

2010-2011 Informatics/Media Arts and Science

Section	Document Name
Fiscal Health	• INFO.pdf

Mission

The mission of the School is to excel and lead in education, research, and outreach, spanning and integrating the full breadth of computing and information technology, including the scientific and technical core, a broad range of applications, and human and societal issues and implications.

The School aims to lead the nation in creating a new, broad and interdisciplinary view of computing and information technology, and uses this viewpoint as the foundation of its main areas of emphasis:

Education and Research

Together with the School of Informatics and Computing on the Bloomington campus, the School offers a broad array of B.S., M.S., and Ph.D. programs in informatics and conducts research in a wide range of informatics foundations, applications and implications. This range includes:

- foundational areas including algorithms, data and search, networks and systems, and programming languages
- interdisciplinary applications including artificial intelligence, cognitive science and robotics, complex systems, cyber-infrastructure, digital media, health and life sciences, and security and privacy
- human and societal issues including human computer interaction and social informatics

Economic Development and Entrepreneurship


The School aims to provide talented graduates and professional expertise to a wide range of computing and information technology businesses and occupations, and places special emphasis on partnering with information technology businesses and needs in the state of Indiana. It also emphasizes and supports a culture of entrepreneurship in its students, faculty and alumni.


Diversity

The School aims to provide an environment that involves a diverse array of students, staff and faculty, including women and under-represented minorities, and people with a wide range of intellectual interests and talents. The broad view that the School takes of computing and information technology education and research provides a strong foundation for its diversity goals and being recognized as a national exemplar.

- Lead the nation in the development of an innovative and successful new curriculum for information technology and its applications.
- Educate students, including those who might not traditionally consider an educational path in technology, especially women and minorities.

Goals and Objectives

 **Best Practices:** The School of Informatics will identify and implement best practices for the best possible oversight of school resources; similarly it will act to promote excellent relationships with stakeholders and secure and expand its reputation for excellence

 Communicate and manage reputation

Campus Planning Theme: Best Practices

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:

- Created a position of communications manager
 - Identified a new communications team to support the position of communications manager
 - Continued focus on the School's recently redesigned website, its principle recruitment and communication tool
 - Contributed IMPACT stories to feature on the IUPUI website
 - Distributed other stories through IU system-based electronic periodicals
 - Continued improvement in the materials used to communicate the definition of the word "informatics" and the need/impact for the School in the community
 - Implemented monitoring of social network sites to gauge the School's reputation
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Evidence of Progress for 2010-2011:

- Filled the position of communications manager
 - Assembled a communications team which meets weekly
 - Analyzed traffic patterns on each page of the website
 - **IMPACT** stories on the IUPUI website (about one every other month); stories also placed in Inside IUPUI, JagNews, the School of Medicine's Scope newsletter, the Indiana Business Journal, etc.
 - Video messages on Informatics added to the School's website
 - School faculty acted as presenters in a number of highly visible health and life science conferences in Indiana
 - Regular monitoring of social media in place
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Activities planned for 2011-2012:

- Complete website traffic analysis; add specific "calls to action" on each page
- Identify/designate a School staff member to team with the communications manager to manage the School's interaction with the campus' new customer relationship management system
- Promote active use of social media on the site, which exist but are not well utilized; proactive response to any concerns arising in the social media
- Redesign print materials to support new communications strategies
- Continue to further define the School and its mission in terms which can easily be understood by those unfamiliar with the term "informatics" by replacing and expanding existing messages on the website and in print materials

☑ Conduct effective planning and improvement processes

Campus Planning Theme: Best Practices

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:

- Complete a School-wide planning process in health informatics
- Complete an administrative review of the School's Student Services functions
- Complete a marketing and communications review of each of the seven programs, three undergraduate and four graduate programs

- Select benchmark schools for undergraduate Media Arts and Science and Informatics; Health Information Administration will continue to look to its accrediting body, AHIMA, for benchmarking

Evidence of Progress for 2010-2011:

- Personnel on the IUPUI and IUB campus collaborated to produce a strategic planning document defining actions the School can take to increase the depth and breadth of its offerings in health informatics
- All Student Services personnel completed a review of their positions with the administration and the new HR specialist in order to update existing job descriptions and look for possible efficiencies
- Website review was conducted of benchmark schools

Activities planned for 2011-2012:

- Planning for HI:
 - The IUPUI campus will pursue one new hire in HI; the Bloomington campus will pursue two new hires in HI
 - The IUPUI campus will focus on its educational offerings (the creation of five new certificates as a result of an ARRA grant) and putting its Clinical Informatics certificate online; in the short term, the IUB campus will focus on research in consumer health informatics and disease surveillance (research that is already ongoing)
 - Two meetings will be scheduled: one high level meeting with the IU VP for Research and representatives of the CTSI and Medical school plus School of Informatics administrators focused on research; a second meeting will follow with faculty from both campuses who have evinced an interest in HI to promote collaboration
 - Several faculty members from both campuses will be encouraged to attend the first Association of Computing Machinery conference in Health Informatics (each offering reviewed by both an MD and a computer scientist)
- Planning for Student Services:
 - A summary and list of recommended actions for Student Services will be completed
- Planning for enrollment/marketing/promotion:
 - HCI: at capacity; no promotion needed
 - Bioinformatics: consider translation of web pages for key international groups
 - Health informatics: promotion of the clinical informatics program and five new certificate programs
 - HIA: identify tactics to identify a better prepared student population needed as the academic rigor of the program increases
 - Informatics undergraduate: Highlight new curriculum offerings while increasing awareness and understanding of the programs among the campus, prospective students and their key influencers through new print and promotional materials, tagline, videos, special events and outreach efforts
 - Media Arts and Science: revise program literature to reflect a refined focus on professional redevelopment skills and training

☑ Provide effective human and physical resources to further the mission of the institution

Campus Planning Theme: Best Practices

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:

- Tenure review for five faculty members
 - Search for a director for the Health Informatics program
 - Search for a tenure-track Media Arts and Science position
 - Search for a second undergraduate lecturer position; as well as a part-time visiting lecturer
 - Search for communications manager
 - Search for a human resource specialist
 - Pursued and achieved funding for the new Media Arts Research and Learning Arcade (MARLA), to support support undergraduate education in applied gaming research and learning
 - Established a fundraising goal of an endowed chair in Informatics at IUPUI
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Evidence of Progress for 2010-2011:

- Four faculty members were tenured
 - New director of health informatics hired
 - One tenure-track Media Arts and Science faculty member hired
 - Undergraduate lecturer hired
 - Communications manager hired
 - Human Resource specialist hired
 - Retrofitting of room identified for MARLA completed
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Activities planned for 2011-2012:

- Four faculty members will receive tenure review
- One clinical rank and one tenured faculty member will receive a promotion review
- Search for a senior or nearly senior faculty member in bioinformatics
- Search for a senior or nearly senior faculty member in health informatics
- Search for the position of registrar
- Search for a second multimedia and technology specialist to provide backup and continuity for existing services
- Complete a credentialing process for all adjunct faculty teaching at the masters' level
- Continue work on the fundraising goal of an endowed chair at IUPUI

☑ Provide good stewardship of resources

Campus Planning Theme: Best Practices

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:

- Efforts were made to fully utilize existing faculty and reduce the use of adjuncts
 - Implemented a laptop initiative, which will reduce the number of classrooms equipped with computers from nine to four
 - Devise a new funding model for graduate students
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Evidence of Progress for 2010-2011:

- Nearly all faculty members now have a full teaching load
 - The School was spending on average \$160,000 per year on computer replacements. Over the next three years, the laptop initiative will save approximately \$244,000. Four computer labs required by Media Arts and Science courses will be retained for high end multimedia applications students cannot reasonably purchase on their own
 - Funding model for graduate students completed
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Activities planned for 2011-2012:

- Assess the actual savings achieved by the laptop initiative as well as student reaction to the change
- Continue to maintain computer labs equipped with high-end programs students cannot usually afford
- Explore the need to support freshman students exploring the major who are not required to own laptops by giving priority to classrooms equipped with school-supported computers
- Implement offering most incoming graduate students scholarships and work experience for up to 300 working-hours per week during the 2010-2011 academic year

☑ Respond to and manage expectations of stakeholders

Campus Planning Theme: Best Practices

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:

- Implemented a comprehensive communication campaign for students and faculty on the laptop program, including several open meetings with students
 - Increased visibility of administration to students; gather student input
 - Showcased high quality examples of student work
 - Maintained relationships with the Media Arts and Science Advisory Board
 - Maintained relationships with Dean's Advisory Council
 - Continued communication with the School-wide Dean's Advisory Council
 - Expanded face to face activity in the health and life sciences campus and business community
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Evidence of Progress for 2010-2011:

- 91% of students indicated awareness of the laptop program when it was initiated; 69% achieved understanding; only one complaint about the program was voiced during two town halls held on the initiative
- Continued monthly meetings ("Lunch with the Dean") to connect undergraduate and graduate students and administration
- Web pages devoted to Informatics student groups and web pages featuring student work were added to the web site
- The Media Arts and Science Advisory Board reviewed and commented on the draft of the most recent changes to the MAS program outcomes, degree requirements and course descriptions
- The Dean's Advisory Council, which meets twice yearly, receives an update on IUPUI contributions; a "dashboard" of key indicators is presented to this group twice yearly

Activities planned for 2011-2012:

- A summary meeting on the impact of the laptop program (particularly as it affects freshman students who may not own a laptop but want to take beginning courses) will be conducted
- Continue "Lunch with the Dean" program on a once-monthly basis
- Develop a schedule of refreshing student work on the web site
- Work with the MAS Advisory Board to help the School produce market-ready graduates and to integrate industry experiences into the undergraduate curriculum. Most recently, the board has agreed to form an ad hoc committee to develop a fresh approach to the N399 directed study course.
- Continue once yearly Indianapolis meeting of the DAC and regular dashboard updates

▣ **Civic Engagement:** The School of Informatics will serve the state of Indiana through community participation and collaborative research partnerships, thereby participating in the growth of an IT culture in the State and encouraging continued economic development. The School will have active and dynamic collaborations with business, education and industry to cultivate mutual opportunities for students.

☑ Enhance capacity for civic engagement

Campus Planning Theme: Civic Engagement

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:

- Formed a RISE Committee that will operate for two years
 - Promoted undergraduate research opportunities
 - Increased international engagement
 - Institutionalized a commitment to service learning
 - Provided structured internships/opportunities for experiential learning in the community
 - Increased career support for graduate students
 - Provided student placements through the Health Information Administration program for multiple health care entities in the state
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Evidence of Progress for 2010-2011:

- A RISE committee, which has a two year sunset provision, met throughout the 2009-2010 year with the following results:
- Undergraduate research
 - Top undergraduate students were invited to a Grant Chat in the spring so that they could meet faculty members and learn about opportunities
- International opportunities
 - The school's first international offering, a course in Paros, Greece, took place in summer 2010
 - A faculty member utilized an international grant to travel to China for a second visit to Sun YatSen University, concluding a 2 + 2 arrangement
 - Another faculty member traveled to Pachuca, Mexico to explore collaborative courses
- Three faculty members used an Engaged Department grant to begin the vertical integration of service learning in the curriculum
 - The School added its first service learning course, Computing for a Cause (C4C). Initial community

partners included the Volunteers of America, the Indiana Organ Procurement Center and School on Wheels, an afterschool program for homeless children

- The School's Career Services personnel focused on business and community internships:

Fall 2009	13 interns	48 credit hours
Spring 2010	11 interns	45 credit hours
Summer 2010	15 interns	45 credit hour

- Career Services developed and began teaching a graduate level career planning course, open to all students in all programs, called Career Launch in summer 2010.
- Placed 56 Health Information Administration students and 8 Coding Certificate students in 64 health care professional practica during the 2009-2010 year

Activities planned for 2011-2012:

- Extend the work of the RISE committee into a second year
- Create a dedicated RISE sub-page for the Informatics web site
- Implement the Sun YatSen 2+2 program
- Offer the international course to Paros, Greece a second time in Summer 2011
- Pursue collaboration on a video production symposium with the Institute of Media Strategies in Hakuoh University in Oyama City, Japan
- Begin planning for assisting international students with their transition to campus
- Implement a second service learning course, New Media Without Borders
- Continue planning for a joint distance education course in legal informatics which will be taught at both IUPUI and the Universidad Autonoma del Estado de Hidalgo (UAEH) in Fall of 2011
- Complete implementation of the recommendations fostered under the Engaged Department grant
- Co-sponsor Career Connection with other schools across campus in October of 2010
- Update to the Careers section on school website, including a Career services blog
- Continue Health Information Administration clinical placements
- Plan for clinical placements required by the new Clinical informatics Certificate

- ☑ Enhance civic activities, partnerships, and patient and client services

Campus Planning Theme: Civic Engagement

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:

- Informatics faculty members continued to engage in a significant number of civic activities and community partnerships, many of them with funding. Some are projects undertaken by the School and involve donating services to non-profit entities seeking technology support through classroom projects
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Evidence of Progress for 2010-2011:

- School researchers collaborated with Regenstrief Institute and MOI University in Kenya to secure a Fogarty grant on Information Technology in Global Health to create the East African Center of Excellence in Health Informatics in Eldoret, Kenya (specifically, developing and deploying technology for the live recording of training courses and

- providing a content and media rich online environment for materials relating to electronic health records)
- The School and RefreshIndy, a local organization of web designers, developers and graphic artists, brought together professional and student talent in Indianapolis to develop (“refresh”) websites for three local non-profit organizations. The work was done in a continuous 48 hours period at the Informatics and Communication Technology Complex.
- In a team including the Schools of Education and Science, Informatics faculty participated in “Discovering the Science of the Environment,” an environmental science education program for middle-school students and their teacher that visits several schools each semester to conduct in-the-field learning activities related to science, math, and the environment
- Faculty conducted a demonstration of low-cost multimedia tools for storytelling for the Indiana State Museum (ISM)
- Faculty collaborated with the Riley Hospital and the Department of Pediatrics Medicine/Pediatrics Program and undergraduate students in the development of the Center for Youth and Adults with Conditions of Childhood (CYACC) web site.
- In collaboration with the Heartland Film Institute, provided a seminar, Animated Filmmaking: Emotions in Motion, which was broadcast to a live audience in Washington, DC. in partnership with the Academy of Educational Development (AED)
- Conducted several successful online service learning projects with health care entities in Indiana and Michigan

Activities planned for 2011-2012:

- Obtained funding for a gaming research space, Media Arts Research and Learning Arcade (MARLA) that can be utilized by researchers from other units on campus for the development of “serious games” (games based in entertainment that have serious teaching objectives)
- Complete application process for campus researchers wishing to utilize resources in the new gaming lab; work toward one or more collaborative projects in that lab this year
- Continue pro-bono class projects and community consultations

☒ Intensify commitment and accountability to Indianapolis, Central Indiana, and the state

Campus Planning Theme: Civic Engagement

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:

- Led by the Dean of Informatics, representatives of the IU School of Medicine and Informatics, the Regenstrief Institute, IURTC, Wishard Hospital, BioCrossroads, TechPoint, Clarian Health Ventures and other organizations formed the Healthcare and Informatics Collaborative at Indiana University (HICIU), an unusually broad collaboration in health information technology; members of this group are working together to select pilot projects in healthcare informatics.
 - Worked with state information technology leaders to respond to opportunities for the state in the Obama administration’s ARRA stimulus package
 - Offered topics course in entrepreneurship
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Evidence of Progress for 2010-2011:

- Provided time from an associate dean for participation with Advancing Health and Life Science IT (ALHIT), an economic development group charged with increasing the number of health and life science information technology companies in the state of Indiana
 - Connected the ALHIT group to CTS; ALHIT will be adapting i2i connect, software developed on campus to connect entrepreneurs, to catalog and promote connections among health IT vendors in the state
 - An pilot project is being planned through the new HICIU collaboration
 - Entrepreneurship class is taught via distance education on both campuses
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Activities planned for 2011-2012:

- Implement initial pilot project with HICIU
- Continue active participation in (ALHIT)
- Continue with entrepreneurship course

 **Diversity:** The School of Informatics will educate students, including those who might not traditionally consider an educational path in technology, especially women and minorities.

 Contribute to the climate for diversity in Indianapolis, Central Indiana, and the entire state

Campus Planning Theme: Campus Climate for Diversity

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:


- Planning continues with the School-wide Assistant Dean for Diversity and Education, who is working with the National Center for Women and IT (NCWIT) to become a national exemplar of diversity
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Evidence of Progress for 2010-2011:

- The Assistant Dean for Diversity and Education is promoting ways to create inclusive cultures in the classroom and targeting grant support for inclusive community activities
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Activities planned for 2011-2012:

- Continue building profile of the School as an exemplar for diversity

 Demonstrate diversity in research, scholarship, and creative activity

Campus Planning Theme: Campus Climate for Diversity

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:

- IUPUI Director for Undergraduate Research presented to faculty on campus-wide opportunities for undergraduate research
 - Provided a lunch connecting promising undergraduate students to established researchers
 - Leadership Council discussion of ways in which faculty can be rewarded appropriately for contributions to the School's diversity activities
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Evidence of Progress for 2010-2011:

- Informatics students participated in:
 - Participated in the Undergraduate Research Opportunities Program (UROP)
 - Participated in the Alliance for Graduate Education and the Professoriate (AGEP)
-

Activities planned for 2011-2012:

- Continue encouraging participation in UROP and AGEP
- Continue funding students through following the campus initiatives whenever possible:
 - Diversity Scholars Research Program (DSRP)
 - Louis Stokes Alliances for Minority Participation (LSAMP)
 - Ronald E. McNair Post baccalaureate Achievement Program (McNair)

- ☒ Engage students, through the curriculum and co-curriculum, in learning about their own and other culture and belief systems

Campus Planning Theme: Campus Climate for Diversity

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:

- HCI classes at the undergraduate and graduate level provide content on human-centered computing and cross-cultural communication
 - Expanded service learning opportunities help students design technology solutions for disadvantaged groups.; the curriculum will help students explore cultural and societal belief systems about each of these groups
 - Diversity content in Learning community courses
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Evidence of Progress for 2010-2011:

- Addition of a required HCI course and approval of an HCI undergraduate certificate, making more course material on human centered computing available at the undergraduate level.
 - The School's first service learning class incorporates partnerships with School on Wheels (homeless children), Volunteers of America (prisoners transitioning to work) and Indiana Organ Procurement Center (terminally ill patients and families donating organs)
 - Learning Community courses dedicate sessions to diversity issues
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Activities planned for 2011-2012:

- Implementation of HCI undergraduate courses and certificate
- Continuation of service learning course; implementation of recommendations from an Engaged Department grant
- Learning community courses dedicate sessions to diversity issues

☒ Engage the Informatics community in global issues and perspectives

Campus Planning Theme: Campus Climate for Diversity

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:

- The School continues to deepen its relationships in China, Mexico, Greece and Kenya
- Identification of international priorities through the RISE committee
- International research collaborations are occurring with the UK, Italy, and Switzerland (HCI) and with the National Center for Biological Sciences in Bangalore, India (Bioinformatics)
- Themed social events celebrating international diversity

Evidence of Progress for 2010-2011:

- Concluded 2+2 arrangement with Sun Yat Sen School of Communication and Design in Guangzhou, China. Participating students will earn a bachelor's degree from both institutions
- The School's first international study abroad class took place during the summer in Paros, Greece; the class provided blogs, video and photographs of their experiences
- Social events with international themes

Activities planned for 2011-2012:

- Planning will begin for 2+2 with Sun Yat Sen; first students to arrive in 2013
- Planning for a second summer course in Paros, Greece
- Development of a course that would be offered at both IUPUI and the Universidad Autonoma del Estado de Hidalgo (UAEH) via distance technology

☒ Recruit and enrollment of a diverse student body

Campus Planning Theme: Campus Climate for Diversity

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:

- Specific trips made to deepen relationships: Dean of the School (South Korea); Associate Dean for Graduate Studies and Research (India)
- Student Service personnel have institutionalized active recruiting of a diverse student body through multiple recruitment events and contacts

- Fundraising activities directed at endowed, need-based and RISE scholarships

Evidence of Progress for 2010-2011:

- Statistics on Gender

Gender	INFO-2008	INFO-2009	IUPUI/2009
Total Male	63.8%	64.0%	43%
Total Female	36.2%	36.0%	57%

- Students by Ethnicity

	Undergraduate	Graduate
Asian	4.7%	23.5%
African American	12.6%	7.8%
Hispanic	3.0%	2.0%
American Indian	.2%	0
Non-Resident Alien	.2%	1.0%
White	74.9%	54.4%
Refused	1.8%	.5%
Other	2.7%	10.8%

- Undergraduate recruitment activity/presence in:
 - La Plaza's FIESTA
 - Minority Engineers Program of Indianapolis (MEPI)
 - Summer workshops for NAACP; Urban League; various AME churches
 - Soon-to-Make a Difference [SMD] program – an advanced computer technology program for girls ages 12-17, which encourages them to explore opportunities in technology and introduces them to Informatics and media arts (African American high school population for summer workshops)
 - Summer gaming camps
 - Mapping Education Toward Achievement (META) (for African American students)
 - Project Stepping Stone – Hispanic high school community
 - Local area high school career days
 - Shades of Brilliance program for high school students
 - Norman Brown Diversity Scholars and Leadership Program Scholars
 - Two scholarships provided for under-represented students
 - Funding is being provided for one Multicultural Scholar for each of the next four years
- Graduate recruitment
 - Two African American Ph.D. students were recruited (one, with the assistance of the Office of Diversity, Equity and Inclusion)

Activities planned for 2011-2012:

- Continue emphasis on raising funds for endowed, need-based scholarships and RISE scholarships for all students, with an emphasis on minority students and women

- with an emphasis on minority students and women
- Continue second year of funds for MultiCultural Scholars program
- Minority Engineering Program of Indianapolis (two afternoon presentations for 40+ students in December, 2010)

☒ Recruit, development, and support of diverse faculty and staff

Campus Planning Theme: Campus Climate for Diversity

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:

- All searches were conducted with special attention to the lack of representation of women and African Americans in the computing fields
- There is a notable absence of African-American faculty; the School does have African-American staff members, but the number is still not representative of the surrounding population in Indianapolis

Evidence of Progress for 2010-2011:

- One female tenure track faculty member was added to the Media Arts and Science program
- Two female lecturers were added in the Health Information Administration program
- One female lecturer was added to the Informatics program
- One female staff member was added
- A diversity page was added to the school's website
- Gloria Quiroz, the School's freshman/sophomore undergraduate advisor, was the recipient of the 2009 Nan Bohan Community Engagement award; the Sigueme (Follow Me) Award for assistance to Latino students; the Chapter Advisor of the Year award for her work with the Gamma Phi Omega International Sorority; and was also honored at the IUPUI Fraternity and Sorority Life's (FSL) third annual Leadership Reception

Activities planned for 2011-2012:

- Continue aggressive attention to diversity in all searches per OEO guidelines

☒ Retain and graduate a diverse student body

Campus Planning Theme: Campus Climate for Diversity

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:

- Undergraduate Degrees Conferred

	Dec 2009	May 2010	June 2010	Total
MAS	22	26	3	51
INFO	3	6	0	9
HIA	0	0	15	15
Other	0	0	0	0

Coating Cert	0	0	2	2
INFO Cert	0	0	2	1
Total	25	32	21	78

• Graduate Degrees Conferred

	Dec 2009	May 2010	June 2010	Total
BIO	2	2	0	4
HI	4	3	0	7
HCI	1	3	1	5
MAS	1	3	0	4
MS Cert in HCI	1	0	1	2
PhD HI	0	2	0	2
Total	9	13	2	24

- The School's Student Services personnel are notably effective at intervening with students in ways that support their retention and graduation. This is done with a variety of tools and techniques, including a supportive environment, goal setting, identifying role models within the student population, interventions for students having difficulty and emphasizing personal responsibility
- Four year plans of study have been added to the school's web site
- An advising companion and advising syllabus direct students to the quickest path to graduation
- Four undergraduate seniors spent a week on campus with Informatics faculty as a part of the Alliance for Graduate Education and the Professoriate, which is designed to promote interest in graduate education among underrepresented minorities
- Retreat undertaken to focus on a sense of identity and community for the School

Evidence of Progress for 2010-2011:

- Funding was made available to support several female students attending the Indiana Celebration of Women in Computing in Spencer, Indiana (February 5-6, 2010)
- Minority scholarship opportunities
- Frequent contact and life coaching plans for under-represented students
- Personal contact with students identified through the early warning system
- Provides internship and practicum opportunities through career services
 - Statistics on Retention

	05-06	06-07	07-08	08-09	09-10
Freshman/Sophomore	80%	80%	73%	82%	89%
Junior/Senior	82%	85%	82%	88%	90.8%
All INFO Undergrads	82%	83%	79%	86%	90.6%
All IUPUI Undergrads	74%	75%	76%	80%	TBD

Activities planned for 2011-2012:

- A renewable scholarship will be established in conjunction with the NSF Aspirations for Computing Award for high school girls contemplating careers in computing
- If budget is available, continue sponsorship of students attending the Grace Hopper Conference, the Midwest

Women in Computing Conference and the Indiana Celebration of Women in Computing

- Continue scholarships for under-represented minorities
- Continue acting on findings of the early warning system, which triggers an intervention for at-risk students by advisors; a plan of action is put into place that includes faculty, advisor and student
- Continue engagement of students in internship and practicum opportunities

☑ Student, faculty, and staff perceptions of the campus climate for diversity

Campus Planning Theme: Campus Climate for Diversity

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:

- Planned a diversity web page to the overall school's web page
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Evidence of Progress for 2010-2011:

- Diversity page posted
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Activities planned for 2011-2012:

- Enhance diversity page by elaboration of the RISE initiative

▶ **Research and Scholarly Activity:** The School of Informatics will have an active and robust interdisciplinary research program that builds upon existing strengths of the university and the State.

☑ Conduct world-class research, scholarship, and creative activity relevant to Indianapolis, the state, and beyond

Campus Planning Theme: Research, Scholarship and Creative Activity

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:

- Efforts to increase the number of research collaborations outside the School
 - Efforts to increase the number of successful proposals
 - School of Informatics faculty were awarded 21 university-funded research grants in fiscal year 2010 (quadruple the number received in the prior fiscal year)
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Evidence of Progress for 2010-2011:

- In 2007-2008, Informatics faculty members were listed as collaborators on two proposals; in 2008-2009, the number of proposals submitted by other schools or units on which Informatics faculty were listed as collaborators increased to 20. For 2009-2010, that number jumped to 27.

- Forty-four proposals were submitted in 2007-2008; forty-five proposals were submitted in 2008-2009 (\$7,079,920 requested); forty seven were submitted in 2009-2010 (\$6,834,127 requested); 10 were accepted in 2007-2008 (\$1,384,557); 17 were accepted (\$2,164,978 awarded) in 2008-2009; 10 were awarded in 2009-2010 (\$1,480,277). Recovered indirect costs increased 6.3% over the prior fiscal year.
 - The School participated in the campus-wide Translating Research into Practice and Research Day Efforts
 - A joint effort between the School of Informatics at IUPUI and the National Institute of Technology Calicut (NITC) in India aims to increase international research opportunities among life and computer science scholars. Both institutions have co-founded the first International Symposium on Biocomputing (ISB) which took place February 15-17, 2010 in Calicut, India
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Activities planned for 2011-2012:

- Pursue collaborative opportunities with CTSI
- Explore joint grant opportunities with Regenstrief Institute
- Pursue joint research with Computer Science
- Pursue large-scale research grant opportunities: energy, health games, etc.
- Continue elaboration of the School's Signature Centers
- Take steps to increase undergraduate research
- Sponsor 2010 Vision Fest, an international media arts competition
- Organize national Symposium on Health Games
- Provide greater peer review support prior to external grant submissions

☒ Enhance the infrastructure for research, scholarship, and creative activity

Campus Planning Theme: Research, Scholarship and Creative Activity

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:

- Create incentives for faculty to secure external funding
 - Provide a pre-review mentoring process
 - Increase research-based funding of graduate students
 - Research infrastructure, especially additional laboratory space, was created to support and expand research in the School
 - A target of 30% grant success rate was set
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Evidence of Progress for 2010-2011:

- An effective pre-review process mentoring mechanism for faculty submitting grant proposals was established
 - Fifty-six percent of graduate students were funded by research grants
 - A target of at least 80% of the faculty submitting grant proposals each year was set. One hundred percent participation was achieved among tenured and tenure-track faculty in 2008-2009; in 2009-2010, this same measure fell to 90%.
 - The target of 30% grant success rate was met in 2008-2009 but fell to 21% in 2009-2010.
-

Activities planned for 2011-2012:

- Undertaken a review of the computing environments in which the School's faculty conduct research; if feasible, proceed with automated backup plans for each researcher's data
- Continue to increase the percentage of graduate students funded by faculty research support
- Explore additional space in the Walker Plaza building to establish the User Simulation and Experience Research Lab (USER), home to three separate research initiatives: Games for Improving Health (GIH) Research Center, the Human-Centered Interaction Design (HID) Research Center, and the Visualization and Interactive Spaces (VIS) Research Center.
- Targeting prospective graduate students and encouraging them to work through SROP
- Target NIH and NSF training grants for graduate students
- Research brochure

☑ Provide support to increase scholarly activity and external funding

Campus Planning Theme: Research, Scholarship and Creative Activity

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:

- Full financial and administrative support for pre- and post award mechanisms was put in place.
 - Plan a compelling research seminar series to connect faculty with outside leaders and to promote external collaborations
-

Evidence of Progress for 2010-2011:

- Gave incentives to faculty for securing external funding such as, decreased teaching load, give back 10% of F/A, public recognition, annual research awards
 - Research colloquia occurring regularly with good attendance
-

Activities planned for 2011-2012:

- Identify 2-3 major collaborative research initiatives in such areas as Health Communication, Translational Health or Android science
- Establish strong research collaboration with the National Institute of Technology, Bombay, India, and explore NSF funding opportunities.
- Work with Registries Institute and AMIA on building Health Informatics Training and Education opportunities grants
- Build a strong research collaboration with CCBB, CTSI, Regensrief and SOI and explore bioinformatics related grant opportunities.

▶ **Teaching and Learning:** Lead the nation in the development of an innovative and successful new curriculum for information technology and its applications

☑ Enhance undergraduate student learning and success

Actions taken for 2010-2011:

- The first year of an intensive two-year process, the Council for Undergraduate Education (CUE), was initiated to elevate the levels of attention to teaching and to prepare the School for the 2012 accreditation. An executive steering committee directed the work of six sub-committees
 1. Teaching and Assessment Committee
 2. RISE Committee
 3. Graduation and Retention
 4. Distance Education
 5. Undergraduate Informatics Curriculum
 6. Recruitment and Marketing
 - The proposed undergraduate MAS curriculum was completed and submitted
 - The undergraduate Informatics faculty proposed goals of increasing the number of required and elective courses offered inside the School to strengthen students' identification with the school; continued examination of types of business areas of specialization for informatics students and revision the curriculum to create more coherence from year to year; an HCI undergraduate certificate was approved and implemented
 - The undergraduate HIA program proposed development of a new Professional Practice Experience (PPE); a new course for the Medical Coding PPE; continued discussion of an EHR Certificate; beginning development of the Data Analyst Certificate.
 - The Assistant Dean for Student Services received a \$5,000 pilot grant from the Lumina Foundation for an experimental intervention titled "Removing Barriers to Higher Education."
-

Evidence of Progress for 2010-2011:

- Each of the CUE committees met regularly throughout 2009-2010, submitting summary reports to the Executive Council; four committees decided to continue their work into 2010-2011
 - The revision of the MAS undergraduate curriculum was completed and the course remonstrance process completed
 - The undergraduate Informatics faculty adopted a new four year plan of study which includes several new courses, including an overview research course; an ethics course; and additional data structure/ data management course; a human-computer interaction course and additional content on project management
 - The undergraduate HIA program (which celebrated its 60th anniversary this year) implemented the new Professional Practice Experience program
 - Pair Problem-Solving, a technique shown to increase the retention of women in STEM disciplines, was implemented in a foundational mathematics course with good impact on student grades and satisfaction
 - Student evaluation scores remain high (3.201- Fall 2009; 3.284 - Spring 2010)
 - Four students matriculated as a result of the Lumina Foundation grant
-

Activities planned for 2011-2012:

- The year of the Council for Undergraduate Education two year process will continue and conclude, with the committees on Teaching and Assessment, Retention and Graduation, Distance Education and the RISE Initiative continuing
- The new MAS curriculum will be implemented Fall 2010
- The MARLA laboratory will begin operating, giving students access to a professional-level game studio, library and gallery equipped with the latest in gaming technology; under the mentorship of faculty and industry professionals, students will have the ability to design, build and test their own games among peers as well as engage in ongoing research on “serious games” for education, health care and energy conservation.
- Faculty will begin additional course development for the new Informatics four year plan of study
- The undergraduate HIA program will develop a new course and manual for the Medical Coding
- Professional Practice Experience; continue EHR Certificate discussion with possible implementation; and begin development of the Data Analyst Certificate
- Team teaching will be implemented in the introductory Informatics course
- Paired learning techniques will continue in math-base courses
- The need for a new permanent Assessment Committee to coordinate the activities of the various program curriculum committees will be explored

☒ Provide effective professional and graduate programs

Campus Planning Theme: Teaching and Learning

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:

- A new Graduate Certificate program in Clinical Informatics was developed
 - Actions were taken to increase interaction between faculty and graduate students
 - The bioinformatics curriculum has been completely remodeled for both MS and PhD degrees so that 1) majority of required courses are bioinformatics related and 2) number of required courses are significantly reduced to increase time on research
 - An active search for a health Informatics Program Director was launched
 - Assessment projects from all graduate programs were added to the yearly PRAC Report
-

Evidence of Progress for 2010-2011:

- The new graduate certificate program in Clinical informatics has been approved
 - An active Indian student association has been fostered which is helping mentor and support new students from India
 - The overall graduate student enrollment increased
 - The School awarded its first Ph.D. in Informatics
 - A new Director for Health Informatics Program was hired
 - The School received a major ARRA Grant for establishing graduate-level training in four different specialized areas in Health Informatics
-

Activities planned for 2011-2012:

- An aggressive marketing program for Health Informatics will be undertaken

- HIA faculty will be asked to give formal study to conferring degrees beyond the undergraduate degree (AHIMA, the profession's chief professional organization, is encouraging this)
- The Health Informatics advisory board will be revived
- The Health Informatics masters program will pursue accreditation by CAHIIM
- The feasibility of a bioinformatics certificate for undergraduates will be investigated
- Four new Graduate Certificate Programs in four different specialty areas in Health Informatics will be established
- A Five-year, BS-MS program in HIA and HI will be explored
- Implementation of Principles of Graduate Learning and graduate program participation in the PRAC report will continue

☒ Recruit and support a well-prepared and diverse student population

Campus Planning Theme: Teaching and Learning

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:

- Enhancing the website with easy to use plans of study
 - Attracting and retaining the best students with named scholarships and other funding opportunities
 - Recruiting activities for undergraduate programs
 - Recruiting activities for graduate programs
 - Creating more common identity for the school across programs through community building and student groups
-

Evidence of Progress for 2010-2011:

- Supporting a well-prepared student population
 - Four year plans of study for all three undergraduate programs now posted on the website
 - Multiple undergraduate scholarships for each program
 - Funding of two Chancellor's Recognition Scholars for the next academic year. Eligible students meet Academic Excellence Scholarship standards (3.75 H.S. GPA, 1250 SAT/28 ACT) and will receive a stacked scholarship totaling \$8,000 for up to four-years of funding when they maintain a 3.0 cumulative GPA and continuous fulltime enrollment (2009-2010)
- Recruiting a well-prepared (undergraduate) student population through:
 - Summer gaming camps
 - K-12 outreach
 - New Tech High School initiative (two Informatics undergraduates are teaching a web programming class and a video class for New Tech High School, an academy located inside Arsenal Technical
 - Special Program for Academic Nurturing (SPAN) – 17 high school students taking Informatics classes
 - Recruitment activities with Ivy Tech
 - Targeting undecided UCOL students; participation in UCOL Major Exploration Day
 - Recruitment activities with IUPUC
 - Step Onto Campus; Scholars Day
 - Prospective Student Tours with the Informatics Student Government
 - Class Visitations
 - Mapping Education Toward Achievement (META)
 - Ivy Tech articulation agreement 2+2 for HIA and MAS
 - Recruitment Class: six area high school targeting underserved populations (low income to ethnicity),

- supported in part by the Lumina Foundation
 - Inviting high school tech clubs; hosting open houses for interested students and parents; presenting to area high schools with faculty
 - Sending information to high school guidance counselors/technical directors and inviting them to special happenings
 - Recruiting a well prepared graduate student population through:
 - Recruiting visit to India by the Associate Dean for Graduate Studies and Research
 - Actions taken to recruit more international students, especially MS
 - Annual introductory research meeting for all graduate students and faculty; all PhD students are required to talk to faculty before registration
 - Four undergraduate seniors spent a week on campus with Informatics faculty as a part of the Alliance for Graduate Education and the Professoriate, which is designed to promote interest in graduate education among underrepresented minorities
 - Community Building
 - Faculty sponsorship of campus-wide gaming club promoted for students (tournaments; open to the community and used for recruitment); co-sponsor is the Informatics Student Group
 - Sponsored Illustration Club and the Anime club
 - Friday night study halls with faculty occurred once each semester
 - Sponsored movie nights and discussion groups (60 students participated)
-

Activities planned for 2011-2012:

- Continue with funded scholarships
- Sponsor VisionFest 2010
- Community activities
- Participate in the first Grad Expo

☒ Support and enhance effective teaching (technology support)

Campus Planning Theme: Teaching and Learning

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2010-2011:

- Creation of business continuity plan for the school
 - Gather information on possibility of adding movable partition in one large high-end computer classroom to allow the school to have more small classes: especially classes requiring intense use of professional applications.
 - Continued work on new website to improve usability and ease of use for students selecting classes and planning the shortest path to graduation
 - Continued research and implementation of distance education content delivery to improve the student experience
-

Evidence of Progress for 2010-2011:

- Web Committee formed to oversee content on website
- On-line course evaluation system successfully tested in spring 2010 semester
- Mid-Term course evaluation developed for evaluating classes, especially the use of technology for distance

- education classes
 - Movable partition project put on hold due to budget concerns
 - Submitted IUPUI School of Informatics Business Continuity Plan
-

Activities planned for 2011-2012:

- Continued work on website to improve usability and ease of use for students selecting classes and planning the shortest path to graduation
- Research and plan ways to implement close-captions for all website and distance education videos
- Development of a class evaluation instrument to convert from a paper and pencil system to an online system for all Informatics classes.
- Continued research and implementation of distance education content capture process to streamline and improve work-flow

Fiscal Health

Reallocation Plan

Other Question(s)

1. What changes are you seeing in the characteristics of incoming and returning students, and how are you preparing these students to meet the changing needs of the future workforce?

More prospective students are seeking short term, intensive programs that lead to specific jobs and target salaries. The School has rapidly developed and executed five new certificates to respond to the state and nationwide need for graduates with expertise in informatics and healthcare. They are:

- o Certificate in Clinical Informatics (Clinician Leader)
- o Certificate in Informatics for Public Health Professionals (Public Health Leader)
- o Certificate in Informatics in Health Information Management and Exchange (Health Information Management Exchange Specialist)
- o Certificate in Informatics in Health Information Security (Health Information Privacy and Security Specialist)
- o Certificate in Informatics in Health Information Systems Architecture (Programmer and Software Engineer)

The School is tracking certificate graduates closely. All but one student in the first cohort have secured jobs with titles and salaries appropriate to the certificates they pursued.

Again, in order to shorten the time to graduate, the administrative team and the program directors will begin an intensive review of faculty resources in 2012 to determine if one or more 1-year MS programs or 5-year BS/MS programs are possible. Special attention will be given to utilizing classrooms year round.

The changing nature of information technology demands that faculty devote considerable attention to updating course content and degree programs. Although this presents challenges to a “stable” curriculum, it is necessary to prepare students for the workforce. Since the campus offers a number of computing degrees, the School is also actively engaged with other campus units in clarifying the differences between/among the various computing degrees available to prospective students.

The School gives special attention to retaining students who are less well prepared in math and science. In particular, the School is adopting “Key Practices for Retaining Undergraduates in Computing” identified by the National Center for Women in Computing.

Select Informatics students are now participating in the Emerging Leaders Program, which pairs promising students with an interest in entrepreneurship to state and national IT leaders for mentoring.

The vast majority of incoming students are now equipped with laptops, which has allowed the School to decrease the number of computer equipped classrooms. Computer classrooms are now maintained for students taking introductory classes to explore the field and for Media Arts and Science students needing access to high end computing applications

2. What are your plans for any surplus amounts in your fund balance?

At this time, Informatics is implementing a \$400,000 cut over the next two years. Making the reasonable assumption that the campus limits cuts to two years, the School will utilize remaining surplus funds to:

- Address the need for more space; the School is at capacity for faculty offices, conference room space, and research laboratories.
- Invest in the personnel needed for the implementation of innovative and ambitious accelerated one year masters' programs and five year BS/MS programs in Health Informatics, Bioinformatics, Human Computer Interaction, and Media Sciences.
- Develop a state-of-the-art virtual practicum space for health informatics education and training that will be one of a kind in the nation.

If cuts that have been proposed three and four years out are implemented, surplus funds will be consumed for the continued operation of the School, severely limiting any possible growth.

3. What are your short-term and long-term plans for ensuring adequate facilities to meet your mission? To what extent are on-line and/or hybrid courses a useful strategy in addressing any anticipated space constraints?

The School is fully utilizing existing office, conference and lab space. In the short-term, administration will continue to consolidate spaces and assign part-time faculty to shared office space. Since there is no room for expansion in the IT building, the School will need to work with the IU Real Estate office for additional office space for the long-term. The School plans to continue to rent space in Walker Plaza to support research teams/graduate student collaboration. The fund balance may play an important role in necessary expansion.

The School has a significant investment in on-line and hybrid classes which ease the space constraints in classrooms. Dedicated IT staff members will provide continued support for existing online classes and expansion to new offerings as requested by faculty and students. The demand for distance education courses in Informatics has remained steady and is likely to increase in the area of health informatics, as attempts are made to accommodate working medical and nursing professionals pursuing those credentials.

4. What marketing strategies/materials are you planning to develop/disseminate during the coming year?

- a. Who is the intended audience for each?
- b. What do you hope to accomplish with this strategy with this audience?
- c. How much are you planning to spend for each strategy?
- d. How will you tell if your expenditure was worth your investment? [Provide return on investment (ROI) data for past expenditures, if available, and plan to track ROI in the future.

The School has several marketing targets: prospective students and their parents, current students, prospective faculty, alumni, employers, and donors. During the 2010-2011 year, special attention was given to undergraduate recruiting. The School's website was reviewed to ensure that a clear "call to action" was evident on nearly every page. In 2011-2012, more balanced attention will be given to both undergraduate and graduate programs as well as promotion of the School's research agenda. The School's Communication Manager co-leads a group of Student Services, Career Services, website and special events personnel in the execution of various marketing strategies.

The School produces very few print materials: folders for mailing materials for prospective students when requested, program rack cards, a research brochure, banners, flyers designed in-house, signage for events and publicity for research conferences. A significant portion of last year's budget was devoted to refreshing of print materials, so even less money will be needed in 2011-2012 for print. The School of Informatics and Computing at IUB employs a graphic designer, who is available on occasion for assistance. High end photography is done by a faculty member/expert when his research schedule permits. Student photography is encouraged on the social media sites.

a. *Who is the intended audience for each?*

· **Prospective undergraduate students:** Prospective students interested in Informatics tend to be comfortable with most forms of technology. Therefore, the website is the primary recruitment tool. Facebook, YouTube, Vimeo and Twitter providing additional communication channels. Materials are mailed to prospective students' homes to get them in front of parents. The School also has ten target high schools. Rather than direct marketing, the emphasis is on building relationships with instructors who teach computing or gaming courses and administrators who want to keep their teachers' technology skills up to date. The School is very interested in using the Talisma CRM system when it is more fully available to further refine target lists of prospective students.

· **Prospective graduate students:** Again, the website is the primary mode of recruitment. There is a new focus on international recruiting. This year, the School's Executive Associate Dean has traveled to China to recruit for the Sun Yat Sen 2+2 initiative. A Chinese translation of the website supported his efforts as well as videos of Chinese graduate students. The Associate Dean for Research and Graduate Studies has traveled to India for recruitment. Plans are being formulated for a strategic partnership in India to recruit directly from high schools.

· **Current students:** There were many videos on the website that featured faculty. A concerted effort has been made to replace them with videos of engaged, successful students, since peer influencers are so important. A small student ambassador group has also been identified to replace faculty and staff in some contacts with prospective and current students. Career Services personnel started a blog this year for communicating with current students.

· **Prospective faculty and potential research collaborators:** Each year, a low cost research brochure is produced in-house to highlight the School's researchers and their areas of interest. It is e-mailed to other campus researchers and disseminated to potential candidates identified by search committees.

· **Alumni and others with an interest in the School:** Twice a year the Bloomington campus produces a print magazine that includes both IUB and IUPUI features. That magazine will likely be scaled back to print once a year and a web format once a year. The magazine is designed to give an overall view of the School's accomplishments, providing a good overview for recruiting prospective faculty and enhancing the reputation of the School.

· **Employers:** Previously, Career Services had invested in a large full color brochure, supported in part by ads from employers. The print version has now been retired; the material has migrated to the website. Relationships with employers are so important that nearly all who are actively involved with the School (by providing internships or hiring), receive a yearly site visit by Career Services personnel.

· **Donors:** In concert with the IUPUI IMPACT campaign, the School's development officer produced a written case for support (in consultation with community-based PR professionals) that can be customized to coincide with the interests of prospective donors. There was no significant budgetary investment associated with this piece.

· **Community events:** Because Informatics is a multi-disciplinary field, the School must work to create an inclusive sense of identity that embraces students and faculty with a wide variety of interests. This is done through School-wide events and the occasional give-away t-shirt or other branded materials.

b. *What do you hope to accomplish with this strategy with this audience?*

· **Prospective undergraduate students:** increase enrollment – tracked by semester

· **Prospective graduate students:** increase enrollment – tracked by semester

· **Current students:** retain and graduate – tracked by semester

· **Prospective faculty and potential research collaborators:** attract top notch faculty and promote interdisciplinary research collaborations – totals tracked yearly

· **Alumni and others with an interest in the School:** enhance the reputation of the School, further build the small alumni base (since it is a relatively new school) and increase engagement; clear measures have yet to be established

· **Employers:** increase the number of employers who provide internships or hire undergraduate and graduate students – tracked yearly

· **Donors:** achieve the IMPACT campaign goal and establish a pattern of Annual Giving – tracked by the development director

· **Community events:** increase the number of students who turn out for School-wide events – tracked by the School's special projects/events coordinator

c. *How much are you planning to spend for each strategy?*

- The School devotes these resources to marketing/communications/student life:
 - o One communications manager (full time)
 - o One special projects/events coordinator (30% devoted to activities that support marketing/communication activities)
 - o Twenty percent of the webmaster
 - o Ten percent of a video specialist (position devoted primarily to distance education)
 - o Two percent of an audio specialist (position devoted primarily to distance education)
 - o Five percent of an administrator overseeing these efforts
- Last year's budget was under \$50,000 for all purchases: advertising, design and photography, events and programs, printing and production, promotional items, student incentives, website hosting for events requiring registration, and professional development for the communications manager.
- A proposal for the new initiative with India is under consideration. Costs for that initiative have yet to be finalized.

d. How will you tell if your expenditure was worth your investment? [Provide return on investment (ROI) data for past expenditures, if available, and plan to track ROI in the future.]

Heavy emphasis on marketing research and analytics

- The communications manager position was redesigned in 2009 and a hire made who had strong analytic skills. That position is now vacant, but the search committee has endorsed the need for a new incumbent with similarly strong analytic skills.
- As noted above, enrollment, retention and internship/employer statistics are already tracked regularly. Incoming students are surveyed each year to ascertain demographics and other characteristics, as well as how they learned about the School.
- Strategies in 2010-2011 increased click-throughs on the Undergraduate Apply Now page by 30% and by 20% on the Graduate Apply Now page. The School will continue to track its website analytics.
- Impact on donors will be judged, in part, by the success of the campaign.
- The School now produces a "lessons learned" document for every sponsored event. The ROI on each event is examined and a data-driven decision is made about whether to continue or discontinue the event in the following year. (Several events have been "retired" after this careful review, although that has caused some faculty dissatisfaction when favorite projects are suspended.)
- ROI of new international efforts will be measured in new students recruited/enrolled.