2007-2008 Informatics/Media Arts and Science

Section	Document Name
Goals and Objectives	• Informatics Colloquia_Annual Report.docx
Goals and Objectives	• Informatics Distance Education_Annual Report.docx
Goals and Objectives	• Informatics Scholarships_Annual Report .docx
Fiscal Health	• Informatics.pdf

Mission

A School-wide strategic planning process was completed in December 2007 under the leadership of Dean Robert Schnabel. That planning process identified School-wide opportunities and challenges and produced the following mission statement:

"The Indiana University School of Informatics has set as its goal to be nationally recognized as the foremost in the country for excellence and leadership in Informatics programs, including undergraduate and graduate education, research, placement and outreach.
* *
*We believe there is great need and opportunity for professionals trained in state-of-the-art information technology and science with an emphasis on creative human applications. There is an urgent need in our society for graduates with education and experience in informatics, particularly with interdisciplinary skills. The School of Informatics will be foremost in the country to graduate professionals with formal preparation in information technology with subject area expertise." *

While many elements of the overarching plan provide excellent direction for Informatics activities on the IUPUI campus, there will be additional strategic planning for IUPUI Informatics during 2008-2009. That planning will emphasize IUPUI´s special opportunities and challenges as an urban university. The unit is in its second year of interim leadership. After a year of co-leadership by Drs. Sara Hook and Mathew Palakal, Dr. Anthony Faiola was appointed interim Executive Associate Dean in July of 2007. Dr. Faiola also serves as program director for the Human-Computer Interaction program and the Media Arts and Science program. A national search is now underway for a permanent Executive Associate Dean.

Goals and Objectives

▶ **Best Practices:**

⊻ Communicate and manage reputation
    Campus Planning Theme: Best Practices
    Secondary Goals:
    Sub Unit:
    Time Frame:

Actions taken for 2007-2008:

The Program Review recommended that School programs be unified under a single, more sharply defined vision and definition of Informatics. The challenge is to better define and represent an evolving discipline without excluding future areas of research in this rapidly changing field.

- A School-wide communications plan was completed in 2008, which identified consistent message themes designed to create awareness of the School, enhance revenue, and implement communication strategies that are more data-driven.
- A web team, which includes the award-winning designer of the IUPUI website, was assembled to revise the

current IUPUI Informatics web site. The process should provide a forum to discuss and represent a more sharply defined vision of the discipline.

- The Director of Community Relations continues to promote the School's faculty, students, research, service and scholarship. Emphasis is placed on identifying students and faculty who are engaged in particularly compelling work - stories that can be told as a means of extending the general understanding of Informatics, its implications and applications.

Evidence of Progress for 2007-2008:

- IUPUI Informatics participated in the School-wide communication planning process.
- The Web redesign committee has conducted four focus groups of undergraduate, graduate and international students. That data has been examined and interpreted by an outside review; wireframes models for two possible approaches to new website architecture have been developed and are being tested. An updated timeline has been provided by the team.
- Stories promoting the School, its faculty and students are told by various means including the School's Web site, news releases, and streaming video.

Activities planned for 2008-2009:

- IUPUI Informatics will examine its specific communication and marketing needs in light of the existing School-wide communication plan
- Over the course of the 2008-2009, the Web team will assemble all-new content, design, photography, video, student and faculty features, and information architecture. The website is being designed to serve as a communication and marketing tool for prospective students as well as a resource for current students planning their academic and career path.

⊻ Conduct effective planning and improvement processes
Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit:
Time Frame:

Actions taken for 2007-2008:

- A formal Self-study and Program Review for the IUPUI Informatics Unit was conducted in 2007-2008
- A position was created and a staff member promoted to coordinate all time limited special projects for the unit. This includes capstone events, the animation festival, the colloquia series, the website redesign, the meetings of the Media Arts and Science Advisory board, commencement and other major events.

Evidence of Progress for 2007-2008:

- A response to all the recommendations from the program review has been generated
- The position of project manager creates a new line of assistance and accountability for complex projects

that require coordination

Activities planned for 2008-2009:

- Recommendations are being folded back into the strategic planning process
- CAS assessment of academic advising [Fall 2008]
- CAS assessment of career services office [Spring 2009]

⊻ 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 2007-2008:

- Hired three additional tenure-track faculty, one in Human Computer Interaction, one in Health Informatics and one in Media Art and Sciences
- Hired two additional staff members for Student Services, two to support the distance education initiatives, one to support the website, one to support server administration and one for administrative support

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Evidence of Progress for 2007-2008:

- All new hires in place
- Search and screen committee for EAD assembled

Activities planned for 2008-2009:

- Search and screen in process for a permanent executive associate dean
- Additional hiring planned includes a lecturer for undergraduate Informatics, an additional Health Information Administration faculty member, and a Health Informatics faculty leader
- Coordination with the activities of the new school-wide development officer

⊻ Provide good stewardship of resources
Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit: Technology Resources and Classroom Utilization
Time Frame:

Actions taken for 2007-2008:

As noted in the School's program review, technology support for faculty and students is one of the strengths of the School. Informatics must continue to provide state of the art computer hardware and software to fulfill its teaching and research missions

- For the second year in a row the school has invested in iMac computers to replace aging hardware in the computer classrooms. The iMac can be configured to dual boot both the Macintosh operating system and the Windows operating system. This gives the students and instructors the flexibility to use the applications that most closely match the environment students will find in the business and creative world.
- The school has installed a trouble ticket system to allow for better tracking of problems with hardware and software in the computer classrooms and faculty and staff offices.

Evidence of Progress for 2007-2008:

- Dual boot iMacs purchased and installed in computer labs.
- A trouble ticket system has been implemented, accessed directly from the home page of the Informatics web site. Both faculty and students can access the system.
- Priority scheduling for an additional room in the IT building (271) has been negotiated.

Activities planned for 2008-2009:

- The school will continue to refine the hardware and software being offered in the computer classrooms in response to the curriculum updates being undertaken by faculty and administration of the school.
- The equipment checkout process will be revised to control the utilization, breakage and losses.
- The current classroom scheduling system will be reviewed and revised

⊗ Respond to and manage expectations of stakeholders
  Campus Planning Theme: Best Practices
  Secondary Goals:
  Sub Unit:
  Time Frame:

Actions taken for 2007-2008:

- Support of Informatics Student Government (ISG) trip to visit companies in Chicago
- A series of monthly meetings ("Pizza with the Dean") has been instituted to connect undergraduate and graduate students and administration.
- Faculty sponsorship of campus-wide gaming club promoted for students (tournaments; open to the community and used for recruitment)
- Reports prepared for the Dean's Advisory Council, which represents an important link to the larger community

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Evidence of Progress for 2007-2008:

- Minutes of the student meetings are taken and incorporated into the strategic planning process

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Activities planned for 2008-2009:

- A series of monthly breakfasts will be instituted to connect faculty and the executive associate dean.
- Continued mentoring of students leading the ISG
- Continuation of monthly meetings between students and the dean.

▶ **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 2007-2008:

Career Services and internships

- Career Services created and hosted a campus-wide IT Virtual Fair – called the Computer Related Virtual Career Fair in October 2007
- Sponsored employer visits with RGA, Microsoft
- Provided support to the Office of International Affairs for a day conference on "Working in the US" and "Work Authorizations"

Other

- Continued work with IUPUI Solutions Center on various community projects
- Organization of a new advisory board for the Media Arts and Science Program

Evidence of Progress for 2007-2008:

- All career events and internship events completed
- Media Advisory board members identified; initial meetings conducted

Activities planned for 2008-2009:

Career services and internships:
- Increase internships by 100%
- Define benefits and long-term impact of internship possibilities
- Create standards and guidelines · Bring additional employers to the School
- Increase the effectiveness of the online recruiting system
- New techniques: virtual interview station, job search boot camp, speed networking
- Enhance the Career Services portion of the website
- Workshop for parents to assist in supporting student through job search · Online career planning course

Other

- Continue close relationship with IUPUI Solution Center
- Continue to develop the infrastructure of the Media Arts and Science Advisory Board · Partner with the existing HIA Advisory Board
- Revitalize the Health Informatics Advisory Board
- Membership on the Advancing Life Science IT in Indiana Committee

⊗ Enhance civic activities, partnerships, and patient and client services
Campus Planning Theme: Civic Engagement
Secondary Goals:
Sub Unit:
Time Frame:

Actions taken for 2007-2008:

Many activities related to civic engagement undertaken by the School involve donating services to non-profit entities seeking technology support. The School-wide Dean's Advisory Council has a particular interest in entrepreneurship and is actively supporting faculty and students in projects that may have commercial value.

- Mark Hill, local entrepreneur and member of the School of Informatics Dean's Advisory Council, taught a dual-campus course on entrepreneurship in the spring of 2008.
- Dr. Karl MacDorman, along with 2008 HCI alumna Chris Newlon, designed a mega-collaboration tool for disaster relief to address the needs of grassroots aid organizations such as the Peace Learning Center
- Media Arts and Science students created a promotional DVD for national distribution to help the American Legion broaden its outreach.
- SOI hosted its first Adopt-A-Family through Christamore House in December, 2007

Evidence of Progress for 2007-2008:

- Mark Hill's class, which includes a number of speakers who are accomplished business people, is being videotaped for wider distribution

Activities planned for 2008-2009:

- Health research initiative with Crispus Attucks High School
- Consultation with the national office of the American Legion on social networking applications for disabled veterans
- An undergraduate videos will create persuasive video content for the Smoke Free Indiana Advisory
- A graduate MAS student will work with Cyber-Sight, a telemedicine ophthalmology program allowing developing countries to connect with expert mentors through the Internet

⊗ 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 2007-2008:

The School-wide strategic plan identified the following priorities
- Continue to develop SOI presence in the Indiana community
- Continue to develop entrepreneurship: culture, courses, fostering start-ups
- Successfully launch corporate partners program (initially IUB)

Evidence of Progress for 2007-2008:

- Initial statement of commitment to address these issues
- Clear interest and support from the Dean's Advisory Council

Activities planned for 2008-2009:

- Further define what commitment and accountability mean in this arena and develop metrics to measure the School's progress

▶ **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:
Secondary Goals:
Sub Unit:
Time Frame:

Actions taken for 2007-2008:

- One of the five subcommittees working on the School wide strategic plan was focused on diversity
- Two high level goals and four strategies came out of that strategic planning process:
  - Broad representation of and participation by women and underrepresented minority groups among our students, faculty and staff in our School.
  - Have the School be a national example of how the broad view of computing and IT embodied in the School can lead to more diverse participation by students and faculty.
- The committee developed four strategies for achieving these goals:

  1. Hire a School-wide diversity coordinator
  2. Led by the diversity committee and coordinator, establish a set of key actions

  3. Assure the reward structure of faculty and staff properly rewards contributions to the School's diversity program
  4. Work with the National Center for Women and IT for the School to be an "exemplar" on a School wide (Bloomington and Indianapolis) basis, but focusing both on women and underrepresented minorities. Use this affiliation to help assess our current state.

Evidence of Progress for 2007-2008:

- The School has added a system wide Assistant Dean for Diversity and Education as evidence of a serious interest in and commitment to issues around diversity
- The Assistant Dean will be committing one day every two weeks to activity on the IUPUI campus

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Activities planned for 2008-2009:

- A strategic plan for diversity will be developed for Informatics

⊻ Demonstrate diversity in research, scholarship, and creative activity
Campus Planning Theme: Campus Climate for Diversity
Secondary Goals:
Sub Unit:
Time Frame:

Actions taken for 2007-2008:

- No specific actions noted

Evidence of Progress for 2007-2008:

- The lack of activity has been noted and plans are being made to address this objective more directly

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Activities planned for 2008-2009:

- Identify and define research possibilities; promote applications by undergraduate minority researchers
- Create scholarship opportunities for women and students of underserved populations

⊻ Engage students, through the curriculum and co-curriculum, in learning about their own and other culture and belief systems
Campus Planning Theme:
Secondary Goals:
Sub Unit:
Time Frame:

Actions taken for 2007-2008:

- The School is designed along two axes: the technological and the social. Assignments in social and organizational informatics include content that address diversity issues

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Evidence of Progress for 2007-2008:

- Initial meeting with personnel from Office of International Affairs about course design that would allow alternative formats to traditional exchange programs

Activities planned for 2008-2009:

- Focus in the corporate practice cultures on internationalization of the curriculum

⊻ 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 2007-2008:

- Preliminary discussion of the best candidate countries for partnership
- Experimental course taught with Sun Yat-Sen University. The course spanned 12 time zones, four countries and three continents.
- Two faculty members and continued work with Operation Walk - Mooresville in Nicaragua February, 2008

Evidence of Progress for 2007-2008:

- Initial discussions with the Office of International Affairs
- Discussion of a 2+2 program with Sun Yat-Sen

Activities planned for 2008-2009:

- Develop an international strategic plan

⊻ Recruit and enrollment of a diverse student body
Campus Planning Theme:
Secondary Goals:
Sub Unit:
Time Frame:

Actions taken for 2007-2008:

- Recruitment activities at SACNAS – Society for the Advancement of Chicanos and Native Americans in Science
- Recruitment efforts with META – Mapping Education Toward Achievement [Hispanic]
- Presence in the Shades of Brilliance
- Compiling research minority scholarships
- Identifying role models within student population
- Early college high school classes [+SPAN opportunities]

Evidence of Progress for 2007-2008:

- All recruitment efforts implemented

Activities planned for 2008-2009:

- SACNAS – Society for the Advancement of Chicanos and Native Americans in Science: starting a chapter in SOI
- Tales of Taste* Internationally themed dinners with recipes from around the world
- Identify and define research possibilities; promote applications from undergraduate minority researchers
- Graduate recruitment at research and graduate fairs of diversity such as the   National Society of Collegiate Scholars. the National Association of Medical Minority Educators, the McNair National Research Conference, the Society for the Advancement of Chicanos and Native Americans in Science, the Annual Biomedical Research Conference for Minority Students, the National Conference on Undergraduate Research and the   American Medical Informatics Association

⊻ Recruit, development, and support of diverse faculty and staff
Campus Planning Theme:
Secondary Goals:
Sub Unit:
Time Frame:

Actions taken for 2007-2008:

- The faculty and staff of IUPUI Informatics are already quite diverse in ethnic origins. Their origins include the Philippines, Italy, Belgium, Iran, Brazil, Algeria, Venezuela, Turkey, and several from India and China.
- The faculty and staff are also diverse in their academic "cultures," spanning the arts and the sciences.
- 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 2007-2008:

- Worked with Office of Economic Opportunity to review publications that might reach more African American candidates

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Activities planned for 2008-2009:

- Continue to work with the Office of Economic Opportunity in all search and screen committees to aggressively recruit African American faculty and staff members
- Work with new School-wide assistant dean for diversity who has extensive experience in recruiting women and underrepresented minorities

⊻ Retain and graduate a diverse student body
Campus Planning Theme: Campus Climate for Diversity
Secondary Goals:

Sub Unit:
Time Frame:

Actions taken for 2007-2008:

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, including
- Goal setting
- Supportive environment
- An emphasis on personal responsibility
- An advising companion and advising syllabus
- Interventions for students having difficulty, including time and stress management
- Diversity Scholars Research Program
- Multidisciplinary Undergraduate Research Institute
- Undergraduate Opportunity Research Program
- Recognition of student work
- Compiling research minority scholarships
- Identifying role models within the student population

Evidence of Progress for 2007-2008:

- The unit's one year retention rate is 83%, one of the highest on campus
- The unit's six year graduation rate is 85%.

Activities planned for 2008-2009:

- Continuation of initiatives listed above
- Starting a School chapter of SACNAS
- Sponsoring Tales of Taste – internationally themed dinners with recipes from around the world

⊗ Student, faculty, and staff perceptions of the campus climate for diversity
Campus Planning Theme:
Secondary Goals:
Sub Unit:
Time Frame:

Actions taken for 2007-2008:

- Revitalization of School's diversity committee and committee of faculty and staff women in IT

Evidence of Progress for 2007-2008:

- Regular meetings scheduled for 2008-2009

Activities planned for 2008-2009:

- Mission and vision process initiated for the diversity committee with assistance from Human Resources

▶ **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 2007-2008:

Objectives for 2007-08 were:

(a) To have at least 80% of the faculty apply for grants/contracts each year

 (b) To attain (at least) a 30-40% grant success (award) rate/year

(c) To encourage faculty to apply for multiple grants each year

(d) To promote collaborative grant opportunities

(e) To focus on health/life science related opportunities and

(f) To promote multidisciplinary research projects.

The rationale for these goals was based on several criteria. As part of improving research, scholarship and creative activity in 2006-07, various data pertinent to these areas were collected and studied. Activities such as publications in peer reviewed venues and presenting research and creative activities at national and international forums were found to be good (quantitatively sufficient). However, the data showed that there was a lack of effort in applying for and securing both internal and external grants and contracts. Along the same line, there was a need to improve on multidisciplinary research and grants efforts as the School is well positioned to take advantage of these opportunities because of its multidisciplinary nature.

Evidence of Progress for 2007-2008:

- External grant applications have grown from 32 submissions in 2006-07 to 44 in 2007-08 and total research expenditure has grown to over $1.2M. Scholarly publications have also steadily improved.
- Teams led by School of Informatics faculty received two Signature Center awards – the Android Science Center (Karl MacDorman) and Translational Bioinformatics Center (Jake Chen). Prof. Tony Faiola is a key contributor on the TASI Signature Center in the School of E&T.
- The research activities in the School are highly multidisciplinary and hence there are significant collaborations with the IUPUI and Indianapolis communities. Faculty collaborate with the Schools of Medicine, Nursing, Engineering, Science (Computer & Information Science), the Regenstrief Institute, VA Health Center and the Center for Computational Biology and Bioinformatics, among others.

Activities planned for 2008-2009:

- Identify 2-3 major collaborative research initiatives: possible areas include Translational Health; Android Science; Health Communication; and Personalized Medicine.
- Develop undergraduate research opportunities program through IRI and UROP (Undergraduate Research Opportunities Program).
- Seek again to have at least 80% of the faculty submitting grant proposals for the year with at least a 30% success (award) rate.
- Have 50% of Graduate students funded by faculty research support.

⊻ 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 2007-2008:

- Four "Grant Chat" sessions were held to make faculty aware of grants and contract opportunities, collaborative project opportunities, and to discuss campus priorities and internal funding opportunities.
- Research infrastructure, especially additional laboratory space, was created to support and expand research in the School.

Evidence of Progress for 2007-2008:

- Grant chats continue
- Laboratory space in use

Activities planned for 2008-2009:

- Establish an effective mentoring mechanism for faculty to submit successful grant proposals and grant pre-submission review process.

⊻ 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 2007-2008:

- Full administrative support for pre- and post award mechanisms were put in place.
- A research seminar series was started to connect faculty with outside leaders and to promote external collaborations.

Evidence of Progress for 2007-2008:

- Administrative support has been identified and deployed
- Research seminars continue

Activities planned for 2008-2009:

Provide faculty with incentives for securing external funding, such as decreased teaching load, give back certain percentage of F&A to faculty awardee, public recognition, annual research awards.

▶ **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
Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: Undergraduate Studies
Time Frame:

Actions taken for 2007-2008:

- Program Review of IUPUI portion of the school focused on undergraduate programs, including assessment, ways to engage students in curriculum planning, increasing enrollments, means of utilizing and sharing feedback from students, alumni and external constituencies.
- Overall school-wide strategic planning included a subcommittee on undergraduate programs
- Revision of the MAS undergraduate curriculum undertaken.
- Development of a new health information technology course to be offered in Fall 2008.

Evidence of Progress for 2007-2008:

- According to the IUPUI Spring Census for spring 2008, overall credit hours in the IU School of Informatics, IUPUI, increased 8.2% over spring 2007, while the IUPUI campus as a whole saw an increase in credit hours of 2.1%. Spring 2008 also brought an increase in undergraduate headcount of 62 over spring 2007.
- Enrollments continue to be strong in HIA (140 declared majors) and MAS programs.Student evaluation data of teaching shows that faculty members maintain a 3.23 average overall teaching score (on a scale of 0-4).
- Five undergraduate students were chosen as top 100 students; one undergraduate student was selected as the top male student for the IUPUI campus.
- Two faculty members were selected to receive Trustees Teaching Awards
List of scholarships earned/awarded attached

Activities planned for 2008-2009:

- Continued development of the new MAS undergraduate curriculum, including new and revised foundation courses and additional areas of focus.
- Appointment of a Task Force for undergraduate informatics that will consider how to strengthen this degree, expand enrollments and better "tell our story".
- Initiatives include assuming more courses that Kelley is no longer interested in teaching.
- Promotion of a minor in Business as a cognate of choice for informatics undergraduate students.
- Formation of a comprehensive clinic that would give students from our school and from other schools an opportunity to work with real-world clients. A pilot with an internal client is underway with the IUPUI Solution Center acting as a conduit.
- Development of an accounting course for health information to be offered in Fall 2009.
- Implementation of the RISE initiative, including a dual-campus course with a partner institution overseas, culminating in a 10-14-day trip to that country.
- Development of a series of courses that would utilize SimCorps – hypothetical companies – that students would consider throughout the curriculum.
- Explore more dual-campus courses with Bloomington utilizing technology.
- Seek collaboration with other schools for curriculum development, including Computer k collaborations with other Science, Herron, Kelley and CIT.

⊗ Provide effective professional and graduate programs
Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: Graduate Studies
Time Frame:

Actions taken for 2007-2008:

The main strategies for 2007-08 were:

(a) To organize an "enrollment shaping in graduate programs" initiative to look into all aspects for graduate education including Recruitment, Admission process, Retention, and Graduation

(b) Develop Graduate certificate programs in Media Arts & Sciences and Human Computer Interaction

(c) Establish a PhD in Human Computer Interaction and

d) Significantly increase MS student enrollment in all graduate programs.

The graduate programs were not revised and the curriculum for Health, Bio, Media Arts & Science, HCI, all need serious revision. Over the past few years, there has been a decrease in graduate student enrollments. Therefore, it was necessary to look at the overall health of the graduate programs and the enrollment shaping initiative was the answer to address many of the issues.

- A series of meetings addressed Recruitment, Admission, Retention, and Graduation issues.
- New recruitment materials for all graduate programs were created.
- The admission process was streamlined to accelerate the response time to applicants. This was important to attract good students to the program--delays in this process results in students opting to attend other institutions.

- Changes were made on the funding mechanisms for MS & PhD students in order to admit more MS students using an "incentive" awards mechanism. Graduate programs were stronger and attractive.
- A comprehensive revision of the graduate curriculum in Media Arts and Science (MAS) program has been completed and will be implemented in the fall of 2008.
- An online Human Computer Interaction (HCI) Graduate Certificate Program went live in the spring of 2008

Evidence of Progress for 2007-2008:

- The number of PhD students in the School has doubled to 40. This is helping the overall research in the School significantly.
- The number of paying students in some of the MS programs has also somewhat increased due the "incentive" award mechanism.
- New marketing materials have been produced to advertise the graduate programs.

Activities planned for 2008-2009:

- To develop a new Graduate Certificate Program in Clinical Informatics.
- To target more paying international students, especially, MS students.
- To explore the possibility of developing Graduate and/or Graduate Certificate programs in HIA.
- To develop, implement, and market Graduate Certificate in Health Informatics.
- To revive and work closely with Health Informatics Board to market graduate programs.
- To increase interaction between faculty and graduate students.

⊗ Recruit and support a well-prepared and diverse student population
Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: Student Services
Time Frame:

Actions taken for 2007-2008:

A wide variety of recruitment efforts occurred this year including:
- Conducting student tours of the labs; 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; E-letters to post on the web; web chats; training admission recruiters; high school link articles
- Recruitment activities with Ivy Tech
- Targeting undecided UCOL students
- Recruitment activities with IUPUC

Evidence of Progress for 2007-2008:

- The unit realized a 10% increase in undergraduate credit hours over 2006-2007

Activities planned for 2008-2009:

- All of the above plus
- Vincennes University: Articulation Agreement 2+2 for HIA and MAS
- Ivy Tech Community College and Vincennes University: Articulation Agreement 2+2 for NEWM
- Saturday School for high school students
- VisionFest 2010
- Recruitment Class: six area high school targeting underserved populations (low income to ethnicity), supported in part by the Lumina Foundation

☒ Support and enhance effective teaching
Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: Distance Education and other teaching innovations
Time Frame:

Actions taken for 2007-2008:

The IUPUI distance education program at the School of Informatics increases the educational services to students taking classes in an online environment. The distance education program uses the latest technology in capturing, producing, and delivering lecture content to students while partnering with sound pedagogy to deliver a superlative online course to students at the school of Informatics.

- Hired a fulltime sound and video technician.
- Outfitted three rooms with recording equipment to capture both instructor and student feedback for an online environment; with the addition of these outfitted rooms, the distance program was able to expand to include MAS curriculum, specifically, the addition of the classes NEWM S-355, and NEWM M-190, as well as the capture of NEWM N-280 for delivery next semester.
- These courses, as well as the HIA, HCI, and Informatics courses are currently being streamed from a new server housed at the School of Informatics.
- In HIA and undergraduate Informatics, templates were developed and implemented for online classes to create a uniform look and feel across multiple sections and classes.
- Additional content, like flash games, and digital study guides, were created to help facilitate online learning within a given discipline.
- Lastly, an online evaluation program has been developed to capture student satisfaction with the courses being offered online.

 Other:
- In spring 2008, SOI offered its first 12-week course and its first Friday course. Other course formats include hybrid courses taught in synchronous and asynchronous modes, one-week intensives, Saturday portfolio classes, and learning communities.

Evidence of Progress for 2007-2008:

- Fifteen Informatics courses and four Media Arts and Sciences courses are now offered online. The School's distance learning began in 2004 with one class and an enrollment of seven students.   Total online enrollment for spring 2008 was 354 students. Most courses offered via distributed education leverage innovative software such as Adobe Acrobat Connect, the latest in streaming and webcast technologies, as well as a variety of capture and simulation methods designed to support innovative curriculum development
- Students now have the option to complete their course work (22 courses) for the Health Information

- Students now have the option to complete their course work (22 courses) for the Health Information Administration degree through a completely distributed environment
- The distance education multimedia team has successfully captured, edited, hosted and posted IUPUI's Distinguished Lecture Series. These lectures will be used by all H199 (Honors Seminar) students as a required part of their coursework.

Activities planned for 2008-2009:

- Resources will be implemented to add a virtual component to the online environment in targeted classes
- The distance program seeks to increase a greater sense of community and coloration in a distance environment and will pilot new software to accomplish this goal
- The program will continue to build upon its current infrastructure to accommodate proposed collaborations between both the Bloomington and Lafayette campuses
- Additionally, research will be conducted to determine the best process and practices for closed captioning lecture material.

Fiscal Health

The School of Informatics at IUPUI continues to perform at a satisfactory level with a healthy fund balance to cover fiscal year 2007-2008 deficits. The deficit was primarily the result of the over $300k in construction costs to complete an audio production room (a room not finished when the ICTC building was turned over to the University) and conversion of IT 358 from a computer classroom to a video production/green screen room.

Informatics projected that credit hours for 2007-2008 would remain flat from fiscal year 2006-2007 at both the undergraduate and graduate levels. Graduate credit hours were indeed flat, but the unit realized a 10% increase in undergraduate credit hours over 2006-2007. For 2008-2009, leadership is projecting an 8% increase in undergraduate credit hours and 12% increase in graduate credit hours. Currently the unit is ahead of fall projections by 9% in undergraduate credit hours but below by the same percentage in graduate credit hours.

The most recent fiscal analysis indicated that Informatics will have a surplus in 2008-2009. This is due to having a budgeted position that has thus far been unfilled, conversions of three faculty members from 12-month to 10-month appointments and several resignations. A special emphasis on distance education has been successful. (See attached) In addition, three faculty positions were filled at salaries less than what was budgeted. Leadership is reviewing the possible funding of other faculty positions as well as a staff position.

Reallocation Plan

Other Question(s)

1. What are you doing to increase
   a. the number of undergraduate degrees your unit grants?
   b. the number of undergraduate degrees you grant to low-income students (Pell recipients)?
   c. the number of first-time full-time students who complete degrees in four years?
   d. the percentage of students completing courses successfully?
   e. your research funding?

1.   **What are you doing to increase:**

a.   <u>The number of undergraduate degrees your unit grants?</u>

    Student Services:

- &avβσπ;&avβσπ;&avβσπ;&avβσπ;&avβσπ;&avβσπ;&avβσπ;&avβσπ; Has created an Advising Syllabus and Advising Companion to guide students through (1) milestones in completing their degrees; (2) student responsibilities in the

advising process and (3) the Principles of Undergraduate Learning

- Is currently analyzing data gathered in the Fall of 2008 through a Council for the Assessment of Standards (CAS) survey of the effectiveness of the existing advising system
- Implemented an electronic postcard system for enrollment and retention purposes (students compete to design the postcards, which are used to prompt advising appointments)
- Adopted the Students Taking Academic Responsibility (STAR) program, which intervenes with undergraduate students at risk
- Scheduled student/advisor "empowerment sessions" twice a semester for students having academic or personal difficulties. Personnel from the CAPS program intervene as needed.

Faculty members are:

- Increasing distance education options for local, national, and international students; providing screening instruments to help students decide if they have enough self-direction and discipline to undertake distance education courses early in their program of study
- Providing increasing numbers of alternative format courses (six, eight, ten and twelve week courses): 16 such courses were offered in 2007; 20 in 2008; and 12 in the spring of 2009
- Considering providing flexible teaching schedules (based on a 12 month cycle rather than 10 month cycle and creating an expectation for students that they continue studies through the summer); this type of scheduling would assist in "shortest path to graduation" plans

Administration has:

- Created a five year program in Media Arts and Science
- Committed to two proven interventions (pair programming and supplementary education, also referenced in 1d) to increase success/boost retention in entry level courses
- Pursued opportunities for international education, such as the 2+2 program with Sun YatSen University
- Participated in recent recruitment efforts in India with future partnership anticipated
- "Marketed" the major to UCOL students via UCOL's publications, provided regular orientations to UCOL advisors about the major, advertised on Campus Center and UCOL televisions, provided regular table exhibitions and participated in UCOL bulletin board rotations
- Is reviewing summer offerings to identify and emphasize classes targeted to helping students finish their degrees in the shortest time possible

b.   The number of undergraduate degrees you grant to low-income students (Pell recipients)? As demonstrated in the data recently distributed by IMIR, the School of Informatics is doing as well or slightly better granting degrees to low-income students when compared to other science and technology-based units on the IUPUI campus. We are

- Sponsoring, through Student Services, a recruitment class at Perry Meridian, Pike and Arlington High Schools
  - o   Students are trained to assist high school seniors in the application process to colleges and universities
  - o   The Lumina Foundation for Education recently provided a modest ($5000) amount in support of this program

- Promoting the Summer Research Opportunities Program (SROP)
  - o   This program targets low income students, through the "Grant Chat" system, directed by the Associate Dean for Research
  - o   A series of meetings has been initiated to match researchers and students via lunches which occur in early fall and late winter

c.   The number of first-time full-time students who complete degrees in four years?

- Promoting existing honors courses to attract more students who have the capacity to complete degrees in four years
- Creating interactive graphics and visualizations, as a part of a website redesign, to concisely illustrate a student's plan of study, the jobs to which the degree (s) can lead and the pathways in to graduate study

d.   The percentage of students completing courses successfully?

- Piloting two new techniques to increase student success in more difficult math and programming classes.
  1.   Pair programming and pair learning, which puts students in pairs to program or problem solve. Research shows the technique increases student success and decreases programming errors.
  2.   Supplementary learning, in which a student who has successfully passed a class is paid to offer a lab immediately after class to supplement student learning
- Several faculty members offer open labs in addition to office hours to help with difficult concepts and applications; one offers extra Saturday labs
- The administration is planning to add graders and other paid classroom assistance to make instructional support more available to students
- Student Services is promoting early college classes to talented high school students

e.   Your research funding

Specific activities already undertaken to increase grant funding include:

- Sponsoring regular Grant Chat sessions to discuss RFPs, promote collaboration, and discuss pre-submission vetting scheduling
- Posting samples of successful grant proposals on Oncourse
- Developing more collaborations with other units on campus in the areas of Health Science and Life Science applications
- Providing full time support person for pre-award submission and post award management
- Securing adequate start-up funds to hire top quality research faculty

Specific planned activities to increase grant funding are:

- Setting up a proposal pre-submission review process by recruiting seasoned faculty (from the campus and beyond) who have a successful record of grant awards; compensating those reviewers
- Paying for some statistical support for the School's researchers
- Paying for investigator travel to meet with both program officers and collaborators in anticipation of grant proposal submissions
- Providing teaching load release to support research and grant activities
- Establishing effective reward mechanisms for faculty to secure all types of funds (research, teaching, and service) from any sources (government, industry, foundations, community) (e.g., 10% return of ICR to PIs starting July 2008 fiscal year, to be used for any faculty

development purposes except personal salary)

- •&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ; Adding regular meetings in the late fall to promote undergraduate research opportunities initiatives
- •&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ; Setting aside regular time at each Faculty Council meeting to focus on the research of two faculty members
- •&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ; Establishing effective mentoring mechanisms for faculty to submit successful grant proposals

2. **If you had to implement a budget reduction of 3-5% a) what would be your budget priorities and b) what strategies would you employ to walk the fine line of maintaining critical operations and investing in your future? Please describe how faculty will be involved in the decision making process.**

   a.   Budget priorities include:

   - •&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ; Strengthening research themes within the School; concentrating all hiring to support those themes (e.g. health and life sciences, bioinformatics)
   - •&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ; Improving the quality of the Informatics undergraduate program
   - •&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ; Supporting the already successful HIA program, which has grown from 12 students in 2003 to 150 students in 2009
   - •&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ; Improving enrollment in the MAS graduate program numbers
   - •&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ; Fine tuning the new Ph.D. program
   - •&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ; Improving communication about the School's degree programs

   b.   What strategies would you employ to walk the fine line of maintaining critical operations and investing in your future?

   The School administration has generated a list of possible budget cuts that would not interfere with the priorities listed above. A few examples are implementing a laptop program in order to significantly reduce the cost of computer replacement and maintenance in several computer labs; eliminating a position through attrition related to retirement; realizing savings in our technology budget through the University's new software arrangement with Adobe; and redesigning and cost- sharing two existing positions with other units on campus.

   The School has two levels of leadership which allow administration to involve faculty in the decision making process. The first is the School's Leadership Council, which includes faculty and staff members with managerial responsibilities who provide regular consultation on School administrative matters. The second is the School's Budgetary Affairs Committee. According to the bylaws of the Constitution of the School, *"In keeping with the campus policy, in the case of financial exigency, the (Budgetary Affairs) committee will participate with school administration in the formulation of a plan to address the problem, consulting the various campus and university policies on financial exigency and program modification."* The committee is currently active and consists of five full time faculty members, the President-Elect of the Faculty Council and the School's Fiscal Officer, who serves ex-officio.

3. **Please describe current commitments or plans that require multiple year funding, including the amount of funding required and the length of time the initiative's funding is required.**

   - •&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ;&νβσπ; The first two years of Ph.D. student funding needs to be provided from the School budget. As these students move on to become Ph.D. candidates and funded by faculty research, new students are further recruited and funded by the School. This requires multi-year funding.

- &vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ; The School has a $75k commitment to its Signature Centers in the fall of 2009, which will be the last installment of our three-year commitment to these projects.
- &vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ; Summer salary for three new faculty members has been committed over the next two summers, for a total of $42k plus fringe. We also are committed to providing graduate student support to each of the new faculty members for two years, totaling $60k per year.

4. **How do you intend to use your reserves over the next four years? Please provide the information by fiscal year.**

- &vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ; **2009-2010:** Informatics lecturer position; start up package for HI director; bridging the end of salary lines
- &vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ; **2010-2011:** Informatics lecturer position; outfitting a classroom with the technology necessary to "internationalize" the curriculum without actual travel so that students who do not have the funds or the freedom to travel can learn by participating in global virtual teams
- &vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ; **2011-2013:** Ideally, we will be able to safeguard reserves as much as possible over time. Because we have a relatively small alumni/fundraising base, there may be some need for monies to build out specialized technology labs needed for continued growth

5. **What are the current numbers and percentages of tenure-track faculty, clinical faculty, and lecturers in your school? Please describe your plan for allocating new faculty positions so as to influence the number and percentage in each category.**

a.   Breakdown:
- &vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ; 51% tenure or tenure track faculty
- &vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ; 13% clinical faculty
- &vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ;&vβσπ; 36% lecturer and research associates

b.   Allocation:
If opportunities become available, it may be healthy for the School to alter the distribution above slightly to include more tenure-track faculty.

6. **How do you define return on investment for diversity efforts in your unit (e.g, numbers of faculty/staff/students recruited and retained, grants received for special studies, new teaching methods or courses, placement of graduates, program reputation)? What are you doing to improve your ROI?**

On August 1, 2008, the new Assistant Dean for Diversity and Education began her work in the IU School of Informatics both in Bloomington and on the IUPUI campus. With a primary goal of developing IU Informatics into a nationally recognized Exemplar Model for Diversity in IT, she has been proceeding with a SWOT analysis for each campus, assessing the current state of diversity, our desired state, and will be designing and implementing multifaceted strategic initiatives to address the diversity imperative.

 In fact, and as has been mentioned in earlier parts of this report, some new initiatives have already begun to be implemented 1) to improve student success and retention in key undergraduate classes; 2) to measure the student experience of the major using a survey from the National Center for Women in Information Technology; and 3) and to involve underrepresented talent in a new research experience for undergraduates. We also have an ongoing Diversity Task Force and a Women in Informatics group that will soon help our students organize their own community of support. An exploration of opportunities to collaborate with units on the IUPUI campus to further our success in diversity initiatives is essential.

A technical approach to calculating the diversity ROI is available from the Society for Human Resource Management:

"The diversity return on investment (DROI) is calculated by using the diversity initiative cost and benefits to get the benefit/cost ratio (BCR). BCR = diversity initiative benefits ÷ diversity initiative costs. This ratio is also referred to as a cost-to-benefit ratio. The DROI calculation is the net benefit of the

*diversity initiative divided by the initiative costs: DROI% = (net diversity initiative benefits ÷ initiative costs) x 100. This formula is the same basic formula used to evaluate other investments in which the ROI is reported as earnings divided by the investment." *

As our process moves forward we will specifically (1) calculate the change in performance data, (2) determine the annual amount for the change, and (3) calculate the total value of the improvement in a variety of areas.

One major benefit to calculating our DROI is that the Assistant Dean for Diversity and Education is fully funded by the IUB campus. Measurable target goals are being prepared for the following areas:

- Student academic performance
- Student retention
- Student recruitment for diversity
- Promoting Culture of Inclusion
- Diversity of students, faculty and staff
- K-12 Outreach
- Grants and other sources of financial support for diversity initiatives, including scholarships