Assessing Student Learning Outcomes

IUPUI Summary Response to ICHE Goal 6

July 2008

Learning Outcomes for all IUPUI Undergraduates

Between 1991 and 1998, IUPUI faculty and staff worked toward a coordinated approach to general education for IUPUI undergraduates in a series of multi-disciplinary committees, daylong retreats, consultant-led workshops, and town hall meetings. This process culminated in 1998 with the adoption by the IUPUI Faculty Council of six Principles of Undergraduate Learning (PULs). Between 2005 and 2007 several faculty groups worked on revisions and on May 1, 2007 the following principles were approved by the Faculty Council:

- Core Communication and Quantitative Skills the ability of students to express
 and interpret information, perform quantitative analysis, and use information
 resources and technology—the foundation skills necessary for all IUPUI students to
 succeed.
- 2. **Critical Thinking** the ability of students to engage in a process of disciplined thinking that informs beliefs and actions, remaining open-minded, reconsidering previous beliefs and actions, and adjusting his or her thinking, beliefs, and actions based on new information.
- 3. **Integration and Application of Knowledge -** the ability of students to use information and concepts from studies in multiple disciplines in their intellectual, professional, and community lives.
- 4. **Intellectual Depth, Breadth, and Adaptiveness -** the ability of students to examine and organize discipline-specific ways of knowing and apply them to specific issues and problems.
- 5. **Understanding Society and Culture** the ability of students to recognize their own cultural traditions and to understand and appreciate the diversity of the human experience.
- 6. **Values and Ethics** the ability of students to make sound decisions with respect to individual conduct, citizenship, and aesthetics.

The Principles of Undergraduate Learning are the essential ingredients of the undergraduate educational experience at IUPUI. They form a conceptual framework for all students' general education. Rather than being taught only in a set of specified courses offered primarily during a student's first two years of college, the PULs permeate the entire undergraduate curriculum, including the major field of study. Expectations related to the PULs that begin in the first year and continue through graduation speak to what graduates of IUPUI will know and be able to do upon completing their degrees and thus define the meaning of an IUPUI baccalaureate degree, regardless of major.

Engaging Learning Opportunities for Students

Through the combined efforts of faculty and administrative support staff, all IUPUI students should experience each of the following:

- 1. Prior learning is assessed in mathematics and selectively in foreign languages, chemistry, and several other disciplines upon matriculation and students are placed in courses appropriate to their levels of achievement.
- 2. Advisors work with incoming students to create a Personal Development Plan (PDP). The PDP outlines students' academic and career goals, and integrates them with the PULs. Advisors, faculty, and students provide opportunities for students to reflect upon their progress toward achieving their plans. In fall 2008, all students in UCOL Learning Communities will pilot the PDP. In 2009, all incoming first-year students will develop a PDP.
- 3. Students are introduced to the PULs in their First-Year Experience courses and Themed Learning Communities. These courses use active learning pedagogies and proven best teaching and learning practices.
- 4. Students continue to develop their PUL-related knowledge and skills in coursework, particularly in Gateway courses—those 30 or so introductory courses that account for over 30% of all undergraduate credit hours. Many of these courses have been revised over the past several years to support increased student engagement and success.
- 5. Students engage in experiential learning opportunities throughout their undergraduate programs, including undergraduate research, international study abroad, service learning, and other experiential opportunities such as internships, clinicals, practica, and the like. Beginning fall 2008, the RISE to the Challenge program will be developed, wherein we develop assessment and transcripting policies and procedures for these experiential learning opportunities, cross-referenced with the PULs.
- 6. Students' PUL-related knowledge and skills are assessed in the courses in which these concepts are taught, with baccalaureate-level skills assessed in capstone courses or in association with other culminating experiences such as internships, undergraduate research studies, design projects, or professional licensure exams. Reflection and hands-on experiences related to students' chosen fields characterize many of these experiences.
- 7. Faculty and professional staff use both direct and indirect measures of student learning to improve curriculum, instruction, and assessment processes.

Administrative Structures and Practices that Promote Learning

Various mechanisms have been established at IUPUI to ensure that the seven processes listed above are occurring and that they are having a positive impact. These mechanisms include both locally developed and national surveys, comprehensive academic program reviews, performance indicators, and annual assessment reports. Beginning fall 2008, IUPUI will have its first Undergraduate Curriculum Advisory Committee, a collaborative committee comprising faculty elected through the faculty governance system and faculty appointed by the Office of Academic Affairs, to ensure that curricula are designed to support and provide the processes listed above.

Surveys

Indirect evidence of student learning is collected annually through surveys administered to representative samples of enrolled undergraduates. The locally-developed *IUPUI Continuing Student Survey* was administered first in 1995 and annually until 2001 when this survey was moved to a biennial administration to permit use of the *National Survey of Student Engagement (NSSE)* in the alternate years.

Program Review

Comprehensive academic program review provides an additional mechanism for ensuring that general education instruction and assessment are occurring according to plan. Peer review of all academic units (and many student support and administrative units) is conducted in a seven-year cycle and review teams are directed to comment on the quality of curricula, methods of instruction, and the evidence of student learning in general education (based on the PULs) as well as the major field of study. Each unit prepares a self study, which is reviewed first by a faculty subcommittee of the Program Review and Assessment Committee (see page 3 for a description of PRAC).

Performance Indicators

IUPUI has developed performance indicators designed to chart progress on ten institutional goals, including student learning outcomes. Underlying each of the macroindicators related to teaching and learning is a rich set of sub-indicators based on direct and indirect evidence derived from the sources just described (see www.iport.iupui.edu and http://www.iport.iupui.edu/pi/).

Annual Assessment Reports

To ensure that IUPUI students have opportunities to participate in engaging learning experiences that are aligned with expected learning outcomes, IUPUI faculty have developed the template that appears below for initiating and guiding assessment of learning in academic units.

What	How will we	How will	What evidence	What are the	What
general	know this	students	can we provide	assessment	improvements
outcome do	outcome	learn these	to demonstrate	findings?	have been
we seek?	when we see	things (in or	what students		made based
	it? That is,	out of	know and can		on assessment
	what will	class)?	do? That is,		findings?
	students know		how can we		
	and be able to		assess student		
	do upon		learning?		
	graduation?				

An oversight group, the Program Review and Assessment Committee (PRAC), with representation from each academic unit as well as student affairs, prepares an annual report on the assessment of student learning using the template illustrated above. The campus report is

based on individual reports submitted by each academic unit and the Division of Student Affairs. The content of the campus report is reviewed by a PRAC subcommittee, and suggestions for improvement of approaches to instruction and student support services, as well as assessment methods, are offered.

ePort

IUPUI's electronic portfolio (ePort) enables students and faculty to document student learning of the PULs, using authentic student work produced in and out of the classroom as evidence of achievement for both accountability and improvement. Work that students collect and submit to ePort can provide a rich source of documentation for the annual assessment reports and guide faculty efforts to improve curriculum and pedagogy. As faculty members and departments incorporate ePort into their curricula, they simultaneously refine courses and whole curricula to address desired learning outcomes more deliberately and effectively. Thus, ePort supports improvement in learning outcomes at the same time that it demonstrates these outcomes.

Assessment Findings and Responsive Actions

Surveys

The *IUPUI Continuing Student Survey* contains a series of questions that ask students to *rate their knowledge and abilities* in the areas described in the PULs. A careful examination of student responses to these questions can provide a general gauge of the extent to which undergraduates at IUPUI believe they have the abilities that comprise the PULs. In addition, comparing the average responses of lower- and upper-division students can suggest how experiences encountered at IUPUI contribute to learning and development. The table below presents the overall means and means for lower- and upper-division students to the knowledge and ability questions.

PUL/Survey Question	All Students	Lower- Division	Upper- Division
Core Communication & Quantitative Skills			
Reading and understanding books articles, and instruction manuals	4.39	4.19	4.49
Solving mathematical problems	4.39	4.19	4.49
Finding useful information on the internet for work-related projects	4.37	4.22	4.47
Writing clearly and effectively	4.23	4.03	4.33
Speaking clearly and effectively	4.13	3.98	4.20
Working as part of a team to solve problems	4.26	4.11	4.34
Preparing a presentation that I will deliver to a group	4.14	3.90	4.27
Writing a final report on a project or other work assignment	4.23	4.00	4.35
Understanding a statistical report	3.60	3.43	3.70
Critical Thinking			
Thinking critically and analytically	4.17	3.96	4.30
Evaluating other people's ideas and proposed solutions	4.18	4.03	4.29
Systematically review and improving own ideas about how to approach an issue/problem	4.17	3.98	4.28
Creatively thinking about new ideas or ways to improve existing things	4.14	4.00	4.22
Discussing complex problems with co-workers to develop a better solution	4.12	4.01	4.18

PUL/Survey Question (Continued)	All Students	Lower- Division	Upper- Division
Integration and Application of Knowledge			
Applying what I learned in college to issues and problems I face every day	4.07	3.92	4.16
Gathering information from a variety of sources when deciding what action to take	4.19	3.97	4.30
Finding new ways to use my skills and knowledge as I encounter new situations/problems	4.15	4.00	4.24
Putting ideas together in new ways	4.12	3.99	4.20
Intellectual Depth, Breadth, and Adaptiveness			
Having a general understanding of subjects other than the one in which I majored	4.11	3.97	4.18
Learning independently	4.32	4.16	4.42
Learning new approaches to work or to advanced studies	4.08	3.91	4.18
Trying different approaches to solving a problem	4.11	3.95	4.20
Having an in-depth understanding of my major field of study	3.96	3.71	4.12
Understanding Society and Culture			
Dealing with conflict among co-workers and friends	4.08	3.99	4.13
Working effectively with people of different races, ethnicities, and religions	4.40	4.33	4.44
Communicating effectively with people who see things differently than I do	4.18	4.07	4.25
Values and Ethics			
Exercising my responsibilities as a citizen (voting, staying current with community and political issues)	3.96	3.77	4.04
Making informed judgments when faced with ethical dilemmas	4.25	4.11	4.32
Recognizing the consequences of my actions when facing a conflict	4.45	4.36	4.50

An examination of these results reveals that students tended to rate their abilities in domains related to the PULs as high or very high (i.e., between 4 and 5 on a 5-point scale). All but three of the items have means of 4.00 or greater for all students, and two of the items rated below 4.00 have means of 3.96. It is also notable that *upper-division students rated their abilities more highly than lower-division students* on every outcome measure. Although the difference between upper- and lower-division students is not conclusive evidence of the value added by an IUPUI education, the consistency of the results across all of the PULs suggests that attending IUPUI does make a difference in student learning.

Program Review

In response to the review of academic advising in University College, the staff undertook a pilot program in 2007-08 to assign specific advisors to all incoming beginning students in the Fall of 2008. This is a priority because the assignment of an advisor ensures that a beginning student has a connection with an individual on campus and fosters greater student learning and increased student satisfaction with advising. A new senior advisor for learning communities has been hired in response to the recommendation that better training be provided for learning community teams. The functions of career counseling/planning and advising have been integrated and the career staff have been relocated to University College. A monthly reading/discussion group has been established to move toward increased professionalization of advising. One meeting of this group was devoted to learning more about the scholarship of advising and was facilitated by a faculty member in the School of Education.

School of Engineering and Technology faculty conducted several reviews for which follow-up meetings were conducted. As a result of the reviews, the school made several changes, including having the dean schedule a meeting with all department chairs every 2 weeks in which chairs are given the opportunity to participate in more school level decisions. The school has formed a recruitment and retention committee and The Freshman Technology Center to increase enrollment, retention, and graduation rates. Faculty across disciplinary boundaries are collaborating in research proposal development with the school's dean of research. The school has restructured to provide more support staff to departments.

The Departments of Communication Technology, Engineering Technology, and Computer, Information and Leadership Technology in the School of Engineering and Technology conducted a joint review. The review team recommended a reorganization of the technology departments. As a result, the five technology departments were consolidated into three without loss of programs. More courses are offered on line and the Facilities Management master's option in technology was introduced in the fall semester (www.engr.iupui.edu\facmgt). Four courses for the program were developed, put online and taught during the 2007-08 academic year.

Responding to recommendations from the Mechanical Engineering review team, faculty have set a goal to reach \$1M (from \$600,000) in research expenditures by 2010. In addition, the faculty plans to expand collaboration with central Indiana industry by providing more interns, graduates, and capstone projects while collaborating with employers on research and development projects. New or vacant faculty positions in renewable energy and biomechanics have been filled. Investments have been made in laboratories. Responding to the

recommendation that graduate programs be established, the department has proposed a new graduate certificate in systems engineering.

The Electrical and Computer Engineering faculty have invited the dean and his staff to meet with them monthly to improve communication. A three-year course offering plan has been developed and posted to the ECE website. In response to the issue raised about the declining quality of students in the program, tutoring services for sophomore and junior courses have been implemented. In addition, a student advisory committee has been established. Student involvement issues have been addressed in part by (1) providing the IEEE student chapter with office space, (2) securing teaching labs with computer-controlled electronic locks so that ECE students have more access, (3) communicating with ECE students regularly via email and bulletin board announcements, and (4) initiating recruitment events. Computers, printers, and network switches in the laboratories have all been upgraded and a computer upgrading plan is being written. Finally, as a result of this review and the 2004 ABET visit, the department conducted its first comprehensive planning process in which vision and mission statements were written and approved; goals and objectives for teaching and learning, research and service, and engagement were written and prioritized; and an implementation plan was approved. Supporting the implementation plan are faculty annual performance evaluation guidelines, faculty rewards guidelines, tenure and promotion criteria, the ECE research plan, a peer review of teaching plan, a marketing plan, a laboratory maintenance and upgrade plan, and a graduate and undergraduate enrollment plan. Finally, the dean has instituted a *Meeting with the Dean* series for students.

Performance Indicators

Two of IUPUI's ten mission-related goals focus directly on student learning. These goals are stated: "support and enhance effective teaching" and "enhance undergraduate student learning." Each year faculty and staff review panels are convened to assess IUPUI's progress in these areas using the following scoring rubrics:

A *green light* indicates that the goal is being achieved at an acceptable level or is clearly heading in the right direction.

A *yellow light* indicates that the goal is not being achieved at an acceptable level, though it might be improving or declining slightly.

A red light indicates that the current status or direction of change is not acceptable.

The data used to evaluate success in the area of supporting and enhancing effective teaching show that the goal is not being achieved at an acceptable level (a yellow light). Although the data suggest there are increasing levels of faculty participation in professional development opportunities related to teaching and learning, the effective use of technology to improve teaching and learning was rated very negatively.

A yellow light was also assigned to the goal of enhancing undergraduate student learning. The data continue to show that IUPUI is moving toward a more inclusive, welcoming, learning environment, with assessment efforts on the rise and improvements in student satisfaction. Student advising, however, is lagging behind other components of this goal, with current student and alumni surveys consistently documenting that this is an area needing improvement.

Likewise, first-to-second year retention rates have not improved significantly, and they lag well below the retention rates of our peers.

The Student Electronic Portfolio

The IUPUI student electronic portfolio (ePort) is designed to provide evidence of both achievement and improvement in each of the PULs as they are learned within various contexts—first-year experiences, the major, and RISE experiences, for example. Authentic evidence of individual student learning, as well as aggregated information about learning at the course, department, program, and campus levels will be increasingly available as the ePort software matures and is more widely adopted across the campus.

The implementation of ePort is integrated with several concurrent initiatives, such as the establishment and maintenance of faculty Communities of Practice based on the PULs, implementation of a Personal Development Plan in first-year experiences, the RISE initiative (including undergraduate research, international learning, service learning/community engagement, and other experiential learning opportunities, such as internships, practica, and clinical and field experiences), and faculty development. This progress report therefore includes information about these integrative aspects of ePort implementation.

Since the academic year 2005-2006, implementation of ePort has been supported at the department/program level by two-year Integrative Department Grants, designed to engage department faculty in conversations about and improvement of student learning. The goal is to integrate the Principles of Undergraduate Learning explicitly into discipline-specific learning outcomes, and to develop assignments that provide evidence of student learning in both the discipline and relevant Principles of Undergraduate Learning. Each department receiving a grant is provided funding for faculty to engage in significant planning for student learning, and for a team of specialists in instructional design, instructional technology, assessment, and information resources to support curricular transformation resulting from those discussions. Assignments integrating the Principles with learning outcomes for the major are submitted to ePort to document growth and achievement in student learning.

Recipients of early Integrative Department Grants, including the Department of Secondary Education, the Division of Education at IUPU Columbus, and the Department of Visual Communication have made significant strides toward building curricula that more intentionally incorporate and assess the PULs and related discipline-specific learning outcomes, using customized versions of the ePort learning matrix. Current grantees, including the Biology Honors Program, the School of Engineering and Technology, the Department of Computer and Information Science, and the School of Dentistry are making good progress. For the 2008-2010 round of grants, new projects have been funded in the Department of Computer, Information, and Leadership Technology and the Department of Tourism, Convention, and Event Management. In addition, the IUPUC campus is beginning a campus-wide initiative to implement ePort.

The availability of modest funding support to implement ePort at the department, program, and school levels has generated considerable interest among IUPUI schools and departments, where faculty have begun to see ePort as a means of supporting learning and

assessment of both disciplinary outcomes and the PULs. The ePort team, made up of representatives of the Center for Teaching and Learning, the Consortium for Learning and Scholarship, Planning and Institutional Improvement, and University Information Technology Services, works intensively with these departments, both to guide and advise them on implementation of ePort and to seek their feedback on ongoing development of the software. Development priorities for the coming year include continuing to build assessment capabilities that will automate aggregation and disaggregation of assessment outcomes based on student work submitted to ePort.

- 1. Communities of Practice (CoPs): To date, five CoPs have been established, one for each of the PULs, except for Depth, Breadth, and Intellectual Adaptiveness, which is addressed in two additional Communities of Practice, namely Civic Engagement across all the PULs, and Technology and the Scholarship of Teaching and Learning. With a total engagement of around 80 faculty, these Communities are still fledgling. Nonetheless, they are doing important work in relation to ICHE Goal 6. They have refined the expectations for learning of the PULs at the introductory and intermediate levels and have developed some sample assignments that explicitly integrate the targeted PUL with discipline-specific concepts and knowledge. The expectations for learning appear in the ePort learning matrix, and the sample assignments provide well-structured opportunities for students to demonstrate their learning of the PULs in ePort.
- 2. The Personal Development Plan. The ePort team is working with University College to integrate the Personal Development Plan into ePort. Beginning in Fall 2008, all students in UCOL-sponsored first-year seminars will create a reflective PDP that delineates their goals for their education and beyond, focusing on how their mastery of the PULs and participation in RISE experiences will help them achieve those goals. Students will include the PDP in their ePortfolios and revisit it periodically over the course of their education at IUPUI. A task force on the PDP has recommended that it be implemented in all first-year experience seminars (i.e., those sponsored by schools other than University College, as well as the UCOL ones), and revised during the second semester, at the point when students enter a major, and prior to graduation. These revisions would provide opportunities to students to interact with ePort periodically.
- 3. The RISE Initiative: IUPUI's new academic plan calls for all IUPUI undergraduates to participate in two experiences captured in the acronym "RISE"—Undergraduate Research, International Learning, Service Learning, or other Experiential Learning opportunities, such as internships, practica, and clinical and field experiences—during their college careers. Some of these experiences will take place within courses; others will not be associated with specific courses, but will still be represented on students' transcripts. The faculty, administrators, and units responsible for RISE have agreed that RISE experiences shall focus on the PULs and shall include a reflective component that will be incorporated into students' ePorts, along with other relevant materials from a given experience. The process is already well under way in the area of undergraduate research, where IUPUI faculty members are leading a national NSF-funded project that is using electronic portfolios to assess intellectual growth resulting from mentored undergraduate research. Our Center for Service and Learning has

also done a considerable amount of work on using reflection to document service and civic engagement. Detailed planning for RISE will begin this fall, with implementation planned for Fall 2009. As the RISE project takes shape, we will continue to work on integrating it with the PULs and ePort.

- 4. **Faculty Development**: The Center for Teaching and Learning provides support for faculty who wish to learn how to use ePort to document progress and achievement in the PULs. The Center works with the ePort team to co-sponsor several workshops each semester, including an ePort kick-off for faculty members beginning new Integrative Department Grants, a once-a-semester ePort Symposium that brings together grantees to exchange information and ideas, and sessions on such topics as curriculum mapping and reflection. Intensive individual technological, pedagogical, and assessment support is also provided. Every Center-sponsored workshop involving course development includes sessions on the PULs and information about how to develop assignments that integrate the PULs explicitly with discipline-specific concepts.
- 5. **Integrative Department Grants**: These grants provide resources, including funding and technological, pedagogical, curricular, and assessment expertise to departments seeking to develop their curricula in ways that explicitly integrate the PULs throughout the major, providing opportunities for students to achieve a basic level of competence in all of the PULs, and, beyond that, to grow and develop intellectual competence in the PULs as they progress through the major. This intellectual growth and achievement is documented and assessed using ePort.

The above five initiatives provide a widening network for integrating and supporting the Principles of Undergraduate Learning throughout the campus, as well as increasing faculty engagement with ePort as a means for documenting progress and achievement in the PULs. This intentionally incremental approach is enabling faculty to come on board at a comfortable pace, ensuring that their motivation to enhance student learning of the PULs becomes the prime factor in their engagement.

Annual Assessment Reports

Direct and indirect sources of evidence of student learning are being used in every school to guide efforts designed to improve curricula, instruction, and student support services. Some examples of evidence and responsive improvements drawn from the 2007 reports from academic units are summarized below:

School (with	Source(s) of Evidence	Responsive Improvements
Majors)		
Business	Carefully structured homework	A representative sample of courses reported using
	exercises and carefully coded	Kelley's new course assessment strategy.
	tests (FA), pre- and post-test	Financial Accounting (FA) course faculty will be
	score improvements (HR	encouraged to provide more elaboration on the
	& OM), 'research papers (team	recommended process for solving the problems.
	and individual), course	Other FA improvements will include generating a
	evaluations (HR), and survey	"must know" list and providing weekly timed

	responses (OM)	quizzes. One Human Resources (HR) course faculty will place more emphasis throughout the course on relevant class material; and more course review time will be applied near the end of the semester. Both actions are expected to help increase student learning. The Operations Management (OM) group is planning to analyze the pattern of errors in exams to determine a more effective way to present the material. They will also generate a list of "typical problems" associated with both homework exercises and tests.
Dental Hygiene	Surveys and Feedback from students, faculty, patients, advisory committee, and alumni.	A significant effort was made to analyze all curricular components in the Associate Degree Program for their relevance and value in addressing the student learning competences and program goals. As a result of this comprehensive analysis, a number of curricular changes were made: contact hours and/or credit hours were reduced in two courses; credit hours were increased in the Head & Neck Anatomy course and the Clinical Periodontics course, based on student, faculty and external assessments. Assessment tools also were evaluated for their relevance to student learning goals. The need for more assessment tools to promote critical thinking and problem solving was identified and specific tools are being developed for several of the clinical DH courses for 08-09. Assessment of changes made in the 2007-08 curriculum were reviewed, based on their assessments, and found to be successful. New clinical experiences initiated in 2007-08 were successfully implemented, and received positive feedback from community partners, students, and faculty involved. They will be continued for the coming year. A change in the scope of legal practice for hygienists in Indiana resulted in the creation of a new course in local anesthesia that will be offered Fall 2008 for the first time. Assessment of clinical competence exams found that no changes were needed for the coming year in existing exams. Two new competence exams will be added. Utilization of online instruction in the Evidence-Based Learning, Preventive Dentistry and Clinical Practice II courses in the AS program, and the Educational Methodology courses in the BS program were initiated and assessed based on student evaluations

		and student achievement (grades). Students liked the online components of the courses very much and requested that more courses utilize online approaches to instruction. Feedback from current BS degree completion students led to the decision to offer the H406 and H407 Educational Methodology courses once a year instead of once every two years. This feedback coupled with increased student enrollment in the program led to the decision to offer the course annually. Progress on the BS entry-level curriculum has been delayed due to a request by the Dean.
• Secondary	Benchmarks At the end of the first year students and faculty provide a rating of disposition along 30 dimensions. Students write a reflection reporting on areas of growth and/or concern cited by the faculty. Prior to student teaching, students	Faculty review the results of the benchmarks in light of program and course objectives. Modifications are made to address areas of weakness.
Engineering and Technology	view and analyze a content pedagogy teaching case. Syllabi for each course (and	Architectural Technology full and part-time faculty are educated in and involved in the
Architectural Technology	each of its sections) specify at least one PUL and one ABET program outcome. Instructors are charged with assessing any PUL and ABET program outcome noted for a given course, reporting the findings and recommending actions for course improvement. At least one course is identified to assess each PUL and ABET program outcome.	collection of work items and outcomes data. Courses assess all of our accreditation-based program outcomes and we think will prove to be good indicators of student learning as we stabilize the administrative groups of both areas. We were reviewed and recommended for full ABET accreditation for ART (6 years); and continue to develop our ART BS degree.
	Homework assignments, lab reports, projects and presentations, final exams in courses Capstone project reports Student satisfaction surveys Student exit surveys Alumni surveys Employer surveys Industrial Advisory Board	

appraisals

- Faculty end-of-semester reflections
- Internship reports done by Graduates

We have mapped these onto the IUPUI Principles of Undergraduate Learning to show that all PULs are thus assessed and have found patterns that indicate students are meeting or exceeding our expectations. We continue to refine the connection between work items and measurable outcomes to better substantiate this data.

Biomedical Engineering Course outcomes, available on the BME website and in individual course handouts, are associated with specific ABET program outcomes, which in turn are mapped to university PULs.

Program outcomes and objectives have been defined and submitted to our constituents, who have provided suggestions and feedback.

Ultimately our assessment process will use four key measurements:

- Student learning through student works, including homework, laboratory, and exam performance;
- Industry's satisfaction with our graduates using surveys and focus groups;
- Alumni satisfaction using surveys and focus groups; and
- Matriculation rates, graduation rates, job placement, graduate school admissions, and

Student performance on measures of course outcomes continues to influence the development and refinement of courses. Senior courses were offered for the first time in the fall; as a result of student performance and feedback in these and other courses, several changes have been made:

- Assignments in several courses in the junior year have increased emphasis on writing, as well as on open-ended problem solving;
- have been re-evaluated, and in two cases (Biosignals and Systems; Biomedical Computing) replaced with books that give a stronger analytical foundation; and
- The Biosignals and Systems course is being re-worked to include an introduction to Simulink, useful for the senior-level Quantitative Physiology course.

Over the summer we will discuss the student learning outcomes as a faculty to determine changes for next year.

We continue to be guided by feedback from the 2005 BME department review: in particular, all faculty now have offices, and about half have allocated laboratory space, in the same engineering building, rather than being scattered all over the engineering and medical areas. The consolidation

advancements.

Our first undergraduate degrees were awarded in May 2008. Because we did not yet have any graduates during 2007, at present (1) has been used as our primary assessment tool, supplemented with student feedback on their experiences in our new BME courses and university/peer feedback from continued communication with our advisory board and other constituents. We have selected several courses for more targeted assessment of ABET outcomes/PULs. At present all homework and exams are being collected, scanned, and stored, in order to provide data on the evolution of our curriculum and student learning over several subsequent semesters.

of faculty space will continue in the upcoming year. Furthermore, the capstone senior design class, offered for the first time this year, was taught by Bill Combs, an engineer from Medtronic, who introduced ideas of entrepreneurship into the course. Elective courses continue to be developed to meet the needs and interests of our undergraduate students.

Biomedical Engineering Technology

Every course has specific objectives that are linked to the Program Outcomes as required for ABET accreditation. Every Program Outcomes is mapped to one or more of the PULs.

- Reports assessed using rubrics:
 - Course project reports (written & oral)
 - Capstone project reports (written & oral)
 - o Research reports
 - o Formal laboratory reports
- Final exam questions targeted to specific objectives
- Student satisfaction survey
- Student & faculty course objective surveys.

Every semester, course coordinators are required to review all assessment data and propose changes to each course as indicated. In addition to changes in individual courses, the following changes were made that affected the curriculum as a whole:

- To improve problem solving: continued recitation session for ECET 107 and added a session for ECET 157.
- To improve mastery of the knowledge, techniques, skills and modern tools of their discipline, new laboratory equipment was purchased and assignments written.
- To improve student understanding of appropriate professionalism in the workplace, guidelines for practicum students were designed and implemented.
- To improve student's awareness of reference quality and literature searches as well as proper citation methods, guidance materials were posted in BMET 420 and 440.

	Industrial Advisory Board	,
	appraisals	
Computer Engineering	Our learning goals are embedded in our assessment of Program Outcomes for ABET accreditation. Each of the Program Outcomes is mapped to the PULs. Capstone project reports Laboratory reports Final exams Midterm exams Student satisfaction surveys Alumni surveys Employer surveys Industrial Advisory Board appraisals Student Advisory Council Oral presentations Term papers/project reports	 Curriculum Changes: ECE400 Senior Seminar is being discontinued and reconstituted as ECE 200 Sophomore Seminar to give students earlier exposure to subjects such as interviewing, resume writing, entrepreneurship, and internships. This change has been formalized this year and will be run for the first time this fall. ECE 492 Senior Design is being converted to a two-semester course. ECE 487(1 cr.) and 488(2 cr.) will be the new course numbers. Students will receive project assignments about one-half of the way through the first semester. Feedback from Faculty and Course Outcomes Survey showed that students were struggling with the current structure of C Programming courses(ENGR 197 and ECE 264). Faculty developed a plan to create one C Programming course to cover material presented in both courses. The new course ECE 262 will be 4 credits and will contain the same material covered in the two previous courses. Faculty voted for the creation of an Engineering Economics course based on feedback from our Industrial Advisory Board and alumni. The new course will be one of a few courses that will satisfy a new Economics requirement on the Plan of Study. A new General Education elective was proposed and passed by the department faculty. Engineering Project Management is in the process of being approved for future offerings. Feedback from Industrial Advisory Board and alumni spurred this change.
Computer Engineering Technology	Every course has specific objectives that are linked to the Program Outcomes as required for ABET accreditation. Every Program Outcomes is mapped to one or more of the PULs. • Reports assessed using rubrics: • Course project reports (written & oral) • Capstone project reports	Every semester, course coordinators are required to review all assessment data and propose changes to each course as indicated. In addition to changes in individual courses, the following changes were made that affected the curriculum as a whole: • To improve problem solving: continued recitation session for ECET 107 and added a session for ECET 157 To improve mastery of the knowledge, techniques, skills and modern tools of their discipline, new laboratory equipment was purchased and

Computer Graphics Technology	 (written & oral) Research reports Formal laboratory reports Final exam questions targeted to specific objectives Student satisfaction survey Student & faculty course objective surveys. Industrial Advisory Board appraisals Syllabi for each course identify Learning Outcomes based on ABET accreditation requirements. These Outcomes are tied to the IUPUI Principles of Undergraduate Learning. Laboratory written and oral project reports Homework assignments, quizzes, final exams in courses Course projects and presentations Capstone projects and reports Student satisfaction surveys Student exit surveys Faculty formative and summative reflections 	Based on outcomes of the assessment measures, several programmatic changes were made: • The CGT program decided to initiate a student laptop program fall 2008. • The Associate Degree Option for both the Interactive Multimedia Development and Technical Animation & Spatial Graphics tracks were made comparable. Here are some of the specific changes made: • Math 153 (1st semester) and Math 154 (2nd semester) were replaced with Math 159 (however, students can still take Math 153 and Math 154 in place of Math 159). • CGT 216 was moved from the 4th semester to the 3th semester. • CGT 299 was added to the 3th semester. • TCM 340 was moved from the 6th semester to the 3th semester. • TCM 340 was dropped as a requirement in the 3th semester. • IET 104 was dropped as a requirement in the 3th semester. • CIT 141 replaced CIT 140 in the 3th semester.
		semester to the 4 th semester. O CGT 251 and 299 were added to the 4 th semester. O CSCI N355 was dropped as a
		requirement in the 4 th semester.
Computer and Information Technology	Our learning goals have been specified for most courses using the ABET criteria at: http://cit.iupui.edu/fcptcourses.s html	There haven't been any significant curricular changes during the past year as a result of assessment. Instead, we have taken this past year to "clean up" our curriculum because there were a number of long-overdue housekeeping changes. We expect more substantive changes during the
	As the first step toward	next year as we undertake a strategic planning

"institutionalizing" the collection of artifacts, during the past year CIT began an effort to collect artifacts for assessment via electronic portfolios. Some of the best e-portfolios include:

- http://joebaker.iupui.eps ilen.com/
- http://mteng.iupui.epsile
 n.com/
- http://pfisk.iupui.epsilen.com/

process.

CIT did meet with its Industrial Advisory Committee, but there were no substantive assessment results from that meeting.

Construction
 Engineering
 Management
 Technology

Every course syllabus contains both the IUPUI Principles of Undergraduate Learning (PUL) and the ABET a-k outcomes as required to satisfy ABET accreditation for a particular course.

Every instructor has been requested to review the importance of the PULs and ABET outcomes with the students at the outset of every semester.

The following measures continue to be utilized:

- Individual and group projects
- Capstone project presentations
- Laboratory reports
- Final exams
- Student evaluations
- Department committee meetings
- Industrial Advisory Board (IAB) meetings
- Interviews of industry representatives who hire our students
- Student feedback in focus groups

Changes continue to be made in both courses offered and in the course sequence. Also, given the extensive reorganization of the program and re-alignment within the departments of Electrical & Computer Technology and Mechanical Engineering Technology, assessment analysis has been deferred to the conclusion of the 2008-2009 academic year.

Changes during the reporting year include:

- Increased use of technology vis-à-vis software applications within the classroom.
- Increased access to technology with the implementation of new computer classroom labs in the ET Lower Level.
- On-going review by the Industry Advisory Board of current curricula and program requirements.
- Online course offerings continue to be increased.
- Renewed emphasis on the importance of student evaluations at the conclusion of each semester.
- Began development of additional course electives to address current industry needs with targeted implementation of Fall 2008.

• Electrical Engineering Technology

Every course has specific objectives that are linked to the Program Outcomes as required for ABET accreditation. Every Program Outcome is mapped to one or more of the PULs.

- Reports assessed using rubrics:
- Course project reports (written & oral)
- Capstone project reports (written & oral)
- o Research reports
- o Formal laboratory reports
- Design & build project (assessed using rubrics)
- Final exam questions targeted to specific objectives
- Student satisfaction survey
- Student & faculty course objective surveys.
- Industrial Advisory Board appraisals

Every semester, course coordinators are required to review all assessment data and propose changes to each course as indicated. In addition to changes in individual courses, the following changes were made that affected the curriculum as a whole:

- To improve problem solving: continued recitation session for ECET 107 and added a session for ECET 157
- To improve mastery of the knowledge, techniques, skills, and modern tools of their discipline, new laboratory equipment was purchased and assignments written.

FreshmanEngineering&Technology

The Freshman Engineering Program is a service unit for the other engineering departments. In 2007 the Freshman Technology Program was created. It occupies offices in the same suite as Freshman Engineering. Both programs share the same support staff. Goals of both programs encompass adjustment to college life and mastery of strategies for student success. Additionally, Freshman Engineering provides preparation for advanced courses in the engineering curriculum

The learning community courses (ENGR 195 and TECH 102) are built on the University

Curricular changes are made in response to assessment findings from the engineering departments as well as results of assessment of the freshman courses. Results from course outcome surveys, project report evaluations, and peer evaluations have produced changes in project design, instruction about teamwork, and other teaching methods.

Significant changes in freshman engineering courses during 2007 include:

- Providing report writing instruction in ENGR 196
- Teaching two sections of ENGR 195 and ENGR 196 as components of Themed Learning Communities (TLCs). One grouping was linked with public speaking (COMM-R 110) and the other was linked with writing (ENG-W131).

template and learning objectives are mapped to PULs and ABET criteria. Similarly, in all other freshman courses, objectives are mapped both to ABET criteria and PULs. Sources of assessment date include:

- Hourly and final exams
- Online quizzes
- Oral presentations
- Project reports
- Student satisfaction surveys
- Course outcome surveys
- Peer evaluations

Interior Design Technology

Syllabi for each course (and each of its sections) specify at least one PUL and one CIDA program outcome. Instructors are charged with assessing any PUL and CIDA program outcome noted for a given course, reporting the findings and recommending actions for course improvement. At least one course is identified to assess each PUL and CIDA program outcome.

Homework assignments, lab reports, projects and presentations, final exams in courses

- Capstone project reports
- Student satisfaction surveys
- Student exit surveys
- Alumni surveys
- Employer surveys
- Industrial Advisory Board appraisals
- Faculty end-of-semester reflections
- Internship reports done by Graduates

We have mapped these onto the IUPUI Principles of

Interior Design Technology full and part-time faculty are educated in and involved in the collection of work items and outcomes data. Courses assess all of our accreditation-based program outcomes and we think will prove to be good indicators of student learning as we stabilize the administrative groups of both areas. We have completed extensive self-study for our CIDA visit in October of 2007. We were reviewed and recommended for full CIDA accreditation for the INTR BS degree (6 years).

Undergraduate Learning to show that all PULs are thus assessed and have found patterns that indicate students are meeting or exceeding our expectations. We continue to refine the connection between work items and measurable outcomes to better substantiate this data.

• Mechanical Engineering

Our learning goals are embedded in assessment of our Program Outcomes for accreditation by the Accreditation Board of Engineering and Technology (ABET). Each of the Program Outcomes is mapped to the PULs. The correspondence maps, relating our program outcomes to PULs, prepared jointly with the ECE department, are depicted at our assessment web site from http://www.engr.iupui.edu/me/f puls.shtml.

With the assessment measures that are in place, we are continuously monitoring the effectiveness of the curriculum established in Fall 2003. Sources of assessment data include:

- Capstone design project reports
- Laboratory reports
- Final exams
- Hourly exams
- Term papers/project reports
- Oral presentations and jury evaluations
- Student satisfaction surveys
- Alumni surveys
- Employer surveys
- Course outcomes surveys

- Exit surveys showed that the expected improvements in the fall 2003 curriculum are mostly being met, with the exception of the outcomes of the new statistics course.
 Measures are planned to address this finding.
- The student satisfaction survey results led to:
 - a. More emphasis placed on co-op, internship, and job placement services. Regular oral presentations have been scheduled each semester to assess quality.
 - b. A student learning center was established and sponsored by the department. The center was organized and staffed by the student organizations. The center was assessed by the satisfaction survey.
 - c. Recitation schedules have been adjusted to meet student needs. More recitations were conducted by the course instructors. The effects have been assessed in the Student Satisfaction Survey.
- Jury evaluation of capstone design projects led to:
 - a. More emphasis on prototyping and evaluation.
 - b. More emphasis on project management.
 - c. More emphasis on project presentation.
- Course outcomes surveys led to:
 - a. Addition of term papers/technical writing exercises in certain classes to improve research and writing skills.
 - b. Increased faculty supervision during the first six weeks, inter-group evaluations.
 - c. Emphasis on solving more examples in various classes.

New curriculum has been developed based on the exit survey results. The curriculum streamlined the courses and emphasized important components, such as statistics and contemporary

Mechanical	 Exit surveys Faculty feedback mechanism Industrial Advisory Board appraisals Student Advisory Board appraisals Learning goals for major are 	issues like six sigma in engineering. Full-time faculty reviewed courses and prepared
Engineering Technology	specified by Program Outcomes that are based on ABET program accreditation requirements. • Each of the major's Program Outcomes is mapped to the Principles of Undergraduate Learning and to the ABET student learning outcomes requirements. • Course learning objectives are mapped to Program Outcomes. Assessment measures include: • Laboratory written and oral project reports. • Capstone design project written and oral reports. • Assessed homework assignments linked to course learning objectives. • Assessed exam questions linked to course learning objectives. • Student satisfaction survey linked to Program Outcomes. • Graduation examination questions linked to Program Outcomes. • Alumni surveys linked to Program Outcomes. • Employer surveys linked to Program Outcomes • Feedback from Industrial Advisory Board. Faculty End of Semester Reflection documents.	 End of Semester Reflections that indicated the following changes were made based on course assessments: MET 111 – Identified the need to change the textbook. MET 111 – Lab reports were weaker compared to past semesters: planning underway to address the issue. MET 213 – Identified the need to change the textbook. MET 213 – Lecture portion of course moved to online; assessment was that the experiment worked well but with room for improvement. Planning underway to address issues from move to online lecture. MET 214 – As a result of prior semester's assessment, additional lecture emphasis was placed on mapping between Mohr's stress coordinate system and the physical part's coordinate system (x,y). This was stressed during lecture and additional homework problems on this topic were included. MET 214 – Handouts developed for areas of 3-D moment diagrams. MET 310 – Major change in software used by course from Algor to Ansys Workbench, to bring software more in line with industry standards. Change necessitated revision of all laboratory assignments. MET 310 – Textbook judged inadequate and changed for fall semester. MET 350 –Spreadsheet analysis of series pipe systems added. Addition was a result of assessing required body of knowledge in this area by the course instructor.

Organizational Leadership and Supervision

- Syllabi for all courses include goals that embed one or more of the IUPUI Principles of Undergraduate Learning [PUL].
- Specific assignments
 within each course are
 designed to measure
 competence in the specified
 PUL[s] for that course.
- The department maintains and updates a list showing that all PUL outcomes are measured at several points in the sequence of core courses utilizing:
- Quizzes. Midterm exams. Final exams.
- Evaluation of oral and written reports. Reports draw content from research, multiple assigned readings, community involvement activities, group projects, simulations, analysis of case studies, or other structured assignments.
- Surveys of student attitudes toward progress in meeting course objectives. Students' self evaluation of performance in meeting PUL outcomes.
- Alumni surveys.
- Industrial Advisory Board appraisals.

- Department was awarded an IUPUI grant to explore the portfolio approach to assessment. Pilot project begins fall 2008.
- Renewed efforts to define a ladder of competence levels for 200, 300, and 400-level courses within the department. Competences are defined by the IUPUI Principles of Undergraduate Learning.
- Long term goal established to connect a portfolio approach to the ladder of competences. Students' portfolios will document competence at each level.

Technical Communications

Technical Communication does not have majors. The program assesses oral presentations and written reports for the departments in the school utilizing:

• Oral presentations for engineering majors

TCM has done some self-evaluation and reflection on the assessment tools and techniques used for our program, resulting in the following:

- With the demands made on everyone's time becoming more and more of a concern, TCM is limiting assessment activities per course to one semester each calendar year.
- TCM has shared its rubrics for both oral and

	Written reports for lower level technology majors Oral presentations for upper- level technology majors	written assignments with the ET faculty in order to encourage a consistent approach to our students. • TCM faculty offer to participate as jurors for senior design presentations for both engineering and technology students. • TCM faculty make presentations to Tech 102 and senior design classes on oral presentations, PowerPoint, and written reports, as requested by faculty. • For technology students, we continue to educate our adjunct faculty about the importance of consistent assessment and the results of our efforts as part of our strategy for improvement. • TCM has begun to evaluate TCM 340 for the first time. Using the instructors' rubric for the evaluation of the students' final portfolios, we have collected data from a representative sample of 11 students. • We continue to look at curricular changes that may need to be made to stay current with the demands of the modern workplace. Those may include Wikis, collaborative software, and podcasts.
Herron	Assignments, projects, exams in courses, Sophomore Advancement Reviews, artist's statements at sophomore and senior levels, capstone courses, student surveys, alumni surveys, internship supervisors' reviews, 2nd looks assessments, senior exhibitions, senior portfolio, video tape/DVD, teaching portfolio, lesson plans, written reflections on teaching	Students who do not meet expectations in the Sophomore Advancement Review are placed on probation or denied advancement; now they are given instructions about what to do prior to being considered for a subsequent review. A new text was adopted for the Herron Themed Learning Community and a new section was added in Fall 2007; Visual Community Design (VCD) faculty plan devoted more time to teaching research and writing skills; all VCD students are
Informatics • Informatics	 & lesson plans, use of rubrics School-wide strategic planning process in Fall 2007 	Complete revision of undergraduate MAS curriculum, including development of foundation was a course.
 Media Arts & Science ("New Media") Health Information Administratio 	 (including a subcommittee on undergraduate education) Program Review of IUPUI portion of the school in Spring 2008 	 foundation year courses, to start Fall 2009 Task force to expand and enhance undergraduate Informatics curriculum Friday-only course 12-week courses Other course formats include 8-week courses, hybrid courses (taught in both synchronous and

n (HIA) asynchronous modes), one-week intensives, • Alumni survey Saturday portfolio classes and learning Survey of current students communities. conducted by the IGS Continued focus on N100 and I101 as gateway (Informatics Graduate courses Students) Revision of Y195 course Development of more online courses • Feedback from Career Development of student evaluation system for Services staff online courses Common syllabus template • Feedback from Student Capstone experience that blends HIA and Services staff MAS students • Feedback from alumni Faculty annual review process that recognizes – and rewards – faculty for excellence in • Feedback from employers, teaching through salary merit internship participants, Responding promptly to student complaints community members, and about courses rather than waiting until end-ofcolleagues from other schools semester student evaluation data indicate at IUPUI. problems Mentoring and shadowing of new faculty who Feedback from advisory are having issues with their teaching board members Continuing to expand internships and other • Ideas from meetings with experiential learning opportunities. Deans, Academic Policies "Don't cancel class" initiative of Career and Procedures Committee. Services staff Council on Retention and Canceling two unproductive – and costly – Graduation and Retention, international exchanges where our school **Enrollment Management** received no benefits Council. Articulating a clearer message about what Informatics is and what students can do once they have this degree Revision of the school's Web site, so that information such as plans of study, information on courses, etc. are up-to-date and can be used by faculty in advising students • Significant funding for new scholarships based on merit Diversity initiatives, including a diversity plan for the school, with particular emphasis on women in IT School of Added a speech course requirement to the B.A. Student survey Journalism Student course evaluations -Degree • written comments • Changed number of credits in the major from 33 to 47 Student focus groups Interviews with media Completely revised J100, Introduction to Computer Methods for Journalists executives New requirement for every major to have a Internship placement

evaluations Bi-weekly curriculum discussions Curriculum review	 camera capable of both still and video photography and introduction of multi-media throughout the curriculum Require a minimum of 20 percent up to a maximum of 100 percent of course assignments to participate in The Sagamore, JagRadio and JagBytes Added student mentors to Introduction to Mass Communication and Critical Issues Seminar Created a Public Relations Society of America student chapter Revitalized the Journalism Student Association Send a week J-Gram via e-mail to all majors and intended majors with current news of interest Started a new monthly publication, JagJournal, published by our students, for current students and alumni.

Liberal Arts	Analysis of retention and	Increased coordination of skills and learning
Anthropology	graduation data indicated the need for streamlining the Senior Project, the capstone experience for Anthropology majors.	outcomes between upper-level courses and the Senior Project that prepare students for successful completion of the final requirement in the major.
• Communication Studies	Departmental administration of questionnaires to and interviews with currently enrolled majors; exit interviews with seniors.	 Adoption of Civic Engagement as primary mission of department; wrote and received Civic Engagement grant to integrate CE throughout the curriculum. Restructured undergraduate curriculum to reflect more open curriculum with 3 core course requirements. Created new faculty position (Director of Undergraduate Studies) to address undergraduate student and curricular needs.
• Economics	Evaluation of curriculum in light of the department's focus on health economics on the graduate level.	Elective course offerings that allow majors to prepare for graduate studies with a health economics concentration.
• English	Assessment of the effectiveness of the electronic portfolio in detailing student learning outcomes in the capstone course.	Discussion about the transition from piloting the electronic portfolio in select capstone courses to use of this tool for broader and more varied groups of English majors.
Geography	Development of assessment measures for student learning outcomes in hybrid and online courses.	Evaluation of various examples of assessment strategies in selected courses, combinations of traditional in-class and newer online formats.
• History	Evaluation of student learning outcomes in the capstone course has led to re-consideration of requiring an introductory course to the major.	Discussion (based on systematic analysis of assignments) about how to effect coordination between introducing majors to the requisite skills and knowledge in the field and enabling seniors to complete the capstone course successfully—irrespective of the concentration students chose (American history; European history; African, Asian, and Latin American history).
• Philosophy	Dissemination of best practices developed in introductory Philosophy courses required for liberal arts students.	Department-wide reporting of award-winning teaching practices and how they can benefit students in all introductory-level Philosophy classes.
• Political Science	Evaluation of the balance among the major components of the capstone course (skills, knowledge, and career planning)	Integration of school and campus-wide focus on career planning with departmental goals for the major.

• Religious Studies	Systematic analysis of capstone course assignments in relation to the Principles of Undergraduate Learning.	Explicit integration of the Principles of Undergraduate Learning into the rationale for and design of the senior project.
Sociology	Inclusion of career planning as part of capstone course for majors.	Discussion about how the school's efforts toward expanding career planning for its students should be coordinated with the goals the department has already implemented for Sociology majors.
• World Languages and Cultures	Development of comprehensive assessment plan for all language majors.	Implementation of assessment plan and improvements based on assessment analyses.
Medicine • Health Professions Programs	Learning Goals for Majors that Encompass PULs are Specified 1. Clinical experience evaluations 2. Final practical exams 3. National certification exams 4. Employer surveys	All benchmarks for student achievement were met in 2007 – 08 but one; participation in scholarly or creative activities. Benchmark is 50%, programs reported 40.54%. First occurrence below threshold. Will monitor for trends and discuss with the program directors.
Nursing	 Undergraduate National Council of State Boards of Nursing Licensure Examination (NCLEX) Educational Benchmarking Inc (EBI) Exit survey Alumni survey Employer focus groups Assessment Technologies Institute (ATI) RN Comprehensive test Capstone evaluation IUPUI Continuing Student survey Educational Benchmarking Inc (EBI) Exit survey Alumni survey Employer focus groups Typhon Nurse Practitioner Student Tracking System CNS Competence Evaluation 	 Simulations are designed to incorporate PBL to facilitate critical thinking in a non-treating learning environment Faculty continue to make changes to course content and teaching pedagogies based on feedback Introduction of the dedicated educational unit to increase the effectiveness of clinical teaching Introduction of the Self-Tracking and Assessment to Success (STATS) program As a result of a comprehensive program review, admission to 3 specialty majors was suspended Curriculum changes have been made to strengthen students' depth and breadth of knowledge, and statistical and writing skills

Physical Education and Tourism Management • Department

- Department of Physical Education
- (a) Exit Interviews with graduating seniors; including a written survey.
- (b) Interviews with placement sites for both capstone and mid-curricular field experiences.
- (c) Service-learning community site evaluations.
- (d) Undergraduate student research activities (local and national presentations).
- Tourism, Conventions, and Event Management
- 2007 Comprehensive program review
- Senior exit survey

- (a) Formed a working group to look at curriculum improvements; these include course modifications, new course proposals, and collapsing of some courses.
- (b) Initiated a Freshman-to-Senior benchmarking program to be able to gather formative and summative data regarding student academic performance and learning; intent is to utilize an electronic portfolio.
- (c) More focused effort on student preparation prior to involvement in community-based experiences.
- (d) Increased internal communication network of interested faculty in working with undergraduate research.
- The program review committee recommended conducting a strategic curriculum study to avoid redundancy and to present opportunities for students to broaden their general education. A committee consisting of three TCEM faculty members was formed to address this area soon after the recommendations were made public. The committee relied on an existing model developed by the department to assist in competence identification and also on IUPUI's matrix of Principles of Undergraduate Learning. The committee presented its recommendations to the TCEM faculty for approval in Spring 2008. The department unanimously approved the revised curriculum, which will take effect fall 2009.
- Began offering courses in an accelerated format (12 weeks) to meet student needs.
- Launched a two-year project that will utilize ePortfolio as the mechanism in which to document and assess Principles of Undergraduate Learning and other TCEM student outcomes.

Public and Environmental Affairs

• All Majors

Student performance in gateway, capstone courses and other courses; DFW rates and grade distributions; school & campus student surveys; NSSE; retention and graduation data; student, employer and faculty evaluation of internships; focus groups; internal and accreditation reviews; course

- Admission guidelines were revised in response to concerns about student preparation for written communication and quantitative skills.
 W131 was added as an admission requirement.
- In response to performance issues related to quantitative skills, faculty in each major evaluated the quantitative courses in their majors to determine appropriate math prerequisites.

	learning outcomes mapped to degree learning outcomes	• An interactive student success seminar was developed by faculty/staff in response to concerns expressed by faculty and students regarding student readiness and efforts to reduce the number of students on probation. The seminar helps students 1) identify their learning styles and adapt to different teaching styles, 2) improve study skills, 3) develop educational goals and start to implement strategies to achieve those goals, 4) address time management issues, and 5) interact with faculty on ways to become a better student and achieve academic goals. The seminar, which is available to all SPEA students and a requirement for students on probation, is offered several times each semester. Student response to the program has been overwhelmingly positive and the creation of an online program is in progress.
		• Articulation agreements were reached with Ivy Tech for the BS in Public Affairs, BS in Public Health (Environmental Health Science), BS in Health Services Management, and the BS Criminal Justice.
Criminal Justice (Criminal Justice and Public Safety Management majors)		 A new course SPEA-J275 Diversity Issues in the Criminal Justice System received final approval and was added to the curriculum; all majors are required to take this course, which addresses an important gap in the curriculum. Focused computer skills and provided additional flexibility by adding SPEA-J426 Mapping and Analysis for Public Safety as an option for students to meet computing requirements.
		• Faculty members continue to make course enhancements to ensure achievement of student learning outcomes for individual courses and the degree. Examples include 1) emphasize improvement of writing skills (J272, J324), 2) individual meetings with students who fail or have below average performance on a first test (J201, J150), 3) incentives for attending class and being on time (J101), 4) developing internships to

	improve experiential learning, 5) offering increased student flexibility with online courses (J101), 6) linking knowledge, skills and abilities needed for specific jobs to course learning outcomes and involving students in service learning (V100 Learning Community linked to J101).
• Environment al Health Science (formerly Environment al Science	Curricular changes, leading to accreditation, were approved and the major was awarded full accreditation by the National Environmental Health Science and Protection Accreditation Council to 2012.
and Health)	• Faculty revised the minor in Environmental Health Science.
	• Faculty continue to work on reducing DFW rates by revising course content and increasing support for students to strengthen quantitative skills, chemistry gaps, and critical thinking skills through individual meetings and group tutoring sessions(E451) and faculty continue to work on critical thinking skills in lower level courses by emphasizing problem-solving (E162, H316).
 Health Services Management (formerly Health Administration) 	The process of phasing out the Health Administration major in the BS Public Health degree moved forward with approval of the BS in Health Services Management. There are now separate degree programs for environmental health and health services management.
	The degree changes previously approved for the Health Administration major were transferred to the BS Health Services Management degree. This degree emphasizes communication skills, quantitative skills, critical thinking issues, diversity, and ethical issues facing the health care field.
	 The BS Health Services Management curricular changes include: <u>General Education:</u> 1) Communications: increased the number of communications courses from 3 to 4 – added a second communications course 2) Social Sciences: dropped the requirement

	C DOLG V 102 OD DUIL D 120
	for POLS-Y 103 OR PHIL-P 120
	 Health Services Management Major: Dropped a requirement that incoming students had to have an associate degree in the health care field; the major is open to all students, but we still retain the articulation agreement with Ivy Tech for students with associate degrees/credentials in a health care field Expanded the concentration with 13 courses to a major with 18 courses. Added a new 1 credit SPEA-H126 Introduction to Careers in Health Administration to introduce students with fewer than 55 credit hours to the health care field. Added to the major courses in general management, health services management, applications in health services (skill-focused courses), and an experiential requirement and the capstone. Emphasized ethics with SPEA-H474, a course in health care ethics.
	• The general management section has increased options with courses from public affairs; these courses address finance (V352), performance measurement and program evaluation (V379), diversity (V443), and negotiation and dispute resolution (V435).
Public Affairs (Management, Policy Analysis, and Civic Leadership majors)	BSPA faculty completed a self-study of the program leading to the internal program review in the spring semester. As part of the self-study, faculty reviewed/revised learning outcomes for courses and degrees and mapped the curriculum to the degree learning outcomes and the PULs.
	• The course director reviewed/revised the course objectives and learning outcomes of V170 Introduction to Public Affairs and SPEA-V473 Management, Leadership and Policy (capstone course) to ensure a seamless and logical progression of knowledge and skills emphasized in the courses. Both courses were refocused to include experiential learning, increase course rigor, and emphasize critical thinking, writing, and oral

_		
		 communication. The course director also implemented a previously developed final self assessment in V473 to determine student perceptions of mastery of the outcomes for the class and the majors. The course director revised the learning outcomes for V261, V369 and the graduate information systems course to ensure appropriate rigor, progression of knowledge and skill acquisition, and reduce overlap
Science • Psychology	Surveys, student feedback on end-of-class evaluations, test scores, DFW rates, and attendance.	 Survey data collected from students entering B311 Introductory Laboratory in Psychology revealed a very wide range of competence in the ability to use SPSS to analyze data. B305 Statistics is a prerequisite for B311 and is the course in which data analysis is learned. A set of standardized SPSS modules was created and required in all sections of B305 Statistics during the 2006-07 school year to insure that all students who enroll in B311 Introductory Laboratory in Psychology in the future will enter the course with a fundamental competence in SPSS. An in-depth discussion was implemented in B310 Lifespan Development on a topic about which only 4% of the class were knowledgeable during the previous semester. After the in-depth discussion was implemented the following semester, 90% of the class was knowledgeable about this topic. Three items on the B104 Psychology as a Social Science end-of-semester evaluation were rated lower than desired. After the implementation of a new teaching technique called "5-minute Trainer," the scores on all three of these items increased the following semester. The number of B105 Psychology as a Biological Science students not passing the cumulative final exam was not acceptable. A more active learning approach to the class was introduced, and this transformation was piloted in 2 out of 5 sections during both the Fall 2007 and Spring 2008 semesters. For the two semesters, the average on the cumulative final
		exam has been no different for the traditional

respectively. It must be kept in mind that all sections take the same exams. These exams are based on material from the textbook and the multiple-choice questions are generated from the publisher's test bank. The traditional sections are given this material in lecture format during class periods, whereas the transformed sections do not receive traditional lectures over the material. The students are responsible for reading the material and instructors go over some of the material during one session per week, and the students engage in application exercises during the other weekly session. The next step in the course transformation is to adapt the exams to more accurately assess the objectives of the transformed course. This should provide a better measure of the success of the transformation in improving retention and understanding of course material. Dr. Neal-Beliveau taught one traditional and one transformed section in Fall 2007. The overall class average was higher for the transformed section (81% vs. 76%); however, those sections have 200 more points available to them during the semester (700 vs. 500) and exams make up 46% of their final grade compared to 64% for the traditional sections. The DFW rate was 19.7% for the transformed section vs. 21.4% for the traditional section. Class attendance, which has been shown to be very important for success in gateway courses, was also much higher for the transformed sections. **Social Work** Information from Office of the Increased systematic development of service Bachelor of Registrar and University learning opportunities at the freshman, College. Social Work sophomore, and junior levels. Invested more faculty efforts in service as Focus Groups; mentors for undergraduate research projects. Course/Instructor and Student Intensified the oversight by faculty of some Learning Assessment System; field practicum agencies. Course Learning Objectives Developed new practicum sites. Classification System. Exit Developed more online courses and teaching surveys; service learning approaches to address different student surveys learning styles. Recognizing students' struggles with different - 34 -

vs. transformed sections: 73.1% vs. 72.8%,

	Student video tapes; practicum mid-semester and final student evaluations. Analysis of documentation on the millennials. Systematic curriculum assessment, particularly in the area of international social work. Linkages between teaching and international research.	roles and time commitments, our <i>Introduction</i> to Social Work course was offered as an eight week compressed course. Faculty assessed the need for students to have further knowledge on legal matters in relation to vulnerable populations. As a result a new course was created: Law, Inequality, and Poverty. Revisions were made to the course Global Society: Human, Economic, Socia, l and Political Issues. Development of modules on international content. Development of an undergraduate field placement in South Africa. International research project involving faculty and students.
Bachelor of Science in Labor Studies	Analysis of course objectives and syllabus format. Analysis of 2006-2007 end-of-semester course evaluation system.	 Revisions of course objectives. Adoption of common syllabus format. Adoption of a system-wide student evaluation system.
University College • Summer Bridge Program	End-of-Course Questionnaire; GPA and Retention Reports; student participation statistics; and student profiles.	 Because of positive assessment results, the Bridge program was expanded to over 525 seats in 2008. Students who are awarded the First Generation Scholarship will be required to participate, and students who are 21st Century Scholars will be offered an additional scholarship award for participation if they are eligible. A special section for international students will be offered in summer 2008.
• First Year Seminars	End-of-Course Questionnaire; GPA and retention data; student participation statistics; and student profiles.	 The annual Learning Community May Colloquium's theme for 2008 was "Self: Promoting Student Development." A second part of the colloquium was the Common Theme Project. The book selected was "A Long Way Gone" and students will be encouraged to read the text. The Personal Development Plans (PDPs) are a way to have students come up with specific ideas for getting experiences that will help them reach their goals. The plan will help students examine four areas of experience and develop realistic goals in Education,

		 Employment, Extracurricular Activities and Experiential Learning. A Jump-Start grant (from OPD) has enabled University College to revise how on-line learning communities are conducted. Modules have been developed for incorporation in Fall 08 on-line learning communities. A new program with four pilot sections for on-lines has been introduced. University College has continued to expand its Themed Learning Community (TLC) sections. A Task Force was appointed and charged with making recommendations for revising the goals and objectives for the course. The committee submitted a final report in May. Implementation process is scheduled for fall 2008.
Critical Inquiry	Course evaluations; grade data; and instructor perceptions, and	 Medical Magnet High School students was developed and piloted during Summer I, 2008. Continued to clarify learning objectives and revised end-of-course questionnaires to reflect
	qualitative results (in-depth	the changes.
	students' perceptions)	• Resources will be devoted to ensuring that CI faculty members are engaged with each other through a Community of Practice.
		Increased training and support for all faculty.
		• Fall retreat allowed for faculty engagement and professional development. Increased communication and mentoring of faculty was focus of 2007-2008.
		Oncourse project site was created for Critical Inquiry (CI) instructors. This project site facilitated sharing of resources, allowed for discussion forums and delivery of information. Brown bag forums were held to discuss CI format and structure.
		Critical inquiry academic coordinator and associate researched CI to start developing a resource of material and best practices. Additionally, the CI academic coordinator created "University College Critical Inquiry"
- 0-:	Novy Student Evit Survey	Handbook—A Teacher's Guide".
Orientation	New Student Exit Survey, Transfer Student Exit Survey, Qualitative Survey for Parents.	Continued focus on EXPLORE THE ROAR (campus tour) to create an engaging and interactive tour- while keeping in mind the important learning outcomes of the FLASH

• Advising	Questions related to established learning outcomes for advising included on New Student Orientation Exit Survey and end of course evaluations for first-year seminars	program (First year students Learn & Achieve Socially Here). There was an improved response to the revised "find my way around campus" intervention. A new technology video was implemented. Continued to work with the Academic Advisors to create a more engaged and collaborative effort in the advising session All programs have been redesigned to be more "hands on" and to facilitate more active learning. The format of the Transfer Orientation was revised. Presentation content and flow was modified for each session of the program to meet the needs of transfer students. The Financial Aid presentation was revised slightly to respond to their comments regarding too much information and too repetitive. Formally merged academic advising and career counseling into new unit called Academic and Career Development Focused the year on establishing vision and goals for the unit. Piloted personal development plans (PDPs)in five sections of the first-year seminar course. Awarded two advisor research fellowships Implemented online advising record system to build on electronic record built for each student at the point of admission
• Learning Center	Tutoring Survey; graduating Student Mentors Website; biology mentors and instructors surveys and interviews; end of semester grade reports.	 As a means of expanding the reach of the mentoring program, the Bepko Learning Center will build partnerships with new Gateway course for the Fall 2008 semester. Supplemental Instruction (SI) DFW rates are lower than Structured Learning Assistance (SLA) rates due to the fact that SI is a voluntary program. Traditionally, the most motivated students take advantage of the service. With SLA the program is counted as part of students' grades. The result of this information has forced us to look for additional space for our sessions. The director and coordinators will solicit feedback from our instructors on a more regular basis to help address issues with mentors and students in a more timely fashion.

		 processes to help insure that students receive quality help from their peers. In response to a desire for exam jams that are more reflective of finals and overall course content, Center staff met with course coordinators to discuss, select, and obtain approval of Exam Jam content.
Themed Learning Communities	Student Feedback Questionnaire, Qualitative Research and Analysis (focus groups), Student Participation and Profiles GPA and Retention Analyses, National Survey of Student Engagement, Enrollment Reports	 Surveys results are distributed to instructional team members to guide future planning. Analysis from Student Feedback Questionnaires and NSSE were used in liaison and TLC instructional team retreats to guide future planning. For example: TLC instructional teams participated in a workshop designed to create stronger interdisciplinary assignments. Instructional teams discussed items from the AAC&U "College Learning for a New Global Century" report. Instructional teams attended sessions on how to incorporate initiatives into the TLC curricula including: the Political Engagement Project, the Global Classroom, Service Learning and Campus and Community Life.
Columbus • Division of Business	Business strategy globalization game in capstone. New reflection assignment at the end of the internship as well as reflections throughout the program: in learning communities, management courses, and career planning and professional development courses.	Expanded the number of students taking internships; the final program reflection now requires students to address their learning, curriculum content, PULs, and other aspects of the academic experience. Modify courses and integrated curriculum every semester via team meetings.
Division of Education	National PRAXIS exams; faculty-developed performance assessments based on national standards and PULs for a total of 8 assessment points for each of five programs. Self-assessment process will produce reports to be submitted September 2008 for National Recognition.	Changed field experience expectations, including separate course syllabi for practica that link PULs and national standards to performance assessments in the field experience; implemented student ePortfolio to evaluate content knowledge at the point of application to professional programs. Created new positions for advising and office of student teaching in response to self-study findings. Will reorganize student teaching and freshman learning communities to coordinate with leadership from these new positions. Assessment teams meet at the close of each semester to evaluate student work.

Division of Nursing Division of	National licensure exam (NCLEX); clinical performance practicum / capstone evaluation; course evaluations; ATI assessments; ATI NCLEX blueprint predictor; surveys and focus groups. National League of Nursing Accreditation (NLNAC) visit 2/13/2008 which included a self-study of the Columbus LPN to ASN program.	Students will take practice and proctored ATI assessments with a modified benchmark of 70%. Students will remediate until they reach 90% if the 70% benchmark is not met. NLNAC visit was positive and all IU SON programs were accredited for 8 more years. While nursing courses continue to be modified and kept current, focus on course, faculty, and student evaluation will be a priority. Another focus for the Columbus campus of IU SON will be on the BSN program since the LPN to ASN program has been suspended with the last cohort graduating in May, 2009.
Division of Science	 Assignments, lab reports, project reports Exams, including common finals in some areas Lab practical exams Research proposals and reports, including capstone Presentations (individual and group) State board exams Self-evaluation and supervisor evaluation of practicum experiences Midterm and end of semester course evaluations Employer feedback Alumni feedback 	Some psychology courses built in additional time for discussing controversial issues as a basis for critical thinking papers. Other psychology courses used interactive software to create electronic case studies.
Center for Service and Learning	Center for Service and Learning	Used feedback continuously throughout the academic year for improved program implementation. Improved processes for student application and payment.
Office of Community Service	Student interviews, oral reflections.	Improved program implementation. Increased alternative spring break options.
Office of Neighborhood Partnerships	Interviews with community partners and residents; student reflections.	Increased and strengthened networks with community partners.
Office of Service Learning Faculty Development (general)	Faculty interviews, focus groups, conference reports.	Improved workshop content. Changed most workshops to community of practice style. Added faculty writing circle opportunity.
Boyer Scholars Program	Pre-post inventory of knowledge, online opinion	Used both formative and summative feedback to improve implementation of program.

	survey, focus groups.	
Faculty	Faculty interviews; Civic-	Faculty used Civic-Minded Graduate Scale to
Fellows	Minded Graduate Scale.	•
Program	Willided Graduate Scale.	improve their service learning courses.
Student	Student and staff interviews	Improved processes for student application and
	Student and staff interviews;	Improved processes for student application and
Scholarships	faculty and student reflections.	payment. Documented value of program for
CCT D 1	D 11: .: 1 ::	students and faculty.
CSL Research	Publications, website	Used both formative and summative feedback to
Collaborative	development; focus groups; oral	improve implementation of program. Developed
(Signature	and written conference	partnership with National Service Learning
Center)	evaluation forms.	Clearinghouse.
General	Civic-Minded Graduate Scale;	Student responses and comments used to improve
student learning	short version of student	instrument and program implementation. Faculty
outcomes related	reflection (exit narrative).	used scale to improve service learning courses.
to civic		
engagement		
General student	End-of-course student	Anonymous student responses provided to
opinions on	evaluation form for service	individual faculty for course improvement and
service learning	learning courses.	documentation of teaching excellence. CSL used
courses		aggregated responses to improve faculty
		development opportunities.
Continuing	Learning goals for majors that	Assessment findings are used to further develop
Studies	encompass PULs are specified	the capstone course, serve as a basis for review
	to the extent they are measured	and update of the curriculum, and serve as a
Associate of Arts	in each of the other academic	justification for the development of the threshold
in General	departments. General Studies	course.
Studies	students take courses in all of	
	the disciplines on campus.	
Bachelor of	Students are therefore exposed	
General Studies	to the PULs in a variety of	
General Statics	ways.	
	The Learning Community and	
	the Capstone, the only courses	
	taught in the major, both cover	
	the PULs.	
	In the Capstone course, the	
	students create a portfolio of	
	PUL experiences from their	
	work both at IUPUI and	
	experientially.	
		•
Health and	Standardized student	• Faculty agreed on 14 core questions for student
Rehabilitation	evaluations of teaching.	assessment of teaching. The revised course
Sciences		evaluations have been used at the end of each
	National licensure exams.	semester beginning Spring 2007.
		Physical Therapy, Occupational Therapy, and

Accreditation reviews.	Nutrition and Dietetics graduates exceeded the national average on their respective licensure exams.
	Both Physical Therapy and Occupational Therapy programs had on-site visits in 2007 and both received full reaccreditation status. Nutrition and Dietetics maintained its full reaccreditation status.