

University of Dayton Executive Summary Library Instruction Assessment First-Year Composition Research Skills

In the 2007-2008 school year, the instruction team at Roesch Library used three separate measures in an effort to gauge how well first-year students in the English Composition program (ENG101, 102, and 114) understood research terms and resources and applied this understanding to locate relevant sources for their research papers. Using the University's Information Literacy Competencies (<http://library.udayton.edu/services/ref/infolit/ilc/index.php>) as the set of outcomes, the team used quizzes, pre- and post-tests, and citation analysis to measure how well students performed.

The assessment efforts for the instruction team remain incomplete, particularly in defining what success would mean for each measure and possibly in using appropriate measures. In Measure 1, the instruction program bases success on numbers developed by the English Department, which maintains its own set of outcomes and measures. However, no other definitions of success are in place for the other two measures. Clearly, it would be beneficial to align the instruction program's outcomes and measures for first-year composition instruction with theirs—or at the very least work to share results with each other. Results have been shared in the past, and it is recommended that this practice continue.

Measure 1: Online tutorial quiz results

The online quizzes test research and citation concepts and are administered only in the Fall to first-year composition students. The standards for this measure's success are taken from the English Department's outcomes & measures, as this tutorial was developed to specifically address the general information literacy competencies, which are expected to be delivered in the first-year composition courses.

Student averages ranged from 95% on Quiz 4 by ENG114 courses to 75.9% on Quiz 3 by students in ENG101. Overall, the combined average for all sections on all four quizzes was 86.61% (8 score averages divided by 8), which meets the English Department measure of 85% or better on the quizzes. This measure is used for the department's General Competencies Outcomes, and more specifically, outcome five: Upon completing their general competencies English course, students will be able to use emerging technologies in completing their research and writing assignments. Students are, however, failing to meet this goal for individual quizzes, namely, Quiz 3. Students in ENG101 are also failing to meet this goal for Quiz 2.

The completion rates for ENG101 have climbed steadily, and rates remained more or less steady in Fall 2007. ENG114 rates slid a bit in Fall 2007, and as noted before, ENG198 sections did not take the library module at all. There will never be 100% completion because course instructors are also registered as students in the WebCT program. In addition to the usual WebCT challenges, the library instruction coordinator took a sudden leave of absence this past Fall, which might also account for some of the decline.

In aggregate, there was a 70.38% (all 8 completion rates divided by 8) completion rate for all of the quizzes. This number falls below the English Department's standard of 100%, as set forth in the department's General Competencies Outcomes, and more specifically, outcome five: Upon completing their general competencies English course, students will be able to use emerging technologies in completing their research and writing assignments.

Tutorial refinements for the summer include rewriting quiz questions, new video installments (due to database changes), and simple cosmetic improvements to the tutorials themselves. The instruction team

will need to decide if the module for the library video tour still merits inclusion, given the physical changes that have happened on the first and second floors of the library. Discussions with the English Department are also needed in the future, particularly if the ENG100 & 200 course changes are approved; there is concern about the viability of the tutorials with the possible restructuring of the composition program.

Measure 2: Pre- and post-tests

The instruction team added another measure of learning for the English Composition courses this year. In particular, this dimension sought to test student learning during the course of the ENG102 library instruction session, which takes place in the winter semester. Until now, no direct assessment of student information literacy skills has been employed for this course or semester. Using student response systems (clickers), this testing would assess how much information had been retained from the previous semester's library tutorial and/or research practice in general.

Because of the pre- and post-tests required additional class time, the clickers were only used in the 75-minute ENG102 classes and only for those classes taught by the full-time instruction librarians. In the end, data for 19 out of 22 sessions was captured; technical glitches lost the other three sessions. Testing began in January and continued through April. The pre- and post-tests yielded as many as 280 results (Question 3 on the pre-test) and as few as 236 (Question 1 on the pre-test).

The pre-test had four questions, which were repeated for the post-test. The questions were not taken directly from the previous semester's tutorial quizzes, but they did reflect the content covered in the tutorial as well as knowledge that could have been acquired during the Fall semester, whether through a library visit for another course or discussion during an ENG101 class. There were three quantitative questions that sought to assess student ability in selecting appropriate information tools (online catalog, databases); locating information sources (articles); and distinguishing between popular and scholarly sources. The fourth question was qualitative in nature, designed to gather information about student confidence about library research.

Students fared most poorly on Question 2, with both the pre-test and post-test, which the team believes is due in part to the question wording. Concerns were also then raised about the wording of the other questions. As a result, the team will be developing new questions or refining the current set; the team is in the early revision stages right now.

The instruction team also had concerns about the assessment method itself, as this approach adds extra time to the instruction session. Some found the pre-test constrictive, while others had a difficult time rounding students up for the post-test. Work remains on resolving the issues surrounding the testing method and technology. In spite of these issues, however, it was agreed that the clickers provided an immediate and easy way to gauge student understanding of research concepts. The clickers will be used in the Fall English Composition courses for some sort of assessment, but until the other issues are resolved, the Fall implementation remains vague.

Measure 3: Citation Analysis

The other two measures primarily test student knowledge of research terms and resources, but given that library research is an applied skill and that these measures assess knowledge of rather than actual practice, a third measure—citation analysis—has been incorporated. To that end, this measure looks at how well the following competencies have been achieved over the course of a semester by analyzing the sources used in works cited lists.

Using the same 5% sample as the English Department uses to assess student work, the instruction team conducted its own citation analysis on student portfolios. The instruction team analyzed 16 papers from ENG114 in the Fall semester and another 53 ENG102 papers from Winter semester. Student portfolios, which contained a semester's worth of assignments, were reviewed, and the last research-based paper

was selected for analysis. In general, the research paper is the last major writing assignment for both ENG102 and ENG114 courses.

In both semesters, students relied mostly on article, book and web sources. Because the ENG102 sample was about three times as large as the ENG114 sample, however, ratio descriptions allow for a more comparative analysis. In the Fall, ENG114 students used more books than articles by a slight ratio (41% books to 38% articles). In the Spring, ENG102 students used a majority of articles (56%) as sources, while book use was significantly less (18%). ENG102 student actually cited more websites than books; ENG114 students, on the other hand, used websites only 14% of the time.

There are several possibilities to account for the discrepancies. This analysis looks primarily at the research papers citations and does not take into account the research assignments, which appear to center around four main themes, as derived from the paper titles: namely, current events, literature-based, themes of literacy, and other. This approach likewise does not include any assignment source requirements; that is, the number and type of sources are not included or correlated to individual sample papers.

This measure is a time-intensive approach that yields the greatest data on how first-year students actually locate sources for their research papers. The current approach looks at the results in aggregate only and does not include any analysis of the type of research paper required. Although citation analysis generates great insight into the sources students are choosing, it may be worthwhile to investigate other approaches because of the project's shortcomings. For example, the English Dept. uses rubrics to evaluate student portfolios; the instruction team might develop a rubric for the citations or this time might be an opportunity to participate in the English Department's evaluation, if only for the research aspect.

The English Department conducts a separate portfolio analysis of student work in the English Composition program; this assessment includes a set of outcomes and measurements, including those related to research skills. It would be beneficial to work more closely with the English Department on these outcomes and measures, perhaps even utilizing the same measures and outcomes for a more unified analysis and discussion.