, we have an operating budget for the College website. This will allow us to continue developing and refreshing the website regularly so that we maximize the value of the new content management system.

Key takeaways of the Task Force process:

- There is much that we do well in the digital space, but there can be no resting on our laurels. As one Task Force member says, "Whenever we're caught up, we're never caught up. This changes the way we think about our work." We have been able to keep up at the base level technologically in terms of infrastructure and systems through a mix of hosting internally and brokering external services, and now we are turning attention to disseminating information more broadly about available services and offerings, building out consulting services to help people select and use available tools to meet goals across campus, and developing roadmaps for additional key foundational areas, such as information security and stewardship.
- We need to develop greater comfort on campus for "living in beta," for trying new approaches and technologies that are experimental, to designing assessment practices that enable us to learn from our experiments, and to integrating lessons learned into our next iterations of a project or service. One faculty member of the Task Force referred to this as "becoming a hacker campus." The Digital Bryn Mawr vision requires that we build our practices of innovating, assessing results, learning from those experiments, and adapting for the next iteration. For IS and others facilitating innovation with digital tools, it will

be important to manage expectations about which services are solid "commodity" technologies, which are in pilot so that we can assess their value for the community, and which are local experiments for those with particular goals and tolerance for imperfection. We need to help faculty, students, and staff to be comfortable learning new skills and figuring out by experimenting.

- Technology is rarely the problem; our challenge is making great use of the technology via people and understanding. The Task Force process and the report have clearly surfaced the fact that this is a College issue, not an IS issue alone, and the College as a whole is taking greater ownership of the digital future for Bryn Mawr.
- It is critical to make time for assessment of what we're doing and which paths are worth taking. In the SEADS context, we have enacted this practice by taking a critical pause to learn from phase 1 and to instantiate a new project model that allows for more systematic assessment of Bryn Mawr, Haverford, and joint BiCo goals and requirements.
- Security requires significant focus: we are by design an open academic community, and we need to develop understanding across campus about how to manage the associated risks.
- We can learn from "MOOC moment" how best to time our adoption of new technologies or approaches. Bryn Mawr has a strong track record of continuously scouting the horizon and making wise choices about which investments to make and when for our particular context.
- Staff and faculty education require significant investment: it is a challenge for those who have other primary jobs to continuously acquire new technical skills and to stay current on emerging opportunities and best practices.
- We have a responsibility to shepherd with care the changes represented by these Digital Bryn Mawr priorities. Skillful change management will be essential. As a Task Force member says, "Let's stumble forward and not backwards as we move through the new terrain."

Digital Bryn Mawr Task Force Final Report
April Board Meeting 2014

With this report, the Digital Bryn Mawr Task Force brings to fruition its two and a half years of research, planning, and context-sensitive streamlining and refining of priorities. This report presents an overview of priorities and goals that have emerged through the Task Force process, describes how these priorities and associated goals are taking shape in a changing environment at Bryn Mawr, and outlines recent accomplishments, current initiatives, and recommendations for the future for each of the priority areas.

Overview of Priorities and Goals

Three high-level goals inform the Digital Bryn Mawr priorities and associated objectives articulated below, and they will guide our assessment of progress toward realizing the Digital Bryn Mawr vision:

4. Enable digital fluency for students, faculty and staff
5. Continue to develop appropriate uses of technology for the liberal arts context
6. Experiment, assess, learn, iterate – strive to be agile

In working toward the final Digital Bryn Mawr Task Force report, we have been continuously scanning the environment to understand trends in higher education, especially for liberal arts and women's colleges, and how technology is evolving in order to proactively integrate models that serve the College's goals and leverage technology appropriately for our context. Much of the activity and planning described below, across the areas of academic innovation, external relations, and infrastructure/foundations, was done in conjunction with the research, synthesis, and prioritizing of the Digital Bryn Mawr process. The track record of stewardship in these areas provides a strong basis for supporting the kinds of transformation we are aiming to achieve at scale.

Bryn Mawr has moved from experiments in using digital technology and thoughtful assessment of those experiments to securing significant grant funding for building sustainable and scalable programs based on early successes with these experiments. We are now at an important pivot point where we need to begin shifting from the soft funding of the grant programs, and the overhead of managing through both organizational structures and grant administration structures, to core funding and sufficient expert resources on campus to enable efficient delivery of programs and services across the areas of academic innovation, infrastructure and technology deployment, and leveraging of technical facilities to meet the College's top priorities. These priorities include recruiting outstanding students, ensuring that they receive an excellent 21st century education that will prepare them for life and professions beyond Bryn Mawr, and continuing to forge strong connections between alumnae/i and the life of the College. Building a strong core educational technology team to enable digital fluency development and integration for faculty and students will be essential to realizing our goals, and this team will be a resource that can be leveraged to design and facilitate educational opportunities for the full campus community and to extend technology-enabled educational experiences from the campus to the broader Bryn Mawr alumnae/i and friends network.

The technological environment will continue to evolve at a rapid pace. This means that the College needs to invest in hiring and professional development that will result in a more agile faculty and staff who are able to learn new technologies with ease, to understand which technologies and approaches will best serve our academic and administrative goals, and to help one another implement new approaches in the most efficient and effective ways to meet our goals of meaningful, innovative, and sustainable liberal arts education for the 21st century.

Major Areas of Priority:	**Associated Goals:**
ACADEMICS	1. Create a (sequenced) set of academic and co-curricular experiences for students to enable digital fluency 2. Enable faculty to use digital technologies in ways that improve scholarship and student learning 3. Continue leadership in blended learning in the liberal arts context
EXTERNAL DIGITAL RELATIONS	
• Undergraduate Recruitment	1. Use the Website Revamp Project to make the website more dynamic with more frequently changing content to attract visitors. Increase the amount of video content offered on the College website and social media outlets 2. Bolster Undergraduate Admissions' use of current social media channels to provide additional layers of content and opportunities to connect with admissions staff, current students, and prospective students
• Alumnae/i Engagement	1. See # under Undergraduate Recruitment. 2. Leverage digital technology to create opportunities fo alumnae/i to connect to the College's curriculum and programming in ways that are sustainable and require little extra burden on already taxed resources 3. Where possible provide and market alumnae/i access to online services for scholarship and learning, e.g., JSTOR, Mango, etc.
• Marketing & Communications	1. See #1 under Undergraduate Recruitment. 2. Leverage digital technology to better communicate the College's messaging to its key audiences
FOUNDATIONS FOR DIGITAL BRYN MAWR	1. Refresh network infrastructure regularly to handle the increasing demands, and prepare for ubiquitous network access to position the College to re-imagine the classroom, facilitate collaboration on and off campus, and enable people to use a variety of devices 2. Make tools available for collaboration on campus and between campus constituents and remote collaborators. Raise awareness of these tools 3. Develop effective programs for digital asset management to ensure appropriate preservation of and access to data. Thi includes storage capacity planning and

	investment, education for the community about how to manage and ensure appropriate handling of data, digitization of important special collections as a component of preservation planning, and interfaces that enable discovery of the College's rich digital collections and data (research data, historical collections, institutional data to inform decision-making, etc.). 4. IS should focus increasingly on… • advancing Bryn Mawr's digital infrastructure and systems; • higher-order collaborative partnerships with faculty and students to enable teaching, learning, and research; • planning and prioritizing with administrative colleagues to enable strategic use of systems and data.

Context of Change

The Digital Bryn Mawr Task Force began its work in Fall 2011. In the intervening two and a half years, much leadership change has occurred at the College. At the same time, the MOOCs frenzy in higher education has subsided to a tempered appreciation for various models of blended and online learning designed and deployed to meet context-specific goals. Bryn Mawr has emerged as a leader in blended learning for the liberal arts. President Cassidy's appointment ensures continuity for current campus initiatives that support the Digital Bryn Mawr priorities and enables us to move forward confidently with appropriate next steps in planning and implementation in each key area.

Gina Siesing's appointment as Chief Information Officer & Director of Libraries means that Information Services is moving forward with organizational design and planning related to broader goals in alignment with the Digital Bryn Mawr priorities. Main concerns in this context include positioning IS well to provide ample services and programs in support of teaching, learning, and research; analysis and planning for foundational areas such as network infrastructure upgrades, business continuity, and information stewardship and security; and strategic planning for other key areas of IT and Library development, such as upcoming building renovations, TriCo and LAC partnerships, etc.

We may find that particular elements of the Digital External Relations priorities are subject to refinement as the Chief Enrollment Officer and Chief Communications Officer positions are filled. For instance, the new Chief Enrollment Officer will determine whether a client relationship management (CRM) system is essential to success of undergraduate recruitment going forward. If so, we would initiate planning for CRM needs across areas of the College.

Recent Accomplishments & Current Initiatives:

Bryn Mawr is already making strides in the areas of academic innovation, digital external relations, and infrastructure/foundations for Digital Bryn Mawr. The College built on its recent accomplishments and lessons learned to develop the recommendations in this report, which are outlined in the table below.

Major Priorities:	Recent Accomplishments & Current Initiatives:	Costs & Funding Sources:	Outcomes:
ACADEMICS	• NGLC grant included a study and report on how blended learning models in Science courses supported student retention and success. This Blended Learning Program has– BMC leadership of 40-school LAC cohort and associated student success data in science courses. Hiring of Coordinator of Academic Technology Initiatives in Provost's Office, who supports such projects and works closely with IS Research Support & Educational Technolog colleagues in planning services and partnerships with faculty (http://blendedlearning.blogs.brynmawr.edu) • Mellon grant awarded for "Developing a Liberal Arts Curriculum for the Digital Age" – 3 ½-year program launched in January 2014 to further blended learning and integrate digital technologies across the curriculum, especially in the social sciences and humanities. Steering Cmte comprised of faculty, Provost's Office, and IS colleagues. Two postbacs and student interns to be hired and mentored in support of curricular projects. • Tri-Co Digital Humanities initiative – developing sustainable and scalable models. • Participation in broader Lafayette-led Mellon grant – Digital Scholarship in Liberal Arts Colleges. • Active engagement of TriCo GIS specialist funded through Mellon grant. • Integration of academic technology into many	• Next Generation Learning Challenge grant (http://nextgenlearning.org/) - $250,000 • Mellon grant - "Developing a Liberal Arts Curriculum for the Digital Age" - $300,000 • Tri-Co Digital Humanities – Mellon funding and faculty, staff, student contribution • Tri-Co GIS specialist – Mellon funding through AY2014-15. Possible need to fill vacancy as specialist may be taking faculty position elsewhere. • Funding for Digital Preservation Workshop is through IS at Bryn Mawr and counterpart Libraries at Haverford and Swarthmore ($10k total for 20+ staff). We will be hosting this national workshop at Bryn Mawr.	• NGLC project - Promising early results for student cohorts overall and for students from lower socioeconomic backgrounds • Kim Cassidy and Jennifer Spohrer have given numerous invited presentations on the blended learning program nationally. • Model extended to more faculty and courses and to Humanities and Social Sciences via new Mellon grant.

	individual courses (e.g., Intro Chemistry Lab with digital acquisition of data, fitting of data to models, coding at small scale - 100 students/year; Biology; Economics, etc. - statistical packages and methodologies; GSSWSR full-semester course and undergraduate course; Mathematica in use across multiple disciplines) • Organizational design and development focus in IS to enable the group to fulfill its stated mission to "SERVE by supporting technologies that benefit teaching and learning; FOSTER collaborative relations that advance the curriculum, research, and mission of the college; and help BUILD intellectual partnerships that encourage self-reliance and cooperation." • Recent hires in IS to fill Digital Collections Librarian and Greenfield Center Director positions to further enable digital scholarship endeavors at the College and in the TriCo. The Digital Collections Librarian will participate as an expert contributor in the TriCo Libraries' digital repository and database assessment and planning project. Staff across the TriCo will be participating in the upcoming year in an important nationally recognized Digital Preservation Workshop so that we are working from shared best practice frameworks in planning for digital preservation and access for our collections. • Re-purposing of two open IS positions to enable greater baseline literacy (desktop support specialist) and academic technology fluency (educational technology specialist). • NEH Foundations grant awarded for planning		• Re:Humanities is a national undergraduate conference, in its third year, funded through TriCo Digital Humanities and recognized widely for its quality. • Intro and advanced GIS courses taught on all three campuses. Multiple departments interested in GIS for research and course projects. Students gaining work experience and, in a few cases, jobs leveraging GIS skills. • As outgrowth of CLIC and TriCo GIS grant,

	and piloting of Seven Sisters open access portal on history of women's education – Bryn Mawr as lead institution • Gina working regularly with faculty Committee on Libraries, Information, and Computing (CLIC) to identify and liaise with appropriate standing committees to support academic goals (e.g., Curriculum Committee, Committee on Appointments, Graduate Council) • IS and Provost's Office reviewing digital fluency competency models in higher education to inform infusion of digital fluency opportunities across the curriculum and to help faculty articulate and assess meaningful learning outcomes. CLIC faculty also contributing thinking to relevant digital fluency skills for Bryn Mawr students and ways we can scaffold these competencies (e.g., focused development on effective ways of presenting complex data and using data effectively to inform decision-making, abilities to use technology to do short presentations, opportunities and mechanisms for feedback on presentations in courses, awareness of societal concerns regarding security/privacy and legal/ethical issues around use of data and technology, personal strategies for managing one's own digital identity, design thinking as it relates to problem solving and transformation of resources into innovative solutions, ability to leverage digital tools for local collaboration and global communication and collaboration, etc.). An important connection for mapping and articulating progress in developing competencies will be eportfolio environments to enable students to connect their curricular		reviewing current demand for GIS at Bryn Mawr and across TriCo before term position expires in spring 2015. Faculty and staff developing proposal for next fall for approach to sustaining GIS programs and services at Bryn Mawr and across TriCo since this is a multi-disciplinary set of activities with broad applicability for faculty research, for faculty-student partnerships, and for students' development of digital

	and co-curricular experiences with their goals, aspirations, and developing knowledge and skills. The Education program has experimented with eportfolios, and IS and LILAC are working toward a small-scale pilot of this eportfolio model for the LILAC student advisory group. • TriCo Hack-a-thon – create similar co-curricular opportunities for BMC students to practice their skills, and highlight successes, e.g., the BMC team's victory at the Hack-a-thon this year. IS has recently sponsored a Philadelphia-area Wikipedia Edit-a-thon as part of the Seven Sisters edit-a-thon series for Women's History Month. This event focused on getting new users started on editing, and served to educate community members about the extremely low percentage of female Wikipedia editors (under 10%).		fluency and marketable skills. • We will track numbers of participants in co-curricular events sponsored b LILAC, IS, et al., and capture stories of success.
EXTERNAL DIGITAL RELATIONS			
Undergraduate Recruitment	• Website Revamp Project underway – Communications and IS partnership. Platform and functionality developed, training and content development in progress. The Phase 1 launch will include Admissions, Alumnae/i, Financial Aid, Giving, and the landing pages for the primary navigation, such as Academics and Student Life. We are aiming for a late spring/early summer launch of Phase 1 of the Web Revamp project, but the timing of the launch will be sensitive to the needs and cycles of the offices responsible for communicating with the primary constituents: prospective students and alumnae/i.	• See budget and fundin details under Marketing & Communications below.	• The website revamp will giv Enrollment better access to Drupal and Google Analytics data (currently not access to much web data for Admissions). Specific Qs: • What are the

	• Overall goal for the new website (outside of engagement) is clearer and simpler navigation, which we think will impact user-friendliness and the overall experience. Right now, the "image" our site portrays of BMC is dark, disorganized, and overly wordy. We are confident the new site addresses these issues quite well. • Continuous enhancement and monitoring of social media channels. Undergraduate Admissions currently has a very robust blog on Tumblr (see stats in righthand column). Other outlets currently employed by Undergraduate Admissions include an active "Class of 2018" Facebook page and Pinterest in addition to making regular use of the College's Twitter and Instagram accounts. • Admissions is currently working with Communications on a rollout plan for the new video content produced by 9.14 pictures that has recently been completed. This will include both the Admissions site, as well as social media, and will most likely be used primarily this summer/fall for an "Apply to Bryn Mawr" campaign. These videos will be deployed by the Admissions Office as part of their yield strategy throughout April and May. After yield, the videos will be available to the public on YouTube, and will be pushed out through other areas of the website, on social media, and other vehicles. Part of the project was to provide a model for in-house duplication.		bounce rates and is the amount of time users spend on the site increasing? • Is the number of uniqu visits increasing? • What might we do differently to better engage with an international prospective student (or any other key constituent group)? • At Bryn Mawr, we recruit ver personally, and that concept guide our social media efforts as well. Since our numbers are small, we measure the effectiveness of our social

			presence not solely on numbers of visitors, friends or re-posts, but on the quality of interactions and conversations. We place a large value on the "word of mouth" we hear from high school visits, on the road, and here on campus during daily visits and events. • Of course measurement is also critical to improvement. Last fall, we launched a new admissions blog on Tumblr that has gained a steady (and growing) following. Mo

			nthly visit to our Tumblr blog have increased from **352** (Jan) to **408** (Feb) to **791** (March). We've averaged **866** page-views per month during this time. • The Class of 2018 Facebook page has **493** total likes, which is up from **351** on 3/24/14 (we saw a significant increase since the release of RD decisions.) -Monthly average number of peopl engaged with the page - **618** (since 1/1/14) -Monthly average number of people sharing

			stories about page (likes, comments, etc): **203** (also since 1/1/14) -We average **22** daily repins on Pinterest (since 1/1/14 and the average daily reach has been **1,827.**
Alumnae/i Engagement	• See website revamp status under Undergraduate Recruitment. • As part of the website revamp, the Alumnae pages are being redesigned to feature more dynamic content and easier navigation, and to make information about events, programs, and resources more accessible. • Transition from Harris to iModules for Alumnae/i Association (Summer 2014) • Executive Director of Alumnae/i Association bringing together faculty and colleagues from across departments to make experiences available to alums via digital technologies. • The Alumnae Association is working with the Provost's Office to post 360 lecture videos that were captured via our campus-wide Tegrity lecture capture system. This opportunity was identified in a meeting of Gina Siesing, Tracy Kellmer, Sarah Theobold, and a subsequent meeting with Jennifer Spohrer to identify content that is already occurring, e.g., 360 lectures, and discuss ways to make it available to alumnae/i on the website with low	• See budget and funding details under Marketing & Communications below.	• We will want to measure engagement in a broad way using analytics to determine not only what pages are most visited, or what content goes viral on social media, but also what features entice people to complete a desired call to action, such as apply or give. We also want to know what are the most effective

	overhead for campus resources. • The Provost's Office has created emeriti faculty video interviews which the Alumnae Association is posting on the Bulletin site. • The Alumnae Association has utilized the Alumnae Bulletin and Facebook to publicize alumnae/i access to JSTOR (May 2013 Bulletin) and Mango (Feb 2014 Bulletin). The Bulletin is planning to run an overview of all services available to alumnae/i in the upcoming May issue. JSTOR and Mango will be included in this piece. In the future, the Bulletin plans to run short stories with testimonials by alumnae/i who are using JSTOR and Mango with interesting results.		means for driving people to the websites—e.g., email, social media, texting—and how they interact with it once they are there. We'd also want to track the differences in behavior within a constituency group in a better effort to tailor or customize the experience based on demographic information, such as, what might we do differently to better engage with an international prospective student? • The Alumnae Association will use Google

			Analytics to measure traffic and engagement with the website content mentioned above. Analytics will help us measure the appeal of the content and will inform decisions about future content.
Marketing & Communications	• See website revamp status under Undergraduate Recruitment. • Continuous enhancement and monitoring of social media channels • Communications is wrapping up a video strategy and production project. The department has contracted with 9.14 productions to create a series of videos that exemplify the College's positioning and relevant proof points. These videos will be deployed by the Admissions Office as part of their yield strategy throughout April and May. After yield, the videos will be available to the public on YouTube, and will be pushed out through other areas of the website, on social media, and other vehicles. Part of the project was to provide a model for in-house duplication.	• Project budget for Website Revamp Project ($550k). Between FY14-FY18, a $100k allocation will be gradually added to the annual operating budget for Communications/IS for continued evolution and development of the website, and for the recurring costs of website refresh. The Communications Office also allocates resources from its budget to writing, photography,	• We will want to measure engagement in a broad way using analytics to determine not only what pages are most visited, or what content goes viral on social media, but also what features entice people to complete a desired call to action, such as

	• The College's social media presence continues to grow steadily. Since Nov. 20, 2013, Facebook has increased from 6,741 followers to 7,138, a gain of 397. Twitter has increased from 4,498 followers to 5,944, a gain of 1,446. On Nov. 7, 2013, we launched in Instagram account and gained a following of 619 to date. • April 1 "Annual Outsider" edition and Inside Higher Ed stories about "Brn Mwr": The BRN MWR prank notification reached **32,224** individual Facebook feeds (with **6,875** users clicking on the post) thanks to **179** total shares of the post and **797** total likes. Nearly **70** users tweeted the link and **18** shared it on Tumblr. *How that translated to web traffic?* The homepage saw **7,620** pageviews on April 1 with over 66 percent (**5,088**) clicking on the news story about the name change. Approximately half of those pageviews (**2,424**) came from users clicking on the College-generated bit.ly link. Over 65 percent of these pageviews came from new visitors to the site. *How else did people find it?* The top non-College sourced traffic referrals to the homepage came from: **Facebook** (visits from the full and mobile sites combined, totaled about 35 percent), **Inside Higher Ed** (13.5 percent), and **Jezebel.com** (4.7 percent).	video production and special projects, that result in content that supports the website, among other communications vehicles.	apply or give. We also want to know what are the most effective means for driving people to the websites—e.g., email, social media, texting—and how they interact with it once they are there. We'd also want to track the differences in behavior within a constituency group in a better effort to tailor or customize the experience based on demographic information, such as, what might we do differently to better engage with an international

			prospective student? • All Bryn Mawr social media subscriber numbers increasing regularly. Current as of 3/25/14: Facebook followers: 7,13 Twitter followers: 4,944 Instagram followers: 619 (launch date: 11/7/13)
FOUNDATIONS FOR DIGITAL BRYN MAWR	• MS Windows Active Directory Infrastructure refresh (completed spring 2013) • TriCo Virtualization stack (VMWare) refresh (completed summer 2013) • SEADS PeopleSoft Student implementation (Haverford now on same platform with BMC – completed summer 2013 with modifications into fall 2013) • Fischer Identity Management Phase 1 complete (SEADS - completed summer 2013 with modifications into fall 2013) • SEADS OneCard Access and Services projects complete (SEADS - completed summer 2013 with modifications into fall 2013) • BMC Virtualization infrastructure (VMWare) refresh (completed fall 2013)	• Dalton 300 upgrade funded by College – eight-year refresh cycle currently.planned as part of regular classroom upgrade. • SEADS phase 1 projects were funded in appropriate proportions by BMC and HC jointly. • All current infrastructure and systems upgrade projects other than SEADS, TriCo Library,	• The MISO survey, developed here at Bryn Mawr and administered nationally b David Consiglio, Director of Research Support and Educational Technology in IS, is a web-based

	• Zimbra email/calendar system virtualization (to be completed spring 2014) • Network Internet Router refresh (to be completed summer 2014) • Drupal CMS implementation & web site migration (underway- initial launch summer 2014) • SAN storage infrastructure refresh (50% completed; full project to be completed summer 2014) • Backup solution refresh (50% completed; full project to be completed summer 2014) • Embark and Portfolio Image management system upgrades (to be completed summer 2014) • DSpace (TriCo Repository) upgrade (completed summer 2013) • Network Core Refresh (completed fall 2013). The network upgrade was both a regularly scheduled event (we refresh the core/edge about every 6 years), and necessary to begin building the redundancy that was requested. The core itself is now split between Canaday and Guild. This has yielded a significant increase in processing capability and available bandwidth. The new core is significantly faster (128Gbps interconnect vs. 76Gpbs backplane) than the last and provides 10Gbps Ethernet capability. Guild and Canaday have a 40Gbps load-balanced connection between them, providing significantly more bandwidth to our TriCo VMWare cluster and services and Web Server (both located in the Canaday server room). The connection also provides a redundant pathway for our dual ISPs, though we are not using it just yet.	and Website Revamp projects are funded through the IS budget.	quantitative survey designed to measure how faculty, students, and staff view library and computing services in highe education. We use the bi-annual survey responses from Bryn Mawr students, faculty, and staff to assess the importance and quality of our services and to inform continuous improvement. We also use the benchmark data from peer institutions provided b MISO to compare our service portfolio and

	As we build out the new single-mode fiber optic network on campus, we install cable from each location on campus to both Guild and Canaday. We are in the early days of this process on campus and have not installed very much single mode fiber yet. Park will be the first complex to be "multi-homed" to both locations this summer. This will provide redundant 10Gbps links to the Science complex. As of now, we have about 10 individual 1Gbps links that only connect to Guild. Brecon may be the 2nd building to go online this way, but we will have to start upgrading the equipment in the buildings to get there. • PeopleTools (PeopleSoft) system redesign (underway; to be completed spring 2014) • Aruba Wireless upgrades (ongoing) • Aruba ClearPass deployment in pilot for faculty and staff conference rooms (Apple AirPlay enterprise management solution - ongoing) • Infrastructure Planning: TriCo conversations to inform local planning around system and storage capacity planning and provisioning/funding models, Internet 2 membership and associated services, methods of authentication and authorization within and across campuses (CIOs, Library Directors, BMC Chief Technologist & Director of Networking/Telecom). Identity Management roadmap development. Systems and storage provisioning/cost model development for BMC, TriCo Libraries, and BiCo IT systems (Right now BMC is absorbing some of these BiCo/TriCo costs, so articulation of models will		quality with parallel services at peer institutions. • IS also participated in national IT and Library core data and staff salary surveys annually, via the EDUCAUSE Core Data Service, the Consortium of Liberal Arts Colleges (CLAC), and the Oberlin Group. • IS has an Assessment Working Group that coordinates all of our qualitative and quantitative assessment activities, including both the holistic service assessment

	yield revenue from partner institutions to offset the services we're providing).
	• Collaboration tools and spaces:
	  • Already in place: Video conferencing facilities in Dalton 300 and Park Science. Conference phone / bridge phone services. Adobe Connect for web conferencing. Moodle organizational sites and collaboration tools. Many people using Skype, Dropbox, and similar cloud services.
	  • Current initiatives: Dalton 300 upgrade (summer 2014); IS and Provost's Office partnership to transform Visual Resources room in Canaday into space for individual and collaborative work on digital images and media and resource for supporting presentation of visual data – existing staff supporting course and research activities in new ways (summer 2014); we will be working to develop rubrics to help people map goals to appropriate collaboration tools and services/support, and education campaign to raise awareness of possibilities.
	• Administrative Information Systems has reinvigorated a Data Standards & Administrative Information Systems Advisory Group to review standards for data usage across the College and to prioritize projects and enhancements in this space.
			surveys, project-specific assessments, and focused assessments to address known areas of organizational development or enhancement
			• IS staff draw regularly on data, such as library resource usage data and help desk tickets, to analyze trends and to make decisions about how we allocate resources to meet community needs.
			• We will be soliciting quarterly input from AIS partners on the quality of planning,

			prioritization, and delivery of administrative information system projects and enhancements. This model in the administrative area will inform planning for IT governance overall for the College.

Recommendations for Future:

The table below outlines key recommendations toward bringing Digital Bryn Mawr goals to fruition. For each of the recommendations, we have articulated costs and funding sources where known or plans to develop cost models where needed, as well as appropriate metrics for assessing progress and determining our levels of success going forward.

Major areas of focus include developing a stronger core of expertise and services to enable academic technology integration across disciplines, leveraging the new content management system and social media tools to create a dynamic and engaging web and social media presence for the College, and moving IT portfolio planning to next levels of maturity to ensure that we continue investing and transforming wisely to meet the evolving needs of the College in the context of a fast-evolving technology landscape.

Major Areas of Priority:	Recommendations for Future:	Costs & Funding Sources:	Metrics for Assessment:
OVERALL	• Ensure that appropriate bodies are well-informed about Digital Bryn Mawr priorities and that they are integrating these goals into their work (e.g., grant	• For systematic integration of technical competencies into job descriptions and staff education, the College could allocate additional	• Staff: • How many job descriptions integrate require competencies? • Assess skills based on job

	steering committees, CLIC, SGA, Curriculum Committee) • Instantiate faculty liaison program(s) and appropriate strategic thinking mechanisms to enable IS to test ideas with community stakeholders, and to enable community stakeholders to serve as advisory to CIO & Director of Libraries around how we leverage information, technology, and our human resources to further Bryn Mawr's goals. Strategic/policy-level advisory body including Board members and other alumnae/i. Expanded practical advisory mechanisms on campus, e.g., student and staff representatives on CLIC / IS Advisory Group. • Systematically integrate technology literacy requirements in job descriptions and performance coaching; screen for experience and ability in recruitment; augment single Staff Education FTE with appropriate training opportunities for existing staff. • Implement Information Security/Stewardship model for Bryn Mawr, including education and prevention	funds to departmental training budgets and/or fund IS to employ additional staff education resources. We currently have a single Staff Education FTE. • For information security expertise, we currently have no dedicated resources on campus and would benefit from investment in this area to mitigate against risk of significant breach and to educate the community. For Bryn Mawr, it would be optimal to have a security expert to develop and manage information stewardship and security programs for the College. We would like to explore potential joint investment with Haverford in this resource; however, a shared information security officer to manage programs makes sense mainly in the context of merged information technology operations.	requirements. • Staff training available and #'s accessing? • How confident do staff feel in terms of ability to learn required technical skills and to use them in their jobs?

	programs for staff, students, and faculty, risk mitigation around sensitive and regulated data, and campus-wide policies and practices to prevent incidents where possible and respond appropriately where necessary.		
ACADEMICS	• Continue to frame grant programs in ways that seed innovation, but also (and critically) help us to build sustainable and scalable practices at the College. • Use phenomenal opportunity of 3 ½-year Mellon grant for "Developing a Liberal Arts Curriculum for the Digital Age" to further blended learning and integrate digital technologies across the curriculum, especially in the social sciences and humanities. Leverage grant period and fundraising to operationalize and augment faculty development, instructional design, and academic technology services and programs so that faculty and students are supported broadly and deeply across the curriculum as they integrate technology into their teaching and learning activities and engage i digital scholarship projects.	• Continue to gain endowment funding to support these goals fully. A portion of the academic recommendations designed to bring the Liberal Arts Curriculum for the Digital Age to scale will be funded operationally following the grant period via already allocated endownment.funds.. • $75,000 - $80,000/year - salary and benefits for each additional technology consultation and support position (instructional design, faculty development, and related educational technology expertise as key competencies for these positions). Not yet funded. • Student academic technology internship program: $25,000 - $40,000/year. • Funding for bootcamps,	• Faculty: • How many have adopted blended learning approaches? • How many are using Moodle quizzes to enable students to check understanding and receive feedback? • What other instructional technologies are adopted and integrated in significant numbers and ways? • How many are engaged in digital scholarship workshops and projects? • How many are participating in opportunities for learning about academic technology uses? • How many people report they are open to using technology in their teaching and research? • How many feel they are using technology effectively

	• Building on the successful NGLC/Mellon model, each year we will continue to facilitate a multi-day institute for faculty and staff focused on course design/redesign (focused on blended learning or other forms of technology integration to support desired learning outcomes).
	• Hire 2-3 additional Educational Technology Specialists to augment the team of academic technology partners. This will enable:
	  • Faculty and staff to create meaningful and innovative curricular and co-curricular experiences for students, and to assess those interventions in terms of learning outcomes and other forms of student success.
	  • Students to leverage digital portfolio thinking and practices to articulate their emerging competencies for relevant audiences and to showcase their work and capabilities.
	  • Alumnae/i to benefit from resources created
		workshops, conferences, trainings etc. = $30,000.
		• Equipment needs/year = $50,000 in classroom upgrades + $15,000 minor equipment.
		• Innovation fund for faculty experimentation will be partially funded via already allocated endowment funds.
			to support student learning and enable scholarship?
			• Have we created year-round opportunities for faculty to learn about and share possibilities (faculty development), and at what levels are faculty participating?
			• How many larger-scale academic projects such as blended learning are staff managing?
			• What are the lessons learned and student outcomes - experience documented and reported to community to inform future projects.
			• To what extent are we able to provide sufficient just-in-time technical support (HW/SW, classroom and media technology), and are faculty reporting increased confidence in ability to innovate and be supported in the classroom?
			• How do faculty rate their experiences with baseline technical environment - email, classroom projection, etc. How positive/negative do they feel on a confidence scale? How stable/robust do they

	(or licensed) in the context of the student/campus experience.
	• Particular recommendations for faculty development and support model:
	  • Individual/small group consultation is most helpful for faculty. We need sufficient expert staffing resources to allow for on-call consultation for "medium/urgent care" - in the teaching moment or just prior as faculty are preparing for class.
	  • Conduct wellness checks with each faculty member – interview to learn about research and teaching goals and to suggest available tools, services, and approaches.
	  • Encourage faculty to take "technological sabbaticals" - 1/2 day per year to explore new features of software that is most useful. Dedicated capacity to consult in support of exploration.
	  • Connect faculty with
			feel the environment is?
			• Is instructional desig consultation leading to increasing integration of technology into course curricula?
			• Do faculty feel they are receiving adequate guidance for assessin effectiveness of new approaches to inform continuous course and program enhancement?
			• To what extent do faculty feel they are learning from one another via pee networks and facilitated faculty development opportunities?
			• Students:
			• Assess skills based on digital fluency categories and criteria developed through Mellon project/LILAC.
			• Articulate plans for curriculum
			• How many alumnae/I have careers and jobs that have technology as a significant focus?
			• How often are students acquiring jobs based on digital proficiency?
			• How well do students feel technology serves the goals

	one another based on recognition of shared interests. Help them to form peer mentoring networks based on common goals that emerge through consultation within and across disciplines. • Faculty have interest in learning about multiple ways of presenting information to their students, including adaptive technologies to ensure accessibility, and in learning about how to integrate technology appropriately to meet learning objectives in the course and discipline. • Integrate into syllabi and policy statements course expectations around require software/formats and help students in eSem learn about common expectations for ability to share files within a community (digital fluency issue is raising awareness about standard and proprietary packages and translation across platforms, import/export of file formats). • Faculty development for eSem		of the course? • % of students with a digital portfolio? • # of students for whom the portfolio is a significant factor in their graduate school admissions and/or hiring for jobs? • Is there any plan of study in which a student would be able to avoid courses and active learning experiences that include competency-building digitally enabled activities? • Have eSems and majors articulated digital fluency learning objectives relevant to work in the liberal arts and/or the specific field/discipline?

	instructors as part of current orientation. • Baseline orientation to Moodle, email/calendaring, network drives, and other elements of our particular campus environment. Another digital fluency issue: what are the pros and cons of local/personal machine and storage vs. cloud-based services. Privacy and understanding the Digital Footprint we're each creating. Managing your own digital universe over time.		
EXTERNAL DIGITAL RELATIONS			
Undergraduate Recruitment	• Complete Website Revamp Project – initial launch targeted for early summer. • Continue enhancement and monitoring of social media channels. • Admissions is planning to implement regular/more frequent video posts to web and social media as part of next cycle's communication plan (which will be completed this summer). • Major goal for next year is to include even more current students and recent alumnae in UG Admissions social media	• Project budget for Website Revamp Project ($550k). Between FY14-FY18, a $100k allocation will be gradually added to the annual operating budget for Communications/IS for continued evolution and development of the website, and for the recurring costs of website refresh.	• See above under Recent Accomplishments & Current Initiatives.

	efforts.		
Alumnae/i Engagement	• Complete Website Revamp Project – initial launch targeted for early summer. • Transition from Harris to iModules for Alumnae/i Association (Summer 2014) • Executive Director of Alumnae/i Association bringing together faculty and colleagues from across departments to make experiences available to alums via digital technologies.	• Project budget for Website Revamp Project ($550k). Between FY14-FY18, a $100k allocation will be gradually added to the annual operating budget for Communications/IS for continued evolution and development of the website, and for the recurring costs of website refresh.	• See above under Recent Accomplishments & Current Initiatives.
Marketing & Communications	• Complete Website Revamp Project – initial launch targeted for early summer. Subsequent migration scheduled in phases. • Continue enhancement and monitoring of social media channels.	• Project budget for Website Revamp Project ($550k). Between FY14-FY18, a $100k allocation will be gradually added to the annual operating budget for Communications/IS for continued evolution and development of the website, and for the recurring costs of website refresh.	• See above under Recent Accomplishments & Current Initiatives.
FOUNDATIONS FOR DIGITAL BRYN MAWR	• Plan for next-generation network and data center upgrades. • Integrate network infrastructure and "smart" classrooms and collaboration spaces into building plans (e.g., Haffner, Park, Canaday). • Specific project: provide	• We plan continuously and make incremental improvements to keep the network and data center infrastructure robust for Bryn Mawr's needs into the foreseeable future. For instance, the campus-wide wireless project has been	• IS: What percentage of time is staff spending on maintenance of commodity infrastructure and tools vs. enabling meaningful or innovative use of technology in academic and administrative areas? • # of consultations with

	wireless access to Thomas via tested model that will work for the structure (thick walls, lead); significant number of classrooms and faculty offices will be covered. Cost to be covered by IS Reserves (~$180k).	completed recently; however, we need to continue planning as wireless technology and mobile usage practices evolve. For next-generation network and data center planning, we need a full professional study to determine specific goals for our context and associated costs. This study should begin with our goals for Digital Bryn Mawr, and should be informed by roadmapping for business continuity and disaster recovery, and by analysis of campus trends and trends in higher education infrastructure services including models for provisioning systems and storage. • Upgraded classroom technology and infrastructure, i.e., opaque blinds and chalk; when screens are down, still need a place to write: Additional cost of $50,000-$65,000/year.	faculty? • # and outcomes of course design and development projects? • How robust do classrooms seem to faculty/students based on current technical environment, maintenance, and support model?