2010

CSU Mini Grant [awarded by California State University]

Shannon M. Staley, San Jose State University

Available at: https://works.bepress.com/shannon_staley/13/
CSU RESEARCH FUNDS 2009-2010
PROPOSAL COVER PAGE

CSU AWARDS FOR RESEARCH, SCHOLARSHIP, OR CREATIVE ACTIVITY

PLEASE COMPLETE THIS FORM AND ATTACH IT TO YOUR PROPOSAL. It is a cover page and not considered part of the three-page maximum length allowed for the proposal.

Name of Applicant: Shannon Staley  Emp ID#: 000008503

Department: SJSU Library  Phone: 808-2349  Email: Shannon.Staley@sjsu.edu

PROJECT TITLE: Standardized Library Instruction Assessment: An Institution-Specific Approach

FUNDS REQUESTED (itemized in budget worksheet attached) $4200

50-WORD ABSTRACT (PREPARED BY APPLICANT)

To apply quality research on information literacy, two graduate students will be hired. One will employ appropriate statistical methods for data collection. The other will program these new statistical reporting features into an online assessment tool. This will enhance an understanding of how library instruction impacts SJSU students’ educational experience.

COLLEGE RANK (WHERE 1 = HIGHEST PRIORITY) ________________ *

*To be completed after College review.

COLLEGE EXPLANATION OF RANKING

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APPLICANT INFORMATION

Rank (Circle One)
Lecturer  Instructor  Asst. Prof.  Assoc. Prof.  Professor  Other (specify): Tenure-track Librarian

Appointment Status (Circle One)
Probationary  Tenured  Full-time Temp  Part-time Temp

Previous CSU Research Fund Award(s) and Year(s) of Receipt: NA **

**Faculty who received funds for the 2008-2009 academic year must submit progress reports with their application covering research completed to date (form attached).
CSU Research Fund Mini-grant Proposal

Background

As the Library and Information Science profession has developed a range of core competencies for information literacy based on the Association of College and Research Libraries (ACRL) Information Literacy Competency Standards for Higher Education and the Association of American Colleges and Universities (AACU) Value Rubrics for Information Literacy, the need to assess students' progressive understanding of those competencies has become critical to determining the effectiveness of various library instruction approaches. Currently, there is no standardized or uniform way of assessing student information literacy skills at our library. A review of the literature reveals that many assessment surveys in the field are created without a process of standardization to determine whether respondents interpret questions correctly. Moreover, most that are standardized, such as the Information and Communication Technology Literacy Test (iSkills) and the Standardized Assessment of Information Literacy Skills Test (SAILS), provide large-scale, general measures of student information literacy competence, lacking ties to institution-specific learning outcomes. Consequently, a database application was developed at the SJSU Library that contains expertly-evaluated questions covering various information literacy concepts. The tool enables librarian instructors to create automated pre- and post-test surveys comprised of questions that match the specific learning outcomes of particular courses crossing campus disciplines. Additionally, this application will record data from each library instruction session through the use of simple reporting features showing a comparison of scores before and after a library instruction intervention. This standardized assessment tool was pilot tested in Spring 2009 with PYSC 100W students. It will further be tested in Spring 2010 with students in the Education and Health Professions disciplines to determine its adaptability across subject areas.

Description of Need

As SJSU librarians continue to use the tool and coordinate with colleagues at the SJSU Office of Institutional Research in reviewing multiple-choice test questions for validity, they have learned that a stronger statistical component to the assessment tool would enhance their understanding of significant findings. This is essential in providing an accurate picture of student learning and optimizing the ability to improve instruction.

Lacking local resources and expertise, the applicant proposes to hire two graduate student assistants with specialized skills. One will recommend and implement appropriate methods of statistical analysis for data collection. In particular, this student would provide a means to analyze student background factors and correlate them with pre- and post- test scores. Additionally, this student would develop a scientific basis for librarians to determine the statistical significance of student pre- and post- test scores. This student will further present deliverables to the library faculty and provide a template for referencing statistical findings in future publications. Utilizing database programming skills, the second graduate student assistant will work closely with the first, incorporating identified statistical analysis methods as automated report options in the online assessment tool. This student will also develop enhancements to the assessment tool, including providing additional sorting options of available survey questions and improving the usability of survey creation.

Points of Evaluation

- Potential for advancing research, scholarship, & creative activity
  In building a statistical analysis component into the assessment tool, individual librarians representing different disciplines across campus are provided a means of quality research and publication.
- **Support for faculty in early phases of their professional careers**
  In addition to the applicant, four additional tenure-track library faculty have participated in testing the use of the assessment tool for its overall viability: Rebecca Feind, Valeria Molteni, Crystal Goldman, and Kathryn Blackmer-Reyes. Moreover, the applicant is currently submitting a document for publication based on the Spring 2009 pilot test of the assessment tool with PSYC 100W students. However, the tool not only provides tenure-track library faculty publication opportunities, but the reports generated by the assessment tool can also document instructional efficacy for dossier preparation.

- **Potential for future funding from external sources**
  Making the tool open source to other librarians and educators will generate external interest and increase the possibility for outside funding.

- **Support for work with limited external funding sources**
  Nationwide, the current budget climate has depleted many sources of outside funding. More and more educators are applying for the few available funding opportunities, creating a competitive review process that yields lower success rates for individual applicants. As an example, a recent National Education Association grant solicited 644 proposals.

- **Promotion of educational equity goals of the CSU system**
  Use of the assessment tool will uncover areas for improvement in the library’s information literacy program, which will inform new ways to address students’ diverse range of learning styles.

- **Student participation in the proposed research**
  SJSU Students will be involved in conducting and supporting assessment research. SJSU students will also be participating as subjects of assessment research by volunteering to take pre- and post- surveys during library instruction sessions.

- **Educational impact of the proposed research on students**
  Studies utilizing the assessment tool will yield data that will assist librarians in developing more useful instructional strategies to support SJSU students’ educational needs.

**Timeline**

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>Fall 2008:</td>
<td>Develop online assessment tool</td>
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<tr>
<td>Spring 2009:</td>
<td>Pilot test assessment tool with PSYC 100W students</td>
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<tr>
<td>Spring 2010:</td>
<td>Pilot test the adaptability of assessment tool with courses from different disciplines</td>
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<td>June 2010:</td>
<td>Hire graduate student assistants and coordinate work schedules</td>
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<td>July 2010:</td>
<td>Student statistician will analyze current data collected and recommend different statistical methods to be applied. The student will provide corresponding EXCEL or SPSS templates for importing the data.</td>
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<td></td>
<td>Student programmer will develop enhancements to the online assessment tool: adding sorting options for available survey questions, improving ease of survey creation, and providing a means for tagging questions that have been expertly-reviewed.</td>
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August 2010: Student statistician will work with student programmer to ensure the programming of statistical report options runs smoothly. Changes are made on either end as necessary. Demonstrations of the new features are presented to library faculty for review.

Student statistician will prepare and present to library faculty recommendations for statistical methods of data analysis and a template for documenting findings in publications. Student programmer will incorporate final changes to statistical report options and other enhancements based on library faculty feedback. A final demonstration of the new features will be presented to library faculty.

Budget

<table>
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<tr>
<th>Deliverable</th>
<th>Cost</th>
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<tr>
<td>Student statistician will analyze current data collected and recommend different statistical methods to be applied: 20 hrs @ $20</td>
<td>$400</td>
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<tr>
<td>Student statistician will provide corresponding EXCEL or SPSS templates for importing the data: 40 hrs @ $20</td>
<td>$800</td>
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<tr>
<td>Student programmer will develop enhancements to the online assessment tool: adding sorting options for available survey questions, improving ease of survey creation, and providing a means for tagging questions that have been expertly-reviewed among others: 60 hrs @ $15</td>
<td>$900</td>
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<tr>
<td>Student statistician (40 hrs @ $20) will work with student programmer (40 hrs @ $15) to ensure the programming of statistical report options runs smoothly. Changes are made on either end as necessary. Demonstrations of the new features are presented to library faculty for review.</td>
<td>$1400</td>
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<tr>
<td>Student statistician will prepare and present to library faculty recommendations for statistical methods of data analysis and a template for documenting findings in publications: 15 hrs @ $20</td>
<td>$300</td>
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<td>Student programmer will incorporate final changes to statistical report options and other enhancements based on library faculty feedback: 15 hrs @ $15</td>
<td>$225</td>
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<td>A final demonstration of the new features will be prepared and presented to library faculty. This will involve the student statistician (5 hrs @ $20) and the student programmer (5 hrs @ $15)</td>
<td>$175</td>
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<td><strong>Total:</strong></td>
<td><strong>$4200</strong></td>
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Additional Considerations

In reviewing this proposal, please consider that the monies not only benefit the applicant, but the applicant’s many colleagues, the SJSU students, and the campus departments. To this end, the applicant has the support of the Information Literacy Coordinator, as assessment of library instruction is an area in need of further discovery and development.
1. Personnel
   a. Research Assistants
      ______ number of undergraduate students
      2 ______ number of graduate students
      1 student @ 120 total number of hours, at $15/h $1800
      1 student @ 120 total number of hours, at $20/h $2400
   b. Clerical Assistants
      ______ number of clerical assistants
      ______ total number of hours, at _______/h ______$0

2. Equipment and Supplies
   a. Equipment (itemize, including shipping charges & sales tax)
      _______________________________________________
      _______________________________________________
      _______________________________________________
      _______________________________________________
      ____________________________ $0
   b. Supplies (itemize, including shipping charges & sales tax)
      _______________________________________________
      _______________________________________________
      _______________________________________________
      _______________________________________________
      ____________________________ $0

3. Travel
   a. Transportation (describe trip(s) and itemize estimated costs)
      _______________________________________________
      _______________________________________________
      _______________________________________________
      _______________________________________________
      ____________________________ $0
   b. Food/lodging
      _______________________________________________
      _______________________________________________
      _______________________________________________
      _______________________________________________
      ____________________________ $0

4. Other Expenses
   _______________________________________________
   _______________________________________________
   _______________________________________________
   _______________________________________________
   _______________________________________________

TOTAL FUNDS REQUESTED $4200

* Although awards will not be announced until March 2010, expenditures consistent with the proposal, which were expended from July 2009 through February 2009, will be considered.