

2009 REVIEW OF BRYN MAWR COLLEGE LIBRARY AND INFORMATION TECHNOLOGY

Introduction

The Committee is delighted to take the opportunity to examine the IS organization now approximately eight years from the time of the decision to look at library and IT operations as a part of a whole. During these years, considerable progress has been made to improve service, combine IT functions into more coherent and centralized services for the campus, and to infuse the IS staff with a service ethos that is serving the campus well. It is apparent to the Committee that the process of completing the self-study and accompanying documents, and the discipline to prepare for our visit has produced positive results. We hope that the self-study has been widely available on campus, as it highlights achievements that could be buried in annual reports and other more diverse communications. We were not positioned to conduct a full-fledged external review of the Bryn Mawr operation, concentrating on highlights related to particular questions Bryn Mawr asked about itself and questions about the Bryn Mawr/Haverford relationship. There are certainly areas that may benefit from further study.

Much that we would have included in this report, if we were not also producing a report on the Bryn Mawr-Haverford collaboration, will be found in that other report. The two should be considered together.

Operations

The College has made considerable strides in centralizing its computing operations, and the work recently done to develop standardized ways of handling e-mail, authentication, single sign-on, and other core functions is an investment that will pay off. The IS organization was also effective in communicating to users the “why” of this change—the inefficiencies and real costs associated with a large number of e-mail clients and individualized choices. The IS organization can take comfort that this kind of campus-wide change is possible at Bryn Mawr, but that it takes a lot of communication, a very effective planning and project management functions and courage—all of which were present for this effort.

While we did not get to spend enough time on the campus to get a detailed sense of this, there is still a very large amount of individual autonomy at the departmental level—departments have computer labs under their administration with equipment and software of their own choice—and at the individual level, where specialized needs are fairly widespread. This leads to inevitable tensions. There will be more models of computers on campus than would be the case if they were purchased centrally. There will be more versions of software on campus than would be the case if there were standardized version management. There are individual faculty members, and we met some, who feel entitled to individual choices on these matters. The committee members have heard this before at

other campuses, and are not surprised. Yet we don't agree that this has to be a matter of "the campus" versus "my needs." No IT/IS department can always be in the position of saying "no" to individual choice. We would encourage the Bryn Mawr IS staff to continue their efforts to reduce costs through standardization and limitation of variation in technology that is unrelated to productivity. We would also encourage continued dialog between the CIO and the Provost regarding this effort so that members of the faculty are brought along, and that as standardization improves performance, the improvements and cost reductions can be realized.

In particular, to the extent that centralized purchasing of computers, printers, projectors and other peripherals is not practiced, it should be. There will be ongoing efficiencies, both in cost and in improved performance, that come from reducing the number of supported models to a necessary minimum. We sense, but we do not know for certain, that reducing the number and variety of "departmental" computing facilities might not be welcome, but we do not see any advantage to having equipment that does not meet campus-wide specifications so that software upgrades, printer drivers and any other interfaces with other computing equipment can be done at the minimum cost to the College. Similarly, integrating better grant-funded hardware and software purchases may clarify for all the extent to which it can and cannot be supported by the College. A single inventory management system as well as purchasing could help with federal purchasing and reporting requirements could save the faculty a lot of time and effort.

Having made the commitment to a single centralized source for administrative information, Bryn Mawr is in a position to make continued enhancements that extend the reach of the data to meet student, faculty and staff needs. Information Services has recruited a staff of very talented people to support the centralized data and data transmission systems, and has moved in the right direction to make maximum use of this investment. The integrity of the data is key, and IS can help make this happen. However, the operating departments of the College are ultimately responsible for the data, its accuracy, and its use, so the most important role that IS can play is to assure that mechanisms are in place to assure that there is one standard format for each of the data formats, that operating departments use that standard, and adapt it when necessary, and that the updating of data is done in centralized ways so that all uses, including operating uses, institutional research uses, and publicity uses are served.

The College has already demonstrated that the future of data access and use for end users is in the Web. There is no magic to this. There will, however, be a constant pull to do too many things at once and to introduce more and more Web interfaces. The task of balancing user demands, having broad-based support for the priorities of developing them, and ongoing testing and improving them will be critical to the success of this strategy.

Elsewhere in this report the Committee recommends that Bryn Mawr engage in long-term and strategic thinking with Haverford and Swarthmore about the choice of an ERP. Bryn Mawr is making the best of its choice for PeopleSoft, which was a fine choice at the time. As opportunities arise at each college to move forward, the long-term vision of “leaning together” with respect to such centralized systems as networking and ERP will be critical. In the shorter term, this strategy may manifest itself as an apparent two-college choice, but, recognizing that constant change and constant (and expensive) market forces will be at play for all, a strategy that aims at convergence, when possible, will pay off.

As neither college has yet attempted to introduce a campus web content management system (CMS), working in concert on this, especially in the context of exchanging data with an ERP, could yield great fruit in the future. BMC has a strong, relatively recent hire working on the web, though this person alone will not be able to meet all the needs of the campus as so much information management moves toward the web.

Hardware, Software and Infrastructure

The IS department has made significant strides in many of the core technologies that will allow the College to balance its security needs and the functionality that the campus requires. To the extent that centralized identity management is a core value, other systems can be adapted to meet particular needs. The shadow systems that still exist, when they can be replaced by core functionality, should, as the dispersal of systems of record, and the dispersal of College data, most of which is subject to legal discovery and privacy law, should be kept to a minimum, and be the subject of constant review.

The administrative computing/Peoplesoft Steering Group and Data Standards Group could be charged with taking responsibility for all shadow systems (and the needed functions they currently play) that include regulated data, such as employment data, student records, and more.

The Committee observed that there is considerable work that needs to be done to make it possible for the students who take courses on the Haverford campus, and vice-versa, to be able to achieve a minimum of core functionality that any student would expect—the ability to register online and see a registration, the ability to use files associated with a course with a single login from either campus, the ability to use course-related materials from anywhere on either campus. There will be some challenges of this kind that will be more complex, such as using software licensed to an individual campus on the other location, so expectations of complete unity of the experience may need to be tempered, but the vision of a unified experience for students, or the ability of faculty members who teach on both campuses to have access to the records and registration of all their students in real time is a vision that should guide development, particularly in collaboration with Haverford.

We were not clear that replacement cycles and budgets had been put in place for servers, storage, network, and ERP. All of these represent significant expense and, in some instances, long-term commitments. On the other hand, they are integral parts of a rapidly evolving ecosystem. Neglecting anyone area, could inhibit the whole from functioning as needed.

Mobile computing has already arrived on the BMC campus. A comprehensive and centralized purchasing, support, and replacement cycle has not. As it has with desktop and laptop computers, BMC should assess and budget for the current and future PDA needs as well as a growing desire for more expensive laptops (relative to desktops) along with the secure network and file sharing systems they require.

A full assessment of the technological infrastructure of the college is clearly beyond the scope of a review as condensed as ours. Information Services should be charged to address this, and to bring in the appropriate outside help, particularly in the areas of disaster recovery; compliance with federal and state privacy, reporting, retention, and access rules; as well as compliance with industry requirements, such as the payment card industry's data security standards.

Staff

The Committee was impressed with the quality of the staff we met, and note that in terms of staffing numbers, Bryn Mawr is within the range we would expect to see for a college of this size. Recent hires have been strong, based on what we saw, and there has been an effort to take advantage of the leadership skills of the staff wherever they are situated within IS for the benefit of the College as a whole. We would expect, over time, to see a more developed academic technology emphasis. The basic orientation of the IT staff to be involved in the teaching and learning enterprise is noteworthy, and is an achievement of the IS organization that should not be underestimated. We did not have the opportunity to pursue this in depth, and the faculty members we met were not, at the time, disposed to explore this in depth, but the situation is very promising for robust interactions among staff and faculty members with respect to technology.

On the other hand, the Committee found a tension expressed both in the self-study and in the on-campus interviews regarding the best use of the decentralized locations of the library system with respect to delivery of other services: Should the "nodes" continue? Are computing staff members reporting to librarians? We believe that part of the strategic discussion of the future of the organization, and the future of the campus, would be helped by examining these as planning issues for the campus. Apparently there is some perceived advantage of having academic support people, whether library or IT staff, located close to the user. How this can be accomplished to maximize the service potential of this service organization remains an open question.

Some areas that maybe worth a broader conversation with the faculty include the type and level of support they envision, which must include with it an appreciation of the role they wish to play. There are many models available to the College. For example, at one end of the spectrum, the faculty could elect generalist support to do general things with technology, which could leave those faculty wishing to utilize more complex technologies largely on their own, and, at the other end of the spectrum, more specialized technology support which would facilitate faculty members use of more complex technologies while requiring those faculty members with more general technology interests and needs with less support. Something in the middle, while more staff intensive, may be the best for all. Finally, periodic conversations between faculty and staff of this nature could help clarify and coordinate roles and expectations.

We noticed a tension that is created when talented staff members are promoted away from jobs they have mastered, a tension that is exaggerated when the non-central locations are seen as a place to put entry level technology staff. We would ask the IS leadership to examine this strategy, as it has tended to place more emphasis on decentralized desktop support staffing, perhaps over-emphasizing the human resources demands of desktop/laptop support, while at the same time making it most probable that those positions will turn over when advancement is possible. IS might consider whether decentralized deployment of high end academic technology specialists who are involved with the faculty in curricular development might be a more effective way to use decentralization to advantage.