



Adams State College

Institutional Technology Plan

March 2008

Prepared By:

Institutional Technology Planning Committee

Adams State College Institutional Technology Plan

Introduction

Information Technology (IT) plays a vital role in the discharge of the role and mission of Adams State College (ASC). Properly conceived, planned and implemented, technology is a valuable tool which will assist Adams State College (ASC) in satisfying its institutional goals. The ASC Institutional Technology Planning Committee (ITPC), reporting directly to the ASC President, is charged with developing this campus IT Plan. Key features of the plan include the following:

- The IT Plan is linked to and supportive of the campus Strategic Plan.
- The IT Plan provides, not only, overarching IT goals, but also contains discrete strategies and tactics for achieving these goals which provide a benchmark against which annual progress may be assessed.
- This plan subordinates hardware and software and the procurement of hardware and software to outcomes, to capacities and needs that can be met through judicious application of IT.
- Due to the rapid evolution of technology this IT Plan is a “living” document, which will be reviewed and updated annually.

Strategic Planning Assumptions

Key assumptions which have gone into the development of this plan include:

- The role and mission of Adams State is to provide educational and learning opportunities for our diverse students; IT must be integrated into and subordinate to that goal.
- ASC Students, faculty and staff will have ever increasing expectations in regard to information technology, such as, expecting online, reliable and secure access to ASC academic and administrative systems, 24 hours a day, seven days a week; this will place greater demands on the College’s capabilities and resources.
- Campus teaching and learning goals and needs will “drive” the technological requirements. Implementing the latest, cutting edge, technology is not a campus priority.

- To remain competitive in the higher education market, ASC must make prudent investments in technology using a systematic planning approach and long-term vision.
- Because information technology (IT) plays an increasingly critical role in the operation of educational institutions, ASC must incorporate IT into its strategic planning and budgetary processes. Without such inclusion, ASC will be unable to profit from the full potential of technology and may find itself dominated by the chaotic impact of unplanned IT growth. Absent a stable funding base, any IT plan will fail.
- Technology is an ever-evolving, moving target; implementation of campus technical solutions should be based, as much as possible, on open-standard products, minimize specific vendor “lock” and provide reasonable flexibility needed to accommodate future demands.

ASC Mission, Vision, & Institutional Goals

Mission Statement

Adams State College dedicates its resources to provide opportunity and access for all students. The College is an innovative leader that recognizes the inherent educational value of diversity. It is a catalyst for the educational, cultural, and economic interests of rural Colorado, the surrounding region, and the global community.

Institutional Goals

1. Promote academic excellence
2. Cultivate a high-quality, student-centered environment
3. Provide educational access and opportunity for success
4. Preserve and promote the unique history and culture of the region
5. Stimulate economic development in the San Luis Valley
6. Improve organizational effectiveness

Vision Statement

We measure our success by the success of our students in achieving their life goals. We are Colorado's most effective state-assisted four-year college. Our efforts provide a high quality educational experience through a supportive and rigorous learning environment. Our programs recognize the value of continual improvement while embracing diversity of culture and ideas that stimulate intellectual growth.

IT Vision Statement

Campus Information Technology (IT) exists to support the achievement of ASC's Mission, Vision and Institutional Goals. IT will be used as an "enabler," in concert with other campus resources, to create an efficient, collaborative and welcoming campus learning and working environment for its many constituents. ASC has the additional IT responsibility to assist our community in overcoming the "digital divide" which hinders rural areas, such as the San Luis Valley.

Institutional IT Planning Process

- The IT planning/review process begins in August of each year with the resumption of fall semester classes.
- Using a Strength, Weakness, Opportunity, Threat (SWOT) analysis model, the planning process focuses on IT activities/needs for the upcoming academic fiscal year; as an example, planning for the 2009 fiscal year (1 July 2008-30 June 2009) will begin in August of 2007.
- The updated IT Plan should be available for submittal to the Cabinet, by December of each year to ensure campus IT needs can be addressed during the budgeting process for the upcoming fiscal year.
- The IT Plan should include a list of goals, strategies and tactics for the upcoming fiscal year, with estimated implementation costs.

Summary of Strategic IT Goals

- **Strategic Goal #1: Empower and Enhance Learning**

Create a technology-enriched environment for learning that is effective as an aid in supporting the experiences of teaching and learning and is instructive by reflecting the technology environment graduates will work in after leaving ASC.

- **Strategic Goal #2: Provide a Reliable, Robust and Secure Information Technology Infrastructure**

Ensure that students, faculty and staff have reliable and secure access to information, educational resources and research resources, recognizing the diverse needs within each of these groups.

- **Strategic Goal #3: Provide Integrated, Customer-Centered, IT Support and Services**

Deliver administrative and academic information and services in an integrated IT environment that fosters an open and collaborative culture and provides ubiquitous access to needed information.

- **Strategic Goal #4: Plan and Manage Information Technology as a Strategic Resource**

Effectively plan, budget and manage information technology as an institutional strategic asset.

- **Strategic Goal #5: Support Service and Economic Development in the San Luis Valley**

Provide collaboration and support to those individuals and organizations working to use technology for economic and rural development.

Appendix A: IT Strategic Goals, Strategies & Tactics

Appendix A will be reviewed and updated, as necessary, at each meeting of the ITPC. This Appendix will serve, not only to document campus IT Goals, Strategies & Tactics, but will also act as a “scorecard” helping the ITPC to assess campus progress towards achieving these goals.

Members of the campus community are encouraged to contact their ITPC representatives if they would like specific items considered by the ITPC for inclusion in Appendix A.

**Appendix A
IT Strategic Goals, Strategies Tactics**

IT Strategic Goals, Strategies & Tactics	Schedule	Status
Strategic Goal #1: Empower and Enhance Learning	As Of: March 2008	
1A. Provide Academic Instructional Technology Support		
1A1. Hire an Academic Technology Director	Summer 2007	Complete; Academic Instructional Technology Center established
1A2. Hire and Instructional Technology Specialist	Summer 2007	Complete - position filled
1A4. Provide Course Management System support	Ongoing	Complete - WebCT support provided by Academic Instructional Technology Center
1B. Ensure students have access to technology		
1B1. Use wireless and other technology to bring network access to residence halls, appropriate classrooms and other campus locations	Jul 2007 - Feb 2008	Wireless installed in SUB, Library and all Residence Halls
1B2. Pursue Title V funding for wireless infrastructure	Summer 2007	Complete - Received \$20K from Title V; built 2 additional TEC classrooms
1C. Ensure Faculty have access to technology		
1C1. Implement an appropriate replacement cycle for faculty computers	Summer 2008	Insufficient General Fund Budget - Awaiting Capital Fee Proposal
1C2. Collaborate with faculty to extend technology into their pedagogy	Ongoing	Academic Instructional Technology Office funded for 2008-2009
1C3. Increase the number of TEC classrooms	Summer 2007	Two additional TEC's completed in 2007; require needs assessment for additional TEC's; currently 40 TECs exist
1D. Provide Support to Distance Education/On-line Programs		
1D1. Provide electronic library resources	TBD	Need further definition of requirement
1D2. Increase the number of distance/technology classrooms	Ongoing	See 1C3 above
1E. Use technology to foster life-long learning		
1E1. Maintain long-term connectivity with former students	TBD	Reviewing use of commercial, no-cost, email accounts for students and alumni
1E2. Provide mechanisms and infrastructure for distance delivery to lifelong learners and others	TBD	
Strategic Goal #2: Provide a Reliable, Robust and Secure IT Infrastructure		
2A. Deliver basic services reliably and effectively		
2A1. Replace out-of-date network components	Ongoing	Switch replacement ongoing; from CISCO to HP
2A2. Upgrade computer room power	Summer 2008	Budget allocated for building upgrade
2A3. Replace Network Edge Router	Jan-08	Complete - installed Rebel Edge Router
2A4. Develop replacement plan for 6509 core router	Summer 2008	
2A5. Develop comprehensive network storage approach	CY 2009	Experimenting with VM technology and NAS/SANS solutions
2A6. Move non-critical services to virtual environment	CY 2007 - 2008	Ongoing; CS testing in process; web services being migrated;
2A7. Implement Desktop Management System	Summer 2008	Trade study complete; testing new Microsoft SCCM product
2A8. Establish and institutionalize an annual desktop refresh budget	Summer 2008	Awaiting Capital Fee Proposal funding
2A9. Implement network management tools to proactively assess network/system performance and simplify troubleshooting	Ongoing	Implemented "Whats Up Gold" product and "Zenoss" product; looking at Airwave tool for wireless management and troubleshooting
2A10. Develop a PBX replacement strategy	CY 2008	Need VOIP writeup by summer 2008 for IT Capital Request submittal to State

**Appendix A
IT Strategic Goals, Strategies Tactics**

2B. Improve IT Security		
2B1. Secure desktop computers	Summer 2008	Ongoing - CS evaluating SCCM desktop management system
2B2. Update security-related policies and procedures	Ongoing	4 new policies approved by cabinet summer 2007; others in-work
2B3. Create position of Information Security Officer	TBD	On hold for budget
2B4. Develop campus IT security awareness program	CY 2007-2008	Joint effort of ITPC plus CS Security Working Group
2B5. Enhance virus and spyware protection	TBD	
2B6. Ensure all online financial transactions are secure	CY 2007-2008	In-process; converting Extended Study Registration Forms
2B7. Implement a laptop encryption approach/policy	Summer 2007	Policy Approved by Cabinet; reviewing full encryption software;
2B8. Implement virtual private network capability	TBD	
2B9. Implement Network Access Control	TBD	
2B10. Install a security alarm system in the Computing Service's Building	CY 2008	Need to assess budget for building upgrade
2C. Minimize Downtime for Critical Services		
2C1. Develop high availability, failover approach for critical services	CY 2008 - 2009	Exploring virtualization capabilities;
2C2. Increase system availability through redundant (or virtual) hardware	CY 2007 - 2008	Purchased 2nd Barracuda email server
2C3. Develop a disaster recovery approach for all critical services	CY 2007	DR Plan to be updated by Dec 2007
2C4. Create a disaster recovery alternate server room	TBD	Concept included in the RH Capital Plan; need to research other off-campus options
2C5. Lobby for additional fiber path to the San Luis Valley	TBD	Should push in conjunction with MNT re-bid
2C6. Install computer room environmental sensors that provide real-time problem notification	CY 2008	Need to assess budget for building upgrade
2D. Maintain and Develop ASC's Human IT Infrastructure		
2D1. <i>Ensure ongoing personnel training is a priority; ensure that budgets reflect this priority</i>	Ongoing	Complete - training budget established
2D2. Provide promotion/growth opportunities for IT staff	CY 2007 - 2008	Initial position upgrades complete
Strategic Goal #3: Provide Integrated, Customer-Centered, IT Support and Services		
3A. Develop a Robust IT Help Desk		
3A1. Designate a Support Services lead to manage and coordinate the IT Help Desk	Fall 2007	Complete - Support Services Lead Position established
3A2. Develop a comprehensive training program for work study students	CY 2007-2008	In-Work; established 3 levels of student support
3A3. Provide after hours on-call IT support	TBD	Awaiting establishment of firm requirement; Academic Inst. Tech providing limited after hours support
3B. Designate the Internet the basic vehicle of service delivery and ensure appropriate services are available through the Internet		
3B1. Increase and enhance web Services	TBD	Need to hire a web application developer to move forward
3B2. Integrate web utilization into ASC Communication and Marketing Planning	Ongoing	Interim Communication Director is campus Web Master
3B3. Deliver Internet-based student recruiting tools to provide a competitive advantage	CY 2007-2008	Implementing Hobson for student recruiting
3B4. Develop a "master" Course Catalog that is maintained online	CY 2008	Catalog Committee formed to review creation process
3B5. Develop an effective e-business capability	TBD	
3B6. Implement the Banner Application Form	Summer 2008	Admissions working to implement form
3C. Develop an effective model for faculty and staff IT training		
3C1. In conjunction with the Director of Academic Technology develop a faculty training model	TBD	
3C2. In conjunction with Administrative Directors develop a staff training model	TBD	
3C3. Provide necessary funding to maintain the ES105 Training Lab	TBD	
3D. Improve Campus Processes Through Effective Use of Technology		

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3D1. Implement a Document Management System	CY 2007 - 2008	SCT Extender Product installed in Records Dept; implementation awaiting Banner 10g upgrade
3D2. Enhance and Extend the Data Warehouse	TBD	Move from Postgress to Oracle database; move from old, non-supported hardware to new hardware
3D3. Integrate Extended Studies processes with Banner Processes	TBD	Resolve "two" campus issue
3D4. Improve campus advising	TBD	Individual identified to support CAAP.
Strategic Goal #4: Plan and Manage Information Technology as a Strategic Resource		
4A. Reduce Total Cost of IT Ownership		
4A1. Explore use of virtual machines to replace physical servers	Ongoing	In-process in nearly every CS area
4A2. Improve patch management/maintenance process	CY 2007-2008	Desktop Management Trade complete - installing SCCM for testing
4A3. Develop remote desktop management capability	CY 2007-2008	Desktop Management Trade complete - installing SCCM for testing
4A4. Review use of thin client technology in computer labs	TBD	
4A5. Continue to explore use of open source software	Ongoing	Complete - a criteria in all formal technology trade studies
4B. Utilize IT to Increase Organizational Efficiency and Effectiveness		
4B1. Group Calendaring	CY 2007	Complete - Google Calendar branded for campus use
4B2. Collaboration Tools	TBD	
4B3. Forms Management	CY 2008-2009	
4C. Stabilize and Target IT Funding		
4C1. Desktop and Network Refresh Program	CY 2007-2008	Network refresh included in student tech fee increase; expect capital fee to fund desktop refresh
4C2. Server Replacement Program	CY 2008-2009	Ongoing; looking at virtualization options; some budget included in tech fee
4C3. Increase student tech fee to provide wireless and maintain infrastructure	May-07	Complete - Students voted to approve additional tech fee
4C4. Establish funding mechanism for on-line programs	CY 2008-2009	Meetings underway on "Virtual Campus" lead by Extended Studies
4C5. Establish funding mechanism for Office of Academic Instructional Tech	CY 2008-2009	Meetings underway on "Virtual Campus" lead by Extended Studies
Strategic Goal #5: Support Service and Economic Development in the San Luis Valley		
5A. Provide collaboration and consulting to those on and off campus working to use technology for economic and rural development		
5A1. Encourage Computing Services and other ASC employees to participate in advisory and governing groups related to rural and economic development	TBD	
5A2. As appropriate, host or support technology forums for economic and rural development	TBD	
5A3. Lobby for additional fiber path to the San Luis Valley	TBD	Should push in conjunction with MINT re-bid