# **Program Review and Assessment Committee**

February 11, 2010 1:30-3:00 p.m. UL 1126

#### ~ Minutes ~

- Members Present: R. Aaron, W. Agbor-Baiyee, K. Alfrey, P. Altenburger, S. Baker, T. Banta, D. Bell, K. Black, C. Borgmann, J. DeFazio, B. Gushrowski, M. Hansen, K. Hart, T. Faiola for B. Hayes, K. Hoffmann-Longtin, L. Killian, V. Majewski, H. Mzumara, J. Paine, G. Pike, I. Ritchie, K. Shea, J. Singh, R. Stocker, M. Urtel, R. Vertner, K. Wendeln, K. Wills
- 2. **Approval of January Minutes**: unanimously approved.
- 3. **PRAC-Grant Report Update:** Assessing One Core Course in Informatics: Establishing Competencies and Outcomes for Human-Computer Interaction Anthony Faiola The purpose of this PRAC-Grant-funded study was to clarify the degree to which the learning outcomes of the introductory course to the Human-Computer Interaction program (I541, also known as HCI 1) align with three existing learning measures: Core Knowledge, as defined by ACM-SIGCHI, an HCI professional society; Academic Competency, as defined by the IUPUI PULs; and Professional Best Practices, as defined by a Design Enterprise Model (DEM) developed by A. Faiola (see "The Design Enterprise: Rethinking the HCI Education Paradigm", Design Issues Summer 2007, Vol. 23, No. 3, pp. 30-45).
  - In a sub-study, three HCI faculty members assessed the degree to which HCI 1 meets the standards of learning defined by ACM-SIGCHI and by the PULs. Scores on a 4-point Likert scale suggested a positive correlation between HCI 1 learning outcomes and SIGCHI core knowledge, and a slightly less positive outcome between HCI 1 and the PULs. However, because HCI 1 is not an undergraduate course, PULs are not expected to be strongly emphasized; even a weak positive outcome is seen as a positive result.
  - In a second sub-study, learning proficiency in four knowledge domains defined by the Design Enterprise Model was compared between a control group (25 students who had not yet entered or had just begun HCI 1) and an experimental group (25 students who had just finished HCI 1 and/or had taken other courses in the HCI program). Learning proficiency was significantly increased in the experimental group as

compared to the control group in three out of four defined knowledge domains. The greatest increases were in domains (Design and Human) emphasized by the course but for which most students may have had limited prior exposure; the slightly lower increase in Computing domain proficiency could be explained by the significant computing backgrounds with which many HCI students start the program. The Business domain, emphasized elsewhere in the curriculum but not strongly in HCI 1, showed the lowest (not statistically significant) increase in learning.

• The results of this study validate the DEM as an alternative paradigm for assessing learning outcomes in HCI, and demonstrate that the content and delivery of HCI 1 are effective for enhancing student learning outcomes in knowledge domains fundamental to the discipline.

### 4. **Presentation:** Fall 2009 Student Data Report – Gary Pike

IMIR is working to make institutional data freely and easily available via the web, so that programs have quick, direct access to the data they need without having to set up a meeting with IMIR. G. Pike gave a brief tour of some of the tools and reports already available through the IMIR website (<a href="http://www.imir.iupui.edu">http://www.imir.iupui.edu</a>):

- Via the "Five Year Trend Reports" link under the "Institutional Reports" tab, one can access enrollment data broken down by level, residency, gender, ethnicity, etc. at the campus, school, or department/program level. Clicking on the small Excel icon on any page allows that page's data to be downloaded as an Excel spreadsheet.
- The "IUPUI Information Gateway" link near the top of the IMIR website leads to reports on students, faculty and staff, alumni, etc. Student data includes admissions, enrollment, assessment, and student satisfaction data. Reports labeled "URR" (University Reporting & Research) may be of particular interest to those seeking data on points of comparison between IUPUI and Bloomington.
- Pike encourages interested users to explore the site: "You can't break it, so play with it!" Giving departments and programs the capability to find, work with, and make decisions on their own data frees up Pike's office to help units with big-picture strategic planning.

#### 5. Update: 2012 Committee and PUL assessment

Trudy Banta responded to questions submitted at last month's PRAC meeting by providing an update of the current state of the PUL assessment process.

• The 2012 Committee has provided a skeleton of a PUL assessment process. Now some programs are asking, "Where's the meat?" The existing plan represents more

than a year of discussion, compromise, and revision by the 2012 Committee, and it is clear that for a campus as large and diverse as IUPUI, a one-size-fits-all plan for indepth assessment of all programs is simply not feasible. Rather, the existing plan provides a framework to which individual departments and programs may add their own "meat" to meet their own unique assessment needs.

• The 2012 Committee, then, may have reached limits of its usefulness in developing a campus-level assessment plan. There is no cohesive way to enforce its suggestions at the campus level; thus, deciding what to do with PUL assessment data – and how to improve programs based on that data – will happen at the program/department level

## 6. New Business: Looking Ahead – IUPUI Annual Report

Before the next PRAC meeting, Susan Kahn will send a draft of the 2008-09 campus assessment report. At the next meeting, we will discuss putting together the IUPUI annual report with eye toward how we are improving programs/student learning using assessment data.

7. **Adjournment** at 3:05 pm; minutes respectfully submitted by Karen Alfrey.