



**Information Technology
Strategic Plan**

2012 - 2014 Academic Years

Introduction:

Functioning and robust technology and capable system administrators are integral to the success of Lake Superior State University (LSSU) students, faculty and staff. The goal of the Information Technology (IT) Strategic Plan is to provide for the continued maintenance, assessment, and development of the technology infrastructure needed to support LSSU's Mission and Strategic Plan and the seven strategies of the Information Technology Strategic Plan.

Background:

The IT Monitoring Committee (see Appendix A for membership) was created in January of 2012 and tasked with updating LSSU's IT Strategic Plan. The committee began meeting in early spring, 2012, and continued to have regular meetings through the summer.

The committee began by gathering information. The group felt it was important to involve the entire campus community with this process and so initiated two surveys; one directed at students, the other directed at faculty and staff at LSSU. Following the on-line surveys, confidential personal interviews were conducted with each member of the IT staff to solicit information and gain an understanding of the IT staff perspective. The results of both surveys and the interviews were reviewed by committee members and were valuable in formulating this plan.

Committee members reviewed a diverse collection of documents in the course of creating the IT Strategic Plan (2012). The previous IT Strategic Plan (2001) served as a framework, but IT strategic plans from several other institutions were also examined and ideas incorporated into the new plan. The group also sought information regarding IT staffing levels and operating budget information for several Michigan institutions. Finally, LSSU's own Mission and Vision, Values Statement, Core Values and Strategic Plan provided guidance for the creation of this document.

The IT Strategic Plan was presented to LSSU administration in October of 2012. After discussion with the President's Cabinet, it was determined that available resources were limited and that not all the actions denoted in the Plan could be implemented immediately. It was determined that a decision needed to be made to either acquire additional resources to support the current IT administration (Interim IT Director) or hire a new Director for IT. After examining the pros and cons of both scenarios, it was decided that LSSU would acquire additional resources for IT and look for collaborative efficiencies to enable the current Interim Director to perform his assigned duties as Director.

Further examination of the oversight provided for IT indicated that the Interim Director was actually responsible for the director position, his last position as network administrator (never replaced), and secretarial duties (position eliminated and not replaced). It was evident that the individual was overworked. The IT Monitoring Committee also noted that better coordination between IT and AV was needed. Both, the Committee and LSSU administration realized that these two issues would need to be addressed in order to have a successful implementation of any plan. Figure I shows the functions of IT and AV at the time of the HLC visit.

The remainder of this document presents the Strategies and Critical Outcomes recommended by the IT Monitoring Committee. It was up to Administration (Provost's Office) to implement the plan within the constraints of available resources. The IT Monitoring Report presented to the HLC on February 1, 2013 contains the implementation details.

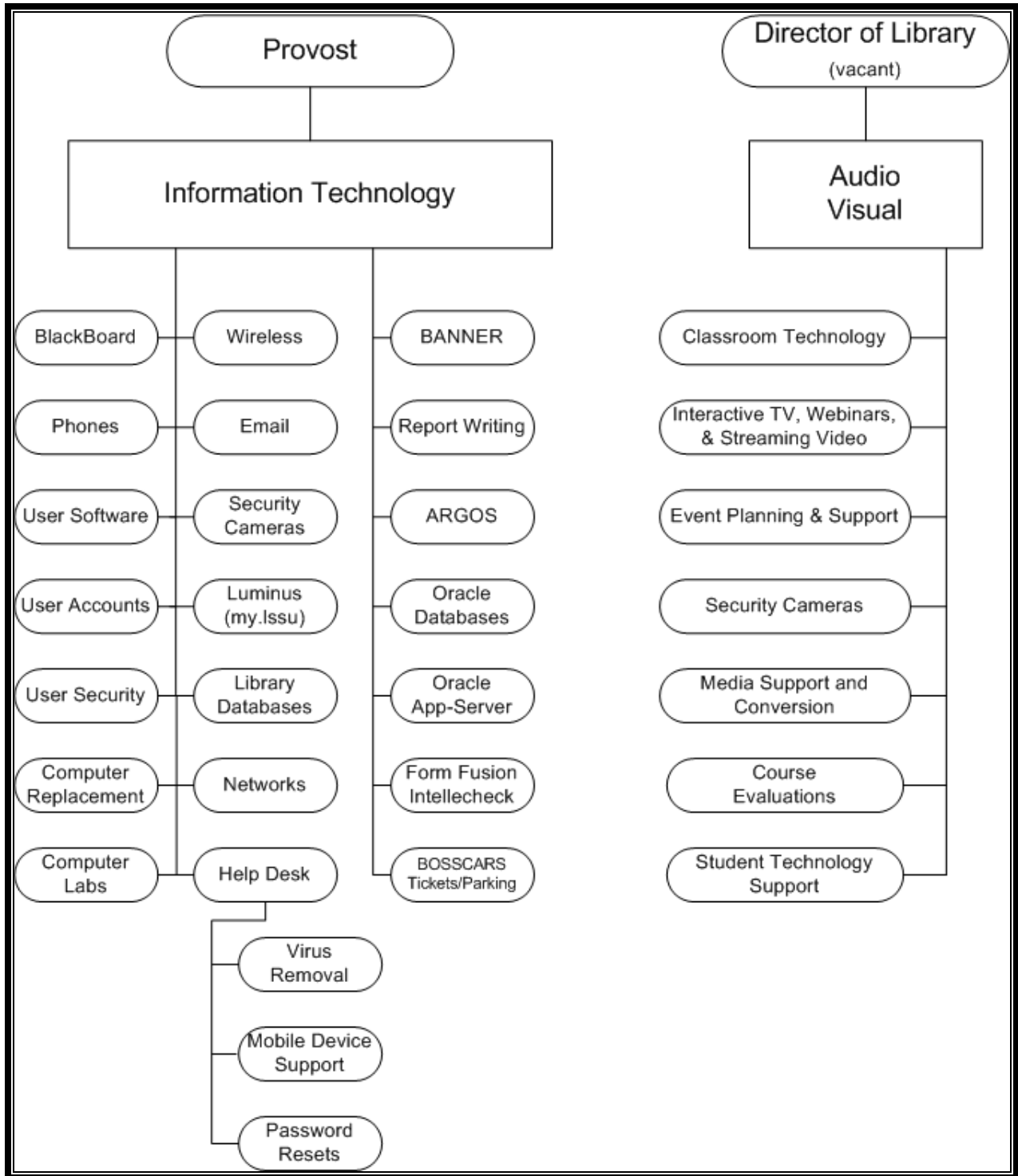


Figure I: Activities and Reporting Lines of IT and AV (at the time of the HLC visit)

Guiding Principles:

- Recognize that people supporting and using technology are more important than technology itself.
- Provide trusted and reliable systems as technology has a huge impact on employee productivity.
- Maintain a high level of security and privacy for all sensitive data.
- Facilitate communication throughout the campus community.
- Select and Implement technology based on defined functional needs and the strategic objectives of the University.
- Provide responsible stewardship for University budgets and resources.
- Maintain appropriate technology lifecycles that optimize value to the University.
- Anticipate change in technology and the needs of customers.
- Promote a responsive shared governance structure to engage the University community in decisions and strategic directions for IT.

Implementing the Strategic Plan:

The execution of the IT Strategic Plan will be the responsibility of the Director(s) of IT and support from AV; all under direct supervision of the Provost. The Director(s) of IT will review and report on the status of the Critical Outcomes yearly. As technologies change, and the need for campus technology modifies and grows, the Director(s) will adapt the Strategies and Critical Outcomes and/or develop new Strategies and Critical Outcomes as needed to each upcoming academic year with input from the IT Steering Committee (Shared Governance). The IT Strategic Plan will be available on the IT website.

Strategy 1: Cultivate an Information Technology culture committed to excellence and service that reaches beyond current needs.

Critical Outcomes:

- 1.1: Establish and maintain sufficient and appropriate IT staffing
 - Evaluate current staff abilities and responsibilities
 - Update staff job descriptions and position titles
 - Determine IT staff needed to address University IT priorities
 - Evaluate staff salaries and ensure, to the extent possible, IT salaries are comparable to those at peer institutions
- 1.2: Establish an IT staff Professional Development Program
 - Determine current and anticipate future training needs of IT staff (see 1.1) and develop a plan and budget to provide necessary training (on-site, off-site, online)

- Provide support for IT staff to attend professional conferences and meetings
- Create a cross training plan to ensure adequate coverage of all important functions

1.3: Develop Assessment Plans and Staff/Department Goals

- Develop departmental short-term and long-term goals
- Develop individual staff member goals for 2012/2013
- Develop and implement a comprehensive IT assessment plan
- Review yearly, revise as needed, and record results of assessment utilizing TracDat software

1.4: Research and evaluate new technologies

1.5: Evaluate consolidation of campus IT resources (AV, IT) & locations

1.6: Revamp and maintain IT website

- Create and maintain IT systems status page
- FAQ Page
- Create How to Guides (resetting passwords, setting up email for phones, etc.)
- Communicate/remind campus community of availability of IT website

Strategy 2: Provide tools and services to support innovative teaching and student centered learning.

Critical Outcomes:

2.1: Develop University-wide consistent classroom technology standards.

- Determine minimum standards needed for all classrooms
- Determine budget needed to implement
- Create implementation plan and timeline

2.2: Maintain and support open student computer labs/kiosks

- Ensure computers and printers are maintained
- Establish and post procedure for students to follow when problems occur

2.3: Maintain and provide training for learning management systems (Blackboard, etc.)

2.4: Collaborate with LSSU's Blackboard support team to provide support for distance learning

2.5: Collaborate with AV to provide support for instructional devices

Strategy 3: Implement and maintain state-of-the-art administrative systems.

Critical Outcomes:

3.1: Maintain Banner and associated systems

- Create and implement a preventive maintenance and upgrade schedule
- Monitor and distribute Release Guides as available

- Stay current with updates, defects, etc. and communicate to appropriate module lead
- Investigate/recommend options that enhance Banner and associated systems

3.2: Implement data reporting tool

- Implement ARGOS during 2012/2013 academic year
 - Determine Campus reporting needs
 - Provide training and support to campus community

3.3: Purchase and Implement Xlerant (budget planning software)

Strategy 4: Build and maintain a secure, reliable and robust technology infrastructure to support the growing communication and information technology needs of the University.

Critical Outcomes:

4.1: Establish a campus wide computer replacement program and communicate with campus

- Implement a 5 year maximum computer life cycle
- Develop a comprehensive computer equipment inventory tracking system

4.2: Replace and upgrade aging network switches and routing gear according to a recommended life cycle

4.3: Enhance campus WiFi infrastructure to eliminate weak areas and provide full coverage in all campus buildings

4.4: Implement improvements to existing datacenter environment

- Obtain and install new 3-phase UPS that is more compatible with backup power generator
- Replace existing 120-volt power connections for servers and network gear with 208-volt power
- Consolidate CAS 301 and CAS 302 data center rooms into CAS 301
- Develop off-site secondary data center capability to provide redundancy and disaster recovery options

4.5: Upgrade and replace aging server and storage hardware, increase utilization of virtualization technologies

4.6: Utilize hosted/cloud services where appropriate to augment existing resources and/or provide greater reliability and redundancy

- Complete migration to hosted Blackboard Learn 9 environment
- Evaluate cloud based solutions to provide additional storage and backup options

4.7: Develop and implement a plan to update computer software to ensure campus is using most current or appropriate versions

- Microsoft Office Suite
- Windows Server/Active Directory
- Linux Server

- 4.8: Enhance the security of the University's information assets
- Implement next generation firewall appliances/technologies
 - Conduct regular external and internal vulnerability scans

Strategy 5: Provide a quality customer service environment to enhance productivity and efficiency.

Critical Outcomes:

5.1: Improve internal communication within IT

- Implement regular staff meetings
- Ensure IT staff is up-to-date with all IT initiatives and projects
- Promote collaboration on projects that involve multiple members of the team

5.2: Improve external Communication

- Create and implement a communication plan
- Improve campus perception of the IT Department
- Communicate Website address, Helpdesk contact information
- Ensure campus community is informed of planned upgrades, downtimes
- Communicate in a timely manner when unplanned downtimes occur and provide updates, alternate methods of access, etc. as needed. Provide updates when problem has been resolved

5.3: Maintain efficient and responsive Helpdesk

- Determine and communicate what services the Helpdesk will provide
- Determine training needs for Helpdesk staff, and create training program to ensure all staff working the helpdesk have received necessary training
- Evaluate hours of operation and staffing levels
- Purchase software both to track requests, and to monitor and improve response times.
- Conduct regular Campus Surveys to assess and improve Help Desk Services

5.4: Provide professional development/training to campus community

- Determine/anticipate training needs of campus community
- Determine staffing needs to provide training
- Develop training plan, training schedule, training materials (when necessary)
- Provide training opportunities regularly (advertise through website, Personal Announcements, etc.)
- Evaluate training (surveys, questionnaires, etc.) and update as necessary

Appendix A: IT Monitoring Committee Members

Linda Bouvet, Sports Information Director

Alicia Brunner, Student Government Representative

Susan Fitzpatrick, Director of Alumni Relations

Vicky Fox, Disability Services Coordinator

Ken Hopper, Director of Norris Center Operations

Beth Hronek, Assistant Professor/Public Services Librarian

Barb Keller, Professor/Dean, College of Natural and Mathematical Sciences

Scott Korb, Director of Housing and Residential Life

Craig Krouth, Accountant

Nancy Neve (Co-Chair), Registrar

Scott Olson (Co-Chair), Interim Director of IT/Network Administrator

Dan Walker, Student Government Representative

Jason Wenglikowski, Webmaster

LSSU Information Technology Feedback

A twenty-five-question survey was distributed to faculty and staff from which there were 149 respondents. A shorter, eleven-question survey was distributed to students from which there were 175 respondents.

Responses have been quantified in the form of percentages and rankings for an overview of perceptions, attitudes and level of satisfaction. Open-ended comments which address specific concerns, such as resetting passwords, complaint follow-up, fixing printers and computers, etc. have been grouped under general categories such as Customer Service, Timeliness, and/or Communication, counted in each applicable category to give a broad view of concerns. Comments will be made available to the managers within IT in order to assist them in addressing specific issues, once a strategic plan has been developed and adopted.

The format of responses is as follows:

Question #. General idea of question (number of respondents)

Questions that are similar, or directly opposing, in nature are grouped within a single table cell for ease of comparison.

**LSSU Information Technology Faculty/Staff Feedback
May 2012**

Responses were comprised of
Staff – 63.1% (94)
Faculty – 30.2% (45)
Both – 6.7% (10)

Q2. Basic Classroom Needs (47)

- Projector
- Computer with up-to-date software
- Reliable internet connection
- Camera, microphone, iClick, peripherals

Q3. Technology Desired in Every Classroom (44)

- Wireless access
- Overhead video/computer projectors
- Electronic whiteboards

Q4. Desire to Teach in Computer Lab (38)

- No – 40%
- Yes – 60%
 - Every class – 18%
 - 1 class per week – 10%
 - Irregular/infrequent use – 20%

Q5. Require Students Bring Laptop/Tablet (48)

- No – 85.1%
- Yes – 14.9%

Q6. Willing To Go Paperless (48)

- Yes – 64.6%
- No – 35.4%

Q7. Need Training to Go Paperless (30)

- No – 60%
- Yes – 40%
 - Means for student to digitize work
 - Better hand-off process
 - IT Staff well-trained in up-to-date software

Q8. Limit free student printing (34)

- Yes – 64.7%
- No – 35.3%

Q9. Present Purpose for Using IT (114)

- Networking
- Troubleshooting
- Hardware/software installation and support
- Computer maintenance
- VPN, VNC, static IP, internet streaming

Q10. IT Service Desired (35)

- Provide equitable access to wireless
- Provide reliable service
- Provide on-demand classroom support *from a staff member, not a student*
- Provide up-to-date software

Also mentioned

- Training for staff
- Dedicated programmer time
- Cross-platform support (Apple)
- 24/7 support for online courses
- Reverse equivalencies in Banner
- Document imaging
- Phone upgrades
- SPSS 18/Qualtrics
- Business Intelligence support & training
- Web updates support

Q11. Current Software Use (75)

- MS Office Suite – mentioned 6x as often as any other software

Multiple mentions

descending order

- Banner
- Adobe
- SPSS
- Discoverer
- Web
- Mac

Single mention

- Audacity
- Dragon
- EdConnect
- Graphics
- Kindle for PC
- MovieMaker
- Mac
- MatLab
- Omni Page Pro
- ProE
- Picassa
- PageMaker
- Publisher
- QuickBooks
- Sibelius
- Web

Q12. Mobile Devices Often Used (108)

- Laptop/PC – 88.5%
- iPhone – 39.7%
- Android based phone – 32.8%
- iPad – 23.5%
- iPod Touch – 21.8%

Q13. Overall Satisfaction (114) 5 point scale

Rating Average	
Quality of computer labs	2.72
Technical support for labs	2.75
Quality & reliability of IT services	2.94

Q14. General Knowledge (114)

	Agree	Disagree
Adequate IT helpdesk hours	49.6%	42.5%
Aware of services provided by IT	72.8%	24.6%
Who I contact for IT assistance	66.4%	31.0%

Q15. Personal Experience with IT (114)

	Often	Occasionally
Helpdesk handled question courteously	66.7	30.7
Helpdesk handled question quickly	44.7%	44.7%
Immediately transferred to a knowledgeable staff member	33.3%	50.9%
Helpdesk handled question in timely manner	46.5%	39.5%

Q16. Preferred Method to Submit Request (115)

- Telephone – 77.4%
- Online – 28.7%
- In person – 19.1%

Q17. Contact with IT in Fall 2011 (111)

# of Times	0	1-3	4-6	7-10	11-15	16+
Responses	6	41	30	12	10	8

Q18. Computing & IT important to work (112)

- Yes – 94.6%
- No – 5.4%

Q19. Desired Top-3 Priorities of IT (97)*(range from 39 mentions to 1 mention in descending order)*

1. Up-to-date hardware and software
2. Reliability of service
3. Increase hours-of-operation and knowledge-base of Help Desk
4. Customer service
5. Timeliness (response time)
6. Support for Banner/MyLSSU/Discoverer
7. Increase IT staffing
8. Communication
 - Regular, on-going software training
 - Equitable access to wireless
 - Support for students
9. Strategic plan
10. Bandwidth
11. Security
 - Cross-platform support in academics
12. Realign existing IT staff to match needs
13. Blackboard training
 - Web updates for departments & faculty
 - Support for faculty/staff
14. Report writers assigned to all departments
 - Liaison between IT & faculty/staff
15. Hire an IT director

Q20. Desired Training (55)*(range from 17 mentions to 1 mention in descending order)*

1. MS Office Suite – Advanced
2. Banner
 - Report writing
3. Adobe
 - Gmail
4. SPSS
 - Contribute
 - Wimba
5. Anchor access
 - iClick
 - Comprehensive overview of available technologies on campus

Q22. Supportive of Paperless Campus (111)

- Yes – 79.3%
- No – 20.7%

Q23. Training Needed for Paperless (89)

- None – 49.4%
- File storage & backup – 46.1%
- Creating PDFs – 28.1%

Q24. Areas IT Does Well (70)*(range from 25 mentions to 1 mention in descending order)*

1. Customer service
2. Day-to-day troubleshooting
3. Managing the complexities of LSSU systems
4. Timeliness (response time)
5. Banner analyst functions
 - Communication
 - Reliability of service

Q25. Areas Needing Improvement in IT (82)*(range from 17 mentions to 1 mention in descending order)*

1. Communication
2. Timeliness (response time)
 - Increase IT staffing
3. Up-to-date hardware and software
4. Realign existing IT staff to match needs
 - Increase hours-of-operation and knowledge-base of Help Desk
 - Customer service
5. Strategic plan
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 - Cross-platform support in academics
 - Hire an IT director
 - Support for faculty/staff
 - Web updates for departments & faculty
 - Security
 - Support for Banner/MyLSSU/Discoverer

Q21. Source of Campus Events & Info (111)

- Email – 93.7%
- My.LSSU – 62.2%
- Word of mouth – 45%
- Flyers – 27.9%
- Memo – 10.8%
- Postcards – 5.4%

**LSSU Information Technology Student Feedback
May 2012**

<p>Q1. Present Purpose for Using IT (170)</p> <ul style="list-style-type: none"> • Anchor Access – 91.2% • Email – 87.6% • Blackboard – 84.7% • Wireless internet access – 81.8% • Wired internet access – 43.5% • Social media – 35.9% • Telephone/VM service – 18.8% 	<p>Q5. Overall Satisfaction (174) 5 point scale</p> <table border="1"> <thead> <tr> <th></th> <th>Rating</th> <th>Average</th> </tr> </thead> <tbody> <tr> <td>Quality of computer labs</td> <td></td> <td>2.27</td> </tr> <tr> <td>Technical support for labs</td> <td></td> <td>3.01</td> </tr> <tr> <td>Quality & reliability of IT services</td> <td></td> <td>3.40</td> </tr> </tbody> </table>		Rating	Average	Quality of computer labs		2.27	Technical support for labs		3.01	Quality & reliability of IT services		3.40																	
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Q9. Computing & IT important to work and studies (158)

- Yes – 93.5%
- No – 6.5%

Q10. Areas IT Does Well (87)

(range from 30 mentions to 2 mention in descending order)

Note: 36 negative or n/a responses

1. Customer service
2. Wireless upgrades
3. Reliability of service
4. Wired network
5. Computer access

Q11. Areas Needing Improvement in IT (118)

(range from 25 mentions to 5 mention in descending order)

1. Reliability of service
2. Broader access to wireless
3. Customer service
4. Communication
5. Timely response and resolution to problems
6. Skills and knowledge of staff
7. Hours of operation
8. Hardware/software in labs & offices
9. Bandwidth
10. Increase professional staff



Monitoring Report #2

Information Technology Strategic Plan

A Report to the Higher Learning Commission

February 1, 2013

650 W. Easterday Avenue, Sault Sainte Marie, MI 49783

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I. Executive Summary

This report provides a summary of the activities that have taken place since the Higher Learning Commission of the North Central Association of Colleges and Schools (HLC) 2011 comprehensive reaccreditation visit for Lake Superior State University (LSSU) where the visiting team noted that “a clearly defined Information Technology (IT) Strategic Plan did not exist”. These activities have led to the development of an IT Strategic Plan and the allocation of resources to address several comments and concerns voiced by the visiting team. Additionally, the visiting team noted that “faculty/staff voiced a need for professional development/training in all areas of technology” and that the team was “unclear about the actual use of online course offerings due to varying responses to this question from faculty”.

Section II (Information Technology Strategic Plan) will provide information regarding the development and implementation of the LSSU IT Strategic Plan. Section III provides details regarding professional development/training and Section IV outlines LSSU use of online courses and the technology that supports them.

II. Information Technology Strategic Plan

A. Background

Lake Superior State University has experienced financial difficulties for several years - only recently improving its financial ratio to an acceptable level in 2011. These difficulties led to reduction in staffing levels, as vacancies in the Information Technology (IT) area remained unfilled. Five years ago the director and secretarial positions were both eliminated. An interim director was appointed from within the university, but no additional IT staff members were hired. This led to an overworked IT support staff and a generally poor view of the services provided by Information Technology.

When the HLC visited LSSU in October of 2011, they observed: "A lack of IT planning was noted during interviews with faculty, administrators and students. All three groups pointed to different needs related to technology on campus, including upgrading of campus computers, additional staff to handle IT issues, and more professional development and training for the IT staff".

The visiting team further noted that "Given the many changes in leadership, the numerous starts and stops of strategic planning, the importance of implementing the Facilities Master Plan, and the recognition of a need for planning in Information Technology, there is a need to see evidence that the new policies and procedures are actually moving the institution forward and there was a clear and publicly stated understanding of what LSSU should do and be in the future". The team felt that "Discussions with students and faculty alike suggest that Information Technology is an area of concern that will require additional attention and resources. The current staff is overwhelmed by requirements and desires additional training. During discussions with the IT staff, it was evidenced that the institution needs consultative advice on the IT infrastructure to better serve faculty and students".

As a result of these findings the visiting team required LSSU to take action to address these issues and required a Monitoring Report be filed on or before February 1, 2013. Specifically, the team outlined the monitoring report and IT Strategic Plan requirements as noted below:

Monitoring Report #2: *The team also found during the visit that a clearly defined IT Strategic plan did not exist. With the fast-paced change in technology, it is imperative that the institution plan for infrastructure updates and hardware and software replacement. The team also noted that the IT area lacked a professional development plan to stay current and abreast of IT needs and updates. Faculty and staff clearly articulated the need for professional development/training in all areas of technology. In addition, the team was unclear about the actual use of online course offerings due to varying responses to this question from faculty.*

This monitoring report describes LSSU's activities in development of the Information Technology Strategic Plan and in addressing the other areas required by the HLC.

B. Developing the Information Technology Strategic Plan

The IT Monitoring Committee was created in January of 2012 and tasked with updating LSSU's IT Strategic Plan. The committee membership provided broad representation from across campus and included faculty, staff, and students. The committee began meeting in early spring, 2012, and continued to have regular meetings through the summer.

The committee began by gathering information. The group felt it was important to involve the entire campus community with this process and so initiated two surveys; one directed at students, the other directed at faculty and staff. Following the on-line surveys, confidential personal interviews were conducted with each member of the IT staff to solicit information and gain an understanding of the IT staff perspective. The results of both surveys and the interviews were reviewed by committee members and were valuable in formulating this plan. The results of the campus survey are attached as Supporting Evidence in Section VI-A.

Committee members reviewed a diverse collection of documents in the course of creating the IT Strategic Plan (2012-2014). The previous IT Strategic Plan (2001) served as a framework for the new plan. IT strategic plans from several other institutions were also examined, and ideas from those plans were utilized by the committee as it prepared the new LSSU IT Strategic Plan. The group also sought information regarding IT staffing levels and operating budget information from several Michigan institutions. Finally, LSSU's own Mission and Vision, Values Statement, Core Values and Strategic Plan provided guidance for the creation of this document.

C. Overview of the IT Strategic Plan

The IT Strategic Plan is comprised of five Strategies. Critical Outcomes have been developed for each Strategy. The Strategies and Critical Outcomes are listed below. The IT Strategic Plan (attached as Supporting Evidence in Section VI-B) contains additional information for each of the Critical Outcomes.

Strategy 1: Cultivate an Information Technology culture committed to excellence and service that reaches beyond current needs.

Critical Outcomes:

- 1.1: Establish and maintain sufficient and appropriate IT staffing
- 1.2: Establish an IT staff Professional Development Program
- 1.3: Develop Assessment Plans and Staff/Department Goals
- 1.4: Research and evaluate new technologies
- 1.5: Evaluate consolidation of campus IT resources (AV, IT) & locations
- 1.6: Revamp and maintain IT website

Strategy 2: Provide tools and services to support innovative teaching and student centered learning.

Critical Outcomes:

- 2.1: Develop University-wide consistent classroom technology standards.
- 2.2: Maintain and support open student computer labs/kiosks
- 2.3: Maintain and provide training for learning management systems (Blackboard, etc.)
- 2.4: Collaborate with LSSU's Blackboard support team to provide support for distance learning
- 2.5: Collaborate with AV to provide support for instructional devices

Strategy 3: Implement and maintain state-of-the-art administrative systems.

Critical Outcomes:

- 3.1: Maintain Banner and associated systems
- 3.2: Implement, and train users for, ARGOS (data reporting tool)
- 3.3: Purchase and Implement Xlerant (budget planning software)

Strategy 4: Build and maintain a secure, reliable and robust technology infrastructure to support the growing communication and information technology needs of the University.

Critical Outcomes:

- 4.1: Establish a campus-wide computer replacement program and communicate with campus
- 4.2: Replace and upgrade aging network switches and routing gear according to a recommended life cycle
- 4.3: Enhance campus Wi-Fi infrastructure to eliminate weak areas and provide full coverage in all campus buildings
- 4.4: Implement improvements to existing datacenter environment
- 4.5: Upgrade and replace aging server and storage hardware, increase utilization of virtualization technologies
- 4.6: Utilize hosted/cloud services where appropriate to augment existing resources and/or provide greater reliability and redundancy
- 4.7: Develop and implement a plan to update computer software to ensure campus is using most current or appropriate versions
- 4.8: Enhance the security of the University's information assets

Strategy 5: Provide a quality customer service environment to enhance productivity and efficiency.

Critical Outcomes:

- 5.1: Improve internal communication within IT
- 5.2: Improve external Communication

5.3: Maintain efficient and responsive Helpdesk

5.4: Provide professional development/training to campus community

D. Implementation to Date

The IT strategic Plan was developed by the IT Monitoring Committee and accepted by the LSSU administration with minor modifications. Administration was left with the task of determining the best route for implementation of the plan while considering the limited resources available to the institution. The Provost was tasked with providing recommendations to the President and his Cabinet. Actions taken by the Provost and LSSU Administration to begin implementation are described throughout the remainder of this report.

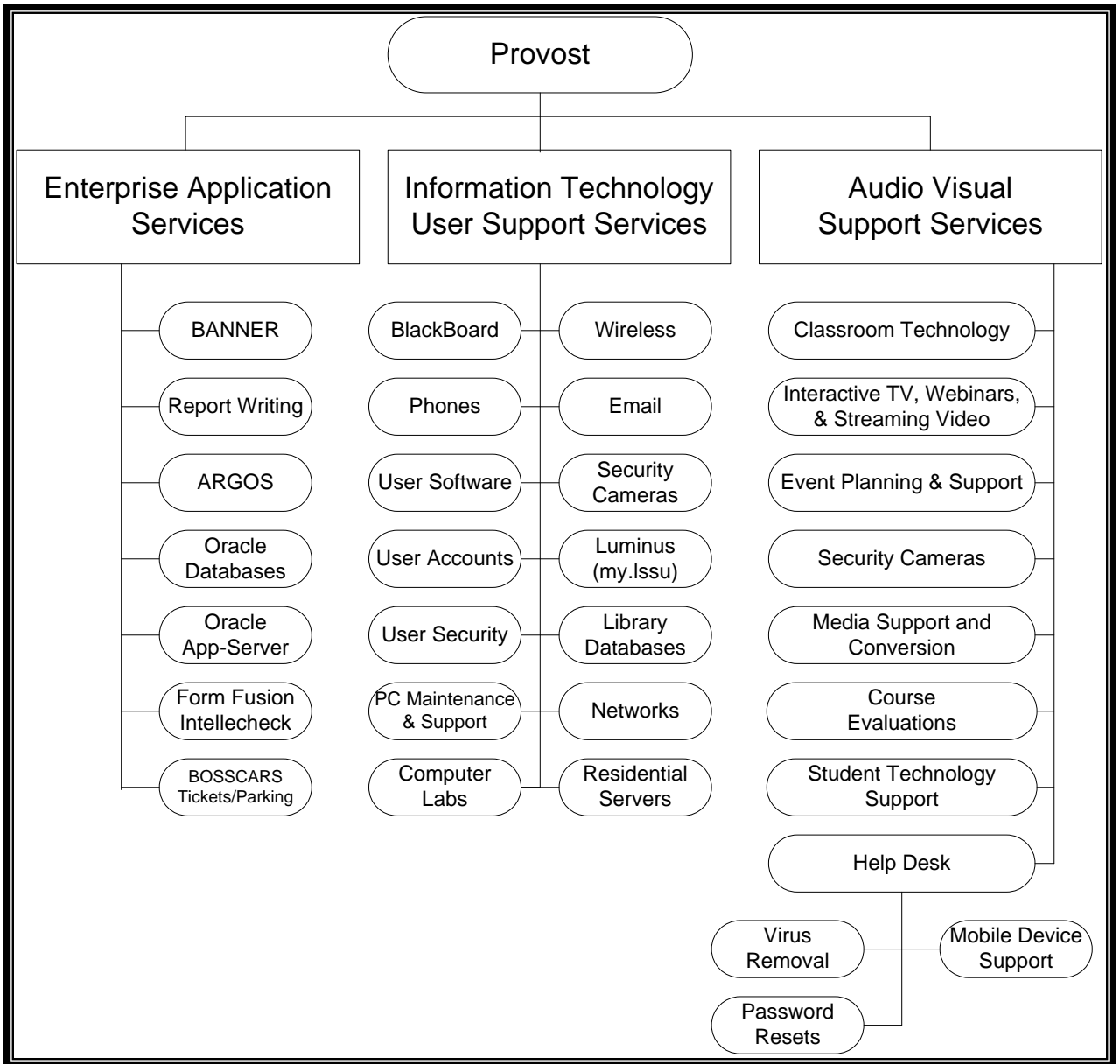
Since January of 2012, several changes in IT have been implemented. Perhaps the one that has the potential for the greatest impact is the slight restructuring of IT and appointments as directors. As noted in the IT Strategic Plan, the current Interim Director of IT was actually doing the job of 2.5 people. He was appointed as Interim Director (5 years ago), no replacement for his old position was hired; and the secretary left and was not replaced. It was also noted that LSSU needed to address the AV/IT relationship; improve communication and the sharing of resources.

Several meetings between the Provost and the staff of IT and AV resulted in a redistribution of responsibilities and appointment of a new (second) Director. At the time of the HCL visit, there was one interim director of IT and the AV staff reported to a vacant Library Director Position. The IT Strategic Plan shows the structure and areas of responsibility at the time of the HLC visit. In November of 2012, the structure was altered as shown in Figure I.

The IT department has now been divided into two areas; Enterprise Application Services and Information Technology User Support Services. Directors have been appointed over both areas. Enterprise Application Services will support broad academic computing needs that represent the backbone of the computer infrastructure. They will work, generally behind the scenes (not directly with users) to ensure internal processes are current, secure and meeting the needs of the campus. An internal appointment was made to lead this area. Information Technology User Support Services will focus efforts on the majority of the campus users by providing secure and adequate access to the university's computing systems. Within this group, LSSU will add two employee lines, redefine and expand one job position, and increase one position from 5/8 to 7/8 time. The current Interim Director will lead this unit. Audio Visual Support Service will now report to the Provost. Previously, AV services included support for classroom technology. Their service area will now include help desk operations.

The new structure will provide the resources necessary to better serve the campus and its constituencies and results in a more balanced division of responsibility for the individuals that lead these areas.

Figure 1: New Responsibility and Reporting Structure for IT and AV



These changes as well as other activities will be discussed below. In each case the change/activity will be tied to the relevant strategy within the IT Strategic Plan.

Strategy 1: Cultivate an Information Technology culture committed to excellence and service that reaches beyond current needs.

Funding for two additional positions in Information Technology User Support Services (ITUSS) has been approved and job descriptions have been developed. The positions were posted in January 2013 and the expected date to fill the positions is March-April of 2013. One current position in ITUSS will be changed from 5/8 to 7/8 time. This position provides support for

Blackboard on campus. Another position's duties have been expanded (redefined). The new job duties include administration of Linux Systems and the University Portal (my.lssu.edu).

New database reporting software has been purchased (ARGOS) and training has been provided for several individuals. A training schedule for campus-wide use of the new software/system is being developed. All currently existing reports will be converted to ARGOS and made available, where practical, for campus-wide access and use.

The decision to consolidate the IT department and the Audio Visual (AV) department was based on a comprehensive assessment. Rather than pursue large-scale changes in reporting, new procedures are being developed and all helpdesk functions are being moved to AV. This will centralize the helpdesk on campus and provide a one-stop shop for all classroom technology support. It also removes this responsibility from the current Interim Director of IT. Resources (staffing) from IT will be moved to AV to ensure full support of the help desk.

Strategy 2: Provide tools and services to support innovative teaching and student centered learning.

LSSU currently utilizes a half-time position for Blackboard support. This position works directly with faculty to train and set up Blackboard accounts and classes. After meeting with IT staff and the individual responsible for Blackboard support, the Provost requested the position be increased to $\frac{3}{4}$ time (as previously noted). LSSU will continue to monitor the needs of the institution and review the position to determine if additional resources are necessary to support Blackboard.

To better equip faculty, additional training materials were added to the Blackboard site and several face-to-face training sessions were offered to faculty. Finally, LSSU's Blackboard environment has been upgraded to Blackboard Learn and the software is now hosted off-site; removing this responsibility from LSSU IT staff.

Additional support for online courses and Blackboard will be provided through a developing Center for Excellence in Teaching. See Section III for further details.

Strategy 3: Implement and maintain state-of-the-art administrative systems.

New database reporting software has been purchased, as noted in Strategy 1. The Enterprise Application Services staff and data managers will now work to develop a new backbone for university-wide access into the data sets. Training will be scheduled for all campus users. Eventually, our current minimally supported system will be discontinued and the new system will be in place and be fully supported by IT staff.

Strategy 4: Build and maintain a secure, reliable and robust technology infrastructure to support the growing communication and information technology needs of the University.

Several older servers and backups systems have been replaced. Virtual Machine (VM) concepts have been implemented and will continue to be expanded through all of the areas supported by IT.

A computer replacement plan has been developed. The plan calls for the replacement of all computers (administrative and academic) on campus every five years (ie: no computers should be more than five years old). Initial implementation of the plan can be accomplished within the current IT budget but additional allocations will be necessary in the future. This plan will remove the replacement burden from the school, department, and administrative unit budgets. With respect to software, the lack of a campus wide computer replacement plan and aging equipment has to some extent prevented implementation of the most current or appropriate versions of operating systems and software. Implementation of computer replacement plan will allow this issue to be addressed. The plan will be fully implemented by 2015.

Strategy 5: Provide a quality customer service environment to enhance productivity and efficiency.

As previously noted, the IT area has been split into two units and some restructuring of IT/AV duties has occurred. Conversations between the Provost, IT directors and the AV department have focused on the need to provide quality customer support. Additional staffing in ITUSS will provide the opportunity to respond to customer needs more quickly.

Within the Enterprise Application Services group, report writers will now work as a team instead of the current focused assignments to departments. Some departments with dedicated report writers will have those individuals reassigned to IT. Report writers will be cross trained and additional outside consultants will be used when necessary. This should help the unit prioritize and respond to campus-wide requests with better turn-around time and accuracy.

As previously noted, the helpdesk and associated resources will be moved to AV. The campus perception of AV has been one of good customer service and moving the helpdesk to AV should improve the perception of customer support for all classroom technology. Additional training for the helpdesk staff will yield a large number (~20) of individuals that have been cross-trained within the AV and IT areas.

All directors now understand the importance of customer service and communication. Each will be developing procedures and processes to ensure LSSU improves in these areas. The Provost will begin monthly meetings with the leaders of all three units to ensure cooperation and continued implementation of the IT Strategic Plan.

III. Professional Development and Training

During the HLC visit, faculty/staff articulated the need for additional professional development/training in all areas of technology. To address this, faculty and administration have met and agreed to develop a Center for Excellence in Teaching. Space has been identified in the Library and talks continue to define the additional resources that are needed to staff and support the Center. A committee has been formed to review the role of the Center and although the entire concept is still in early stages of development, it is expected that some administrative and faculty release time will be needed to oversee the Center. This individual will survey faculty/staff to define specific needs and work directly with the Provost's Office to schedule and appropriately staff training sessions for those that are interested.

The Center should be operational during the fall semester of 2013 and expanded training opportunities could begin as early as summer 2013. Possible training sessions could include Using Blackboard, Training and Certification to Teach Online Courses, Using Handheld (Mobile) Technology to Deliver Instruction, Software Specific Instruction, and more.

With regard to IT staff, the HLC report stated "...team also noted that the IT area lacked a professional development plan to stay current and abreast of IT needs and updates." The two directors will increase budgets for professional development of IT staff. The following training opportunities have already been identified for formal on- or off-site training.

- BANNER and BANNER Related Services
- Windows/Linux Servers
- Networks/Wireless Systems
- Blackboard

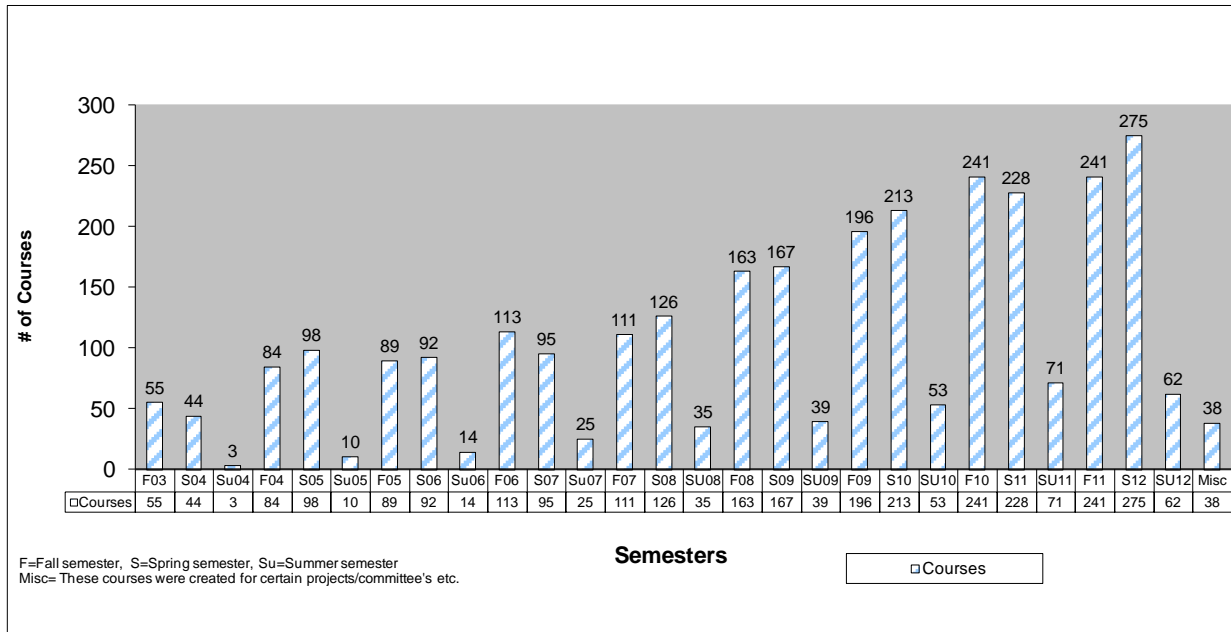
IV. Online Courses

The HLC visiting team was "unclear about the actual use of online course offerings" as noted in their report. LSSU actually makes very limited use of truly "online" courses. However, faculty members do utilize Blackboard and other technologies to deliver blended courses or to simply provide course content to their students.

As LSSU developed the Information Technology Strategic Plan, data from a campus-wide survey was used. In the survey, training/support for online instruction and Blackboard was cited by faculty, staff, and students as a need. However the ranking of the need was very low. Therefore LSSU believes this lack of clarity in our online offerings stems from a liberal use of the term "online". Most faculty members at LSSU use Blackboard to deliver some online content to their classes. These classes are not taught exclusively online, and typically meet face-to-face at regularly scheduled times. Faculty utilize Blackboard to provide students easy access to grades, give quizzes and tests, provide the syllabus, post reading materials, post handouts, provide access to videos, hold office hours, and other such activities. Therefore many courses do have an online component, but are not "online". In any event, the faculty will be surveyed to determine how they are using Blackboard and the results will be used to guide the staff in developing future training and support for this tool.

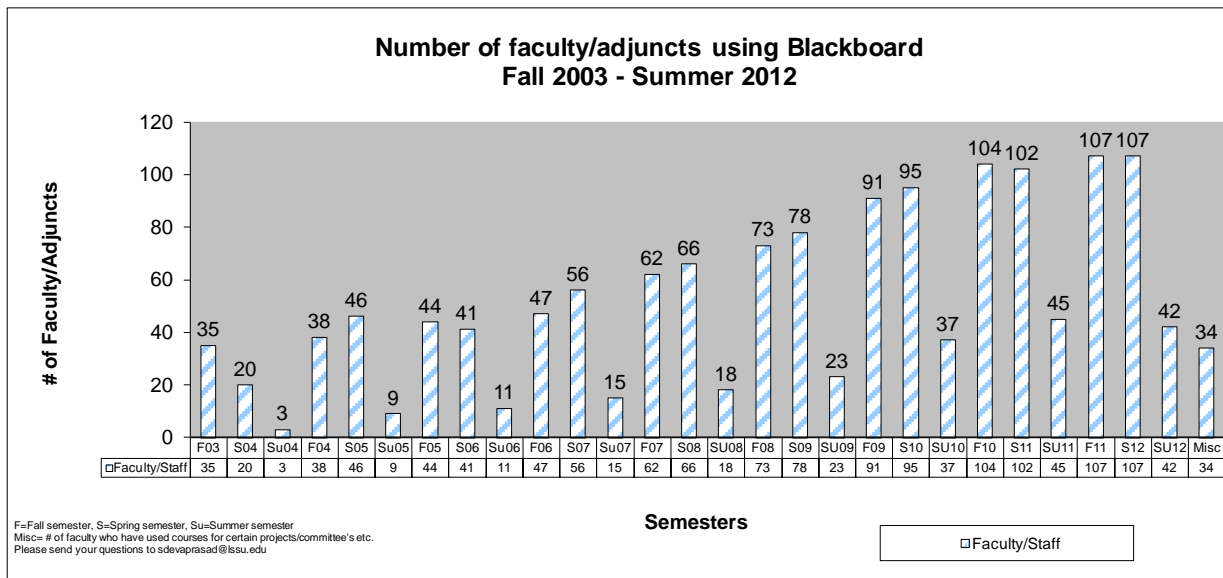
Figure 2 shows the increasing number of courses using Blackboard. The figure includes fall, spring and summer semesters from 2003 through 2012. Currently, about 40% of all courses use Blackboard to deliver some aspect of course content.

Figure 2: Number of Courses Using Blackboard Each Semester



Additionally, the number of faculty using Blackboard has also increased over time. Figure 3 shows the number of faculty/adjuncts using Blackboard over the same period. LSSU employs about 120 faculty and 40-60 adjuncts in any given semester. About 60% of all faculty/adjunct make use of Blackboard.

Figure 3: Number of Faculty/Adjuncts Using Blackboard Each Semester



Although the use of technology (Learning Management System: Blackboard) has increased, the number of truly online and blended course sections has remained fairly constant for the last several years. Table I shows the history of the number of online and blended course sections offered by LSSU over the last five years. Approximately 2-7% of the course offerings in any given year (or semester) are online or blended. The majority of course offerings (~95%) are face-to-face. The largest number of online and/or blended course offerings occurs in the summer semesters.

	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Online Courses	32	49	75	72	58
Blended Courses	3	3	25	41	33
Total Courses	35	52	100	113	92

Table 1: History of Online and Blended Course Offerings

Support for online instruction and for the use of Blackboard has been ongoing. During the 2011-2012 academic year, LSSU began to transition from Blackboard (Web CT8) to Blackboard Learn. This transition was completed in spring 2013. During the transition, several training sessions were offered, online tutorials were developed, and one-on-one help could be arranged. Many faculty made use of the training and one-on-one support.

V. Conclusion

This one-year monitoring report has provided the university an opportunity to begin a dialog with the entire campus to gather thoughts concerning Information Technology and then develop a strategic plan to address the concerns that were raised. LSSU has started to implement the strategic plan and will continue to do so over the following years. The scope of work assigned to the current Interim Director of IT has been reduced by moving some responsibilities to AV (helpdesk), and by splitting IT into two separate areas with two directors. Additional resources have been committed, resulting in two new positions for ITUSS and two additional positions/roles have been expanded. Finally, initial steps have been taken to promote a focus on internal and external customer support, and future procedures/plans will reinforce this concept.

A new Center of Excellence in Teaching is in the process of being developed. The Center will be supported by faculty, staff, and administration beginning in the fall of 2103. The Center will be centrally located in the LSSU Library and will provide a variety of professional development and training for faculty and staff.

The final section of this report clarifies LSSU's use of technology in online learning. In general, LSSU offers very few courses that are truly online; however, most faculty members make use of the online technology to deliver some aspects of the content of their courses. The needs of the faculty in using Blackboard will be evaluated and future training/support will focus on those needs that are identified.

The IT Strategic Plan will be implemented by the two IT Directors, and the AV department, with oversight by the Provost. The plan will be entered into the LSSU assessment tracking system and folded into the LSSU Strategic Plan for monitoring.

VI. Supporting Evidence

A. [Information Technology Campus Survey Results](#)

B. [Information Technology Strategic Plan](#)



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