

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

Project Director

André Buchenot
Assistant Professor of English
School of Liberal Arts

Contact Information

Cavanaugh Hall, 502L
Phone: 414.736.7795
Fax: 317.278.1287
Buchenot@iupui.edu

Project Title

Writing Assessment in the Age of the Digital Archive

Project Dates

December 21, 2012 - April 1, 2013

Project Checklist

Statement of support
 Simple Budget
 IRB Approval

Abstract

English departments often turn to student writing for evidence of effective teaching and learning. However, departments rarely have a systematic method of collecting and organizing student writing. This project creates such a method by adapting the ePortfolio functionality of IUPUI's Oncourse software to create a sustained digital archive of student writing. In spring 2012, this method was piloted with a small number of English courses. In fall 2012, this method will collect data from several more courses. In spring of 2013, the collected data will be organized into a digital archive designed to aid in program and department assessment.

Purpose of Project

In the vast majority of English courses, students learning is assessed not through cumulative exams but through the evaluation student writing. Unlike exams which offer clear data about what students *know* about the material they have learned over the course of a semester, student writing offers a subjective representation of what students are able to *do* with this material. As a result, effectively assessing learning in English courses requires more than just a review of grades and test scores; it requires a deliberate, time-consuming analysis of student writing. At the program and department level, assessment is further complicated by the challenges of storing, organizing, and indexing student writing. Instructors collect hundreds of pages of student writing at the end of every semester and store them according to their own filing systems. Gathering a representative sample of student writing from a given semester or year means collecting and organizing reams of paper. This prohibitively difficult process has resulted in fairly superficial reviews of student writing during period of program assessment.

The purpose of this project is to address these difficulties by developing a digital tool for collecting, storing, and analyzing student writing over multiple semesters. This digital tool uses the ePortfolio functionality of Oncourse to collect digital copies of student writing from courses whose instructors have agreed to participate in the project. The ePortfolio simply stores documents indefinitely; this project seeks to create a separate database to facilitate more flexibility in gathering, indexing, and searching documents. The database will allow researchers to aggregate and study student writing in targeted ways. For instance, a researcher might:

- Create a random sample of student writing produced in multiple sections of a single course;
- Collect student writing from "gateway" and "capstone" to investigate differences in writing from students entering and exiting the major;
- Gather student writing from the two-course, first-year writing sequence to investigate student growth;

- Track the writing of students across their academic careers (student identities will be obscured)

This is a partial list and represents only the most basic expected functions of the database. The PRAC grant will allow the project director to hire a research assistant who can enter the digitized student writing into the database and begin exploring further possibilities for this versatile digital tool.

Intended Outcomes of the Project

The immediate outcome of this project will be the creation of a powerful database of student writing that allows for targeted assessment of student writing. This database will be used in the English department's 2014 self-assessment as a means to assess the department's efficacy as an educational body. As mentioned, student writing offers valuable evidence about the effectiveness of teaching and learning. Examining a large body of student writing allows for a nuanced understanding of teaching and learning. Over the course of several semesters and years, the database will grow and create possibilities for longitudinal studies of student writing, an area of much needed research.

In addition to providing evidence of teaching and learning, the database will help to create a more complete picture of the variety of student work occurring in the English department. In the pilot study of this project (IRB #1203008217), the project manager collected a range of student texts including critical essays, creative works, and visual projects. When the scope of the data collection expands from five courses to well over thirty, the range of text types will more than likely increase as well. These data will help members of the department to better understand the teaching work in which their colleagues are engaging. Further, it will help the department administrators present a more sophisticated representation of what it means to study English in the age of digital textuality, "fast capitalism," and shifting linguistic values.

As of this writing, members of the English department and the first-year writing program have expressed interest in sharing the student writing produced in their courses. Initial technical setup is currently underway. Data collection will begin in earnest after the end of the fall semester 2012. Construction of the database will begin at the start of spring semester 2013

Assessment Methods that will be Used in the Project

The project will employ a number of quantitative and qualitative methods. Because the student writing will be stored digitally, it is possible to run a series of automated processes to discover broad patterns. For instance, programs like Word Counter are able to calculate word, character, and syllable counts as well as readability tests (Coleman index, Flesch Reading Ease, Lexical Density, etc), word frequencies, and sentence complexity. These quantitative analyses are broad, but they allow researchers to look for patterns across large amounts of student text. For example, an increase in the use of passive sentence construction may not be an irrefutable indicator of student progress, but it is a notable indicator of potential trends.

Picking up where quantitative research method leave off, a range of qualitative methods will be used to find evidence of effective teaching and learning. IUPUI's Principles of Undergraduate Learning (PULs) offer a generative starting point for qualitative research. Readers might be trained to search for certain features in a representative sample of student writing. Rather than simply asserting that students are meeting the demands of particular PULs, this method would allow researchers to point to specific examples of student writing that meets these demands. For example, the PUL document stresses the importance of "core communication skills" which might be seen in a student's "ability to... comprehend, interpret, and analyze ideas and facts." Using the database, researchers can collect a representative sample of student writing and read for instances of interpretation and analysis. Informed by this study of student writing, it is possible to assess learning subtle, complex ways. Additional assessments will be used as the

database grows in size and more longitudinal studies become possible.

Data Analysis Approach to be Used

As mentioned above, data will be initially analyzed using automated programs in order to identify patterns. These patterns will be turned into a series of data visualizations that will enable an analysis that illuminates trends. These visualizations will be shared with participating instructors and the department chair. Quantitative analysis will be supplemented by a qualitative analysis accomplished by faculty readers and centered on the PULs.

Evaluation and Dissemination of the Results

Initial results will be shared with the department chair to assist in the upcoming English department self-assessment. Further results will be published by the project manager in a variety of sources. A paper on the commodification of student writing in assessment has already been accepted at the 2012 Thomas R. Watson Conference on Rhetoric and Composition. After implementing feedback from this conference, this paper will be revised into a scholarly article for publication in a composition focused journal, most like the journal of the Writing Program Administration Association, *WPA*. Once the database is functional, the project manager plans to write about developing this innovative system for publication in *Computers and Composition*, a scholarly journal exploring the intersection of digital technologies and writing studies. As student writing accumulates, other publication possibilities will be explored.

Details on Intended Use of Findings for Program Improvement

In addition to aiding in the English department self-assessment, data from this project will be valuable for evaluating program development. By studying student writing produced for a single course (English W131, for instance), it is possible to identify areas of strength and weakness that

might be addressed at the writing program level.

Budget

Funds from this grant will be used to hire a graduate (or undergraduate) student hourly to perform data entry and analysis. The student will receive \$12 per hour for an estimated 125 hours.

Item:	Personnel (Research Assistant)
Costs:	125 hours ar \$12/hour = \$1,500.00
Total:	\$1,500.00