Recommendations for the Future of Technology-Enhanced Learning at Stetson University

Prepared by the Academic Technology Committee (ATC) submitted to provost: Feb 2, 2010 revised: March 15, 2010

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Introduction and Background

The Academic Technology Committee (ATC) is a standing university committee with membership that includes faculty representing different units of the university (Arts & Sciences, Music, Business, and Library), administration, IT staff, and two students. In the past, the ATC has functioned primarily in an advisory capacity to the Departments of Information Technology and Media Services as they have deployed new and upgraded services.

As part of the campus-wide visioning process during the 2009-2010 academic year, the ATC has developed a report similar to those produced by other university working groups with Provost Beth Paul's encouragement and support. The Chief Technology Officers from both the DeLand and Law College campuses, as well as the Celebration IT specialist, participated in this effort.

This ATC report assesses the state of technology-enhanced learning at Stetson University and outlines a vision for how the university can move forward on this issue of vital importance for 21st-century education. Since technology is also a critical supporting element of Stetson University initiatives in areas such as Student and Campus Life, Facilities, Enrollment Management and Retention, Marketing, and Athletics, the committee also took care to monitor reports from other working groups and ensure this report is congruent with their recommendations.
This report is the culmination of four months’ research on best practices of technology-enhanced learning both at Stetson University and within the wider academic community. A key component of this research was an ATC survey administered to our current faculty across the university, for which the response rate was calculated at 67.07% (167 out of 249 persons on faculty). This gave us great confidence in the data and the resulting picture they painted of how our faculty currently use technology.

The survey also provided us with a window into faculty attitudes toward technology. When asked whether they would be willing to implement online learning technologies where they benefit student learning, 75.44% (126 out of 167 total respondents) said yes in some form. The key for Stetson University going forward is to select technologies and initiatives that have the highest impact on improving student learning. When this is the goal, our data show that the faculty are more than willing to support it.

To support the development of this report, the ATC established its own wiki site. Pages on the site were used to capture ideas, link to resources, and develop drafts. All members of the ATC and select invitees were given access and editing privileges. Our goal was to demonstrate through the process of writing this report how technologies can be leveraged to more effectively take on service projects of this nature.

Since the focus of this document is on our recommendations rather than our process, we welcome and encourage any questions from the larger Stetson University community about either the specific survey results or the wiki site.

**Definitions**

- **technology-enhanced learning** - the use of specific technologies to improve the student's learning experience and the quality of stated learning outcomes regardless of whether the course delivery method is face-to-face, online or hybrid

- **online course** - a course that is taught entirely through web-based technologies

- **hybrid course** - a course that is taught partly online and partly through traditional face-to-face contact

- **synchronous learning** - learning in which students and professor interact in real-time via face-to-face contact or technology-mediated formats (e.g., phone, chatroom, webcams, and collaborative applications such as Elluminate.)

- **asynchronous learning** - learning in which students access materials via technology-mediated formats (e.g., Blackboard, Moodle, blogs, wikis, podcasts, learning objects, and pre-recorded lectures) at their leisure, thereby giving them greater control over the pace at which information is presented

- **course management system (CMS)** - a web application used to assist educators in delivering digital course materials and manage online learning experiences (e.g., Blackboard, Moodle)

- **Creative Commons** - a free licensing tool that allows creators to easily communicate the rights they reserve and the rights they waive for the benefit of recipients or other creators
Quality Matters Rubric - a set of forty specific elements, distributed across eight broad standards, by which to evaluate the design of online and hybrid courses

Principles

Developing a vision of technology-enhanced learning at Stetson University necessitated that we first define a set of principles to guide our recommendations for concrete actions. It is our hope that these principles will become a lasting foundation upon which the university can not only evaluate the necessity of implementing the recommendations in this report, but also future recommendations for specific technology initiatives.

In order to create a learning environment that meets the expectations of 21st-century students, Stetson University must:

• become a place where technology-enhanced learning is the norm, not the exception, while still retaining the rich tradition of engaging our students in active learning through personal connections with their faculty mentors.

• create a work environment that supports and challenges faculty to develop new and innovative applications of technology-enhanced learning.

• ensure the support staff for technology-enhanced learning has the necessary resources to continuously develop materials and deliver services.

• further develop and continually maintain its technology infrastructure.

• leverage technology to unify the university across its four campuses.

• achieve national distinction for technology-enhanced learning innovations within a traditional liberal arts setting.

Action Summary

The ATC has developed a list of 14 recommendations that translate our principles into action. The following table offers a summary of our recommended actions and a proposed timetable for initiating them. The details of each item are expanded in the next section of this report, along with our rationale.

Proposed timetable for recommended actions in this report.

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<tr>
<th>Action</th>
<th>Immediate</th>
<th>Academic Year 2010-2011</th>
<th>Academic Year 2011-2012</th>
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<td>Offer online courses during summer school</td>
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<td>Create Director of Online Learning position</td>
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<td>Action</td>
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<td>Expand technology training for faculty</td>
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<td>Develop intellectual property policy</td>
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<td>Support faculty technology innovation</td>
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<td>Increase connectivity of ATC</td>
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<td>Refresh older multimedia classrooms</td>
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<td>Expand lecture capture initiative</td>
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<td>Establish online/hybrid strategic plan</td>
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<td>Develop minimum student technology standards</td>
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**Action Items**

*Offer online courses as part of our current summer school program.*

Rationale:

- Several universities have launched online summer schools as a means to keep students engaged while away from campus ([Elon, Ithaca, Ohio](#)). We feel a similar strategy for Stetson would be the best way to expand online learning.

- Although they were not in the majority of our survey respondents, a sizable group (59 out of 167 respondents; 35.32%) indicated they would be likely or very likely to develop an online course if given the opportunity. The number grew (69 of 167; 41.32%) when the question turned to hybrid courses.

Proposals:

- A pilot group of courses should be offered in Summer 2010.
  - The cohort of faculty involved should meet regularly during the Spring 2010 semester to support each other during the development phase.
- Current instructional technology staff should be charged with joining the meetings of this faculty cohort and supporting their needs.

- Care must be taken to ensure that these online learning experiences are consistent with the brand and image of Stetson University.
  - The tuition for online courses should be the same as our traditional offerings.
  - Caps should be set on course enrollments to ensure that courses remain "high-touch" with significant interactions between faculty and students.
  - Courses must include a major synchronous learning component to aid in connections between faculty and student.

- Designate an appropriate group to develop methods of assessing the success of all current courses and the Summer 2010 pilot courses study.
  - The group will meet during the Fall 2010 semester to assess the pilot program and make recommendations for continuing the program.
  - The Quality Matters Rubric will be incorporated into the assessment of the university's online courses.
  - The group should be charged with making recommendations about enrollment caps, best practices, investment in technology enhancements, faculty incentives, and further deployment goals.

**Create a director-level administration position to coordinate online learning.**

**Rationale:**

- Collaborative and interactive online learning, including its enabling technologies and assessment tools, are comparatively new.

- The best way to jump-start a successful online learning initiative at Stetson is to hire someone with demonstrated effectiveness in utilizing synchronous, asynchronous and hybrid platforms to teach and deliver online courses.

- Beyond the application of online learning methodology, a Director of Online Learning is needed to plan and coordinate multi-discipline course offerings in collaboration with other faculty, instructional technology staff, and key academic administrators.

**Proposal:**

- Create a Director of Online Learning position that reports directly to the Office of the Provost.
  - The Director of Online Learning will serve in a twelve-month administration position. Required: a Ph.D. with appropriate specialization and experience employing technology-enhanced learning strategies to teach and deliver online courses.
  - The director will report to the provost to support all Stetson campuses, colleges, schools, divisions, and departments.
- In addition to supporting credit courses in the university’s degree programs, the director will also coordinate the expansion of online certificate and continuing education initiatives.

- Working closely with the provost, deans, and Faculty Senate, the director will develop and implement online learning policies, procedures, training and assessment.

- The director will provide consultation to faculty and assist with training and workshops on technology-enhanced online learning techniques and applications.

- The director should be hired as soon as arrangements can be made to oversee Stetson’s online summer 2010 pilot program. Responsibilities and working agenda will be broadened as Stetson’s online efforts expand.

**Expand use of existing instructional technologies.**

Rationale:

- Despite a significant investment of time and financial resources by the university, many of our existing instructional technologies are under-utilized.

  - For example, the three most common uses of course management systems by our faculty are sharing course documents (77.44%; 127 of 164), sending email (73.78%; 121 of 164), and posting their syllabi (71.95%; 118 of 164).

  - More interactive features such as quizzing (20.12%; 33 of 164) and discussion boards (31.71%; 52 of 164) are comparatively underutilized.

Proposals:

- Establish procedures to ensure the university effectively employs currently underutilized technologies ([Blackboard](#), [iTunesU](#), [WordPress](#), teleconferencing, [Atomic Learning](#), [FaceBook](#) integration, etc.).

- Establish procedures to employ additional free or low-cost services with potential pedagogical value that we have yet to fully tap as a community ([Twitter](#), [Skype](#), [WikiDot](#), [PBworks](#), etc.).

- Begin developing a “How To” collection that assists students, faculty, and staff in recognizing resources that are already available and to better utilize them (e.g., short video clips on doing specific things in Blackboard, how to change your password).

**Expand technology training and workshops for faculty.**

Rationale:

- When asked if they would need technical assistance in developing online or hybrid courses, 56.88% (95 of 167) of our survey respondents said likely or very likely. Many respondents also used the free response questions to express specific needs for training.

- Information shared between colleagues is often more effective than generic workshops and information sessions.
Proposals:

- Develop a system whereby faculty teach other faculty about techniques they have developed.
  - Compile a list of faculty with associated technologies they can teach others to use.
  - Faculty must feel there is a reward for such activity; therefore, insist that tenure and promotion committees view this activity as a valuable service to the university.

- Schedule targeted faculty development and technology training sessions (i.e., summer technology innovation workshop; application-specific workshops and tutorials for Blackboard, Moodle, Elluminate, TWEN, and LexisNexis) with funding for external experts and trainers.

**Develop a university policy regarding intellectual property resulting from technology-enhanced learning initiatives.**

Rationale:

- A single university policy is necessary to establish faculty and institutional rights with regard to intellectual property. A variety of licensing models could lead to the need for increased administrative oversight.

- The model of open courseware and Creative Commons licensing has proven beneficial for such leading universities as Harvard, MIT, and Carnegie Mellon.

- By keeping the licensing model open:
  - The university would own the material, but all parties would have sufficient rights to use the intellectual property in question.
  - The material could be provided as a service to the broader academic community, thereby enhancing the university’s image.
  - The material could be improved based on volunteer input from the broader academic community, possibly leading to new partnerships.
  - Prospective students would be able to preview the material before attending Stetson University.
  - Students that aided in the development would be able to easily point to the material for portfolio purposes.

Proposal:

- Adopt the model of open courseware and Creative Commons licensing for all intellectual property developed to support technology-enhanced learning.

**Encourage and support faculty innovation in technology-enhanced learning.**

Rationale:
Making technology-enhanced learning the norm at our university will require that administration makes it a clear priority and offers faculty incentive programs.

Proposals:

- Establish a Center for Teaching Excellence to facilitate faculty innovation in teaching strategies. Championing technology-enhanced learning would be a core part of the mission of such a center, likely situated within the broader context of enhancing the overall student learning experience.

- Establish a grants program to support new projects involving innovative applications of instructional technology. Grants could be phased so that phase one is granted to develop and implement the new application, and phase two is funded after the faculty have demonstrated success and taught colleagues to implement their new techniques.

*Increase connectivity between our technology leaders and the wider education community.*

Rationale:

- By adding members of the ATC to relevant groups on and off campus, we will be able to increase efficiency and avoid redundancy as we pursue actions based on our principles.

Proposals:

- Appoint an ATC rep to serve on the Florida Distance Learning Consortium (FDLC); Stetson University must network with other universities to stay current on educational technologies.

- Appoint an ATC rep to upcoming master planning process; rethinking our campus must be done with technology in mind.

- Appoint members of the law faculty to the ATC so that this group represents the entire university.

- Encourage faculty participation in leading-edge organizations such as EduCause and NITLE.

*Allocate budget to refresh/upgrade multimedia classrooms university-wide.*

Rationale:

- Our DeLand campus includes 90 existing multimedia classrooms, representing an investment of over $2.3 million. Twenty-five, nearly 30%, of those installations were installed between seven and eight years ago are beginning to show their age. There has been considerable “down time” in the past year requiring costly repairs and fixes. This “down time” has impacted faculty teaching and student learning. (The College of Law with its newer multimedia classrooms does not currently have similar issues.)

- In the past several years, multimedia technology has improved – this is particularly notable for projectors; modern equivalents are 2 to 3 time brighter than existing projectors, have higher resolutions – and prices for such units are about one half what they were in 2002 – 2005.
• Funding for repairing, refreshing and upgrading these rooms has never been stable, meaning that IT has had to be creative when they need to pay for upgrades and divert funds from other budgeted items.

Proposals:

• In the upcoming FY, allocate an annual budget of at least $50,000 to upgrade and repair multimedia classrooms on the DeLand campus, targeting those that were installed prior to 2005.

  - This would begin to repair and/or refresh 10-20 percent of the rooms.

• During future budget cycles, increase to a refresh rate of 20 percent. In future years, similar funding will be required for the Celebration and School of Law campuses. If increased revenues allow, the refresh rate could grow at a faster pace.

  - By increasing the refresh rate to 20 percent, rooms would have a predictable shelf life of 5 years. A defined life-cycle of 5 years for all multimedia classrooms would enable us to better budget for the long-term impact of new multimedia classrooms as they are added to our facilities.

**Expand lecture capture initiative.**

Rationale:

• Several national reports have shown the positive impact lecture capturing has on student learning ([Briggs 2007](#); [DeAngelis 2009](#), [Elsasser, et. al. 2009](#), [WPI 2009](#)).

• Several options exist for easily capturing lectures while using presentation software (e.g., [Mediasite](#), [ProfCast](#) and [Camtasia](#)).

• ATC’s recent survey found a high percentage of our faculty use presentation software 75% (123 out of 164); yet, we have low reported uses of podcasting 11.59% (19 out of 164) and lecture-capture 6.71% (11 out of 164).

Proposals:

• With a minor investment in necessary software and a large push in educating faculty, the potential yield of lectures captured could be significant.

• Lecture-capture software could also be used by students to record and reflect on their own presentations and further enhance their learning experience.

**Establish a strategic plan for coordinating and expanding online and hybrid courses across Stetson campuses.**

Rationale:

• By coordinating our efforts across all four campuses, we can reduce the need for redundancy and ensure that resources are used most efficiently.
• Students tend to take online courses from a local college (Zemsky, Wegner & Massey 2005, Kirk 2009). Stetson University’s four campuses could be leveraged to "be local" for a much larger community than if any one campus pursues online learning in isolation.

• Enhancing and augmenting online/hybrid course offerings would serve key constituents within the current student body:
  - Student athletes could keep current with hybrid courses during required travel.
  - Non-traditional students could better balance the responsibilities of work and/or family via synchronous learning.
  - Non-resident students could better manage the cost of traveling to campus via online/hybrid courses.
  - Undergraduate students could pursue internships outside DeLand during Fall and Spring while still completing online courses.
  - Study-abroad students could stay connected with the university via online seminars.

• The implementation of online/hybrid courses is motivated chiefly by the desire to enhance existing pedagogical excellence. The ATC recognizes that there are additional benefits of such curricular augmentation, including revenue.

Proposals:

• Implement policies and procedures recommended by the Summer 2010 assessment group to expand online learning programs (course approval, faculty incentives, ownership, establishing new degree-plus-certificate programs, quality-control, mini-semester courses, etc.).

• Appoint multi-discipline, multi-campus online learning support teams (from IT-Media Services, Office of the Provost, Library, Academic Resource Center, etc.).

**Expand technology support staff.**

Rationale:

• With an increase in the number of technology-enhanced learning initiatives, our already depleted IT support staff will need additional positions in order to offer quality service to the faculty.

• Our survey indicates there are key differences between the academic disciplines represented by our university. Giving staff members responsibilities within specific programs would allow them to better specialize and take ownership over the progress within their assigned area.

Proposals:

• Hire an AV technician to maintain and repair multimedia classroom systems.

• Increase DeLand IT support staff in critical areas to properly support new technology initiatives, online faculty and students, as well as “after-hours” users.
• Provide a minimum of three (3) instructional technology designers assigned to specific curricula areas on the DeLand campus; provide a minimum of one (1) technology designer for the Law School.

• Hire a support person to fill a newly-created position dedicated to course management systems.

• Expand DeLand/Celebration Helpdesk hours to Monday – Thursday 8:00am to 9:00pm, Friday 8:00am to 5:00pm, and Saturday 7:30am to 6:00pm.

**Expand instructional technology infrastructure.**

Rationale:

• With an increase in the number of technology-enhanced learning initiatives, the university must ensure that money is budgeted for the hardware and software necessary to enable these programs to be successful.

Proposals:

• Allocate budget to add/upgrade multimedia classrooms in academic buildings with minimal systems (i.e., Presser Hall, Sampson Hall, Davis Hall, Law School facilities).

• Expand DeLand campus network to provide 100% wireless coverage to support mobile computing.

• Implement plan for Academic Multimedia Production Center (ultimately multi-campus) to support student and faculty technology projects and innovations.

**Develop a set of minimum technology standards for professors.**

Rationale:

• Without faculty mentors who model the profitable use of technology in learning, students cannot be expected to develop good habits in their own use of technology.

Proposals:

• Require the use of a course management systems for maintaining grade books.

• Require that all syllabi are posted and accessible to all Stetson University students and others.

• Ensure that students will be able to use personal technology within the classroom for appropriate learning tasks.

**Develop a set of minimum technology standards for students.**

Rationale:
Minimum standards can help clarify for students the expectations of the faculty and better equip them for life-long learning in the digital age.

Proposals:

• Expand the university's "Code of Computing Conduct" to include acceptable uses of mobile computing devices.

• Require all entering first-year students beginning in the Fall of 2010 to take at least one online course as part of their graduation requirement. Students will benefit from exposure to this teaching technology because it supports lifelong learning. Allow academic deans to waive this requirement based on the special circumstances of the degree program and/or available online course offerings.

• Require incoming students to have minimum technology competencies. This could be implemented by developing an online, asynchronous course that trains them to use technology successfully before they arrive on campus.