

## **ITAB Report for the Academic Year 2009 – 2010**

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The Information-Technology Advisory Board advises the Chief Information Officer, and other senior officers as appropriate, on resources and priorities concerning all aspects of computing, information management, and communication technology. It reviews and makes recommendations on the University's planning and implementation of current and proposed computing and information technologies. The Board reviews and makes recommendations about policies consistent with the goals and objectives of the University for the proper use of computing resources by faculty, staff, and students. Its goals include enhancement of the academic environment through the effective use of computing and communication technology, including appropriate computing, information, and communication support for teaching and research. The Information-Technology Advisory Board is also a source of input and feedback regarding matters of administrative computing, communication, and information technology needs and requirements.

ITAB meets biweekly during the academic year. Its executive committee, which sets the agenda, meets on the alternate weeks. The current membership of ITAB is (\* denotes members of the executive committee):

- Michael Pickett – Vice President for CIS and CIO (Chair)\*
- Thomas Doepner – Associate Professor (Research) of Computer Science (Vice Chair)\*
- Harriette Hemmasi – University Librarian
- Jan Hesthaven – Professor of Applied Math, Director CCV
- Nancy Dunbar – Associate Provost\*
- Geri Augusto – Adjunct Assistant Professor of Public Policy
- John Cayley – Visiting Professor of Literary Arts
- Joseph Rován – Associate Professor of Music
- Catherine Axe – Director, Disability Support Services, Office of Student Life
- Anjali Sridhar – Asst. Director, Third World Center
- Jeffrey Hiris – Systems Manager, BioMed Gerontology
- Steve Lee – Medical Student
- Gal Michael Peleg – Undergraduate Student
- Ang Zheng – Undergraduate Student
- Andrew Ferguson – Graduate Student, Computer Science
- Andrew Lison – Graduate Student, Modern Culture & Media
- Terri-Lynn Thayer – Asst. Vice President for CIS & Deputy CIO\*
- Catherine Zabriskie – Director, Academic Technology Services, CIS
- John Spadaro – Director, Technical Architecture & Outreach, CIS

- Geoffrey Greene – Associate Director, IT Support and Production Services, CIS

ITAB minutes, handouts, and suggestions for future agenda items are kept on a wiki that's maintained by CIS and is accessible (and editable) by all ITAB members.

## **1 Summary of Accomplishments**

ITAB began the year by revising its charter to acknowledge the fact that its chair is both the head of Computing and Information Services (CIS) and the chief information officer (CIO) for the entire university. ITAB's revised charter reflects the need to advise its chair on "all aspects of computing, information management, and communication technology" as they affect the university. The name of the board was changed from Computing Advisory Board (CAB) to Information Technology Advisory Board (ITAB). These revisions were approved by the FEC on September 15, 2009 and by the faculty on October 6, 2009.

ITAB's major task in the academic year 2009-2010 was to increase its knowledge of IT at Brown, both within and outside of CIS. We began the year by exploring aspects of IT lying outside CIS's purview. IT directors in the following areas presented overviews of their operations to ITAB:

- Facilities
- BioMed
- Campus Life
- Library
- CCV
- Center for Gerontology and Healthcare Research
- Computer Science
- Engineering

In addition, CIS told us about its activities over the summer and its major ongoing projects. They explained how they were coping with the economic crisis and the budget reductions, and how this affects their strategic plan.

In the remainder of this section we go over the various IT-related services discussed in ITAB as well as some major CIS initiatives on which ITAB provided feedback.

### **1.1 IT-Related Services**

We heard a number of presentations on many of the IT-related services provided by CIS and others. The various presentations and our attendant discussions are summarized below.

#### **Academic Technology**

The Academic Technology Steering Committee (ATSC) was set up last year, partly to get faculty and student input on IT projects supporting teaching and learning. A concern expressed in the discussion was that this committee focuses only on instruction. Some of the technology projects they evaluate would be useful for researchers as well; we suggested that research concerns should be included in their deliberations.

One project approved by ATSC is equipping selected classrooms with lecture-capture facilities. Media Services (recently made part of CIS) gave a presentation of what has been done. Prof. van Dam of Computer Science was invited to provide counterpoint, since he has been using for many years lecture-capture technology different from that provided by Media Services. Because van Dam and Media Services work with each other, his concerns were not new to them, but illustrated some of the range of possibilities. Media Services is providing a facility for general use by individual faculty members, while van Dam has considerable experience and expertise in the area and has assistance from his TAs.

As for the lecture-capture facilities provided for general use by Media Services, concern was expressed that it caters to a “PowerPoint” style of lecturing that is not used by all. However, it was not clear what an alternative would be that is easily used.

Another important category of academic technology is video and teleconferencing. Some ITAB members with experience in this area related it to the rest of us. The Instructional Technology Group (ITG) has been helpful in assisting with video and teleconferencing, but it has been a learning experience for all involved. Things are particularly challenging in international conferences, especially when there are language issues (as when the technical people on the other end don’t speak English).

CIS has set up a video-conferencing facility (CIT 210) that is available to all members of the university community. ITAB members strongly urged that video-conferencing be made more easily available both for small groups and for individuals (on their desktop computers).

ITG has recently set up an “academic services gateway” to facilitate access to various academic services provided for faculty by CIS. For example, it lets one upload course information and make it available to students shopping for courses, and it gives a list of CIS-provided tools for use in one’s course. A concern expressed by the faculty on ITAB was that none of them knew this gateway existed, so that it was probably not as useful as it could be.

### **Library Services**

The University Librarian reported on the current IT-related services provided by the Library. Among the new tools in use are *EasyBorrow*, which simplifies requesting books from a variety of sources, and *CitationLinker*, for finding citation information. The Library is taking advantage of software that tracks the usage of their collections, and provides online chat services to assist people with their services.

Among the concerns expressed by ITAB members were the inconveniences caused by the need to authenticate oneself, often multiple times. The Library is working with CIS to incorporate new technology, such as improved VPN and Shibboleth, to make this easier.

A major new Library project is the digital repository, which provides a means for members of the community to manage and archive digital works. It includes indexing and search services and will be integrated with authentication and authorization services such as Shibboleth.

### **Disability Services**

Disability Services is an office within Student Life that provides support for the 500 or so people on campus with disabilities. Its director gave us a presentation on what can be done to make IT

services, in particular web services, more easily accessible to those with various disabilities, including sight and hearing.

### **IT Procurement**

Much can be done to reduce IT costs, hardware, software, and personnel if standard technologies can be identified and redundancies eliminated. A working group has been created to come up with a plan for dealing with this. ITAB members had a number of suggestions on what might be done.

### **Banner/Mocha**

Though Banner has not been an issue in this year's ITAB discussions, Mocha, an interface to Banner (and its predecessor) designed and built by a few CS undergraduates a few years ago and widely used by Brown undergraduates since, was an issue. There was a major outage of Mocha during fall-semester registration, due in part to its being run by a handful of people, all with full-time jobs elsewhere. ITAB discussed at the beginning of the academic year whether CIS could do anything to help remedy the problem. It was further pointed out that the Mocha developers probably would not have time to implement various government-required additions (such as textbook information) that must be supported by the course-registration interface.

CIS discussed these issues with the Mocha developers and obtained their blessing to replace Mocha with a CIS-maintained equivalent; CIS put together such an equivalent interface and demoed it to ITAB in October. While we were impressed with what CIS had done, we suggested that it not be put into general use until it was well debugged. Thus we suggested they not make it available for registration for spring courses, but introduce it later. It is being used for registration for fall 2010 courses.

## **1.2 Major CIS Initiatives**

CIS is involved in a number of major projects, the most important of which have been presented to and reviewed by ITAB.

### **Disaster Recovery**

Numerous natural and man-made disasters, ranging from long-term power failures, to major snow storms, to a fire or flood in the data center, could disrupt IT services at Brown. The plan put into place by CIS involves moving many of their services to another on-campus site, as well as duplicating most of their services at a semi-secret IBM site in New York state.

ITAB felt that what has been done was clearly necessary and had been well thought out and executed. Much of campus IT activity (including paycheck processing) will continue to function in all but region-wide disasters. However, what is not covered are those services not provided by CIS, including much research and instructional computing. Since such computing is more diverse and specialized it is difficult to replicate, but some sort of plan should be devised to enable the university's primary mission to continue.

### **Email and Cloud Computing**

Last summer CIS moved all undergraduate email accounts to gmail. By all accounts this appears to have taken place smoothly with no disruptions in service, and students seem happy with the new email service. In addition to getting email accounts with much higher quotas than

previously, they have access to a wealth of services and applications via “Google Apps for Education.”

As explained to ITAB by CIS, the university cannot afford to continue its existing email and calendaring services for faculty and staff. They suggested that all CIS-supported email and calendaring be moved to Google Apps for Education. This was discussed intensively within ITAB (as well as in other campus forums). We discussed the differences between the current Outlook/Exchange-based environments and the web-based Google environment, and we went through various scenarios of how individuals could move from one to the other. We discussed the new functionality offered by Google Apps for Education, including the backed-up storage “in the cloud” that would facilitate controlled sharing and collaboration. We also discussed the retraining and other inconveniences involved when everyone must learn entirely different ways of doing things.

In one of the very few votes taken by ITAB, we agreed unanimously (with some abstentions) that CIS should proceed with the project and move the university from Outlook/Exchange to Google Apps for Education.

### **Security and Privacy**

CIS presented plans for “data stewardship,” ensuring that all our data is appropriately protected, even in light of soon-to-be-enacted privacy laws. There was much discussion about how this might affect individuals. For example, should people be required to change their passwords periodically? Should laptops be required to have encrypted file systems? What should be done about sensitive data that resides (unknown to the user) in browser caches? In many cases, a major culture shift may be required to make this work.

CIS also presented a new campus architecture for network security aimed at making it easier to manage. Discussion included questions about integration of non-CIS subdomains. This will require some work by the administrators of these domains, but should integrate well.

## **2 Suggestions for Next Year**

Meetings have been plagued with uneven attendance. Though meeting dates and times are known well in advance, many members leave early, and some have had fairly spotty attendance. If members cannot commit to being at most of the meetings for the full allotted time, they should resign their positions so that others may take their place.

It might be useful for the CIO (or his designate) and the faculty vice-chair of the ITAB to visit various academic departments to discuss their IT needs and how well they are being addressed by the university (whether in CIS or elsewhere). These needs could be summarized and reported to ITAB, so as to evaluate the effectiveness of IT services at Brown and suggest areas of improvement.

This year’s reports from non-CIS IT organizations were informative and valuable and should be made an annual event. In keeping with the spirit of the new ITAB charge, ITAB should make sure that it is kept abreast of the concerns of all IT organizations at Brown. It might also be useful for these organizations, if they choose, to be subject to the same scrutiny as CIS to ensure that they managing their IT resources well.