# **Assessing Student Learning Outcomes**

# **IUPUI Summary Response to ICHE Goal 6**

# **July 2006**

#### **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):

- 1. **Core Communication and Quantitative Skills** the ability of students to write, read, speak and listen, perform quantitative analysis, and use information resources and technology.
- 2. **Critical Thinking** the ability of students to analyze carefully and logically information and ideas from multiple perspectives.
- 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, both within the United States and internationally.
- 6. **Values and Ethics** the ability of students to make judgments with respect to individual conduct, citizenship, and aesthetics.

The Principles of Undergraduate Learning underlie a "process approach" to general education at IUPUI that is intended to permeate the entire undergraduate curriculum, rather than being taught in a set of specified courses offered primarily during a student's first two years of college. The PULs constitute a set of common learning outcomes that provide a shared intellectual foundation across disciplines. As such, they define the meaning of an IUPUI baccalaureate degree, regardless of major.

# **Engaging Learning Opportunities for Students**

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?				

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 other disciplines upon matriculation and students are placed in courses appropriate to their levels of achievement.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. 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**

## **Annual Reports**

Various mechanisms have been established at IUPUI to ensure that the five processes listed above are occurring. First an oversight committee representing each academic unit 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. The content of the campus report is reviewed by a faculty committee, and suggestions for improvement of approaches to instruction and student support services, as well as assessment methods, are offered.

## **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 every seven years and review teams are directed to comment on the quality of curricula, methods of instruction, and the evidence of student learning in general education as well as the major field of study.

#### **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.

# **Assessment Findings and Responsive Actions**

#### **Annual 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. A few examples of evidence and responsive improvements drawn from the 2006 reports from academic units are summarized below:

School (with Majors)	Source(s) of Evidence	Responsive Improvements
Business	Surveys and student feedback	Changed advising procedures and advisor availability; created pilot Waiver Exam for students to demonstrate computer knowledge and skills in order to waive computer training class.
Education	Benchmarks	Assessment methods are being modified: As a part of Benchmark 3 students will view a teaching video case and then respond to a series of questions. They will be instructed to bring materials from the three Block courses prior to the benchmark.

School (with Majors)	Source(s) of Evidence	Responsive Improvements
Engineering and Technology  • Biomedical Engineering	Homework, laboratory, and exam performance; employer and alumni surveys and focus groups; matriculation rates, graduation rates, job placement, graduate school admissions, and advancements.	Retooled laboratory exercises for BME 222 (Biomeasurements); mapped student performance on final exam in BME 241 (Biomechanics) to course outcomes and used to direct changes in lectures.
Computer and Information Technology	Assignments, tests, lab reports, project reports and presentations, final exams in courses; internship and project reports; student, alumni, and employer surveys; Industrial Advisory Board appraisals	Increased emphasis on oral and written communication skills; standardized the specific tools to be taught in all systems analysis and design courses.
Construction     Technology	Individual and group projects; capstone project presentations; laboratory reports; exams; student and employer surveys; senior exit interviews; peer reviews; Industrial Advisory Board discussions	Implemented additional training for some faculty, reassigned other faculty among courses, varied the course offerings and time of day of offerings; added more case studies, real-life examples and lab experiences to aid integration of course content to industry applications.
Electrical and Computer Engineering	Capstone project reports; laboratory reports; exams; student, alumni, and employer surveys; Industrial Advisory Board appraisals; oral presentations; term papers/project reports	Moved Matlab from the freshman year to the sophomore year to reduce the gap between the time that student learn it and apply it in ECE 202; required operating systems course; hired professional student advisor; implemented formal exit interviews for graduating seniors; expanded tutoring services; upgraded computers and software in all teaching labs; instituted a required student advising program.
Electrical and Computer Engineering Technology	Course project reports (written & oral); capstone project reports (written & oral); research reports; formal laboratory reports; Design & Build project (assessed using rubrics); final exam; student and faculty surveys; Industrial Advisory Board appraisals	Required ECET 499, Ethics and Professionalism; upgraded laboratory computers; required more formal training in project management; added new hardware.
Freshman     Engineering	Hourly and final exams, student surveys, oral presentations, peer evaluations, project reports, project assessment survey	Implemented a "hands-on" project component in all ENGR 196 sections.

School (with Majors)	Source(s) of Evidence	Responsive Improvements
Mechanical     Engineering	Capstone design project reports; laboratory reports; exams; term papers/project reports; oral presentations and jury evaluations; employer, student and alumni surveys; faculty feedback mechanism; Industrial Advisory Board and Student Advisory Board appraisals	Implemented team report-writing format in experimental labs; added peer evaluation mechanism to grading of reports; added more tutoring sessions; increased emphasis on coop, internship, and job placement services; added more use of project management tools in design projects; added formal recitation hours in key sophomore level courses for solving more examples.
Organizational Leadership and Supervision	Course assignments, exams, projects, term papers, community involvement activities, student and alumni survey, Industrial Advisory Board appraisals.	Added graduation requirement of C or better in all required OLS core courses; added Project Management course and a research writing component to the OLS degree program; hired a teaching assistant to help students with project components and required more frequent drafts of writing submissions earlier in the semester, resulting in over 80% of students completing OLS 490 in one semester; students in OLS 252 online classes who live outside the area now receive a video version of on-campus orientation
Technical     Communications	Oral presentations and written reports	Reworked the assessment tool used by outside jurors for oral presentations, making the form and categories simpler for jurors to use; trained adjunct faculty on the importance of consistent assessment; revised assessment tools and rubrics.
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 exhibition, senior portfolio, video tape/DVD, teaching portfolio, lesson plans, written reflections on teaching & lesson plans, use of rubrics	All art education courses contain PULs and state standards have been developed and refined in art education.  Course assignments and activities have been modified in all programs and changes in instruction have been made when appropriate.  Visual Communication, and Fine Arts students receive clear information about expectations for Sophomore Advancement Review and are assigned a faculty mentor to assist them if they pass the review.  New foundations curriculum for all majors is in place and operating effectively.
Liberal Arts  • Communication Studies	Increased use of internships, especially in the gateway courses.  Increased opportunities for	Systematic integration of service learning.  Development of more numerous online course
	students to take courses online.	offerings at all levels of instruction (including online certificate).

School (with Majors)	Source(s) of Evidence	Responsive Improvements
• Economics	Experimental format of its gateway course (E102) but continued use of common final as assessment tool.	Formed large lecture classes in line with gateway courses in other disciplines.
	Requiring electronic copies of the majors' capstone projects	Assessment of all senior projects by department faculty.
Geography	Major transformation of gateway course.	Online format for introductory courses (student evaluations for Spring 2006 will be used to make adjustments).
Mathematical Sciences	Exams	Individual student exam scores are compiled and analyzed by subscores on topics corresponding to course outcome objectives. The variations in scores from student to student, section to section, and year to year are analyzed. Average scores have been going up and the variation among sections has been going down over the past few semesters.
<ul><li>University College</li><li>Summer Bridge</li><li>Program</li></ul>	End-of-Course Questionnaire	Altered math component Altered writing component Provided more free time for collaboration Created innovative curricular components Shortened team building/ice breaker activities
• First Year Seminars	GPA and retention data, student participation statistics, and student profiles	Program has been expanded due to positive impact on GPAs and retention.  2004 GPA reports indicated African American TLC participants had a fall semester cumulative grade point average of 2.56 compared to 1.98 for non-participating African Americans who participated in a first-year seminar. This information led us to encourage participation from African American students. We are pleased that these efforts appear to have been successful.
Critical Inquiry	Course evaluations, grade data, and instructor perceptions	Clarified learning objectives. Approved Faculty Fellowship, "Linking Freshman Writing (W131) and Critical Inquiry (U112)Developing template/curriculum for linkage of W131 & U112. Developing a U112 linkage with J101 for 2007. Increased training and support for all faculty.

School (with Majors)	Source(s) of Evidence	Responsive Improvements
• Orientation	New Student Exit Survey	FLASH (First year students Learn & Achieve Socially Here) was incorporated into the EXPLORE THE ROAR (campus tour) to create an engaging and interactive tour- while keeping in mind the important learning outcomes of the FLASH program.
• Advising	Student Walk-In Traffic Report	Implemented a new walk-in tracking system that will allow us to keep track of wait time as well as the time students spend with an advisor, to help in ensuring adequate advising coverage.  In February 2005 implemented appointments from which we anticipate a decrease in walk-in traffic in 2005-2006.
Learning Center	Report on contact with students	Will produce an online referral system so students will have 24-hour access to tutor contact information
• Math Assistance Center	Student Surveys Summary Report	Investing in an effort to develop software-based modules that students may use (with guidance from tutors) to achieve needed improvements in specific topical areas
Columbus  • Division of Nursing	National licensure exam (NCLEX); clinical performance practicum / capstone evaluation; course evaluations; ATI assessments; ATI NCLEX blueprint predictor; surveys and focus groups.	Offered multiple online courses for the RN-to-BSN program in Spring 2006 to provide flexible degree options for students.
Division of Education	National PRAXIS exams, locally-developed performance assessments based on national standards (3 program benchmarks), student, employer, field placement teacher, and advisory board surveys	Will begin internal self-study during Summer 2006 in preparation for state and national program review and accreditation. In 2006 will implement second phase of change to field experience expectations.

# Surveys

In the 2005 *IUPUI Continuing Student Survey*, 84% of students responding said they were satisfied with their overall academic experience at IUPUI; this figure was just 78% in 1995. Similarly, satisfaction with the quality of instruction has risen from 77% to 81% and satisfaction with the use of technology in the classroom has increased from 59% to 72% over the same

period. Satisfaction with advising has risen from 51% to 56% during this time, but even 56% is too low. Efforts to improve advising are underway in most of IUPUI's academic units.

Responses on the most recent administration of the *NSSE* indicate that IUPUI seniors experience larger learning gains than their peers at other urban universities and other doctoral-intensive universities in six areas, including three that are directly related to the Principles of Undergraduate Learning (PULs): thinking critically and analytically, writing clearly and effectively, and speaking clearly and effectively. IUPUI seniors reported lower learning gains than these peer groups on one item related to the PULs—developing a personal code of values and ethics. A faculty Community of Practice is working to promote a broader understanding of the *values and ethics* PUL, including ways to teach and to assess the related abilities more effectively.

## **Program Review**

Responding to recommendations received during the Biomedical Engineering program review, faculty drafted a list of general electives, a proposal describing depth areas with relevant coursework, and a more comprehensive list of approved technical electives. The review team's recommendation to *increase diversity hiring* (especially female) has influenced the program's search and screen activities.

In response to recommendations made by the team that reviewed the programs in the School of Public and Environmental Affairs (SPEA), a professional advisor now assists with course choice and sequencing while faculty advisors provide mentoring and insights on career and internship opportunities. Associate faculty are also encouraged to mentor students. There are increased opportunities for students to connect with faculty in the field, including an Honors track and internships with state agencies. As a result, fewer students report dissatisfaction with many areas on student satisfaction surveys than students did five years ago, and there is an increase in the number of students declaring majors in SPEA programs.

The program review for the internship program area of the Kelley School of Business provided an opportunity for staff to reflect on the process of connecting students with internships and to analyze the goals and virtues of going forward with the program. In addition, Kelley is using employer feedback to assess student learning of the PULs.

An external team member who is responsible for a Public History program on another campus commented that the IUPUI program is the best program he has encountered. As a result of this and other comments made during the review, the co-dean of the University Graduate School offered to match funds provided by the Dean of Liberal Arts to support this program.

## **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 increasing levels of faculty participation in professional development opportunities related to teaching and learning and a significant increase in the use of technology to improve teaching and learning. *Green lights* have been assigned to the subgoals of "institutional priorities for teaching development and practices" and "development of technology-based and technology-assisted teaching capacities." *Yellow lights* have been assigned to the subgoals of "engagement of students through the curriculum and co-curriculum in learning about their own and other culture and belief systems" and "use of assessment results to support and enhance effective teaching and student learning and course and curriculum changes." However, the panel noted that a growing number of schools and departments are employing sophisticated methods for assessing learning.

The data used to evaluate success related to the goal of enhancing undergraduate student learning show that IUPUI is moving toward a more inconclusive, welcoming, learning environment, with assessment efforts on the rise, increases in retention, and improvements in student satisfaction. Student advising, however, is lagging behind, with current student and alumni surveys consistently documenting that this is an area needing improvement. Review panels gave a *green light* to the subgoals "demonstration of students' general education and major-specific learning outcomes," "quality of the learning environment," and "graduates' contributions to their professions and communities, economically, socially, and culturally." A *yellow light* was assigned to "student academic progress and achievement" to indicate the need for more work to improve advising and retention to graduation. Last year the panel assigned a *red light* for this subgoal, thus improvement has been noted in this area.

# The Student Electronic Portfolio

Led by the Center on Integrating Learning, the IUPUI student electronic portfolio (ePort) is being designed to provide evidence of both achievement and improvement in each of the PULs as they are learned within the context of the student's major. 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 moves from its pilot phase in Fall 2004 to full implementation over the next four to five years.

The implementation of ePort is integrated with several concurrent initiatives, such as the establishment and maintenance of Communities of Practice based on the PULs, Themed Learning Communities, General Studies Curriculum Development, Service Learning/Community Engagement, and Faculty Development. This progress report therefore includes information about these integrative aspects of ePort implementation.

1. **ePort**: In fall 2004, ePort was pilot-tested in nine Themed Learning Communities, involving more than 20 faculty and almost 200 students. A research project comparing students in the ePort pilot with students in Themed Learning Communities not in the ePort pilot produced some promising results. While not widely generalizable due to the small sample size, these early data show that students in the pilot engaged more with their learning (based on a comparison of questions from the NSSE), saw written communication as more important to their learning, revised their writing more frequently, and, despite frustrations with an unstable technological infrastructure, were retained at the same rate. This information provides promising baseline data for ePort in relation to student learning.

Faculty in the pilot project developed assignments that explicitly integrated the PULs into discipline-specific work so that students might load them into the ePort learning matrix, which is based on the PULs. These assignments are posted on the website of the Center on Integrating Learning (COIL) as resources for other faculty.

A group of eight members of the IUPUI Senior Academy (emeritus faculty) reviewed 180 student reflections. On a scale of 1-3, most reflections (105) were awarded a 1 (good start, but could be improved), revealing that both students and faculty need support in understanding the role, the potential, and the mechanics of reflective writing about the Principles. Only 22 of the reflections received a 3 (exceeds expectations), while 53 received a 2 (meets expectations). Still, for most students and faculty, this was the first time they had been involved with reflective writing. One significant result of this experience with Senior Academy members arose from their desire to have more interactions with the students, to know more about the contexts in which the reflections were written, and to provide opportunities for students to try again. As a result, we have revised our approach to reviewing reflections, and will situate those reviews directly in the students' academic programs. Supporting that decision is the notion that the PULs should be taught, learned, and assessed in explicit integration with course material, and that faculty should be directly involved with the curricular and pedagogical implications of that integration. While this heralds a significant shift for many faculty, it also will move forward the campus approach to addressing the PULs more comprehensively, and will situate them directly in the overall curriculum of each academic and professional program.

During Spring 2005, the ePort learning matrix, based on the PULs, was pilot-tested in five first-year classes and a customized version of the matrix was pilot-tested in the English Capstone. Faculty reviewed the reflections of their students, and, in one instance, traded classes to review the reflections of each other's students. This seemed to work well, and to bode well for the decision to change the approach to that of reviewing reflections. One notable result from the spring pilot is that 100% of the students in the English Capstone said that ePort should begin in the first year. Another notable result, more in direct keeping with ICHE Goal 6, is that the student reflections in the Capstone Matrix clearly indicated familiarity with and achievement in the PULs.

The technological infrastructure to support the ePort is now stable on an IU server, rather than on a developer's server. This alone will make its use easier for faculty and

students. It is embedded in the new Oncourse CL, with which faculty and students are becoming increasingly familiar, again adding to greater ease of use. Finally, we are further refining the learning matrix, developing customizable learning matrices that can be used by each course or each department, and creating a set of templates whereby students may demonstrate their learning for a wider range of purposes.

The academic year 2005-2006 saw a notable change in the implementation of ePort. While continuing to focus primarily on first year students for ePort, COIL initiated Integrative Department Grants, designed to engage faculty at the department level in conversations about student learning. The goal was to integrate the Principles of Undergraduate Learning explicitly into discipline-specific learning outcomes, and to develop assignments that would 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 conversations about 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 loaded into ePort to document growth and achievement in student learning. The Department of Secondary Education and the Department of Computer and Information Technology were the recipients of the first round of grants. For 2006-2007, the Department of Biology, the Department of Visual Communication, and the Division of Education at IUPU Columbus have been awarded grants.

We anticipate that this move to implementation of ePort at the department level will intensify the effectiveness of ePort to document student learning not only in the major, but also of our Principles of Undergraduate Learning. Further information is available at <a href="http://www.opd.iupui.edu/COIL">http://www.opd.iupui.edu/COIL</a> and then click on ePort.

2. **Themed Learning Communities** (TLCs): The TLCs combine 2-4 first year courses with a first-year learning experience around a particular theme, and thereby provide an excellent and integrated introduction to the PULs. TLCs are therefore an ideal site for piloting the ePort. In 2004 and 2005, nine TLCs piloted the ePort. In preparation for use by all 19 TLCs in Fall 2006, we are in the final stages of developing the Learner Profile of ePort, based on findings that students who articulate their goals and tie these goals to learning outcomes, have better success at achieving both their goals and the learning outcomes.

The TLCs play an important complementary role to ePort in relation to Goal 6 in that they are an ideal site for students to integrate assignments in several courses for a particular PUL. Therefore they provide an excellent catalyst for student learning of the PULs in a context that is truly integrated within the disciplines. Further information is available at <a href="http://www.opd.iupui.edu/COIL">http://www.opd.iupui.edu/COIL</a> and then click on Themed Learning Communities.

3. **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. Further information is available at <a href="http://www.opd.iupui.edu/COIL">http://www.opd.iupui.edu/COIL</a> and then click on Communities of Practice.

- 4. General Studies: The curriculum for General Studies is grounded in the Principles of Undergraduate Learning. In Spring 2005, General Studies faculty began to develop a three-credit course using ePort to document and assess learning in relation to the PULs. This was implemented in Spring 2006 with one class of pilot students. Since General Studies boasts the largest number of majors on campus, the involvement of this program provides a significant catalyst for engaging more students and more faculty in ePort as a means of documenting student progress in learning the PULs. Additionally, General Studies caps its curriculum with a capstone course requiring paper portfolios constructed entirely around the PULs. The portfolios are reviewed by faculty from across the campus. It is anticipated that this capstone course will begin using ePort for its capstone portfolios as soon as the infrastructure is fully developed within the Oncourse CL environment.
- 5. Service Learning/Community Engagement: Six departments (Sociology; World Languages and Cultures; Communication Studies; Sociology; Visual Communication; and Computer Information Technology) are currently involved with an initiative in the Center for Service and Learning to integrate service learning and community engagement meaningfully throughout the major. This engagement will be documented through reflections developed by the students in relation to the PULs. These reflections will be posted to the ePort to demonstrate the integration of service learning/community engagement with the PULs and with the major. Together with the Civic Engagement Across the PULs Community of Practice, the Center for Service and Learning is providing significant leadership in assessing student understanding of the PULs in relation to community engagement.
- 6. Faculty Development: The Center for Teaching and Learning provides several kinds of support for faculty who wish to learn how to use ePort to document progress and achievement in the PULs. The "ePort Airport" is a day-long workshop on the PULs and ePort, and is available to individual departments or other campus groups upon request. Individual technological support is provided, as well as a wealth of shorter workshops offered throughout the year. Every 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 in order to demonstrate progress and achievement on ePort.
- 7. **Integrative Department Grants**: Probably the most exciting development over the past year has been the startup of Integrative Department Grants. These grants provide

resources from funding to technological, pedagogical, curricular, and assessment expertise to departments seeking to develop their curricula in ways that explicitly integrate the PULs throughout the major, providing not only opportunities for students to achieve a basic level of competence in all of the PULs in relation to the major, but also 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. Two departments were awarded integrative department grants for 2005-2006, and each has developed a model of integration appropriate to its department culture. Three departments have been awarded grants for 2006-2007.

The above seven 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. Taking this intentionally incremental approach will enable 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.