Dear 2012 Committee Members,

Richard and I have developed for your review instructions for departments and faculty that we hope can be sent in early August. Please try to read this before our meeting tomorrow afternoon at 2:00 p.m. In particular, we all need to read this from the perspective of a faculty member—is it clear? Would you know what to do if you received this out of the blue?

Terri and Pratibha, please note that we have referred to a series of workshops on page 3. And Susan, note that there is a reference to rubrics in that same paragraph. Let's talk tomorrow about putting all the information on the Web and providing a URL that can go into this draft right away.

We need to discuss how and when to distribute this information for chairs and faculty. Should we ask deans to be in charge of making sure department chairs are working to fulfill their responsibilities?

Then let's spend a few minutes talking about the assessment of computer/information literacy.

I look forward to seeing you tomorrow!

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Ensuring Student Learning of the Principles of Undergraduate Learning
~ Information for Department Chairs and Faculty ~

Principles of Undergraduate Learning

The Principles of Undergraduate Learning (PULs) were first approved by the Faculty Council in 1998 and were reaffirmed by that body in 2007. They are the core components of the undergraduate educational experience at IUPUI and form a conceptual framework for all students' general education. This framework describes the knowledge and skills graduates of IUPUI should develop prior to completion of their degree requirements. The core areas of the PULs are described at http://www.iport.iupui.edu/selfstudy/tl/puls/ and include:

1, Core Communication and Quantitative Skills;
2, Critical Thinking;
3, Integration and Application of Knowledge;
4, Intellectual Depth, Breadth, and Adaptiveness;
5, Understanding Society and Culture;
6, Values and Ethics

Prior Work
In spring 2009, faculty in every undergraduate department used the following scale to identify for each course they teach a maximum of three PULs they emphasize through class activities and assignments:

3 indicates a *major* emphasis: *This PUL is prominent in at least one course objective; it is a focus of the course. Student learning of this PUL is assessed via at least one major assignment.*

2 indicates a *moderate* emphasis: *The PUL is explicitly emphasized in the course. It is prominent in at least one course assignment and is assessed via that assignment.*

1 indicates a *minor* emphasis: *This PUL is identified in one or more assignments and is implicitly emphasized in the course.*

The PULs now associated with each course in the 4-year graduation plan for your major are available in a matrix by course name and number in the first attachment. By simply typing a course name and number in this matrix, you can do the following:

a. Study the PUL coverage offered by courses in your own department.
b. Review the PUL coverage in any combination of courses offered in or outside your department.
c. Create a matrix for individual students for use in advising to ensure that they have opportunities both within and outside your department to learn and progress toward mastering the PULs during their undergraduate education.

What Needs to be Done
Currently data concerning the PULs, their integration into the curriculum, and evidence of student learning are being collected for our self-study for reaccreditation by the North Central Association in 2012. Two important steps must be performed. One is at the department level and the other involves individual faculty.

Departments

Develop a Departmental Plan to Evaluate Student Attainment of the PULs
During the 2009 fall semester, each department must develop a sampling plan specifying when **each course will record levels of students' learning** on those PULs given **major** or **moderate emphasis** in that course. Please develop a plan to ensure that over the next nine semesters the evidence of student learning described below will be collected and recorded in every course for which your department is responsible. Each of the six PULs should be assessed in at least one course each semester. Initiating the data collection process in classes with smaller enrollments may be helpful. You know best how to structure a sampling plan that distributes all the courses you teach over the 9 semesters (including spring, summer, and fall) beginning spring 2010 and ending fall 2012. (A new three-year cycle will begin in spring 2012.)

Individual Faculty

Record a Level of PUL Attainment for Each Student in Your Course
1. **Review the combination of PULs emphasized in your course**
2. **For each student enrolled, assign a rating using the following scale to describe the student's ability to demonstrate the PULs emphasized as evidenced by their class performance:**

> **3 (VE)** = **Very Effective**
> **2 (E)** = **Effective**
> **1 (SE)** = **Somewhat Effective**
> **0 (NE)** = **Not Effective**

In assigning the rating for each PUL, use evidence from a single assignment or from multiple sources over the entire course (test items, oral presentations, individual and group projects) that were designed to give students opportunities to practice and make progress in learning the particular PUL emphasized. Note that **no student names or numbers are needed** since this is a process designed to look not at individual students or classes, but at department, school, and institutional effectiveness.

For example in the hypothetical course Advanced Avionics and Flight (402), five students were enrolled in the Summer 1 session of 2010. Previously, PULs 1 and 3 had been identified by the instructor as the two emphasized most. Although Student 1 could explain the theoretical principles relating to aerodynamics and could apply his knowledge to new problems (PUL 3), he consistently made errors in using the formulas and scored poorly on an examination containing mathematical computations (PUL 1). Therefore the faculty member rated this student's levels of PUL attainment as 0 and 3, respectively:

Student	PUL: Quantitative Reasoning	PUL: Critical Thinking
1	**0**	**3**
2	1	2
3	1	3
4	2	1
5	2	3

UITS personnel are developing a means to record these ratings directly. For now, please send these student data to Trudy Banta (tbanta@iupui.edu). This should be completed within a week of posting final grades for the term. The evidence of learning that you collect will be combined by staff in Information Management and Institutional Research (IMIR) so that we can report average ratings of levels (0-3) of learning for departments, schools, and the campus. At the department level, the ratings for each PUL can be studied to see where students need more practice.

You may make up your own definitions for the ratings VE, E, SE, and NE, or you may find it helpful to use or adapt the VALUE rubrics developed by the American Association of Colleges and Universities at http://www.aacu.org/value/ . Other examples of rubrics, along with information about a series of helpful workshops offered by the Center for Teaching and Learning, are available at http://www...... or Oncourse site.

Optional – Minute Paper for Students

For your own personal use, if you would like to ask your students how they experienced the PULs in your course, please find questions for students in the second attached document. In developing the questionnaire for your course, **use only the 4 questions** designed for the **one or two PULs that you emphasized**. This is called a minute paper because after you have explained your purpose for asking the questions, students should be able to answer the 4-8 questions in just a minute or so of class time. Student responses may give you some insight and feedback that you can use in considering your approaches to teaching and obtaining evidence of student learning the next time you teach the course.

Thank you so much for your work in ensuring student learning!

Attachments: Course X PUL Matrix for Department
                PUL questions

Student Learning Perceptions

To Program Faculty: Please **select only those items** in the list below that pertain to the **one** or **two** PULs to which you have given **major** or **moderate emphasis** in this course.

To Students: How effective was this course in helping you learn each PUL emphasized in the course? Please place an "X" in only <u>one</u> box per item.

Thank you very much for taking the time to complete this questionnaire. Your opinions are important!

PUL/Survey Question	Very Effective (3)	Effective (2)	Somewhat Effective (1)	Not Effective (0)
1A - Language Skills				
Reading and understanding books, articles, and instruction manuals				
Delivering a prepared presentation to a group				
Writing a final report on a project or other work assignment				
Contributing to a team to solve problems				
1B - Quantitative Skills				
Solving mathematical problems				
Using mathematics in everyday life				
Understanding a statistical report				
Preparing a report using quantitative data				
1C - Information Resource Skills				
Identifying the sources of information that are most appropriate for a project				
Using computer software for work (word processing, spreadsheet, graphics, etc.)				
Evaluating the quality and accuracy of information found on a web site				
Recognizing which ideas or material need to be fully acknowledged to avoid plagiarizing				
2 - Critical Thinking				
Analyzing other people's ideas and proposed solutions				
Systematically reviewing your own ideas about how to approach an issue				
Creatively thinking about new ideas or ways to improve things				
Discussing complex problems with co-workers to develop a better solution				

PUL/Survey Question	Very Effective (3)	Effective (2)	Somewhat Effective (1)	Not Effective (0)
3 - Integration and Application of Knowledge				
Applying what you learned in college to issues and problems you face every day				
Gather information from a variety of sources when deciding what action to take				
Finding new ways to use what you have learned as you encounter new situations/problems				
Putting ideas together in new ways				
4 - Intellectual Depth, Breadth and Adaptiveness				
Learning new approaches to work or to advanced studies				
Having an in-depth understanding of your major field of study				
Having a general understanding of subjects other than the one in which you majored				
Being able to modify how you approach a problem based on the requirements of the situation				
5 - Understanding Society and Culture				
Dealing with conflict among co-workers and friends				
Seeing the relationships between local, national, and global issues and problems				
Working effectively with people of different races, ethnicities, and religions				
Communicating effectively with people who see things differently than I do				
6 - Values and Ethics				
Exercising my responsibilities as a citizen (voting, staying current with community and political issues, etc.)				
Making informed judgments when faced with ethical dilemmas				
Recognizing the consequences of my actions when facing a conflict				
Understanding and appreciating the arts				

July 2823, 2009

Ensuring Student Learning of the Principles of Undergraduate Learning
~ Information for Department Chairs and Faculty ~

PRINCIPLES OF UNDERGRADUATE LEARNING

The Principles of Undergraduate Learning (PULs) were first approved by the Indianapolis Faculty Council in 1998 and were reaffirmed by that body in 2007. They are the core components of the undergraduate educational experience at IUPUI and form a conceptual framework for all students' general education. This framework describes the knowledge and skills graduates of IUPUI should develop in and outside courses in their major prior to completion of bachelor'stheir degree requirements. The core areas of the PULs are described at http://www.iport.iupui.edu/selfstudy/tl/puls/ and include:

1. ,Core Communication and Quantitative Skills (that is, 1A. Written, oral, or visual communication skills; 1B. Quantitative skills; 1C. Information resources skills);
2. ,Critical Thinking;
3. ,Integration and Application of Knowledge;
4. ,Intellectual Depth, Breadth, and Adaptiveness;
5. ,Understanding Society and Culture;
6. ,Values and Ethics

PRIOR WORK
In spring 2009, faculty in every undergraduate department used the following scale to identify for each course they teach a minimum of one and maximum of three PULs they emphasize through class activities and assignments:

3 indicates a ***major*** emphasis: *This PUL is prominent in at least one course objective; it is a **focus** of the course. Student learning of this PUL is assessed via at least one major assignment.*

2 indicates a ***moderate*** emphasis: *The PUL is **explicitly** emphasized in the course. It is prominent in at least one course assignment and is assessed via that assignment.*

1 indicates a ***minor*** emphasis: *This PUL is identified in one or more assignments and is **implicitly** emphasized in the course.*

The first attachment allows you to combine Tthe PUL(s) now associated with each course within the 4-year graduation plan for your majors. are available in a matrix by course name and number in the first attachment. By simply typing a course name and number (e.g., ENG-W131) in this matrix, you can do the following:

a. Study the PUL coverage offered by courses in your own department.
b. Review the PUL coverage in any combination of courses offered in or outside your department.
c. Create a matrix for individual students for use in advising to ensure that they have opportunities both within and outside your department to learn and progress toward mastering the PULs during their undergraduate education.

1

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~~What Needs to be Done~~WHAT NEEDS TO BE DONE

Currently data concerning the PULs, their integration into the curriculum, and evidence of student learning are being collected for our self-study for reaccreditation by the Higher Learning Commission of the North Central Association in 2012. Two important steps must be performed. One is at the department level and the other involves individual faculty.

Departments

Develop a Departmental Plan to Evaluate Student Attainment of the PULs

During the 2009 fall semester, each department must develop a ~~sampling~~ plan specifying when at least one section of **each course will record levels of students' learning** on those PULs given **major** or **moderate emphasis** (that is, scored as 2 or 3 in the course matrix) in that course. Please develop a plan to ensure that over the next nine semesters the evidence of student learning described below will be collected and recorded in every course for which your department is responsible. ~~Each of the six PULs should be assessed in at least one course each semester.~~ Initiating the data collection process in classes with smaller enrollments may be helpful. You know best how to structure a ~~sampling~~ plan that distributes all the courses you will teach over the 9 semesters (including spring, summer, and fall) beginning spring 2010 and ending fall 2012. (A new three-year cycle will begin in spring 2012.) Ideally, ~~E~~each of the ~~six~~ PULs ~~should~~will be assessed in one or more of your department's courses ~~at least one course~~ each semester.

By October 30, 2009, please send to Trudy Banta (tbanta@iupui.edu) **a new version of the matrix** in the first attachment that contains **just the courses offered by your department** and the PULs they cover. Then list the courses in which levels of student learning will be recorded (see instructions below) in each semester: spring 2010, summer 2010, fall 2010, spring 2011, etc. through fall 2012.

Individual Faculty

Record a Level of PUL Attainment for Each Student in Your Course
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> 3 (VE) = Very Effective
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In assigning the rating to each student for each PUL, use evidence from a single assignment or from multiple sources over the entire course (test items, oral presentations, individual and group projects) that were designed to give students opportunities to practice and make progress in learning the particular PUL emphasized. Note that ~~no~~ while student names/ID ~~or~~ numbers ~~are needed~~will be used to simplify your work in recording their levels of learning, this identifying information will be removed at the time the data are tabulated and analyzed. Student identities will not be included in our analysis since this is a process designed to look not at individual students or classes, but at department, school, and institutional effectiveness.

~~For~~ As an example of the rating process, in the hypothetical course Advanced Avionics and Flight (402), five students were enrolled in the Summer 1 session of 2010. Previously, PULs 1B and 3 had been identified by the instructor as the two emphasized most. Although Student 1 could explain the theoretical principles relating to aerodynamics and could apply his knowledge to new problems (PUL 3), he consistently made errors in using the formulas and scored poorly on an examination containing mathematical computations (PUL 1B). Therefore the faculty member rated this student's levels of PUL attainment as 0 and 3, respectively:

Student	PUL 1B: Quantitative ~~Reasoning~~Skills	PUL 3: Integration and Application of Knowledge~~Critical Thinking~~
1	**0**	**3**
2	1	2
3	1	3
4	2	1
5	2	3

UITS personnel are developing a means to record these ratings directly in Oncourse and OneStart. Additional information will be sent to you in October when this capability becomes available. ~~For now, please send these student data to Trudy Banta (tbanta@iupui.edu). This~~ Ratings should be recorded and submitted~~completed~~ within a week of posting final grades for the term. The evidence of learning that you collect will be combined by staff in Information Management and Institutional Research (IMIR) so that we can report average ratings of levels (0-3) of learning for departments, schools, and the campus. At the department level, the ratings for each PUL can be studied to see where students need more practice.

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~~Optional – Minute Paper for Students~~**OPTIONAL – MINUTE PAPER FOR STUDENTS**

For your own personal use, if you would like to ask your students how they experienced the PULs in your course, please find questions for students in the second attached document. In developing the questionnaire for your course, **use only the 4 questions** designed for the **one or two PULs that you emphasized**. This is called a minute paper because after you have explained your purpose for asking the questions, students should be able to answer the 4-8 questions in just a minute or so of class time. Student responses may give you some insight and feedback that you can use in considering your approaches to teaching and obtaining evidence of student learning the next time you teach the course.

Thank you so much for your work in ensuring student learning!

Attachments: Course X PUL Matrix for Department
               PUL questions

From: Banta, Trudy W.
Sent: Tuesday, July 28, 2009 8:32 AM
To: Baker, Sarah S; Banta, Trudy W.; Black, Karen E; Evenbeck, Scott E; Fisher,
Mary L.; Hansen, Michele J; Jackson, Richard D.; Kahn, Susan; Kubitschek,
Missy D.; Marrs, Kathleen A; Porter, Rebecca E; Queener, Sherry F; Ritchie,
Ingrid M.; Smith, Joshua S.; Tarr, Terri A.; Varma-Nelson, Pratibha
Subject: New and Improved Instructions!
Attachments: 7-28-09 Ensuring Student Learning of the PULs.docx

　　　　Many thanks to all of you for your good suggestions during our 2012 meeting last
week. Attached please find a new version incorporating track changes that reflect your valuable
comments.

　　　　I have heard from UITS that the student ratings can be submitted via Oncourse and OneStart,
beginning in mid- to late October—good news! :) Note also that I have reflected your suggestion that
the plans for evaluating student levels of learning in departmental course offerings be sent to me by
October 30. Of course that is an arbitrary date and open to your suggestion.

　　　　Please let me know what you think!

Trudy W. Banta
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