

2009 REVIEW OF THE BRYN MAWR-HAVERFORD COLLEGES OPPORTUNITIES FOR COLLABORATION

Introduction

Bryn Mawr, Haverford, and Swarthmore Colleges have important collaborative projects, resources, academic departments, and student groups in place. Most notably, in the Library-IT realm, is the Tri-College library catalog. More recently, the three colleges have together leased dark fiber to provide high bandwidth connectivity between the campuses as well as to offer redundant Internet connections. Both of these resources will pave the way for future collaborations.

The visiting committee was impressed by the extent to which the Bryn Mawr and Haverford students have merged the academic offerings of the two colleges—we were told that 600-800 students from each campus take courses on the other campus each semester. The visiting committee recommends that the colleges organize themselves so that there are contexts in which they can function, and legally be viewed, as a single body. For example, library collections such as digitized film assets could be made available on demand over the new Tri-College fiber. Student's educational records, which are regulated by federal law, could be managed together so that the way in which students learn and live among the two or three colleges will not be constricted by their proximity to the particular college that admitted them. The campus on which a course is offered ought not bind what information they can access and what they can do with it.

This transition will not happen quickly or easily. The leadership of both (or all three colleges) will need to move the institutions together in this new direction. In many areas the IT and/or Library portion of any collaboration can only be considered or achieved if those whom they support, such as the business offices, the registrars' offices, human resources, and the academic programs are equally committed to collaboration, shared oversight, and agree to work toward common procedures and practices.

The visiting committee met with senior staff from academic and administrative computing and the library from both colleges in order to ascertain which areas would be the most fruitful to consider for increased cooperation based on the efficiencies to be realized, degree of service improvements made possible, cost savings, and feasibility of implementation. Our specific recommendations for increased cooperation between HC and BMC are listed below. However, we would like to make clear that we feel strongly that given the state of IT at HC and the consequent number of critical tasks facing an incoming CIO (see HC review), it would be unwise to consider moving forward with a fully joint Library-IT department or a single CIO for the two campuses at this time.

At some point in the future, when the quality and stability of information technology services have improved substantially at Haverford College, it may be worth

returning to the question of whether a single CIO or a completely merged department could benefit both colleges. While we do not believe that a full merger is the best path to follow in the near term, improved communication via inter-campus committees in the areas of IT infrastructure, desktop support, academic computing support, library services, web content management, and administrative computing would only benefit both colleges. The committee heard repeatedly that staff did not know how the other campus did things. Sharing expertise and trust across campus boundaries will go a long way to creating a more fertile environment for future collaboration.

The committee also feels strongly that any future efforts at collaboration in the IT space can only be achieved if the incentives of staff at each of the campuses are aligned with any plans for collaboration. Collaboration is difficult and takes a special effort on the part of all concerned. It does not happen on its own. Unless senior staff (e.g., campus CIOs and non-IT department managers) believe that their performance will be assessed and that they will be rewarded based on their ability to achieve closer collaboration with the other campuses, it is unlikely that new collaborations will ever be given the necessary priority and will therefore not be achieved. Recruitment of a new CIO at HC provides the opportunity to assure that senior management will understand the importance of collaboration with BMC and Swarthmore; however, it will be equally important that BMC's (and ideally Swarthmore's) CIOs have their incentives similarly aligned.

The following are the observations and recommendation that the committee wishes to make:

Library Consolidation

TriCo and Tripod are often mentioned as examples of highly successful cooperative endeavors among the campus libraries. There is no doubt that the Union catalog and the ease with which faculty and students can discover and obtain materials from any of the member libraries are models of how the campuses can work together effectively; however, the visiting committee wondered whether more collaboration among the TriCo libraries in such areas as circulation, acquisition, and cataloging might not result in further efficiencies and cost savings. It was not clear to the committee whether this question has been studied and whether further collaboration has been rejected for some reason. The committee recommends that the matter of further collaboration by the libraries be analyzed in detail and documented in the hope that additional consolidation can be achieved or even if not, that the collaborative work of the libraries can inform any future efforts at collaboration in the IT space.

Internet Connectivity

This is an area in which the campuses have already been very successful at working together. The campuses are sharing very high-bandwidth connectivity to the Internet and the recent acquisition of dark fiber will permit new bandwidth intensive applications such as video streaming to be delivered from one campus to another.

The campuses have very different network topographies and architectures, which reflect different campus policies regarding such things as access to databases and services delivered to faculty, staff, and students. Some of these policies may be historical artifacts that were original driven by constraints imposed by the technology and some may have been a result of management decisions. In any case, it is recommended that a thorough review of these policies by HC and BMC be undertaken to understand their rationale and value and with the goal of simplification and harmonization.

Peripatetic Student Experience

In addition to the need to improve the sharing of student data for administrative use, the committee feels that additional effort needs to be put into making the experience for students who take courses at more than one of the TriCo colleges as seamless as possible. For example, current HC and BMC students are given file space on their respective campuses for the purpose of saving their personal and course related data. The use of these file servers facilitates orderly backups as well as accessibility from any computer on a student's home campus. However, these file stores are not easily accessible from the other campus. A HC student taking a course at BMC does not have (easy) access to her HC files while at BMC. This situation could be improved if each college were able to authenticate any student for access to file space at the other college or if the colleges were to adopt a shared file store with accessibility from either campus or potentially even from outside of Bi-Co (with appropriate authentication).

The need for a common method for authentication and authorization cannot be over emphasized. A single authentication system would facilitate many other shared services including authorized access to student records, sharing of software licenses and other licensed content. The existence of many independent authentication systems at HC makes such shared services difficult or impossible, as well as creates significant security exposures.

Registrar

The visiting committee met with Lee Watkins, Registrar of HC College, to gain an understanding of the processes that are followed for students taking courses at BMC College. Registration and grade information is currently produced by each college's

respective administrative computer system; however, when it is transmitted to HC it is first printed out and then the information is manually entered into HC's system. The registrar was not able to explain why the information could not be transmitted and entered into the HC system electronically. This extensive use of manual data entry may be a historical artifact; however, the visiting committee feels that a direct transmission and entry of the information to the HC system should be developed in order to increase efficiency and reduce the likelihood of error. The committee did not have the time to gain a full understanding of the differences in the rules and practices governing registration and grade reporting at the two colleges and is therefore not able to make any recommendations with respect to the value or feasibility of having a single registrar office for HC and BMC. This may be worth pursuing once a new CIO is in place.

The committee was also surprised to learn that the HC registrar does not have direct access into the BMC student services system in order to view information relating to HC students who take BMC courses (even those majoring in BMC departments). Given the number of courses taken each semester by HC students at BMC (and vice versa), the committee recommends that a way be found to provide access for the Registrars (as well as faculty advisors) to grade information for their students irrespective of which college is hosting the course. Another possibility is for each of the college's student information systems to contain the information about all students within Bi-Co. This would facilitate access for administrators and faculty with a need to advise their students; however, such a merging of data should only be considered after consultation with legal counsel regarding relevant FERPA restrictions on sharing student data.

Servers

All three of the TriCo campuses currently run numerous servers as part of their respective infrastructures. Maintaining these servers requires a dedicated staff with both Windows and Linux expertise on each campus. There may be an opportunity to have one of the campuses maintain servers for TriCo. There are many details that would have to be worked out including service-level agreements and cost sharing, however there is a potential for a significant net savings by each of the Trico schools if centralization could be achieved.

Shared Academic Support

The visiting committee felt there was a potential opportunity for shared academic computing support. As both, and probably all three, colleges strive to put in place much needed academic technology support organizations, economies of scale may be found in such areas as cross-campus academic computation support (Linux, clusters, grid, etc.); animation, multimedia, and smart game development; computer assisted design; geographic information systems; statistics; media management and display; as well as

customized programming. Currently the colleges seem to have one good person in place, which could be harnessed for cross-campus staff backup. As there are many, often discipline and/or technology-driven areas of support needed, the colleges may have an opportunity to divide up the needed staff expertise between the campuses. By centralizing specific faculty support at a given campus it should be possible to reduce duplication of effort and improve services. Faculty and students would need to accept and work with such divisions as well as understand that a single project may require cross-campus support, e.g. stats, GIS, and custom programming.

Email

BMC has recently completed the conversion to a new e-mail platform (Zimbra Collaboration Server) that provides web-based e-mail and calendaring with support for PDAs, Blackberries, and SmartPhones. As HC's requirements in this area are likely to be quite similar to BMC's and given that HC does not yet have a comprehensive e-mail and calendaring solution, there may be an opportunity for collaboration with BMC hosting a Zimbra service for BiCo or even TriCo. Such collaboration would take advantage of the staff expertise already in place at BMC and could provide a net cost savings to HC.

Telephone Services

Although the visiting committee did not speak in detail with anyone regarding telephone services, the very high-bandwidth connectivity between the BiCo (or even TriCo) campuses may offer the opportunity at some point in the future for one of the campuses to support telephone services for the other campuses. The BiCo campuses might want to consider implementing an open source solution using commercially supported software such as Asterisk. Such a solution could be designed to offer wireless telephone services using the campus WiFi network. Since use of the WiFi network avoids using the commercial cellular network, thus providing cellular-like services with the potential for better coverage at a lower cost, it might be possible to levy a modest charge to students for this service as a way to finance the build-out of the campus wireless network.

There are many additional areas that the Bi-Co as with many of its peers still need to re-conceive in the context of current technologies, such as online job applicant tracking systems to help human resources manage the changing landscape of hiring and integrated personal and Bi-Co-wide event calendars. Such examples of the changes to the lifecycle of information and what we have and will come to expect of it will continue to evolve in the years to come. Bryn Mawr, Haverford, the Bi-Co, and the Tri-Co are, along with colleges and consortiums around the country, entering a period of rapid change to almost everything they do.