Information Technology Strategic Plan For 2006 - 2009

June 20, 2006

Nashville State Community College

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Introduction

In the past decade, information technology (I.T.) has grown to permeate every aspect of our lives. It impacts the way we work and the ways in which we conduct our personal business; it influences our choices for entertainment and communication; and it is opening up new and exciting ways for us to learn. No public or private organization has escaped the dramatic impact of information technology, including public and private institutions of higher education.

In February, 2006, the information technology strategic planning team was appointed by the Computer Resources Committee to work with the Director of the Computer Services Division (CSD) to develop an information technology strategic plan for the college. The teams met on four occasions for three hours each. A series of exercises were used to develop I.T. vision, assumptions, goals and strategies. The resulting draft was circulated among the planning team for comments and to the faculty and staff as a whole. From these efforts, this report was developed to provide a three-year information technology strategic plan for the college.

Strategic Planning Methodology

Strategic planning is a process that seeks to clarify what an organization is, what it wants to be, and how, specifically, the organization can successfully make the transition. A strategic technology plan provides technology directions and a management strategy within the context of changing internal and external environments while it sets the philosophy and direction for the use of information technology within the institution.

The specific planning process used for development of the Strategic Technology Plan is a modification of the organizational transition methodology described in *Organizational Transitions* by Beckhard and Harris[1]. This methodology is based upon the principle that:

> . . . a core dilemma for executives and leaders is how to maintain stability in their organizations and, at the same time, provide creative adaptation to outside forces; stimulate innovation; and change assumptions, technology, working methods, roles and relationships, and the culture of the organization itself. (Ibid, p. 1)

The planning approach that has been adapted for use by Nashville State Community College, from the methodology proposed by Beckhard and Harris, requires the following steps:

[1] Beckhard, R. & Harris, R. T. (1987). Organizational transitions: Managing complex change (2nd ed.). Reading, MA: Addison-Wesley.

- Development of a "future state" vision of how the use of information technology, in its broadest definition, should add value in support of the college's mission and goals.
- Development of guiding principles that should govern the decisions and actions of the organization and are aligned with the mission and goals of the institution.
- Development of planning assumptions that details the environment in which the college currently exists.
- Development of goals and strategies, aligned with the institutional mission and goals, to enable the college to move forward toward its desired "future state" in accordance with the guiding principles.

History of Nashville State Community College

In 1963, the Tennessee General Assembly passed House Bill No. 633 authorizing the statewide system of regional technical institutes and area vocational-technical schools.

Nashville State opened in 1970 with an enrollment of 398 students. By the Fall of 2000, that number had grown to 7,315; with an enrollment of over 14,000 students during the entire academic year. Nashville State's initial offering of five Associate's degree programs has grown to 49 degree programs and 12 certificate programs. In addition, Nashville State offers continuing education courses ranging from technical skills to management training and programs providing training in such areas as computer-aided drafting and office technology.

Nashville State shares a 109 acre campus with the Tennessee Technology Center at Nashville. The Nashville State facilities include 239,000 square feet of space for classrooms, labs, offices, student services, and a library.

Since 1984, Nashville State has been governed by the Tennessee Board of Regents (TBR) of the State University and Community College System. By 2001, TBR began analyzing the lack of a comprehensive community college presence in Cheatham, Davidson, Dickson, Houston, Humphreys, Montgomery, and Stewart counties. After extensive study and consultation, TBR decided to pursue the objective of expanding the mission of Nashville State as a comprehensive community college in order to help Middle Tennesseans by preparing a skilled workforce; attracting high skill, high pay jobs; improving the per capita income rank of 8th among 11 peer cities; easing transfer to baccalaureate programs; and projecting a substantial income lifetime advantage of graduates with Associate's degrees.

In the spring of 2002, the decision was approved by the Tennessee General Assembly and the Tennessee State Governor to expand Nashville State to community college status effective on July 1, 2002.

Nashville State is authorized to offer the Associate of Applied Science (A.A.S.) and Associate of Science in Teaching degrees, as well as technical certificates. The Associate of Arts (A.A.) and Associate of Science (A.S.) degrees are offered for students planning to transfer to universities.

Mission of Nashville State Community College

The mission of Nashville State Community College is to provide comprehensive educational programs, progressive partnerships, exemplary services, and responsible leadership to improve the quality of life for the communities it serves.

NSCC IT Vision

NSCC will be the leading community college in Tennessee in its access to and support of state of the art information technology for students, faculty and staff.

In support of this mission, the statements at the right describe the vision and mission for the use of information technology at NSCC.

NSCC IT Mission

Nashville State Community College uses information technology as a tool to assist faculty and staff to:

- Support the college's mission;
- Make learning more accessible, effective, engaging and available;
- Create a challenging and supportive educational environment for the community it serves;
- Support a variety of traditional and non-traditional learning, including distance education; and
- Provide efficient and effective student and administrative services.

Envisioning the Future

Nashville State Community College (NSCC) envisions a future where information technology supports the college's mission and its primary goals of institutional leadership, access to learning, quality and resourcefulness. Our effective use of information technology makes it easier for us to recruit, retain and educate students. Our students get the tools and support that they need to succeed in the classroom and get good jobs as a result. Many of these services are available online with safety, security and accuracy.

NSCC is committed to offering cutting edge technology tools to supplement and enhance the educational experience. The college faculty and administration are aware of individual student needs, and delivery methods and pedagogy are customized to meet those needs. This includes a variety of technology supported instructional methodologies, including on-line e-Learning opportunities.

Students have wireless online access to library and other information resources and can register for courses, pay their bills and receive advisement online. More flexible learning options result in greater student – faculty interaction and this increases student satisfaction. NSCC boasts a highly robust and secured wireless networked environment and provides a superior technology curriculum. Students are technologically proficient when they leave NSCC and prepared to meet the challenges of the workplace. The reputation of NSCC is high among potential employers and NSCC graduates are their new hires of choice.

Information technology support and services are available to students, faculty and staff 24 hours a day, 7 days a week and accessible from anywhere. Faculty are able to use instructional technology to enhance student learning and thus maintain a better than average student retention rate. Continuous on-line training is available to them at their convenience. There are cooperative efforts to identify and utilize innovation among the TBR institutions and to share experience and resources when practicable.

Information is available to the faculty, staff and administration in a secure format designed to enhance decision-making. They are able to access college information from any place, at any time without the need to involve Information Technology support staff. Budget priorities are designed to support this advanced technology environment. NSCC has met the challenges of the future, encouraging success for all.

Information Technology Guiding Principles

Making progress toward the ideal information technology state defined in the IT vision statement requires making numerous difficult decisions and choices. Because these future decisions and choices should not take place in a vacuum, the IT strategic planning task force sought to develop standards that could be used to assist in the decision-making process.

The Guiding Principles reflect how institutional members should relate to one another, how they should operate, and how they should compete in terms of technology throughout the organization. In addition, these IT Guiding Principles must be in alignment with the trends impacting the college. As decisions are required, the principles are designed to help guide actions when choices are not clear. They are meant to provide a context for consistent decision-making that is not just focused on doing things right, but on doing the right thing. The numbers are for reference purposes only and do not indicate priority.

Nashville State Community College
IT Guiding Principles

Nashville State Community College shall use information technology to promote:

1. Student Learning: enhanced educational and career opportunities
2. Distance Education: removing access barriers to educational opportunities for the community it serves
3. Access: 24 / 7 learning opportunities and support resources
4. Professional Development: provide faculty and staff with opportunities and resources to enhance their technological and teaching skills
5. Information Management: effective, efficient and secure management and storage of its information resources
6. Communication, collaboration and cooperation: enhanced interactions among its stakeholders
7. Emerging Technologies: maintain and prioritize funding for educational programs and access to new technologies
8. ADA Compliance: Information technology shall be used to comply with ADA requirements -- including providing different learning style solutions as appropriate for students with documented disabilities
9. Security: ensure information that is intended to be confidential, remains confidential and secure, and all regulatory requirements are being met.

Planning Assumptions about the NSCC Environment

Planning assumptions represent what the IT strategic planning task force believes to be true about NSCC's current environment. These assumptions are based upon the observations and opinions of the task force, and are intended to describe the current internal and external environmental factors that have a bearing on the development and implementation of the college's information technology strategic plan. In making this assessment, task force members reflected on the student population, both existing and anticipated, the faculty, administration and staff, community relations, technology trends and support, facilities, and the physical resources of the college. They identified characteristics in these areas and drafted sets of planning assumptions about trends they foresee as well as new developments they anticipate. The numbers are for reference purposes only and do not indicate priority.

1. Student – related assumptions
    a. We can expect an increasingly diverse student body with differences in age, language skills, background and technical skills. We should plan to deal with this digital divide in a variety of unique and specific ways.
    b. The majority of our students are increasingly interested in flexible course scheduling options.
    c. Older students are often more goal oriented and yet sometimes less familiar with technology.
    d. We can define traditional students as those in training for their first job. They are likely to be younger, more able to multitask, more likely to expect immediate gratification, and more technology savvy.
    e. We can define non-traditional students as those seeking further training or working toward a career change. They are likely to be older and more goal oriented than traditional students.

2. Faculty and Staff – related assumptions
    a. Faculty and staff will have a high level of diverse technical support, knowledge and training.
    b. Faculty and staff are interested in student success and will continue to maintain that the student be the number one priority.
    c. Technology will promote flexibility in work hours and location; therefore, faculty should have a choice of a laptop or a desktop computer.
    d. Promotion and tenure decision will include review of the faculty's commitment to technology.
    e. Administration will minimize barriers for faculty use of technology.

3. Community – related assumptions
    a. The community needs to see that tax dollars are used accordingly.

b. Employers will require more soft skills and management, i.e. writing and communications.
c. The community expects that leading edge technology is used in all aspects of the college
d. The community is not just Tennessee.
e. The community expects greater flexibility with distance education courses, anyplace / any school / anytime options, and relaxed residency laws.
f. The community expects more and less expensive training opportunities.

4. Technology Trends assumptions
    a. Technological competencies of students are diverse, but the digital divide is shrinking. Certain populations will need further assistance in obtaining requisite skills.
    b. Mobile multipurpose devices will become standard. Student, faculty and staff will want connectivity.
    c. Bandwidth requirements will continue to increase with advancements in technology and instructional methods.

5. Technology Support – related assumptions
    a. Technology support will be delivered professionally by well trained, up-to-date staff.
    b. Appropriate technological support will be accessible 24 / 7 and will be delivered efficiently and effectively.
    c. Providing technology support will be everyone's responsibility.

6. Resources / Facilities – related assumptions
    a. The college has received funding for a new Academic / Student Services building. Construction is expected to begin in 2007. Funding is limited and therefore the size of the new building will be limited.
    b. All non-PE classrooms / labs will be "Smart Classrooms".
    c. The campus will develop a fiber optic infrastructure that will provide both private secure access for administrative use and public wireless support for up to 4,500 FTE.
    d. There will be a significant number of laptops to allow faculty and students wireless access to the network.
    e. Current facilities will be more efficiently utilized.

Nashville State Community College Institutional Goals and Outcomes

The 2005 – 2010 Nashville State Community College strategic plan sets to following goals and outcomes:

1. **Institutional leadership**: NSCC will demonstrate its capacity for leadership within the service area through increased partnership with all sectors of the communities it serves.

    a. NSCC, working with Tennessee State University and Metro Schools through Alignment Nashville, will use the ACT Feedback Reports to initiate projects with principals in major feeder schools to improve students' success in entering college without need of remediation.

    b. Workforce Training Center will increase net revenue (defined as gross, direct revenue minus controllable expenses) 10% per year.

    c. NSCC will help establish a Middle College High School in cooperation with Metropolitan Nashville Public Schools.

    d. Banner conversion will be completed which will facilitate a re-engineering of business processes.

    e. NSCC will establish a campus in the southeast Nashville area

    f. The Center for Information Technology Education (CITE) will maintain current National Science Foundation (NSF) funding level and develop strategic partnerships with at least four local companies.

2. **Institutional Access to Learning:** NSCC will focus on increasing the rate of student participation in both transfer and career/technical degree programs.

    a. NSCC will increase the percentage of students enrolling who graduated from high school within the previous year to the NCCBP national median for urban institutions.

    b. NSCC will initiate programs and partnerships to deliver programs that provide access to health-related certificate and associate degree programs for the population of our service area

3. **Institutional Quality**: NSCC will establish and implement high standards for student achievement, currency, and continuous improvement of all its

transfer, career, and workforce training programs.

a. Implement continuous quality improvement processes identified in the Academic Audit self-studies and the audit team reports. Ten programs will report annually on improvements made in their academic quality processes. The programs are Biology, Business Management, Computer Accounting, Computer Information Systems, Computer Networking, Culinary, Music Technology, Office Administration, Photography, and Visual Communications.

b. Increase the percentage of African American faculty to at least the College affirmative action goal. This will be NSCC's primary post-Geier goal.

c. Increase accountability for using professional development experiences supported by the College to improve the effectiveness of classroom instruction.

d. Recruit and retain effective full-time faculty with rigorous hiring, mentoring, promotion, and tenure processes and with the types of appointments that are appropriate to our mission

e. Increase accountability for using professional development experiences supported by the institution to improve job performance.

f. NSCC will improve students' relative performance on the key mission-related measure of Transfer Student Performance, as measured by first-year GPA at transfer institution, compared to peers in the National Community College Benchmark Project.

g. NSCC will improve students' relative performance on the key mission-related measure of program completers employed in a related field, compared to peers in the National Community College Benchmark Project.

h. NSCC will improve students' relative favorable response on items related to the development of critical thinking skills in classes, as measured by items on the Academic Challenge subscale, compared with peers using the Community College Survey of Student Engagement.

i. NSCC will develop a QEP with the capacity and potential to improve student achievement across all program areas in an area of core importance for the College mission.

j.

4. **Institutional Resourcefulness**: NSCC will address fiscal and facilities deficiencies by advocating for: (1) an equitable level of state funding per FTE for the College and (2) equity in the quantity and quality of physical facilities. The College will aggressively pursue distance education, especially web-based courses and off-campus locations as one means of coping with physical facilities shortages.

The Future of Learning…
Nashville State Community College envisions a future in which students will have access to the learning environment at any time of the day or night and from any location.

   a. NSCC will improve the size and quality of campus facilities compared to peers in the TBR system and the national averages for two year colleges.

   b. Increase private giving to the college foundation as a percent of total college expenditures to the Tennessee two-year college average of 3.33% or higher.

   c. Increase market penetration for total students as a percentage of the service area population. The national average is 7%.

Information Technology Goals and Strategies

The goals for the use of information technology at Nashville State Community College for 2006 – 2009 have been identified as follows:

1. I.T. Governance: To review and refine effective information technology advisory, communication, and decision-making processes; aligning them with the appropriate NSCC representative bodies and collegial approval process

2. Infrastructure: To provide a reliable, secure, and comprehensive information technology infrastructure that supports teaching, learning, administration and services

3. Instructional Technology: To use instructional technology that enhances student learning, provides faculty with a variety of instructional tools, and extends flexible educational opportunities beyond the classroom in order to prepare students for the global market

4. Distance Education: To provide quality educational opportunities to students regardless of time or location

5. Administrative efficiency and effectiveness: To provide an Enterprise Resources Management system (Banner) that will facilitate an effective use of academic and business processes

6. I.T. Support / Training / Help Desk: To provide information technology support and training, and develop information technology policies and procedures for NSCC

7. TCO / LCM / I.T. Procurement / Inventory Control: To consider innovative ways to fund information technology capital projects and technology life-cycle replacements, including hardware, software, services and support, while committed to fiscal responsibility

8. Library / Information Access: To facilitate learning and to improve access for Nashville State Community College students, faculty and staff

Aligning Information Technology Goals with NSCC Institutional Goals

		Institutional Goals			
		Institutional Leadership	Institutional Access to Learning	Institutional Quality	Institutional Resource-fulness
Information Technology Goals	1. I.T. Governance	**X**		**X**	
	2. Infrastructure		**X**	**X**	
	3. Instructional Technology		**X**	**X**	
	4. Distance Education		**X**	**X**	**X**
	5. Adm. Efficiency & Effectiveness	**X**			**X**
	6. I.T. Support / Training		**X**	**X**	**X**
	7. Life Cycle Management		**X**	**X**	**X**
	8. Library		**X**	**X**	

Implementing Information Technology Strategies

The information technology strategic planning process that resulted in the development of this strategic plan for Nashville State Community College focused attention on how information technology can and should be used to further its values, mission, and goals. This is important because in order for this planning process to be truly successful, the institution must be able to operationalize this plan on an annual basis.

The Implementation Grid below contains information that will better ensure that the Information Technology goals of NSCC will be better accomplished.

- Goals are strategic level targets.
- Key performance indicators identify completion characteristics or milestones of progress for goals. Answers the question, "How will we know when we have achieved the goal?"
- Strategies associated with each goal identify implementation actions.
- Responsible Party identifies the individual, department, or council that has major responsibility for accomplishment of each of the IT strategies. Typically it will be the responsibility of these individuals or groups to develop the annual operating plans and appropriate budget requests for each of the assigned strategies as well as more detailed project plans. Where multiple owners are listed, the first individual or group listed has primary responsibility for ensuring the implementation of the strategy.
- FY columns show the implementation timeline. An "X" placed in any single FY column indicates completion of a task in that year. X's in multiple FY columns indicate multi-year efforts.
- Progress is to be documented as implementation of the strategies occur.

Goal 1: I.T. Governance: To review and refine effective information technology advisory, communication, and decision-making processes; aligning them with the appropriate NSCC representative bodies and collegial approval process					
Key Performance Indicator(s): Minutes of the CRC will be posted and available to the entire NSCC Community					
STRATEGIES	**RESPONSIBLE PARTY (Owner)[2]**	**FY 06 - 07**	**FY 07 - 08**	**FY 08 - 09**	**PROGRESS/ ACCOMPLISHMENTS**
1.1 Communicate information technology procedures, services and future plans to the NSCC community	CSD	**X**	**X**	**X**	
1.2 Communicate and publicize the Computer Resources Committee's charge, membership, and minutes of its meetings to the NSCC community	CRC Chair	**X**	**X**	**X**	
1.3 Establish a subcommittee of the CRC to deal with software issues, policies, procedures and priorities	CRC Chair	**X**			
1.4 Perform a risk assessment, and review policies, procedures and standards to ensure they are mitigating risks and accomplishing strategic goals	Finance, CSD	**X**			

[2] If more than one Owner is identified, the first listed is responsible for ensuring the successful completion of this strategy

Goal 2: Infrastructure: To provide a reliable, secure, and comprehensive information technology infrastructure that supports teaching, learning, administration and services					
Key Performance Indicator(s): A network plan and disaster recovery plan has been accepted by the CRC					
STRATEGIES	**RESPONSIBLE PARTY (Owner)**	**FY 06 - 07**	**FY 07 - 08**	**FY 08 - 09**	**PROGRESS/ ACCOMPLISHMENTS**
2.1 Prepare, communicate, fund and implement a multi-year network enhancement plan	CSD	**X**	**X**	**X**	
2.2 Ensure network security, disaster recovery and redundancy	CSD	**X**	**X**	**X**	
2.3 Fund and implement wireless access projects in order to have the entire campus wireless-accessible in three years	CSD	**X**	**X**	**X**	
2.4 Enhance Course Management System capabilities and servers	Instructional Services; CSD	**X**	**X**	**X**	
2.5 Ensure adequate Internet bandwidth to support the academic and administrative needs of the college	CSD	**X**	**X**	**X**	
2.6 Revise and improve the existing Disaster Recovery Plan to ensure a comprehensive plan of action	CSD	**X**			
2.7 Ensure the new academic / student services building has state-of-the-art information technology	CSD Director; Facilities	**X**	**X**		

Goal 3: Instructional Technology: To use instructional technology that enhances student learning, provides faculty with a variety of instructional tools, and extends flexible educational opportunities beyond the classroom in order to prepare students for the global market					
Key Performance Indicator(s): New technologies are communicated and installed					
STRATEGIES	**RESPONSIBLE PARTY (Owner)**	**FY 06 - 07**	**FY 07 - 08**	**FY 08 - 09**	**PROGRESS/ ACCOMPLISHMENTS**
3.1 Offer training on new and emerging technologies	LRC; faculty	**X**	**X**	**X**	
3.2 Research best practices and develop a network with faculty at other institutions to learn which technologies they successfully integrated into their curriculum	Faculty Senate Subcommittee	**X**			
3.3 Plan, fund and implement "smart" classrooms that include appropriate new technologies, such as the ability to interface with iPods, PDAs, laptops, smart boards and wireless interface to the network	CSD; Faculty Senate; Academic Deans	**X**	**X**	**X**	
3.4 Provide a means for certain classrooms to be removed from the network in order to provide a secure environment for teaching / learning advance technology and security	CSD; Academic Deans		**X**		
3.5 Provide and support mobile technology units to extend computing and network access into classrooms without permanent technology capabilities	CSD		**X**		
3.6 Support faculty to use prepared course instructional modules and communicate information about their availability	LRC; Faculty Senate	**X**	**X**	**X**	

Goal 4: Distance Education: To provide quality educational opportunities to students regardless of time or location					
Key Performance Indicator(s): Distance Education courses increase by 10% per year					
STRATEGIES	**RESPONSIBLE PARTY (Owner)**	**FY 06 - 07**	**FY 07 - 08**	**FY 08 - 09**	**PROGRESS/ ACCOMPLISHMENTS**
4.1 Expand distance education to include streaming multimedia video on demand and other educational delivery formats	Distance Education; LRC		**X**	**X**	
4.2 Broaden distance education course offerings	Distance Education; Academic Deans		**X**	**X**	
4.3 Provide redundancy and high bandwidth connectivity for distance education servers	CSD	**X**	**X**	**X**	
4.4 Provide distance education globally to a diverse group of students	Distance Education	**X**	**X**	**X**	
4.5 Support and market distance education	President's Office; Creative Services	**X**	**X**	**X**	
4.6 Strive to eliminate barriers for students taking distance education classes and increase advertising	Distance Education; President's Office	**X**	**X**	**X**	

Goal 5: Administrative efficiency and effectiveness: To provide an Enterprise Resources Management system (Banner) that will facilitate an effective use of academic and business processes					
Key Performance Indicator(s): All Banner modules are installed and functional					
STRATEGIES	**RESPONSIBLE PARTY (Owner)**	**FY 06 - 07**	**FY 07 - 08**	**FY 08 - 09**	**PROGRESS/ ACCOMPLISHMENTS**
5.1 Work toward full implementation of the Banner product while re-examining current policies and procedures in order to take advantage of opportunities for improved efficiency	Banner Team Leaders	**X**	**X**		
5.2 Ensure administrative processes are adopted to take maximum advantage of Banner's capabilities	Banner team Leaders; Department heads	**X**	**X**	**X**	
5.3 Incorporate the student advisory system into Banner	Banner Student Team	**X**			
5.4 Provide training and instruction to faculty and staff so they may use Banner to its fullest capacity	Business Office; Records Office; Instructional Services	**X**	**X**		
5.5 Ensure that Banner and other administrative systems maintain technological currency	CSD	**X**	**X**	**X**	

Goal 6: I.T. Support / Training / Help Desk: To provide information technology support and training, and develop information technology policies and procedures for NSCC					
Key Performance Indicator(s): Help Desk statistics are used to determine if response time is acceptable					
STRATEGIES	**RESPONSIBLE PARTY (Owner)**	**FY 06 - 07**	**FY 07 - 08**	**FY 08 - 09**	**PROGRESS/ ACCOMPLISHMENTS**
6.1 Allocate funds and provide incentives and opportunities for training of staff and faculty	Department Heads; Academic Deans	**X**	**X**	**X**	
6.2 Make I.T. resources available, especially during peak hours, to provide faculty, staff and student support	CSD	**X**	**X**	**X**	
6.3 Provide 24 / 7 information technology support	CSD		**X**	**X**	
6.4 Provide additional short courses on new and emerging technologies	Workforce Training; CSD; Academic Deans	**X**	**X**	**X**	
6.5 Develop and publicize information technology policies and procedures	CSD. CRC	**X**	**X**	**X**	

Goal 7: TCO / LCM / I.T. Procurement / Inventory Control: Consider innovative ways to fund information technology capital projects and technology life-cycle replacements, including hardware, software, services and support, while committed to fiscal responsibility					
Key Performance Indicator(s): A desktop computer replacement plan is implement throughout the College					
STRATEGIES	**RESPONSIBLE PARTY (Owner)**	**FY 06 - 07**	**FY 07 - 08**	**FY 08 - 09**	**PROGRESS/ ACCOMPLISHMENTS**
7.1 Develop, fund, and implement technology life cycle management strategies	CSD	**X**	**X**	**X**	
7.2 Evaluate the feasibility of leasing technology rather than buying / surplusing it	CSD: Business Office	**X**			
7.3 Evaluate student-owned laptop program and wireless classrooms vs. the current environment of computers in the classroom	CRC; Academic Deans		**X**		
7.4 Determine the total cost of ownership of technology that is in use past its warranty period	CSD: Business Office	**X**			
7.5 e. Develop a tracking system to monitor the type, age, location and use of desktop and classroom technology	CSD	**X**			

Goal 8: Library / Information Access: To facilitate learning and to improve access for Nashville State Community College students, faculty and staff					
Key Performance Indicator(s):					
STRATEGIES	**RESPONSIBLE PARTY (Owner)**	**FY 06 - 07**	**FY 07 - 08**	**FY 08 - 09**	**PROGRESS/ ACCOMPLISHMENTS**
8.1 Enhance the technical resources available to NSCC students, faculty and staff	CSD; LRC	**X**	**X**	**X**	
8.2 Enhance the accessibility to NSCC's information resources for all students, faculty and staff	LRC; CSD	**X**	**X**	**X**	

APPENDICES

Appendix 1. Projects Over $50,000

Nashville State Community College anticipates the following information technology projects for FY 2006 – 2007 will each exceed $50,000.

1. Desktop Computer Replacement – Faculty and Staff - $224,000
2. Student Lab and Classroom Computer Replacement (TAF) - $366,600
3. Altiris Help Desk Software - $80,000
4. Network upgrades (wiring, fiber, equipment) - $154,000
5. Microsoft Campus Agreement ($60,000 from TAF) - $85,000
6. Servers for Communications Technology Lab - $65,500
7. Equipment for Computer Networking Technology new CISCO Lab (TAF Priority 1)- $56,225
8. Equipment for Computer Networking Technology upgrade CISCO Lab (TAF Priority 2) - $56,225

Appendix 2. Planning Team Participants

Name	Representing
Ayman Al-Qudsi	Computer Services
Debra Bauer	Vice President, Business Office
Jim Dawson	Facilities
Tim Dean	Cookeville Campus
Michael Dickson	Student
Hamid Doust	Mathematics
Nicole Driggins	Biology / Math & Natural Sciences
Carl Dury	Facilitator
Tim Frazier	Student
Carol Frye	Library
Doug Jameson	Distance Education
Jim Johnson	Dean, Information & Engineering Technology
Jim Graf	Information & Engineering Technology
Carol Martin – Osorio	Dean of Students
Richard McKinney	Information & Engineering Technology
David McNeel	CITE
Scott McRoberts	English, Humanities and Arts
Vicki Mendenhall	Computer Services
Robert Overall	Faculty Senate
Bill Pardue	Cookeville Campus
Marla Perry	Health & Social Sciences
Ted Phelps	English, Humanities and Arts
Gail Phillips	Workforce Training
Kevin Poster	Vice President
Laura Potter	Admissions
Eric Prowell	Student
Mira Fleischman	Records & Registration
Judy Smith	Computer Services
Forest Sponseller	Sign Language
Laurie Swanson	Business & Applied Art
Mack Taylor	Student
Faye Vaughn	Library
Ted Washington	Institutional Research
David Weilmuenster	Business & Applied Art
Bill White	Waverly Campus
Amy Wood	Financial Aid

Appendix 3. Technology Challenges and Opportunities

For each Challenge the following were identified as implications for Nashville State Community College and were used to identify future strategies.

Challenge 1: Rate of Change

How do we as an institution keep pace with technological change? What does it mean for a variety of institutional development issues (e.g., faculty / staff development, curriculum development, IT infrastructure maintenance)?

- Impact on training and professional development (faculty and staff)
- Frequent replacement of technology: hardware and software
- Obtaining new technology
- Digital divide among students
- Integrate technology into classes
- Develop WebCT course on "Using Technology"
- Fund for professional development
- Impact of software license restrictions
- Consult students about technology needs
- Benchmarking other institutions
- Don't reinvent the wheel
- Study trends in technology and technology adoption
- Continual need for education on new technology
- Networking with other schools
- Various forms of education, e.g. trade magazines, seminars, networking with others

Challenge 2: Digital Lifestyle

What does the "digital lifestyle" mean to institutions that are committed to being student-centered? How can or should it affect they ways in which the College does business?

- Need 24 hour staffing of Help Desk
- Impact on the way faculty interact with students
- Must maintain current technology
- Expectation that technology is integrated into course instruction
- Students constant need for entertainment / stimulation
- Do not want to lose those who are not digitally inclined – want diversity
- Use PowerPoint and other delivery technology
- Technology remediation
- Flexible curriculum to encourage students to gain technology skills
- How to keep students up-to-date with technology
- Students carry technology (communications, storage, computing) with them – how can we interface with these

- Cater to the merchandise of the public

Challenge 3: Digital Mindset

How can or should the College prepare for students with a "digital mindset?" What does it mean for the way faculty members teach? What challenges does it raise in terms of recruitment and retention?

- Increased expectation for instant information and accommodation
- Disturbing assumption that web pages are to be trusted and that copyright is dead
- Provide a learning environment and not an entertainment environment
- Faculty professional development
- Provide course materials that include digital technology (web research, student collaboration, etc.)
- Integration of entertainment with education
- Instantaneous information – students want immediate feedback
- Copyright is dead; students don't respect intellectual property
- Recruitment: student expect materials to be available on-line and to be provided with services on-line
- Students sometimes think they know more than they actually do
- Academic integrity issues
- More use of multimedia
- Must educate the computer illiterate
- Current information technology
- Faculty will need to change methods of teaching and the curriculum

Challenge 4: Mass Customization

What does this say about students' preferences for learning and interacting with the College? How do we provide choices while maintaining quality and service levels?

- Keep current and share ideas by talking with students
- Keep faculty and staff informed of technology developments
- Most students enjoy using technology for communication, storage and computing
- Research how other institutions are using technology
- Diversified education
- Education anytime – anywhere
- Mass communication is an expectation of our students
- Portals
- Individualism – wanting to be more spoon-fed
- Students increasingly expect instant feedback and instant email replies and are indignant if they don't receive it
- Student labs that are staffed
- Boot camps for technology information

- Require web orientation for all web courses

What is the most underrated new technology?

- Wireless
- Falling cost of LCD screens
- Robotics (walking, talking robots)
- Tablet PCs with touch screens
- Multi-user devices
- Thumb drives
- Merged PDA and cell phone
- OLED
- Webcasting
- Videoconferencing
- "My Space" – blogging
- Flash media

What technology is likely to be the biggest flop in the next 10 years?

- Single user devices
- iPod
- MP3
- Blogging
- Desktop computers
- Fixed location computing
- Wire
- Hard drives

What technology will most change education in the next 10 years?

- Expansion or decrease in the digital divide
- Corporate partnerships
- Asynchronous learning modules
- Wikipedia as an assignment
- Anywhere, anytime education and access to information
- Social computing for collaboration
- Web casting
- Wireless convergence appliances, e.g. smart phones
- Wireless
- Flexibility and mobility
- Textbooks on laptop or tablet PC

- Information is received quickly
- Communication and communication skills
- Proactive in keeping up with technological change

Appendix 4. Obstacles and Solutions

The team identified the following obstacles to successfully reaching our goals as well as solutions to overcome these obstacles. These were considered when determining the strategies for success.

OBSTACLES	SOLUTIONS
• Improper use of technology access resulting in cheating	• Filtering • Instructor's control
• Legal constraints related to software applications	• Update laws to remove barriers • Follow other TBR schools • Statewide "blanket" contract system
• Lack of training (student, faculty, staff)	• Provide opportunities for organized training and assessment • Require training • 3rd party • Temps • CBTs and log use • Workshops and conferences
• Funding	• Proactive planning priorities • Alternative funding (grants, foundations, partnerships with industry) • Additional technology access fees • Corporate IT sponsors • Grant writing committee • Efficiency • Special applications • Gifts / funds • Re-allocate • Special course fees
• Bandwidth	• Purchased more bandwidth and better utilize existing capability
• Accessibility	• Wireless technology • 24 / 7 availability

• Infrastructure	• Develop replacement and conversion strategy
• Lack of awareness of new technology	• Communication
• Short sightedness • complacency	• more forward thinking • quicker transition with I.T. technology
• Contractual	• Legislative • Planning • State contracts • Advance time
• Facility / structure	• Space utilization • Rent • Build other • Upgrade infrastructure • New technology • Contract 3rd • Remotes
• Time	• Better time planning • Redundancy