

# Indiana State University Information Technology Plan 2010-2012



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## **Preface and Process**

Information technology at Indiana State University (ISU) is guided by a formal Information Technology Plan which is updated periodically. The plan documents the conceptual direction for technology growth and implementation as well as defines major project goals, initiatives and activities.

Because the plan is a living document and is designed to establish and guide. The technology direction for the institution, each successive iteration of the plan document has become less concerned with daily operational issues and more focused on articulating the place and role of technology as a core element of Indiana State's strategic direction (as defined by the institution's strategic planning efforts). This shift from an operational day-to-day focus to a strategic focus has been intentional and mirrors, to some degree, the powerful metaphor adopted by the National Science Foundation (NSF) when they re-focused their agenda from "activities that address scientific priorities" to "activities that address global priorities that have scientific implications".

In many ways, technology at Indiana State is at a similar point in its evolution. It is now appropriate for the Information Technology Plan to transition from a document framed in terms of "technology priorities" to a document that addresses "institutional priorities with technology implications". Just as NSF reframed its agenda and activities to focus on what it described as "grand challenges" of society, we are at that point where we must likewise focus on the "grand challenges" facing ISU. The ISU Information Technology Plan 2010-2012 marks the next milestone in the

evolution of thinking about how Indiana State University views the integration of technology in teaching, learning, research, service and support and the role envisioned for technology in support of our institutional mission.

This plan is the result of many hours of work on the parts of all members of the ITAC committee. Membership on ITAC is, by design, representative of the campus community as a whole with particular emphasis given to the academic mission of the institution. In their representative roles, members worked to achieve a consensus on the over-arching strategic goals or concepts that guide information technology. The initial 2008-2010 plan and the revised 2010-2012 plan have emerged as a result of a three-step planning process that defined a series of actions items or core initiatives. Specifically, the three steps were:

1. External Scan – a sub-committee was charged with conducting an external scan to look at the state of higher education vis-à-vis information technology and, to the extent possible, posit future trends and emerging direction. The scan identified both risks and windows of opportunity with specific attention being paid to state and federal funding activities and mandates as well as vendor/market driven technology shifts.
2. Internal Scan – a sub-committee was charged with conducting an internal scan looking at the present state and condition of the technology environment at Indiana State. The scan looked at both academic and administrative use of technology and evaluated current and future use of technology to improve learning, increase or augment research and improve

administrative / service effectiveness and efficiency.

3. Information Technology Core Initiatives – a subcommittee was charged with using the information collected by the internal and external scans to develop a series or set of Information Technology Core Initiatives for each of the 5 strategic goal areas contained in the draft concept/goal statements (contained below). Finally, the draft version of the original Information Technology Plan 2008 -2010 was shared with the campus community and input was sought and incorporated in the final document.

The reader will notice that the 2010-2012 goals speak to broader themes and are framed in terms of what we expect from technology, particularly in the areas of teaching/learning (academics), research, and support.

The number of goals in the 2010-2012 plan was intentionally kept small (the plan contains 5 overarching themes) for the following reasons:

- to focus ISU’s adoption and use of technology on the institution’s core competency (academics, research, and service)
- to make the planning process both manageable and targeted
- to succinctly communicate the ISU strategic technology direction to both internal and external constituencies

For similar reasons, the goals have been stated in non-technical language and reflect the higher-order outcomes that we hope to achieve through the adoption, adaptation and application of technology.

### **Executive Summary**

Indiana State University has entered an exciting period in its history – one that is framed by the confluence of a changing higher education environment and a changing and dynamic period of technology innovation characterized by the emergence of mobile computing and social networking. Superimposed over these external drivers is an institution that has solidified its direction, vision and niche around the themes of experiential learning and engagement. The change dynamic created by these factors is further amplified by changes in administrative leadership, by a decision to undertake a special emphasis study as part of the institutional 2010 accreditation, and by a maturing enrollment strategy designed to attract high ability / high achieving students.

The imperative to provide the robust, stable, and reliable technology infrastructure and to support teaching and learning (including comprehensive faculty professional development and pedagogical support) is easy to understand. To that end, Indiana State CIRT / OIT have adopted 5 core goals/strategic targets that support, augment, and complement the defined direction and goals of the University. The five goals are:

1. Student Learning and Success
2. Research
3. E-Connection
4. Recognition and Reputation
5. Outreach

**Goal 1: Student Learning and Success** – The University will select and implement information technologies and other strategies that integrate with institutional efforts to foster the development of learning environments, address the needs of current and future students, and contribute to student success. Efforts in this area include:

- improve student learning;
- improve and enhance faculty professional development opportunities, programs and activities;
- support and promote the exploration, adoption and assessment of innovative teaching strategies;
- improve the quality and delivery of, and support for, distance and “blended/hybrid” courses and programs;
- improve student access to information resources and educational tools
- assist and support faculty and student efforts related to knowledge creation and dissemination.

**Goal 2: Research** – The University will support the scholarly and creative activities of the campus community with appropriate technology-related and technology-enhanced tools, services and infrastructure. Efforts in this area include:

- enhance the technology infrastructure (voice, video, and data) supporting faculty research;
- implement appropriate technology solutions and/or capabilities that facilitate the communication and dissemination of research related information;
- support research efforts (particularly in STEM disciplines) through the enhancement of visualization and high-performance computing capabilities;

- expand support for technology and non-technology-based grant activities;
- implement best practices that encourage and support creative discipline-related activities.

**Goal 3: E-Connection** – The University will support the expansion, availability, effectiveness, security, and efficiency of institutional services through the use and application of technology-based solutions. Initiatives in this area include:

- improve the voice, video, and data infrastructure;
- assist with, and support, the investigation, adoption, implementation, and assessment of technology solutions that improve communication, collaboration and information sharing related to learning, research, communications, and administrative functions;
- enhance the security for the network, servers, and user workstations;
- implement technology solutions and tools that augment and enhance information access and teaching / learning;
- develop and implement appropriate security policies and procedures;
- improve e-service capabilities for students and employees
- improve technology-based solutions that foster and improve office and administrative effectiveness and efficiency.

**Goal 4: Recognition and Reputation** – The University will pursue state, regional, and national recognition of, and reputation for, Indiana State’s integration and application of technology in the academic enterprise. Campus activities related to this goal include:

- improve communication and information dissemination; participation in state initiatives and activities and; participation in regional (mid-west multi-state) higher education activities, collaborations, consortiums, and organizations;
- support marketing and enrollment services efforts;
- disseminate information about innovative uses of technology at Indiana State through publications, conference presentations, organizational membership and participation on national committees and subcommittee (i.e., Educause, etc.);
- enhance the “service orientation” and “support responsiveness” of the OIT and CIRT units;
- support communications and marketing of information technology;
- acknowledge and promote the technology related activities of faculty and students.

**Goal 5: Outreach** – Indiana State will work cooperatively and collaboratively with extended communities to enhance the general technology environments supporting educational, social, and business and economic development activities. This outreach goal will include:

- partnerships with K-12 institutions to improve academic preparation, encourage college attendance, and improve student success;
- participation in community engagement projects that support community improvement, promote life-long learning, and assist other non-profit groups and agencies;
- build cooperative and collaborative relationships with other local higher

education institutions (particularly Ivy Tech);

- support university efforts, and the efforts of the Center for Public Service and Engagement and the Center for Business Engagement to foster student engagement and promote local and state business and economic development opportunities;
- support of international activities, educational programs, and institutional relationships;
- support university sustainability initiatives.

Each of these core goals and the supporting initiatives outlined above are more fully defined and supported by sets of proposed tasks/activities – these plan details can be found in section “Strategic Goals and Action Items” (beginning at page 20).

## Background

### Issues Facing Higher Education

Higher Education (HE) in the United States faces a changing and dynamic time. There are growing demands from society and government for increased educational access, demonstrated academic and research outcomes and accountability, and workforce preparation and economic development. These calls come at a time when public institutions are simultaneously experiencing declining financial taxpayer support moving our public institutions from being “state supported” to “state sponsored” and ultimately to where, with declining state appropriations they maybe, to a larger degree, “state located”.

These expectations are frequently accompanied by clarion calls for change. Benjamin’s (2003) work, looking at policy change in HE, is as operative today as when he wrote:

The American university is one of society’s key institutions, perhaps the lead institution available today to respond to changing societal imperatives. However, for the university to continue to play a leading role, it is important to match the functions of the institution with the societal imperatives presented by a changed environment. In short, for purposeful, intelligent redesign of the university to take place, new blueprints for changes in the role of the university must be constructed.

William Tierney, Director of the Center for Higher Education Policy Analysis, Rossier School of Education, University of Southern

California, in a presentation identified five (5) over-arching themes that he believed would impact HE. Those themes are:

- **Globalization** – systemic impact socially and on business, industry and government - globalization will drive the need for students to be exposed to, and gain first hand experiences, with other cultures, international business, interlaced global financial, governmental and social activities that will frame their world
- **Increased competition** – “For-Profit” sector, certifications, work-force development – in today’s world, education is big business; new forms of educational delivery are emerging from the for-profit sector, competing with traditional colleges and universities, to respond to the need for life long learning, for professional and work certifications, and public demands for economic development and the attendant workforce preparation that it engenders
- **Increased privatization** – pressure to diversify revenue streams (development, grants, and entrepreneurship) – as the budgets of state government come under increasing pressure, state appropriations directed toward higher education will continue to decline. At the same time, public and government sensitivity to cost escalation pose real or political limits on tuition and fee increases. This budget tightening has caused institutions to rely more heavily on alternate sources of funding including fund raising, grants, and entrepreneurial ventures.
- **Interdisciplinary strategies** – expectation that higher education will help solve social problems – the role of higher education, in the eyes of the public and

governmental leaders have expanded beyond the delivery of educational services to include programs of outreach and engagement and collaborative efforts to develop and assist with the development and implementation of solutions to the social issues confronting society.

- **Technology** – revolution in how we think and interact; shift from consumers of information to creators of information – technology has clearly impacted near every aspect of our lives from providing environmental controls that ensure home and workplace comfort to areas as diverse as transportation, communication, manufacturing, and leisure, recreation and entertainment. At the same time, nowhere has the impact of technology been more evident than in higher education where new technologies are being applied to research and learning as well as most of the service and support aspects of the educational enterprise.

Assuming that Tierney, Benjamin and others are generally right in their view of the higher educational landscape, we must position and plan for the selection, procurement, development, and deployment of technology-based solutions that respond to these challenges.

**Top Ten Information Technology (IT) Issues, 2009**

From the above, it is possible to discern some of the forces on Information Technology (IT) that come from the public, organizational, social, and governmental environments in which the technology operates. At the same time, information technology itself defines or translates related

or tangential activities from a technical perspective or technical frame.

Each year, Educause conducts an extensive survey to identify the top ten (10) information technology issues in higher education<sup>1</sup>. While the results provide an aggregate picture and do not necessarily reflect the top issues of any individual institution, they are instructive and useful as a backdrop or checklist to validate the present and future needs of a specific institution.

The 2009 report reflects the responses from 591 institutions (with a broad mix of institutions based on size, Carnegie class, location, and control (public/private)). The top ten (10) issues were:

1. Funding IT – IT leaders perceived growing internal and external pressure to provide technologies that will offer opportunities for greater and greater innovation, efficiency, productivity, and efficiency while simultaneously reducing demands on institutional budgets.
2. Administrative / ERP Information Systems – while most institutions have recently (or will soon) complete ERP system implementations, pressure for increased functionality, improved reporting, increased service delivery, and improved efficiency continues to drive the need to enhance and implement upgraded or new administrative systems.
3. Security – In the face of growing numbers and sophistication of attacks, increasing

<sup>1</sup> Agee, A.S., Yang, C., 2009. Current Issues Survey Report, 2009, Educause Quarterly, Educause, V44 n4, pgs 45-58; also last viewed at: <http://net.educause.edu/ir/library/pdf/erm0943.pdf>

sensitivity to data privacy issues, and expanded laws and jurisdiction coming from state and federal governments, information technology professionals are finding themselves having to spend more time and resources than ever before on all aspects of security (workstation, server, and network).

4. Infrastructure / Cyberinfrastructure – as the scope of interpersonal communication expands, as access is defined as anywhere and anytime, and as our technology based tools become more robust and increasingly incorporate multi-media (particularly video), institutions are faced with corresponding demands to provide infrastructure (computers, networks, servers, etc.) with higher performance, reliability, and scalability.
5. Teaching and Learning with Technology – integrating technology-based tools within the classroom curriculum creates diverse instructional environments and enhances opportunities and challenges for individuals who crave the expansion of their educational experiences. IT leadership of higher education institutions must understand the institution’s direction and goals, align the direction of technology to support those goals, and craft a vision that allows those responsible for the development, delivery and support of technology to select and stage the technologies today that will be needed in the future.
6. Identity / Access Management – with the proliferation of systems has come the problem of multiple user credentials (username/password). In order to address this issue, simplify management,

and improve security – institutions are looking toward Identity / Access Management systems to address and improve authentication services across the spectrum of systems within the enterprise environment.

7. Governance, Organization, and Leadership – the pervasiveness and strategy value of information technology are such that a strong active and engaged governance, organization and leadership are necessary to realize the full value of information technology and maximize the investments that made. Moreover, strong governance and leadership is needed to ensure that the selection and deployment of technology is aligned with, and support, the strategic goals and direction of the institution.
8. Disaster Recovery / Business Continuity – as information technology applications and the systems that support them become increasingly core competencies for an institution, they likewise represent an increasing risk for business interruption should failure occur. Although most institution have some form of disaster plan, few have broader business continuity plans and even less have comprehensive plans to address the impacts of a wide-spread disaster such as that experience with Hurricane Katrina.
9. Agility, Adaptability, and Responsiveness – as an information technology organization and leader, it is essential to become familiar with institutional challenges, collaborate with services and resources already available, participate in campus-wide discussions about the needs of the institution, adapt to change, and

be responsible for any changes within the institution. These challenges are all equally important in order to improve the institution as a whole and focus on the changing world of today and in the future.

10. Course/Learning Management Systems – the increased use of online course management systems (for example Blackboard or WebCT) for both distance education as well as traditional classroom-based course instruction, the rapid increase in course management system functionality and maturity of these application systems, and the emergence of several open source options are driving continued and expanding interest in the deployment, use and support of course management systems.

**Top Ten IT-Related Teaching and Learning Issues**

In addition to the developing the “Top Ten IT Issue”, EDUCAUSE’s Advisory Committee for Teaching and Learning (ACTL) devoted considerable time and effort to identify the key technology-related teaching and learning issues in higher education. These issues reflect the maturation of technology integration in teaching and learning. Labeled as “Instruction 2.0.” the list clearly reflects the intersection of innovations in instructional practice with new and emerging academic technology.

As stated in the introduction of the ACTL report<sup>2</sup>,

<sup>2</sup> Advisory Committee for Teaching and Learning (ACTL). Top Ten Teaching and

The growing emphasis on a culture of evidence is reflected in the maturation of academic technology. The profession is moving beyond the early stages of providing “novel” implementations and random acts of progress. We are increasingly expected to become more systematic and reflective in our approaches by transforming and assessing teaching and learning. We are also expected to develop a richer understanding of learning and how to support campus constituents.”

The top ten IT-related teaching and learning issues reported by ACTL were:

1. Establishing and supporting a culture of evidence – an increasing number of people are seeking college degrees, the cost of higher education has outpaced inflation, and time to degree completion has steadily increased. As a result, government and taxpayers have increased their call for accountability. Higher education must, if it is to grow and prosper, work aggressively to develop a culture of assessment and accountability. Information technology will need to play pivotal role in these efforts and provide the systems that will allow higher education to effectively demonstrate student success and inform curricular revision.
2. Demonstrating improvement of learning – technology has become an accepted and integral part of the higher education landscape. As the “NetGen” students enter college in large numbers, they bring

Learning Issues for 2007, Educause Quarterly, Educause, V30 n3, pgs 15-22; also last viewed at <http://www.educause.edu/ir/library/pdf/eqm0732.pdf>

with them an expectation of a pervasive use of technology in both their social and educational activities. To engage these students, educational delivery will increasingly involve the use of technology through new approach to learning (more visual, sensory, and engaged).

3. Translating learning research into practice – In recent years, much research has been conducted on learning, teaching methods, and cognitive science. Today, we know much more about how students learn and how to better engage students in learning activities. At the same time, much of the college experience remains unchanged from several decades earlier. It will become increasingly important for faculty to be aware of today’s research and to incorporate what is being learned through the integration of technology into the teaching and learning environment.
4. Selecting appropriate models and strategies for e-learning – the selection and adoption of successful e-learning strategies doesn’t exist in isolation, but rather exists within the context of organizational culture, goals, etc. The academic technologist will be asked to assist faculty with the evaluation and selection of e-learning strategies that help ensure student success while at the same time are sensitive to institutional issues of affordability, effectiveness, and accountability.
5. Providing tools to meet growing student expectations – as noted above, the “NetGen” and “Millennial” students have grown up in a rich digital environment where technology is both transparent and

ubiquitous. They expect technology to serve them and that it will be integral part of the educational experience. Surrounded by cell phones, pagers, boom-boxes, games, IM’ing, they take technology for granted. In order for faculty to engage these students in effective ways it will be necessary for the educational enterprise to adopt, develop and deploy new technology-based tools such as pod-casting, blogs, wikis, virtual environment, 3-D visualization, etc.

6. Providing professional development and support to new audiences – given the changing character of today’s student and the graying of the faculty (more than 30% will retire over the next 10 years), providing technology-relevant professional development and support for the next generation of the professoriate will be critical. Faculty professional development is a must for those who will work in the technology-enriched teaching environments of tomorrow and who will be expected to foster and support the pedagogical paradigm shift that will be needed to effectively engage digitally savvy students.
7. Sharing content, applications, and application development – while technology has much to offer in terms of student engagement and effective learning, it introduces increasing complexity and the need for interdependent collaboration in development and to ensure the effective use of these resources. The delivery of higher education services (particularly instruction) is slowly but surely morphing from being a “cottage industry” where

the faculty member is individually responsible for all aspects of the educational experience to a team-supported learning environment that is defined by experiences both inside and outside of the classroom and that increasingly incorporates technology at some level. A good example of this the type of sharing can be found in the “learning object” repository offered by Merlot.

8. Protecting institutional data – the value of data in the daily operation of the higher education environment has long been recognized and accepted in areas such as record and registration, financial aid, planning and analysis, and the business office. More recently, interest in institutional data has been expressed by the academic side of higher education. In an effort to address calls for accountability and to improve student outcomes, faculty and academic administrators are exploring innovative and productive ways to analyze and mine institutional data for such things as early warning alerts, trends, decision support, and increased productivity.
9. Emerging ethical challenges – as we explore the application of technology in the business of higher education and as the reach of technology expands into all aspect of educational delivery; questions of ethics begin to emerge and need to be proactively addressed. Educators have recognized that technology has the power and ability to provide unique insights into student effort and student aptitude and to provide improved indicators of academic success. While these capabilities are instrumental in

efforts to improve student success and retention, some are concerned about the potential for misuse such as “tracking”, invasion of privacy, etc. The academic use of institutional data raises many difficult questions such as “How much information should a faculty have about the students past academic record and intellectual measures?”, “Should students be informed that faculty will use academic records (including repositories such as e-portfolios) to guide advising, to predict future success, to serve as early warning indicators, or to suggest needed interventions?”

10. The evolving role of academic technologists – the traditional role of the instructional support specialist (often titled instructional designer) is blending with the role of the instructional technologist to create a modified role that might better be titled “academic technologists”. Once a position focused on assisting a small number of early adopters with instructional design or the uses of educational technology, academic technologist today are tasked with being knowledgeable in new technology enhanced pedagogy, supporting rapidly changing technology tools, increased student demand for technology-enhanced capabilities, and increased numbers of faculty (as the a larger share of faculty adopt technology in their teaching). To address these new and increased demands (including increased calls for assessment and accountability), the academic technologist and the areas that support faculty use of technology must evolve and explore new applications of technology to teaching and learning.

**Institutional Context**

**ISU Mission Statement**

Indiana State University’s Board of Trustees approved a revised mission statement and value statements that reflect a commitment to research, public service and a well-rounded education.

Indiana State University combines a tradition of strong undergraduate and graduate education with a focus on community and public service. We integrate teaching, research, and creative activity in an engaging, challenging, and supportive learning environment to prepare productive citizens for Indiana and the world.

In addition to a revised statement, the Board approved accompanying vision and values statements.

**ISU Vision Statement**

Inspired by a shared commitment to improving our communities, Indiana State University will be known nationally for academic, cultural, and research opportunities designed to ensure the success of its people and their work.

**ISU Values Statement**

- **Integrity**: We demonstrate integrity through honesty, civility, and fairness.
- **Scholarship**: We value high standards for learning, teaching, and inquiry.
- **Transforming**: We foster personal growth within an environment in which every individual matters.
- **Responsibility**: We uphold the responsibility of university citizenship.

- **Education**: We provide a well-rounded education that integrates professional preparation and study in the arts and sciences with co-curricular involvement.
- **Embrace Diversity**: We embrace the diversity of individuals, ideas, and expressions.
- **Stewardship**: We exercise stewardship of our global community.

**ISU Strategic Goals**

- **Goal 1: Increase Enrollment and Student Success**: Increase the number of students taking advantage of the educational opportunities at Indiana State, and assist all those attending to realize their educational goals.
- **Goal 2: Advance Experiential Learning**: Advance experiential learning so all ISU students have a significant experiential learning experience within their major.
- **Goal 3: Enhance Community Engagement**: Foster the engagement of students, faculty, and staff in the life of our communities and in pursuits improving their economic and social well-being.
- **Goal 4: Strengthen and Leverage Programs of Distinction and Promise**: Strengthen and leverage the programs that have been designated programs of distinction or promise, to bring greater prominence to them and to the University as a whole.
- **Goal 5: Diversify Revenue Through Philanthropy, Contracts, and Grants**: Expand and diversity revenue sources to enhance the University’s ability to fulfill its teaching, research, and service mission.

- **Goal 6: Recruit and Retain Great Faculty and Staff:** Take measures to enhance the University's ability to recruit and retain great faculty and staff in order to realize its goals and fulfill its mission.

### **Academic Affairs Direction and Priorities**

Academic Affairs is the largest major operational unit within the University. Led by the Provost and Vice President for Academic Affairs, the unit is comprised of five (5) colleges (Arts and Sciences, Business, Education, Nursing, Health and Human Services, and Technology), College of Graduate and Professional Studies, Library, Information Technology and the Center for Instruction, Research, and Technology, Public Services and Engagement, International Affairs, Student Academic Services, and several other smaller, but no less significant, functional areas.

The overarching theme and tone for Academic Affairs has been clearly articulated in the Provost's "Welcome Message" displayed on the ISU web:

Indiana State University offers a comprehensive array of academic and licensure programs that lead graduates to self-enrichment and to productive careers in the professions, government, business and industry. Our distinguished faculty, supported by a dedicated professional staff, is committed to the advancement, dissemination, and application of knowledge and is actively involved in projects of local, national, and international interest.

The Provost outlined 4 themes or major priorities will guide the actions and initiatives of Academic Affairs.

- Student Success (Place Learning First)
- Enrollment (Recruiting and Retention)
- Professional Development (Invest in People)
- Diversity Revenue Streams (Grants, Gifts, and Entrepreneurship)

These priorities not only reflect and support the mission, vision and focus of the institution, they provide a framework in which all Academic Affairs activities should exist. The priorities, coupled with both institutional and academic commitment to Outreach, Engagement & Economic Development, Institutional Recognition (State, Regional, National, International), and a commitment to Efficiency & Effectiveness realized through a comprehensive program of assessment and self-inspection provide the matrix against which all activities of our various offices and departments operate and are measured. By extension therefore it is within this framework that the Office of Information Technology and the Center for Instruction, Research, and Technology operate.

## Technology at ISU

### Conceptual Framework for Technology

Information Technology is one of the primary planning areas of the institution and is recognized for its critical and strategic nature as well as the integral role that it plays in the future of the institution. For higher education, the use and application of technology has particular significance. Our society, and the world in general, is looking increasingly at higher education to engage in primary and applied research, to provide workforce preparation, to support economic development, to provide communication and access to information and knowledge, to support life-long learning without regard to place or time and, to work with local and extended communities to address social issues.

### Our Missions

The Office of Information Technology (OIT) provides technology-based solutions that support the academic, service, and administrative activities of Indiana State University (ISU). The Center for Instruction, Research, and Technology (CIRT) mission is to contribute to student success by providing services that advance Indiana State University faculty professional growth, teaching, and scholarly work and that emphasize experiential learning and community engagement.

### Our Vision

The Office of Information Technology strives to position the University as a leader in the effective, efficient, and innovative use and application of technology. CIRT, in support of the institutional goals of

experiential learning, community engagement and student success, strives to provide a breadth and quality of service to Indiana State University faculty in the areas of professional growth, teaching, and scholarly inquiry that exceeds those offered to faculty at peer institutions.

### Our Planning and Direction

Indiana State University, through the work of the ITAC committee, actively engages in ongoing planning and direction setting activities that are reflected in a dynamic and ever evolving technology plan. This plan, while strategic in focus, is a living document positioned to respond to the fast changing pace of technology while at the same time providing a series of over-arching strategies that guide and inform the general technology direction of the institution.

The plan is defined in sufficiently broad language to accommodate and dovetail with the stated long-range goals of the institution: experiential programs, programs of distinctive and promise, and community engagement and economic development.

The IT plan strategies have been selected on the premise that:

1. information technology represents a core competency for the institution;
2. information technology is pervasive in its reach and scope;
3. information technology (particularly in the areas of infrastructure, application and functionality, currency, and emerging technologies) plays an integral part in support of teaching, learning, research, and service delivery.

**IT Plan Context and Expectations**

As mentioned earlier, today's students and faculty engage education in an environment that is much different than those of us who have studied and worked in higher education for the past 20 or 30 years. The freshmen who entered ISU this year never used a card catalog to find a book; they have always used text messaging for communication; their cable television systems have always offered telephone service and vice versa; they have always been able to read books on an electronic screen; flat screen televisions have always existed; there has always been a computer in the Oval Office and; CDs have never been sold in cardboard packaging.

This frame of reference, a social, leisure and work world that are fully integrated with technology-based tools and products, and the pervasive use of technology have created an environment where computers are taken for granted. Today, technology touches nearly everything we do or use, the services and products that we consume, the recreation that we enjoy, the workplaces where we are employed, and virtually all aspects of our lives. There is no place where this is a more evident than in higher education. Moreover—today's environment is more technologically complex than any time in the history of civilization. Technology supports our communication, manages our money and environment, and brings the world into our living rooms.

If a person were to be magically placed in our world and encountered the pervasive nature of technology they might understandably be led to believe that the evolution of technology and the application

of computers are well into maturity. On the contrary, much of the technology that we presently enjoy and take for granted is nothing more than the dreams and aspirations of less than 40 years ago. Today's technology reality is the fantasy of comic books in the 1950s and 1960s. As amazing as the growth of technology has been during that period, it is equally amazing to realize that the application and integration of technology into our daily lives continues today at an unabated and ever expanding rate.

The acceptance of technology has changed to a reliance on technology—parents, current and prospective students, current and prospective faculty members, alumni, businesses, governments, and administrators all expect information technology to be an integral part of a university campus. It is highly unlikely that a college or university could be competitive without a reliable and robust technology infrastructure. Any more, the question relative to technology is not "Do we need technology to do our jobs?" The question is "How could we do our jobs without it?" It is hard to imagine the higher education environment existing without technology such as:

- word processing, spreadsheets, databases, presentation software
- courseware, video conferencing, library systems
- Internet, intranets, e-mail, web sites, streaming media, web-casting
- enterprise (administrative) systems, imaging, enrollment management systems
- technology-based/enhanced research
- telephones, cell-phones, pagers

- HVAC control, security systems

The pervasiveness of technology has simultaneously increased the importance of aligning the information technology strategies with the strategic goals of the institutions. On the ISU campus, as with many other institutions, the information technology leadership role is positioned at the senior administrative level and participates as an active member of the President’s cabinet. The inclusion of information technology as one of the key planning areas indicates that technology is perceived as being an integral part of strategic success.

Increased focus is being placed on improving the service quality of information technology support and governance processes are being strengthened to allow broader participation in setting the information technology direction. Information technology is consistently included in the planning loop as new administrative system functionality and services, teaching and learning, and/or research are considered. The technology literacy of faculty, students, and staff continues to increase and is one of primary concern when planning professional development activities.

Communication of technology issues has become increasingly important and additional efforts are being made to identify and use communication channels that can reach a wider student, faculty, and staff audience. Today, the direction of information technology must be aligned with the strategic direction of the institution and institutional planning and project prioritization must actively include information technology.

Information technology is an important element in achieving the institution’s strategic goals. The pervasive and strategic nature of technology, as highlighted above, has several implications that frame the direction of technology and strongly influence the selection of task initiatives.

- Financial support for technology must be institutionalized as part of the operational budget augmented by an aggressive program of “opportunity” funding from grants
- Information security and privacy are key concerns in any technology solution
- Additional emphasis must be placed on training and professional development to assist students, faculty, and staff with the use and application of technology
- Technology infrastructure must be robust, reliable, and affordable
- Information technology must contribute to the competitive advantage of the institution
- Information technology must be strongly aligned with the academic mission of the institution
- The investment in information technology must provide a tangible return on investment.

These elements are consistent with the themes found in a variety of recent studies that surveyed colleges and universities relative to strategic positioning of information technology in higher education. Taken in aggregate, the following issues are consistently identified:

- Assisting faculty efforts to integrate technology into teaching and research.
- Providing adequate support for students and faculty.

- Providing and funding a cyclical replacement strategy for technology.
- Promoting online and distance education tools.
- Improving student service with web-centric applications.

It is not surprising that ISU has identified several of these same areas and that our

resultant technology plan identifies and incorporates tasks intended to address these issues.

## Strategic Goals and Targets of Opportunity

**Goal 1: Student Learning and Success** – select and implement information technologies and other strategies that integrate with institutional efforts to foster the development of learning environments, address the needs of current and future students, and contribute to student success.

### **Student Learning and Success Initiative 1: Support institutional efforts to improve student success.**

Anticipated Targets of Opportunity
a) Increase collaboration between OIT, CIRT & the Library (i.e., communications, digital repository, information resources)
b) Provide technology support for course pre-requisite checking, reserve seating, student alert, etc.
c) Expand course transformation options, including distance education (similar activity referenced in 1.4.h)
d) Technology support for general education courses (particularly in the area of assessment)
e) Provide support for student success and retention (MapWorks, Factor Analysis, co-curricular data, etc.)

Items noted in yellow are in progress

Completed during 2008-2010

1. Enhance faculty professional development and strengthen support for course redesign (including NCAT activities)

### **Student Learning and Success Initiative 2: Improve and enhance faculty professional development opportunities, programs and activities.**

Anticipated Targets of Opportunity
a) Internal faculty PD related communication tool
b) Host regional conferences/symposiums
c) Collect and disseminate information on “best practices” (vignettes)
d) Seek and expand inter-institutional collaboration opportunities (similar activity referenced in 2.5.b)
e) Showcase faculty efforts and activities in research and teaching
f) Provide support for instructional use of laptop (including modeling)
g) Increase faculty training options (i.e., time, place, on-demand)
h) Develop a mentorship program that leverages the knowledge of senior faculty to provide further growth opportunities for junior faculty

Items noted in yellow are in progress

Completed during 2008-2010

1. Facilitate and promote the use of Internet-based webinars to allow faculty to participate in professional development activities that might not otherwise be available
2. Expand and promote the CIRT speaker series
3. Provide New Faculty Orientation
4. Provide optional formative in-class observations/visits to assess instructional effectiveness to assist faculty with pedagogical change

**Student Learning and Success Initiative 3: Support and promote the exploration, adoption and assessment of innovative teaching strategies designed to improve learning.**

Anticipated Targets of Opportunity
a) Support the adoption and creation of technology-based learning modules that promote active learning (i.e., virtual labs, Lectora, Elluminate, and Tegrity)
b) Expand access to, and use of, learning objects (i.e., local development)
c) Explore the possibility of a “faculty learning day”
d) Improve support for course and instructor evaluation options including the possible use of online evaluation tools (i.e., SIRs)
e) Assist faculty with use of Social Networking tools and Web 2.0 applications
f) Campus conference to share “best practices”
g) Identify and support technology-related opportunities for student experiential learning (e.g. internships)

Items noted in yellow are in progress

Completed during 2008-2010

1. Explore the expansion of distributed support for technology (similar to RCC concepts used in the residence halls)
2. Implement additional smart classroom technologies and provide improved documentation and training in their use
3. Assist faculty with exploring blended (reduced seat time) models of instructional delivery
4. Expand workshop options to include “in-department” custom sessions
5. Enhance the mini-grant program through the creation of a “showcase” opportunity (along with appropriate publicity) (similar activity referenced in 2.4.2)

**Student Learning and Success Initiative 4: Improve the quality and delivery of, and support for, distance and “blended/hybrid” courses and programs.**

Anticipated Targets of Opportunity
a) Develop a clearly articulated direction/ plan for distance education

b) Provide campus forums for discussions related to distance education
c) Survey students on desired distance course features, outcomes and support
d) Improve distance education course quality through increased support and published guidelines
e) Encourage and promote increased use of Elluminate
f) Enhance support for distance education students (i.e., expand and enhance the role of Help Desk)
g) Implement course “mentor” program for faculty interested in adopting distance education tools or teaching in a distance or blended format
h) Offer “course transformation” academy tailored for middle and late adopters (similar activity referenced in 1.1.c)
i) Support research efforts in the area of effective teaching practices for distance education (i.e., best practices, best tools, pedagogical strategies)

Items noted in yellow are in progress

Completed during 2008-2010

1. Explore and deploy new distance education tools
2. Expand support for video streaming of lectures and pod-casting including the addition of “auto-capture” of lecture (similar activity referenced in 3.4.1)

**Student Learning and Success Initiative 5: Improve student access to information resources and educational tools.**

Anticipated Targets of Opportunity
a) Explore options to improve web accessibility
b) Implement broadband network support (WiMax) in Terre Haute area to support wireless access for off-campus students (similar activity referenced in 2.1.a)
c) Evaluate, adopt and implement new educational tools
d) Explore ways to improve and enhance student technology and information literacy
e) Continue development and expansion of the campus ubiquitous computing options to include expanded range of mobile and hand-held devices
f) Enhance student access to instructional environments and tools that support the creation and sharing of knowledge

Items noted in yellow are in progress

Completed during 2008-2010

1. Increase/improve access to licensed software (both on and off campus)
2. Provide educational opportunities for campus relative to copyright and file sharing
3. Improve communication flow between University and students relative to available technology (particularly for grad, distance, and part-time)

- 4. Improve/enhance wireless network connectivity (to include bandwidth monitoring, limiting, etc.) (similar activity referenced in 3.1.b and 2.1.3)

**Student Learning and Success Initiative 6: Assist and support faculty and student efforts related to knowledge creation and dissemination.**

Anticipated Targets of Opportunity
a) Expand opportunities for faculty teaching/professional portfolios
b) Implement a “loaner pool” of multimedia equipment
c) Create a student and faculty “clearing house” for information resources
d) Increase public recognition of faculty grant activities (showcase)
e) Explore and expand opportunities for non-academic offices, departments and divisions to complement and support classroom-based programs
f) Select and implement web-based technology that will provide faculty with a “one-stop” location for technology information, services, support, etc.
g) Develop plans for physical space needs of CIRT/OIT.

Items noted in yellow are in progress

Completed during 2008-2010

- |  |
|--|
| 1. Implement appropriate software and host electronic journals   |
| 2. Develop, implement and promote strategies to address digital preservation (University-based digital repository) and raise awareness of related issues |
| 3. Expand the availability of collaboration tools (i.e., OneNote, SharePoint)  |
| 4. Expand the use of “shared” network space to facilitate collaboration and file dissemination (i.e., ISecUre, SharePoint)                               |
| 5. Expand support for research grants (identification, writing, promotion)   |
| 6. Diversify CIRT knowledge to cover broad disciplinary areas (quasi-expertise)  |
| 7. Increase opportunities for one-on-one consultation  |
| 8. Implement tools and increase support for data collection and analysis of student learning outcomes  |

**Goal 2 : Research** – support the scholarly and creative activities of the faculty with appropriate technology-related and technology-enhanced tools, services and infrastructure.

**Research Initiative 1: Enhance the technology infrastructure (voice, video, and data) in support of faculty research activities.**

Anticipated Targets of Opportunity
a) Implement broadband network support (WiMax) in Terre Haute area to support wireless access for off-campus students (similar activity referenced in 1.5.b)
b) Support and facilitate the transition of video from analog to digital
c) Continue to enhance the infrastructure and expand the availability of software tools that exploit the use of Internet 2 power and capabilities
d) Pursue FM Radio License for 107.5 and partnership with WFYI for PBS.

Items noted in yellow are in progress

Completed during 2008-2010

1. Continue to expand and enhance wireless network (increased concentrations in instructional buildings such as Root, Science, etc.)
2. Continue to expand the high performance computing infrastructure
3. Increase on-campus and IHETS network bandwidth (similar activity referenced in 3.1.b and 1.5.4)
4. Support the development of video-based instructional tools (i.e., simulations)
5. Expand network bandwidth deployment to better support compute and network intensive research activities
6. Support and expand the use of HD video where appropriate
7. Explore avenues/venues for the introduction and use of Dolby Digital Sound
8. Implement and promote Qualtrics survey software
9. Develop and deploy LCD information Boards (ISULive)

**Research Initiative 2: Develop/identify and implement appropriate technology solutions and/or capabilities that facilitate the communication and dissemination of information related to ISU research activities.**

Anticipated Targets of Opportunity
a) Expand options for faculty to use the web to promote their research
b) Engage Communications and Marketing in the promotion of faculty research activities
c) Explore the use of voice and video in research activities
d) Expand CIRT communications through the introduction of a “research publication” that highlight ISU / faculty research activities
e) Implement communications strategies that allow faculty to share information about their research

f) Explore opportunities to publicize research efforts (showcase, awards, grants)
g) Improve faculty access to web-based resources (i.e., faculty learning & research portal, expanded information access) (similar activity referenced in 2.5.c)
h) Expand the use of Adobe Connect, One Note, etc. to support meetings and discussions (similar activity referenced in 3.2.4 and 3.4.b)

Items noted in yellow are in progress

Completed during 2008-2010

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|--|
| 1. Expand the availability and use of “blogging” to support faculty research efforts |
|--|

**Research Initiative 3: Support faculty research efforts (particularly in STEM disciplines) through the enhancement of visualization and high-end computing capabilities.**

Anticipated Targets of Opportunity
a) Participate in regional and national STEM related activities (including SENCER)

Items noted in yellow are in progress

Completed during 2008-2010

- |  |
|--|
| 1. Provide consultation services related to data management for research requiring the use of large data sets      |
| 2. Enhance the ISecUre capabilities (version upgrade) to support research and collaboration efforts of the faculty |

**Research Initiative 4: Expand and enhance support for grant activities (writing, project/research efforts, assessment, and dissemination of results) to include both technology and non-technology-based projects and research (particularly in the area of humanities and professional disciplines/schools).**

Anticipated Targets of Opportunity
a) Explore opportunities for CIRT and OSP to work together

Items noted in yellow are in progress

Completed during 2008-2010

- |  |
|--|
| 1. Enhance the promising scholars program to include consideration for technology related projects and activities                  |
| 2. Expand and enhance the mini-grant program to support a wider array of faculty activities (similar activity referenced in 1.3.5) |

**Research Initiative 5: Identify and implement best practices to encourage and support creative activities of the faculty in their respective disciplines.**

Anticipated Targets of Opportunity
a) Develop opportunities to “showcase” faculty work
b) Expand inter-institutional collaboration (similar activity referenced in 1.2.d)
c) Develop a web-based information resources that provide highlight exemplary uses of technology in research at ISU (similar activity referenced in 2.2.g)
d) Expose faculty to, and assist faculty with, external resources, audiences, etc.

Items noted in yellow are in progress

**Goal 3: E-Connection** – support the expansion, availability, effectiveness, security, and efficiency of institutional services through the use and application of technology-based solutions.

**E-Connection Initiative 1: Improve and enhance the voice, video, and data infrastructure in support of the current and future needs of students, faculty and staff.**

Anticipated Targets of Opportunity
a) Continue implementation / upgrade of “fault tolerant” technologies
b) Increase wired and wireless bandwidth in select areas as needed (similar activity referenced in 1.5.4 and 2.1.3)
c) Increase the number and type of web-related services
d) Deploy and support Microsoft Office 2010 (similar activity referenced in 3.6.a and 3.6.b)

Items noted in yellow are in progress

Completed during 2008-2010

1. Improve “readability” of Banner
2. Improve reporting and report dissemination options for administrative information (Argos)
3. Expand and support the continued adoption of Office 2007 application suite (similar activity referenced in 3.6.5)
4. Implement additional network and server monitoring tools to facilitate early detection and intervention
5. Support the upgrade of the campus network by introducing current technology

**E-Connection Initiative 2: Assist and support the investigation, adoption, implementation, and assessment of technology solutions that improve communication, collaboration and information sharing in support of the learning, research, communications, and administrative functions of the institution.**

Anticipated Targets of Opportunity
a) Provide additional information on “support options” for students and faculty studying abroad or who are away from campus for extended periods (similar activity referenced in 5.5.c)
b) Explore, select and implement software that will support “electronic workflow” (must include auto routing and electronic approvals)
c) Support the continued upgrade and expansion of the SharePoint services/environment, including features such as online forms processing
d) Explore and support faculty initiatives with the use and adoption of social software (i.e., MySpace, Facebook, Second Life)

e) Migrate student and alumni email to WindowsLive

Items noted in yellow are in progress

Completed during 2008-2010

1. Implement Exchange as the student email solution (replacing the present "MyMail" solution provided as part of the MyISU Portal)
2. Improve support for mobile technologies (particularly laptop)
3. Explore and support the investigation of instructional uses for software that supports social networking
4. Select and implement technology-based solutions that enhance collaboration (i.e., Adobe Connect, OneNote) (similar activity referenced in 2.2.h and 3.4.b)

**E-Connection Initiative 3: Enhance the security for the network, servers, and user workstations to further protect institutional data and the communications/video/data environment.**

Anticipated Targets of Opportunity
a) Recruit and hire a full time security officer
b) Explore and implement options for "e-signature"
c) Select and implement electronic "certificate" capabilities
d) Explore and begin the implementation of software and tools that support "unified communications"
e) Continue efforts to strengthen the disaster recovery and business continuity efforts of all business units
f) Tighten network and server security (Security Zones, traffic management and monitoring)
g) Improve and enhance desktop workstation management and security

Items noted in yellow are in progress

Completed during 2008-2010

1. Implement improved username / password authentication (Stoneware)
2. Implement 2-factor authentication for remote access to administrative systems (particularly Banner and Argos)
3. Explore and implement options for encryption
4. Explore and support the expanded use of the University ID card

**E-Connection Initiative 4: Investigate, select, and implement technology solutions and tools that augment and enhance learning, support faculty teaching, and improve access to information.**

Anticipated Targets of Opportunity
a) Evaluate and deploy tools to facilitate “in-classroom” control of laptop computers
b) Expand the use of Elluminate, Tegrity, One Note, etc. (similar activity referenced in 2.2.h and 3.2.4)
c) Establish an “e-futures” working group/committee to identify, investigate and propose new e-service opportunities and options

Items noted in yellow are in progress

Completed during 2008-2010

1. Evaluate and deploy “auto-capture” of lecture content (audio and PowerPoint) (similar activity referenced in 1.4.2)
2. Explore alternatives that support synchronous and asynchronous faculty / student interaction
3. Investigate, select and deploy solutions for wireless printing to support the mobile/laptop initiative (similar activity referenced in 1.4.i)

**E-Connection Initiative 5: Improve and increase e-service capabilities for students and employees.**

Anticipated Targets of Opportunity
a) Expand web-based access to information
b) Investigate and deploy technologies that will support the enrollment and retention efforts of the institution
c) Implement Web 2.0 technologies and explore opportunities that will be presented with Web 3.0 technologies
d) Support One Stop Shop (Sycamore Express)(similar activity referenced in 4.4.d and 4.6.d)
e) Redesign the MyISU portal

Items noted in yellow are in progress

Completed during 2008-2010

1. Evaluate and implement e-market basket capabilities
2. Implement video display and “kiosk” technologies to improve general information access for students and visitors (pilot project – Van Alstine Information Kiosk)
3. Expand the use of mobile communications options (i.e., text messaging) to support academic and extra-curricular activities

4. Implement VOIP-based Emergency Notification System in classrooms

**E-Connection Initiative 6: Improve and increase technology-based solutions that foster and improve office and administrative effectiveness and efficiency.**

Anticipated Targets of Opportunity
a) Support the adoption and use of Office 2010 application suite (similar activity referenced in 3.1.d)
b) Support the adoption of Windows 07 (when and if appropriate) (similar activity referenced in 3.1.3 and 3.6.5)
c) Investigate, select and deploy an appropriate and scalable office-level document imaging solution
d) Expand the use of various reporting tools to improve institutional access to, and use of, institutional data (i.e., Argos, dashboard, data cubes, etc.) - iStrategy
e) Support the information technology needs of the Foundation and Alumni Affairs to support the development efforts of the institution
f) Support the replacement of upgrade of departmental printers (IKON)
g) Support University initiatives related to sustainability

Items noted in yellow are in progress

Completed during 2008-2010

1. Implement Exchange/Outlook mail system and support the migration of users from GroupWise to Exchange
2. Support the adoption of Leopard O/S (when and if appropriate)
3. Expand support options for Mac h/w and s/w
4. Implement a cyclical replacement strategy for non-academic technology similar to that used by faculty and/or in the computer labs
5. Support the adoption and use of Office 2007 application suite (similar activity referenced in 3.1.3 and 3.6.b)
6. Select, procure, and implement assessment tracking tool – TaskStream

**Goal 4: Recognition and Reputation** – pursue state, regional, and national recognition of, and reputation for, Indiana State’s integration and application of technology in the academic enterprise.

**Recognition and Reputation Initiative 1: Improve communication and information dissemination on campus and in the local community.**

Anticipated Targets of Opportunity
a) Pursue community engagement activities that will improve and enhance ISU’s relationship with the media and the community
b) Identify opportunities to work collaboratively with the City of Terre Haute
c) Identify opportunities to work collaboratively with Vigo County Schools (similar activity referenced in 5.1.d)
d) Improve dissemination of information (both internally and externally)
e) Investigate “email alternatives” to support information dissemination (i.e., push vs. pull; text messaging, Web 2.0, etc.)
f) Identify and communicate the “Top 10” technology users/applications/ideas
g) Provide opportunities for internal celebrations of technology use and adoption
h) Spotlight unique, interesting or innovative uses of technology on a regular basis and through various publications
i) Support the implementation and ongoing operation of the Terre Haute Children’s Museum

Items noted in yellow are in progress

Completed during 2008-2010

- |  |
|--|
| 1. Develop and communicate a clear and cohesive message for technology |
|--|

**Recognition and Reputation Initiative 2: Identify and participate in state initiatives and activities to improve the awareness of and visibility for Indiana State University with higher education institutions, government, parents and prospective students, general public, business, and philanthropic agencies.**

Anticipated Targets of Opportunity
a) Explore and expand ISU’s participation in activities and events promoted or sponsored by the Commission of Higher Education
b) Make better use of government connections and leverage political connections to raise state awareness of technology activities at ISU to garner additional support for key projects
c) Explore opportunities to work with Indiana-based institutions of higher education (both locally and around the state)
d) Identify and participate in inter-institutional consortia
e) Maintain an active leadership role in the state I-Light and IHETS activities

f) Explore opportunities to work collaboratively with K-12 on various technology and learning initiatives
g) Explore opportunities to work collaboratively with Ivy Tech on various technology and learning initiatives

Items noted in yellow are in progress

Completed during 2008-2010

1. Expand I-Light of support for Southern ring and Ivy Tech Wabash
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**Recognition and Reputation Initiative 3: Develop and participate in regional (mid-west multi-state) higher education activities, collaborations, consortiums, and organizations**

Anticipated Targets of Opportunity
a) Attend and present at mid-west regional conferences
b) Encourage joint CIRT/OIT – faculty presentations

Items noted in yellow are in progress

**Recognition and Reputation Initiative 4: Support of the marketing and enrollment services efforts of Indiana State University**

Anticipated Targets of Opportunity
a) Provide technology support for enrollment services activities (particularly those that support recruitment)
b) Support the continuation of the laptop scholarship
c) Solicit and participate in activities that highlight ISU’s use and adoption of technology
d) Support One Stop Shop (Sycamore Express) (similar activity referenced in 3.5.d and 4.6.d)

Items noted in yellow are in progress

Completed during 2008-2010

1. Select and implement technology-based tools that support analytics
2. Design and implement outgoing VOIP-based call center

**Recognition and Reputation Initiative 5: Increase the visibility for Indiana State University by disseminating information about innovative uses of technology through publications, conference presentations, organizational membership and participation on national committees and subcommittee (i.e., Merlot, Educause, etc.)**

Anticipated Targets of Opportunity
a) Present at national conferences
b) Host visitation by higher education professionals from other institutions

- c) Prepare and distribute select publications (Sycamore.Net, Technology Guides, Annual Report)

Items noted in yellow are in progress

1. Participate in national competition(s) relating to the use, adoption or promotion of technology

**Recognition and Reputation Initiative 6: Build and enhance the “service orientation” and “support responsiveness” of the OIT and CIRT units.**

Anticipated Targets of Opportunity
a) Engage in formal program review assessment
b) Identify and participate in activities that provide national recognition for Indiana State (i.e., Educause, NCAT, Learning Initiative, etc.)
c) Renew efforts related to service quality through the development of a “Service 2.0” initiative
d) Participate in the establishment of One Stop Shop (Sycamore Express) (3.5.d and 4.4.d)
e) Expand the options using a virtual service model (85% of all activity to be accomplished online)
f) Revise and upgrade ISU portal

Items noted in yellow are in progress

Completed during 2008-2010

1. Publish annual technology report

**Goal 5: Outreach** – work cooperatively and collaboratively with extended communities to enhance the general technology environments supporting educational, social, and business and economic development activities.

**Outreach Initiative 1: Develop and pursue opportunities for partnerships with K-12 institutions, locally and at the state level, to improve academic preparation, encourage college attendance, and improve student success.**

Anticipated Targets of Opportunity
a) Establish working connections with technology counterparts at local and remote school districts
b) Identify opportunities to work with K-12 institutions or teachers on specialized projects
c) Identify and pursue grant opportunities that would support University/K-12 activities and collaborations (RTT grant)
d) Explore the possibilities of engaging in a wireless network project that would support both ISU and Vigo County Schools (similar activity referenced in 4.1.c)
e) Fully implement activities identified in the CAPE grant

Items noted in yellow are in progress

Completed during 2008-2010

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|---|
| 1. Support ISU initiative intended to acquaint prospective students with the campus (for example – Knowing Sycamores) |
|---|

**Outreach Initiative 2: Identify and participate in community engagement projects that support community improvement, promote life-long learning, and assist other non-profit groups and agencies.**

Anticipated Targets of Opportunity
a) Support the activities of the Center for Public Service and Community Engagement
b) Enhance service and support provided to individuals involved with continued non-credit instruction

Items noted in yellow are in progress

Completed during 2008-2010

- |   |
|---|
| 1. Provide support for United Way agencies through efforts such as STS and not-for-profit web hosting   |
| 2. Seek grant opportunities that would support work with various educational and community groups (for example – Children’s Museum, County Library) |

**Outreach Initiative 3: Seek out and build cooperative and collaborative relationships with other local higher education institutions (particularly Ivy Tech) in order to expand student and faculty opportunities**

Anticipated Targets of Opportunity
a) Investigate and pursue opportunities to work with local Department of Corrections (i.e., Wabash Valley Correctional, Putnamville) and other public service entities (i.e., hospitals)

Items noted in yellow are in progress

Completed during 2008-2010

1. Identify opportunities to work with local higher education institutions (Ivy Tech, Rose Hulman and St. Mary's of the Woods)
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**Outreach Initiative 4: Identify and support the efforts of faculty and the Center for Business Engagement to foster and promote local and state business and economic development opportunities.**

Anticipated Targets of Opportunity
a) Provide technology support for various promotional activities such as TechPoint, BlackExpo, etc.
b) Identify opportunities to work with businesses involved with "incubator" activities
c) Support faculty efforts and activities related to entrepreneurial activities (particularly those involving the Center for Business Support and Economic Innovation)

Items noted in yellow are in progress

Completed during 2008-2010

1. Support the activities of the Center for Business Support and Economic Innovation
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**Outreach Initiative 5: Work with faculty and the Office of International Affairs to develop, enhance, and support international collaborations, educational programs, and institutional relationships.**

Anticipated Targets of Opportunity
a) Provide technology support for the various programs and activities of the Office of International Affairs
b) Identify and respond to technology-related needs of international students
c) Provide enhanced information for students who will be studying abroad or for faculty/administrators who will travel abroad for extended periods (similar activity referenced in 3.2.a)

d) Provide technology related help and services for those offices and departments who are engaged in the recruitment of international students

Items noted in yellow are in progress

Completed during 2008-2010

1. Enhance video conferencing options to support trans-continental meetings and instruction
2. Explore and promote the use of Adobe Connect and similar technology-based tools to facilitate international activities

## Appendix A: 2005/2007 Plan Goals

The Indiana State Technology Plan 2010-2012 is the fourth iteration of the institution's technology plan. As noted in the preface, the technology plan has moved with each iteration from an operational focus (oft times referred to as tactical) to a more conceptual or strategic focus that is aspirational and articulates how technology will serve and support the strategic direction of the institution. While both of previous documents (2003/2006, and 2005/2007) were useful in guiding the development/direction of technology for the campus and the activities of OIT, they were clearly more focused on the technology itself (specifically with building infrastructure). Because much of what we do is predicated on our experiences and actions of the past, it is appropriate to include the 2005/2007 plan goals to serve as a backdrop for vision of the future. The 2005/2007 goals were as follows:

- **Goal 1:** Maximize Institutional Investment - Improve and enhance technology delivery and maximize institutional investment through the consolidation and coordination of support services and procurement.
- **Goal 2:** Current and Future Infrastructure - Support technology-based institutional goals by anticipating and providing for the current and future infrastructure needed to support the teaching & learning and administrative functions of the institution.
- **Goal 3:** New and Emerging Technologies - Support eminence for ISU through the use and application of new and emerging technologies in instruction and research.
- **Goal 4:** Position ISU as Technology Leader - Position ISU as technology leader (locally, regionally, and nationally) and support technology-based engagement and outreach activities in service to the community.
- **Goal 5:** Increase Technology Governance - Increase campus involvement in technology planning and decision-making.
- **Goal 6:** World-class Service Delivery - Deliver world-class quality service to students, faculty and staff in support of their use and application of technology.
- **Goal 7:** Invest in Human Capital - Position institution for the future through investment in human capital.
- **Goal 8:** Infrastructure Maintenance and Currency -Provide continuity and continued currency for existing technology.

## Appendix B: IT Governance

### Information Technology Advisory Committee (ITAC)

The Information Technology Advisory Committee (ITAC) is made up of Indiana State University faculty and staff to provide consultation and advice to the associate vice-president for academic affairs and chief information officer. ITAC examines global as well as local information technology issues, provide input and reviewing Indiana State's strategic plans for information technology, recommends priorities for information technology initiatives, and generally facilitates the flow of information about information technology. Additionally, the committee reviews and responds to the proposals and recommendations submitted by the Office of Information Technology Core Management Team. Through these efforts, the Information Technology Advisory Committee assists in ensuring that information technology initiatives meet the needs of the Indiana State community.

#### Academic Technology Subcommittee

The Academic Technology Subcommittee of ITAC considers proposals and makes recommendations for instructional technology facilities (technology-enhanced classrooms, distance learning classrooms, and public and discipline-aligned computer labs). This subcommittee reviews proposals and makes recommendations to establish or modify academic IT standards and policies related to instructional technology facilities. The recommendations of this committee are submitted to ITAC for review and further recommendation to the CIO.

#### Strategic Planning/Steering Subcommittee

The Strategic Planning/Steering Subcommittee is charged with supporting the development and maintenance of the strategic plan for information technology at Indiana State University to ensure future choices in technology are informed and responsive to the academic enterprise of the future.

#### Web Advisory Subcommittee

The Web Advisory Subcommittee is charged with providing input on activities related to the Indiana State University Web site. This includes areas such as design, content, and structure. This subcommittee acts as a conduit for information dissemination to the broader Indiana State University community on issues related to the Indiana State University Web site.

#### Research Computing Subcommittee

The Research Computing Subcommittee advises CIRT and makes recommendations to ITAC on the best strategies for providing information technology resources to support research activities at Indiana State University. The Research Computing Subcommittee serves as an information conduit between the university and faculty engaged in research. The Research Computing Subcommittee stays abreast of technological, philosophical, and operational advances that impact research computing, advises CIRT, and makes recommendations on how the University should support research computing at Indiana State University in the future.

### Laptop Program Subcommittee

The Laptop Program Subcommittee makes recommendations on the best strategies for leveraging information technology resources to support the laptop program at Indiana State University. This subcommittee acts as a conduit for information dissemination to the broader University community on issues related to the laptop program.

### Distance Education Subcommittee

The Distance Education Subcommittee makes recommendations on the development and implementation of distance education at the University. The Committee considers and makes recommendations on technology related academic policy matters, program development, academic and technical support services, and professional development.

## Student ITAC

In 2002, a subcommittee of ITAC was created to ensure student input in the decisions affecting information technology direction at Indiana State. This subcommittee, called Student ITAC (SITAC), is comprised of eight students. A Student Government Association representative serves as the chairperson of SITAC. The SITAC chairperson is also an ex-officio member of ITAC. An OIT staff member attends all SITAC meetings and serves as a resource for the subcommittee. SITAC provides advice and opinions regarding information technology decisions that affect Indiana State students.

## CIRT Advisory Committee

To help communicate departmental and/or college interests, the CIRT Advisory Committee was created to provide input on policy and to provide feedback on faculty development, and other programming proposals and efforts of the Center for Instruction, Research, and Technology. Committee membership is composed of faculty members appointed by the deans of each college. Committee members also identify strategically valuable initiatives and participate in selecting topics for faculty development programming.

## Institutional Computing Steering Committee

The Institutional Computing Steering Committee membership is composed of one or more members from each of the major offices supporting or using Banner. The purposes of the Institutional Computing Steering Committee are: to provide guidance for possible recommendations relating to the direction of administrative computing at Indiana State; to seek group consensus for matters relating to administrative computing that affect multiple offices; to discuss and make recommendations to for priorities relating to administrative computing which affect multiple offices; and to distribute information to the Indiana State community concerning matters relating to administrative computing.

Following is a list of the members of the 2007 ITAC Committee:

Arts and Sciences	Leslie Barratt	2677	Leslie.Barratt@indstate.edu
Arts and Sciences	Gary Stuart	7898	Gary.Stuart@indstate.edu
Business	Bruce McLaren	3606	Bruce.McLaren@indstate.edu
Education	Susan Powers	2918	Susan.Powers@indstate.edu
Health and Human Performance	Tom Nesser	2901	Tom.Nesser@indstate.edu
Nursing	Esther Acree	2320	Esther.Acree@indstate.edu
Technology	Xiaolong Li	3451	Xiaolong.Li@indstate.edu
At-large Faculty (2)	Sr. SAMy Anderson	2738	Alma.Anderson@indstate.edu
	Jennifer Inlow	2242	Jennifer.Inlow@indstate.edu
Business Affairs (1)	Cindy McClain	3561	Cindy.McClain@indstate.edu
Development (1)	Amy Westgard	7610	awestgard@indstatefoundation.org
ICSC (Chair-1)	Linda Ferguson	8316	Linda.Ferguson@indstate.edu
Library (1)	Tim Gritten	2057	Tim.Gritten@indstate.edu
OIT (CIO-1)	Ed Kinley	8439	Ed.Kinley@indstate.edu
President's Office (1)			
SITAC (1)	Brad Hobbs		bhobbs@indstate.edu
Student Affairs (1)	Mark Frederick	2653	Mark.Frederick@indstate.edu
Support Staff (1)	Tracy McDaniel	3880	Tracy.McDaniel@indstate.edu

[Phone numbers are accessible externally by dialing 812-237 + number]

## Appendix C – Organization & Leadership

The Chief Information Officer / Associate Vice President for Academic Affairs, provides direction to the Office of Information Technology (OIT) and Center for Instruction, Research, and Technology (CIRT). As of the end of the fiscal year 2006/7 OIT had 79 full-time staff and was organized around three units. CIRT had 17 full-time staff. Over 300 student workers contributed valuable services in support of these offices' missions. The students came from all six colleges with the majority (63 percent) being juniors and seniors.

Institutional Computing Services (ICS) manages computer systems and applications to support the administrative functions of Indiana State. This includes the development, enhancement, maintenance, and production support activities of administrative applications as well as administrative systems and support utilities. Most of ICS' work revolves around systems impacting the campus as whole. One such system is the Banner data system which houses student, staff, and financial records.

Technical Infrastructure Services (TIS) implements and maintains the campus-wide infrastructure for the delivery of technology and technology-based services. This group researches, specifies, and implements network hardware and software to support the delivery of voice, video, and data; installs and maintains the telephone-based system as well as the cable infrastructure that supports all technologies including voice, video, and data; and installs and maintains the hardware and operating system software for all IT central servers and other network-based services.

User Services (US) provides phone and face-to-face support for the ISU community, specifically associated with desktop computers and software. The Computer Store is another function of the US area which gives students, faculty, and staff a convenient place on-campus to view and purchase all types of computer related technology.

Center for Instruction, Research, and Technology (CIRT) explores, develops, promotes, and supports effective teaching and research practices to advance knowledge and active learning at Indiana State University. CIRT endeavors to have a measurable impact on the academic community by building the reputation of Indiana State for innovative instruction and technology-enhanced research. Services within this group consist of faculty development and instructional design; research and emerging technology support; interactive and multimedia design; and evaluation and research support. Implementing and maintaining the state-of-the-art instructional facilities on campus including technology-ready classrooms, public and discipline specific labs, and distance learning classrooms reside within this unit. Student support is a primary function within US and is provided through the Computer Support Center, Residence Computing Consultant program, and the walk-in Help Desk.

## Appendix D: Technology Profile Annual Report

Annually, the Office of Information Technology (OIT) and the Center for Instruction, Research and Technology (CIRT) produce a profile that documents the activities of the prior year. Through this document, OIT/CIRT strives to share information about the growth and progress of technology at Indiana State with members of the campus community as well as with external audiences such as educators, governmental agencies and foundations. The Technology Profile is produce in hard copy but is also available in electronic format. Those interested in reading the Technology Profile can request a complimentary copy of the document from the Office of Information Technology or by access the document on the Internet at the following address:

<http://www.indstate.edu/oit/comm/profile.htm>

[Reports are available for the following years: 2004, 2005, 2006, 2007, 2008, and 2009]