

# **Strategic Vision: Technology Services at SUNY Brockport, 2007-2009**

## **Introduction**

The College Technology Council conducted a campus wide technology assessment survey in spring 2005 with the intention of using the survey's findings to inform a new technology strategic plan for the College. As the Council's Technology Strategic Planning Subcommittee worked on the plan in spring 2006 it decided to write a "strategic vision" document, as opposed to a detailed technology blueprint.

## **Values**

The Strategic Vision outlines goals for technology services and principles for how technology decisions should be made. At the core of this vision are our values; it is grounded in our commitment to the College mission, and to the College's goals and initiatives. The vision underscores the importance of collegiality, the importance of ongoing communication with our constituencies, and collaboration with partners across the College. It emphasizes a strong service orientation, the prudent stewardship of resources, ongoing assessment and reflection on our services, processes, and policies, and providing a core of excellent services

## **Strategic Vision**

Develop and exploit technology-based services to benefit students while enhancing the learning process. Look for win-win opportunities where students, faculty, and College administration see greater efficiencies through better use of technology.

Provide for flexible technological infrastructure to provide rapid response to changes brought on by changing technology needs and demands. Where possible, consolidate resources to provide greater efficiencies.

Identify and continually evaluate assignment of resources among the student information, learning systems, decision support, and office support areas.

Nurture an environment where College faculty, staff, students, and ITS staff can openly share ideas regarding technology services.


Develop a methodology to evaluate and prioritize IT projects and new technologies that could be utilized by the College.

Consider what needs to be done to shift IT resources away from dealing with day-to-day hardware and software technology issues towards dealing with using technology to enhance learning and support strategic college goals.

Use resource and project management techniques to make technology decisions and to expedite their implementation. Foster collaborative evaluation of the results.

Establish a process to identify and evaluate the feasibility of outsourcing services to reallocate resources to meet local demands.

### **How Will We Realize this Vision? Four major themes are described below:**

 **Understanding the role of IT through Communication and Collaboration** – Information Technology Services (ITS) will strive to build strategic partnerships with College constituencies. ITS will focus on developing and enhancing collaborative efforts aimed towards meeting the technology needs of the College community. Wherever possible, decision making related to major technology initiatives will be made in consultation with stakeholders. In addition, decisions will determine what needs to be done to establish direct lines of communication with students, faculty, and staff to receive IT feedback.

- Specific Goals and Objectives for 2007/2009
  - Align ITS resources and services with College priorities as articulated in President Halstead's Goals and Initiatives.
  - Gather input from ITS clients via focus groups, surveys, and other tools in order to better understand College technology needs.
  - Strive to understand pedagogical, curricular, lifestyle changes and their impact on teaching, learning, and the use of technology.
  - Develop a liaison program to foster better communication with ITS constituencies.
  - Form a College-wide committee to assess the current mail/calendaring system and recommend future directions.
  - Work with stakeholders to assess need, requirements, functions for a College portal.
  - Collaborate with CELT, the Library, various College Divisions to improve technology services and support.
  - Update the ITS Web Site to more effectively communicate information about IT services and resources, and provide seamless access to tools needed.

## **Technology and Information Services for the SUNY Brockport Community**

ITS will strive to provide high quality services to assist the College's students, faculty, and staff in meeting individual, curricular, and institutional goals.

**a. Systems and New Technology:** ITS will provide leadership in the application of emerging technologies, identifying and evaluating developing technologies to determine how and where they can best support the accomplishment of the College's goals.

- Specific Goals and Objectives for 2007/2009
  - ANGEL LMS Enhancements:
    - Implement load balanced environment (holiday closing 2006).
    - Test and implement upgrades as available.
    - Review, modify, and test all Banner to ANGEL data synchronization.
    - Review and implement new functionality as needed.
    - Work with legislative bodies to develop and enhance ANGEL policies.
  - Banner Enhancements:
    - Banner 7.3 implementation (in progress).
    - Certification Assessment data capture and reporting tools.
    - Imaging of Student Records.
    - Interfacing Banner with 3<sup>rd</sup> party systems (Housing, Portal, Library).
    - Verisign web payment interface (replacement of I-Payment).
    - Oracle 10g – database implementation.
    - DARS 3.5/4.0 implementation.
    - Banner 8 conversion (spring 2007).
    - Integration of departmental databases
  - Continuously improve data analysis and reporting services in support of College assessment, planning, etc.
    - Work towards seamless data warehousing among all data sources (Brockport, Albany, departmental).
    - Investigate standardizing on one web-based reporting tool for report delivery.
  - Email/Calendar: Select and deploy a new email calendaring system in 2007.
  - Identity and Access Management Initiative:
    - Define who/what groups have access to which Brockport resources at what time.
    - Work with College policy makers to craft IAM policies.
    - Implement Banner as center of data universe model.
    - Review, modify, and test all Banner to 3<sup>rd</sup> party systems data synchronization.
    - Work with College affiliates to build front-end data interfaces.

- Library Systems: Aleph 500 library system implementation and enhancement is ongoing.
- Continue evaluation of Federated searching software, electronic resource management, OpenURL products, and RFID technologies. Implement those products that offer enhanced services to students and faculty. Continue to evaluate research databases for efficacy and scope.
- Continue to assess instructional labs, smart classrooms, student response systems, podcasts, and other technology that will aid in teaching.
- Continue to benchmark our services against those at other colleges
- Implement Footprints, the recently acquired Help Desk software. This should substantially increase the tracking and resolution of tickets and offer a broad range of self-help options and answers to frequently asked questions.
- Explore and upgrade learning space technologies to improve support of teaching and learning throughout the college.
- College Website: Assess website is being done by the CTC Web Advisory Committee. New hardware for searching the college website is being deployed in fall 2006.
- Portal services: Investigate, choose, implement, evaluate.
- Investigate and integrate IAS (Instructional Assessment Systems) for student feedback.

**b. Infrastructure:** The College network, backbone, and switches are subject to increasing demands on bandwidth, and are in a state of constant upgrade. The result of the ResNet RFP for outsourcing will determine how quickly and to what extent additional funds are needed. However, the continuing upgrades must be considered the ‘cost of doing business,’ and the demand for bandwidth is expected to grow rapidly with the use of streaming video, simulations, and other resource-intensive applications.

- Specific Goals and Objectives for 2007/2009

- Continuously monitor and upgrade networks to meet increased demand.
- Monitor increasing use of mobile/wireless computing devices and assess their impact on College technology infrastructure.
- Investigate participating in Internet2, which is primarily a research tool.
- Residence hall network services will be provided by Apogee/Falls Earth.

**c. Security:** Threats to the College’s information systems abound and are becoming increasingly sophisticated and dangerous. As we invest in systems, it is crucial that we build robust security and data recovery systems to protect client information, College data, and College systems. IT will follow national and state guidelines, policies, and procedures regarding security as practicable.

- Specific Goals and Objectives for 2007/2009

- Develop a College-wide information security program.
- Provide reliable backup and data recovery services -- redundant and disk-based.
- Provide ongoing Virus, spam, spyware, malware protection.
- Further develop Disaster Recovery planning and architecture.
- Data Security: protect and secure the College's information.
- Provide for campus wide protection and disaster recovery of data via using centralized services supplemented by off campus services.

**d. Desktop / Lab Computing.** ITS will continue to implement its 'Motor Pool' plan, which provides rapid replacement of desktop computers via the efficiencies afforded by the College purchasing machines and software with similar configurations. The ability to clone and replace these machines rapidly is critically important. Computer down-time is no longer acceptable.

- Specific Goals and Objectives for 2007/2009


- Implement a coordinated cradle-to-grave 'motor pool' PC maintenance plan.
- Continue to replace computers via the College's PC replacement program in support of the business of the College. Reduce software costs by implementing concurrent-use licensing when it makes fiscal sense to do so.
- Continually work to improve PC imaging and assure students and faculty are working with "current" software and hardware.
- Assess and update Macintosh labs across the College.
- Begin operational testing of MS Office 2007 and Microsoft VISTA OS.
- Continue with the technology refresh program.
- Satellite PC labs may be scaled back if there is a diminished use of them, and a similar increasing need for traditional instructional spaces.

**e. Information Support Services:** ITS will strive to provide seamless access to information and information services.

- Specific Goals and Objectives for 2007/2009


- Launch the Library Learning Commons project:
  - Extend Help Desk hours and service.
  - Provide integrated information support services in Drake Library.
  - Provide extended support for digital media projects.

- Expand training opportunities provided by ITS, CELT, and Library in order to assist the College community in understanding and applying new technologies.
- Continue to provide recommendations on the integration of instructional technology, audio, video, and ANGEL into the curriculum.
- Digital Assets Management:
  - Continue to experiment with the DSpace digital repository.
  - Continue experimentation with handheld devices (e.g., iPods) in the curriculum.
  - Investigate the use of Harvest Road, and other content management systems.
  - Develop RSS (really simple syndication) feeds and other teaching for instructional use.
  - Investigate document management/content management system for workflow, image and college records searching.
  - Implement and support E-portfolios for student and other use.
  - Continue to enhance and provide opportunities for distance learning where appropriate.

 **Resource Management** - ITS is committed to assembling, directing, and deploying resources strategically to projects that are aligned with College goals. ITS is committed to executing projects and initiatives on schedule, and on budget. Careful stewardship of available resources, calculated risk-taking, and accountability are factors in resource planning. ITS staff development merits extra attention. We need to give each member of the IT community the opportunity to contribute fully. Encourage adopting best practices through a variety of group, one-on-one and other training opportunities for faculty, staff, and students.

- Specific Goals and Objectives for 2007/2009
  - Collaborate with institutional stakeholders to plan for ongoing funding for technology/information services.
  - Develop an IT project/service prioritization scheme to assist in establishing the relative priorities of competing projects.
  - Resources are often scarce and demand for them is always high. Invest wisely and strategically.
  - Continue to develop ITS staff competencies:
    - Provide ITS staff with appropriate training.
    - Mentor new employees.
    - Provide leadership opportunities for employees.
    - Recognize outstanding service/achievement.
  - Investigate outsourcing in areas where a competitive advantage is evident.
  - Begin steps to consolidate hard resources to provide greater efficiencies.

- Focus on using fewer software products, which are fully utilized, in order to achieve higher levels of service while providing an increase in efficiencies.
- Identify the external/internal factors (mandates, customer demands, etc.) that impact the assignment of IT resources.
- Investigate and work towards developing new revenue streams.

 **Assessment and Planning.** ITS and CTC will conduct surveys in 2006-2007 that further examine both the satisfaction and needs of our College. We are also starting a 'liaison' program to provide outreach to various constituencies and suggest more frequent discussions with various 'tech-savvy' members of our College so that any problems or needs can be rapidly addressed.

- Specific Goals and Objectives for 2007/2009
  - Develop processes to continuously assess ITS services and, as appropriate, adjust strategies, objectives, and services.
  - Work with CTC Technology Services Assessment Subcommittee to canvass faculty, students, and staff for the purpose of gathering data to perform an IT/technology needs analysis (focus would NOT be assessment of current services).
  - Work within the College and CTC to maximize funding opportunities and explore alternative vehicles for additional resources.
  - Perform an ITS self-evaluated SWOT (Strength-weakness-opportunity-threat) analysis.
  - Use the LibQual survey instrument for library services assessment.
  - Endeavor to answer these questions:
    - What IT services are candidates for outsourcing?
    - If money/resources were no object, what services would we implement? Why?
    - Are there IT services that could be eliminated? Where is there duplication of services?
    - What IT services can be consolidated?
    - Do current IT services support the College's mission? To what extent?

# APPENDIX

## Integration of Services

### *Overall integration:*

The ITS Satisfaction Survey conducted in spring 2005 found generally medium-to-high levels of satisfaction for most IT services. In particular, the main information systems visible to the College at-large, such as Banner, the Library catalog, and ANGEL, were found to be fulfilling their respective missions. However, respondents noted the need for more effective integration of these various systems.

### *Authentication services*

Information Technology Services staff members are currently working towards integrating LDAP with Banner, making Banner the official source of all student, faculty, and staff accounts. Banner would also be the source of “forwarding records” for B-mail (see below). ITS staff will research and experiment with other systems that can be adapted to use LDAP.

The use of single sign-on for access to all network services is being investigated. This potentially involves the integration of a portal system.

### *E-mail and calendaring*

So far, ITS has been disappointed with some of the functionality of the JES system. ITS will continue to assess the long-term viability of this system and will prepare for migration to yet another system should this prove necessary. We recommend the formation of an e-mail/calendaring committee to complete a thorough College needs analysis before any alternatives are investigated.

### *B-MAIL*

In winter 2006, SUNY Brockport established a new policy recognizing email as an official method of communication with students. This official email communication is known as “B-mail.” Administrative offices across the College will increasingly start utilizing email as a method to communicate important information to students and all ANGEL mail settings will be rolled from Banner on a nightly basis.

### *Calendar Integration*

We will investigate an integrated calendaring system so that events entered in one system are immediately replicated into other systems, thus eliminating the problem of scheduling and tracking meetings/appointments in different systems.

### *Data Warehouse, IR support and Reporting*

- Enhance Banner Data Mart
- Evaluate/Purchase/Implement Sungard ODS/EDW (Operational Data Store/Enterprise Data Warehouse) product

- Continue to offer Hyperion Training
- Continue to work with the Professional Education Unit to determine College needs for ongoing assessment and external accreditation agencies
  - Utilize existing resources to develop a customized solution which can be transferred to other programs and/or College assessment needs.
- NCATE