Report for Program Review and Assessment Committee (PRAC) Grants for IUPUI

Project Director

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Project Title

Writing Assessment in the Age of the Digital Archive

Project Dates

December 21, 2012 – August 31, 2013

Overview of Project

This project was designed to address two "gaps" in understanding of writing assessment.

The first gap in understanding was local. Despite relying heavily on writing for evidence of student learning, the English department at IUPUI lacked a systematic means of assessing this writing across courses. Individual instructors assessed student writing within their classes, but these assessments not normalized across courses. As a result, it was difficult to make detailed analyses of student populations. Put plainly, it was not possible to show that an English major was a better writer when she graduated than when she enrolled. Notably, this lack is mentioned in the 2007 external review of the English department.

The second gap in understanding was global. There is a rich body of scholarship on writing assessment, but there are very few researchers exploring the possibilities of using computer technology to perform long-term studies of student learning. Longitudinal studies of student writing exist but few take on the subject of technology as a means for assessment (see Rogers 2010). Those studies that do connect computer technology and writing assessment tend to gravitate toward automated assessment that tends to flatten nuanced evaluations of learning (see Perelman 2012).

The project, "Writing Assessment in the Age of the Digital Archive" addressed these gaps in understanding by developing a database to store, sort, and analyzing student writing over multiple semesters. The PRAC aided in this project by providing funding for a research assistant to organize data, process files, and offer general technical assistance.

Summary of Project Accomplishments

The project's most significant accomplishment was the creation of a Microsoft Access database used to store, sort, and search student writing. Currently, there are 1,547 pieces of student writing in the database. These documents are searchable by: course number, semester, method of instruction (in-person, online, hybrid), class standing, and five other variables. Using the database, it is possible to "pull" samples of student writing based on these variables for the purposes of assessment. For instance, one might "pull" all of the critical essays written by sophomores for L202: Literary Interpretation in order to study how this population of students is making use of quoted text. This accomplishment was promised in the project proposal.

Another accomplishment of the project was the creation of a more complete picture of the student work occurring in the English department. The project proposal anticipated that student writing would fall into three categories: "critical essays, creative works, and visual projects." The first two document types were found in abundance (721 critical essays, 377 creative works), while the third document type was largely absent (several files contained visual elements, but no documents could be described as wholly "visual"). Surprisingly, there were a large number of documents that asked students to analyze their experience. These reflective essays asked students to approach their experience with the same care with which the approached literary texts (315 reflective essays in total). These data suggest that personal reflection plays a larger role in the work of the department than is suggested in the department's official documents. Such findings are available when using the "distant looking" approaches encouraged by database software.

Data Collection

Work on this project began in 2012 with a small-scale pilot that collected student writing from the eight introductory and capstone classes. Participating students uploaded their writing to the "Assignments" section of Oncourse, and, then, the project manager downloaded these files to his hard drive. Later that year, the scope of the study was widened from the introduction and capstone classes to all English classes. As before, the project manager collected the documents. After receiving a PRAC grant, files were moved from the project manager's hard drive to the School of Liberal Art's secure server. Thanks to the security afforded by this server, the data was far more protected despite being accessible online. On the same server, the project manager worked with Bill Stuckey, a School of Liberal Arts IT specialist, to build the database. This process took several months to complete due to the complexity of the desired search functionality. During this time, the project manager used the PRAC grant to hire Ted Letherer as a research assistant. Letherer was a student in the School of Informatics with experience working with a variety of database software. In consultation with the project director, he designed a file naming syntax and a hierarchy of meta-data "tags" to classify the files. He then set about the time consuming task of processing the files in a way that would be most useful for the database. Once he finished processing the files, he began designing search queries.

It is worth noting that this project was not simply a technical accomplishment. Rather, it was a step toward promoting meaningful assessments of teaching and learning in the English department. During the fall of 2013, the project manager presented regular updates to the English faculty. One of these presentations, it was suggested that the best way to proceed with the assessment project was to survey the faculty about their use of the PULs in their teaching. The project manager prepared an online survey that identified that a solid majority located their work as teachers in the second principle – critical thinking. When pressed, these instructors identified the second outcome – the ability to analyze knowledge – as the most influential to their pedagogies. In 2014, this information will be used to design a sophisticated data pull that will aggregate student papers based on their average use of quoted material. Then, representative samples will be distributed to readers who will examine how effectively the student writer analyzes the quoted material. Currently, the project director is working on assembling interested readers. Reader training will occur in the summer of 2014 with a group reading to follow.

Obstacles and Challenges

The only notable obstacle was the time it took to create the database. Initially, the target date for completing the database was April. The actual completion was in August. To address this obstacle, the project manager asked for and received an extension to the original timeline. While the extra investment of time was frustrating, the resulting database functionality was worth the extra time investment.