Wright College Academic Department/Program Assessment Project Fall 2016

WHAT?

This project will gather information on student digital literacy in an effort to understand how Wright College (and the Physical Science & Engineering department specifically) addresses General Education SLO #3:

"Demonstrate quantitative and technological literacy, especially computer literacy, for interpreting data, reasoning, and problem-solving."

This project will assess whether and how our classes are addressing this SLO rather than assessing student performance.

WHY?

The Assessment Committee of Wright College is continuing with a multiyear assessment of the college's general education student learning outcomes. The information will be used to benchmark student results for SLO #3 and allow us to develop internal targets for improvements.

HOW?

A subset of questions from the 2014 Community College Survey of Student Engagement (CCSSE) were selected for their applicability to SLO #3. Using questions from the CCSSE allows us to compare our results with those from across the state and Hispanic-serving national cohorts. The 12-question survey created by the Assessment Committee (see attached) is designed to be given to any class in the college, though not every question would be relevant for every class (e.g. questions concerning multiple drafts of papers are not likely relevant for science classes). The survey was placed on-line and URL links to the survey were provided to each department.

WHAT WE FOUND

At the end of the Fall 2016 semester every instructor in the Physical Science & Engineering department was asked to post the survey on the Blackboard site for each of their classes. The results were returned to assessment coordinators at the end of January 2017 (see attached).

In our department, a total of 183 students provided responses to the survey. I estimate that our results have a confidence interval of less than 7% (for a confidence level of 95%). This estimate should not be taken too seriously since our sample is not truly random. It favors classes whose instructors pushed the survey and students who frequented Blackboard. However, the survey responses show that every or nearly every course was covered (including chemistry, physics, astronomy, and physical science).

Key findings:

- A strong majority of the students surveyed responded that they used Blackboard "very often" and that it was "very important" for their science class (questions #9 and #12, 65.7% and 67.2%, respectively). Obviously since the survey was linked from Blackboard, these responses have significant selection bias.
- A small majority responded that they "worked on a paper or a project that required integrating ideas of information from various sources" at least "more than once" (#2, 56.9%). Significantly, 27.9% responded "not at all" to this question. This question likely has broad applicability across nearly every class in every department. For 2014 CCSSE, students across Illinois and from other Hispanic-serving institutions across the nation responded with slightly higher majorities for at least "more than once" (63.3% and 64.4%, respectively). Wright College as a whole responded with 63.7% for at least "more than once". This may be a place for improvement for our department.
- Most responded that they used information they read or heard to perform a new task at least "often" (#4, 78.3%). Only 2.8% responded "never" to this question.

- Most responded that their science class encouraged them to use computers and information technology at least "often" (#5 and #6).
- Most responded that their science class encouraged them to solve problems numerically at least "often" (#7, 69.4%). Note that not all classes in our department emphasize numerical problemsolving (e.g. Astronomy 201 does not even have a math prerequisite).
- A small majority responded that they "used the internet or instant messaging to work on an assignment" at least "often" (#3).

Question #1 asks about the use of multiple drafts in preparing papers, an activity less relevant for science classes. Questions #8, #10, and #11 deal with computer lab use and less about assessing our classes.

