Final Written Report Form for Learning Outcomes Assessment Grants 2010
(Submit by Monday, May 30, 2011 to the Director of Assessment)

Instruction: Please type your answers in the respective text areas.

Part A: General Information

Date: May 30, 2011_________________ Project Title: Pharmacy Skills and Patient Counseling

Primary investigator: Patricia Darbishire____________________Email: darbishi@purdue.edu_________

Program and college or unit: PHPR (Pharmacy Practice)

Other directly involved collaborators and their programs and colleges/units:____________________

Part B: Description of the Assessment Project

1) Which learning outcome(s) of your college or unit did this assessment project focus on?

   Learning Outcomes (*linked to Purdue Professional Program Outcome Ability Goals)
   1. Process and dispense new and refilled prescriptions.
   2. Recall, synthesize and apply brand and generic names, common uses, strengths, doses, side effects, and counseling points of commonly used medications.
   3. Demonstrate application of interactive counseling to diverse patient populations.

2) What was the purpose of your assessment project? That is, what did you wish to find out about student learning? As you began, what did you actually expected to find?

   This assessment project was part of the start up of this new course. Prior to implementation of this course, prescription processing, dispensing, and patient counseling were taught to first professional year pharmacy students in a lecture format with application in a simulated laboratory. Students were not provided a consistent opportunity in the curriculum to apply skills learned with actual patients until the third professional year. Even then, no structured assessments tools existed to ensure the individual performance of a student meets course objectives. Course grades were largely determined by the number of prescriptions filled with point deductions for errors committed and written quizzes/exams.

   This new course combines didactic and experiential training. It was piloted and then implemented last year (2010-2011). The purpose of this project was to develop new assessment tools and use the results to evaluate students, enhance the course and disseminate results from the use of assessment tools.

3) What activities comprised this assessment project? That is, what did you do in order to investigate your hypothesis? If you could do it over, what would you change or not do?

   Initial assessment tools were developed for use in the pilot course and reviewed for ease of use and relationship to course objectives by the Purdue Center for Instructional Excellence. Pilot students and TAs were asked to provide feedback on the tools and their utility in the pilot course. Following improvements, the assessment tools were rolled out for use in 2010-2011 in the required course with 160 students. Students rotate through Purdue University Pharmacy "stations" where they are assessed on their pharmacy knowledge and skills with these forms. The forms are electronic and assessment data is entered and captured on spreadsheets by station facilitators and instructors through the use of iPADS.
The first tool, *Prescription Accuracy and Knowledge Assessment Form*, allows pharmacists to verbally assess the students’ medication, prescription, and patient-specific knowledge, in addition to capturing the students’ written/computer generated accuracy when filling the prescription. A second assessment is the *Counseling Assessment Form*, which allows upper level peers (students) to assess the students’ patient counseling skills and student confidence both in real time during each patient encounter, as well as track improvement over the course of the semester.

The third assessment involves videotaping live counseling sessions for student self- and peer-assessment for use in small group discussions.

I do not think I would change anything in the overall process, because we have made multiple changes along the way to get to the finished product.

4) What did you actually find out about student learning? What data support your conclusion?

We determined:

1. Students entered this first year course at varying skill levels. The course assisted in bringing students’ skills to a higher and more level playing field in preparation for their next experiential course in a community-based pharmacy setting.

2. By the end of the course students performed very well in all student objectives for prescription processing, dispensing, and patient counseling.

3. Students felt that the videotaped patient counseling sessions allowed them to improve their sessions with patients.

These conclusions are supported by students’ scores in each area of assessment, in addition to student feedback, and final grades.

5) What next? Based on what you found, what next steps or interventions to improve student learning do you plan to take? When and where do you plan to do this?

This course and the assessment tools have been extremely successful. The biggest focus on the upcoming year will be on the video assessments. The past year the videotaped counseling sessions were only used in recitation due to patient confidentiality issues, but we are working with iTap on the development/enhancement to a new video capturing system that will allow us to electronically post these videotaped sessions for peer and self assessment as student homework assignments and we are developing a method of formal evaluation. I currently have 4 students enrolled in an independent study course whose sole goal is development of this project.

6) Appendix: Please attach publications and presentation abstracts resulting from this work.

Working on a publication now.

I am the sole (or primary) collaborator on this project. My collaborators (if appropriate) and I are available at a mutually acceptable time to present an oral report, with our findings and data, to the University community.

[Signature]

Signature of Investigator