General Education Assessment Summary 2006-07

Prepared by the Office of Institutional Research & Assessment

Several projects to assess student learning outcomes in general education were conducted in 2006-07. By and large, these projects were conceived and carried out by faculty members with courses offered in their Departments or Schools; these faculty members were also members of the Assessment Committee. A summary of these results is below.

By and large, the assessment projects indicated students had some mastery of general education outcomes in various areas, although the structure of the projects makes it difficult to compare student learning across areas. The results of several projects revealed the limitations of faculty members trying to assess student learning outside of their own areas of expertise. The scope of the projects also suggested that more faculty members will need to be involved in the evaluation process to generate meaningful comprehensive results.

Critical Thinking
Rubrics were developed in Summer 2007 to measure students’ abilities to think critically (including the abilities to place issues and/or objects of study in a context, make inferences, and draw conclusions) about the Arts, the Passage of Time, Others’ Perspectives, Technology, Social Environment, and Physical Environment. Two faculty members, one from English and one from Political Science, rated student papers in a 200-level literature course and 400-level political science course. Raters switched papers, so that the English faculty member rated political science papers and vice versa. Assessment findings did not provide meaningful results and the participating raters recommended against future projects in which faculty evaluated work outside of their disciplines.

Mathematics
Significant work has been completed in the assessment of developmental mathematics courses, but only a rubric has been developed to assess student learning outcomes in math courses that fulfill general education requirements:


- A rubric to assess student learning in statistics courses or courses with a quantitative component has been developed; the contents include student abilities in Descriptive Measures of Data, Graphical Measures of Data, Probability/Set Theory, Basic Inference (CI & Hypothesis Tests), and Advanced Inference (Proportions, Two-sample tests, and beyond).
**Personal health & fitness**

566 students were evaluated in PE 144 with a 10-item test and a questionnaire:

- Mean score on test: 56% correct, with a median score of 60% and a standard deviation of 21 percentage points

- Questionnaire results:
  - 76.5% reported doing Moderate Physical Activity; 52.5% reported doing Vigorous Physical Activity

**Scientific inquiry**

A 13-question locally developed multiple choice test was administered to 213 randomly selected students. This test was designed to measure students’ understanding of the scientific method and their ability to assess the validity of evidence/data. Findings indicated:

- Science majors scored higher than non-science majors
- Students who had more general education science courses scored higher on the test

**Foreign language**

Faculty assessed their students based on ACTFL guidelines – in 2006-07 a sample of 298 students taking foreign language classes were rated in oral proficiency by faculty members. Student performance was rated at the following levels:

- 9% approaches standard
- 71% meets standard
- 20% exceed standard

**Verbal communication**

Ten students were evaluated on two speeches delivered at the beginning and the end of one section of COMM 115 Fundamentals of Communication. Both speeches were evaluated on a scale of 1 to 5 on ten learning outcomes identified by the faculty. Major findings included:

- Highest levels of mastery were observed in: Dress and Attire (4.75), Effective Use of Visual Aids (4.66) and the Ability to Inform (4.22)
- Lowest levels of mastery were observed in: Voice Control (3.33) and Ability to Modify a Speech through Audience Feedback (2.62).
- Students improved the most on their ability to modify a speech through audience feedback (+1.42) and their Ability to engage the audience (+1.27)
Writing

Forty-five papers from 100-, 200-, and 300-level courses in English, Sociology, and Honors were collected and rated by two faculty members on a rubric designed to measure thesis development, organization, style & mechanics, and use of personal voice. Results indicate:

- 5 papers (11%) received passing scores from both raters; the overall mean score was 11.2 out of a possible 20 (14 is passing).

- Student competencies were closely grouped in the 2.7-2.9 range on a scale of 1-5; ranked high to low these were:
  - 2.85 Voice
  - 2.82 Organization
  - 2.70 Thesis
  - 2.69 Style

- Papers from upper-level (mean = 13.71) courses were rated higher than those from lower-level courses.

- Papers from Honors courses were not rated markedly higher than papers from other courses.
  - 81.1% reported agreeing or strongly agreeing that they learned skills and strategies to positively modify their lifestyle
  - 71.7% reported agreeing or strongly agreeing that as a result of their knowledge from class on the benefits of physical activity, they do more physical activity
  - 69% reported agreeing or strongly agreeing that their attitude positively changed toward physical activity as a result of the physical activities done during class, as well as when nutritional activities were done during class.