Project Year 2015-2016

Project Title

Facilitating Student Training in Research Practicum Courses

Project Team

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Audience

The Department of Sociology's Global Social Change and Development Track (GSCD--double major program in Sociology and International Studies) offers research practicum courses that integrate undergraduate instruction with data-collection on substantive sociological problems. Currently, instructors and students taking these courses use a web-based database utility with an embedded mapping and time-line producing feature (funded by CER 2012). The Technology Fellowship grant will be used to construct a customizable administrative panel that will enable students and instructors to create new training modules and example sets (or change existing ones) without requiring programming skills. Specifically, these modules will be used in 230.325 *Comparative and Historical Research Practicum*, and 230.359 *Research Seminar on Global Social Protest*. These courses are taken primarily by Sociology, International Studies, and Public Health Studies majors.

Pedagogical Challenge

The CER-funded online web-tool (*Generating Online Databases with Maps and Timelines*, 2012) has been used in various GSCD track courses and has proved to be effective in combining undergraduate teaching and research. However, there are some challenges. First, we have found it problematic to use the same website/database to train new students and to carry out the professional-level research project. At the initial stages of training, students are prone to enter erroneously coded articles into the dataset, which then needs to be cleaned before analysis. A second challenge is that the current non-automated training process is time-consuming both for students and instructors. Thirdly, preparation of example training modules or assignments require construction of new databases/websites from the beginning.

Solution

A new administrative panel will make the student training process more dynamic and efficient and solve long-term issues related to security and sustainability of the website. We will establish a customizable administrator panel as part of the website. Through this customizable panel, instructors will be able to create training modules without making any changes to the actual database. Students will code the articles in this training module. Once they are done, both the instructor and the student will be able to check for and correct errors immediately. The customizable character of the panel makes it a long-term solution. Using the panel instructors can easily create a new module in the face of changing needs. Creating this panel will (1) significantly decrease the time devoted to training students for data collection, (2) provide a more dynamic and interactive training tool for the students; (3) enable instructors and students without programming skills to create new training modules. The administrative

panel will be designed so that the data for the training module can be easily uploaded as an Excel or Access file to the website.

Assessment Strategy

The existing website has been used extensively in the 230.325 *Global Social Change Research Practicum Course* offered by the Sociology Department. In the 2015-2015 academic year, the Sociology Department will offer 230.325 in the spring and 230.359 (*Research Seminar on Global Social Protest*) in the fall. The proposed training modules will be used in both courses. At the end of each course, we will conduct a survey asking students questions regarding (1) their perception of the quality of the new training modules and (2) problems they faced while using the modules. Students taking 230.325--who will also be familiar with the old training procedure--will be asked to compare the newly introduced learning modules to the old model in terms of its efficiency and practicality. Graduate students, who took the *Research Practicum Course* or participated in the *Global Social Protest Research Working Group* in previous years will also be asked to provide a qualitative evaluation of the new training model.

Faculty Proposal

I have been teaching various courses that integrate instruction in comparative-historical methods with hands-on data collection and analysis around substantive sociological problems. For the last two years, in various courses, I have been using a website constructed by Sahan Savas Karatasli, with grant funding from the CER. In the courses, we have faced multiple problems outlined above in the Pedagogical Challenge section of this proposal. The current method of correcting student errors as part of the professional-level data-collection process is inefficient for students, instructors, and affects the overall quality of the research project, since the number of errors made in the training period corrupts the quality of the database being created for professional-level research. Finally, there is no opportunity for students to learn from errors made by other students.

Our solution (as outlined in the Solution section above) is to create a customizable administrative panel through which instructors will be able to create training modules for new students without having them make any changes to the actual data set being used for the research project. Creating this administrative panel will be a long-term solution for student training since instructors and advanced students will be able to create new task sets or teaching sets without any significant programming skills.

Sefika Kumral, the Student Fellow, has the necessary substantive and technical skills to construct the customizable administrative panel, as well as the first set of training modules. I expect her to take the lead in both the design of the panel as well as crafting the training modules that will be used in Fall 2015 and Spring 2016. She has been actively involved in training undergraduate students. She co-taught 230.325 with me in Spring 2014 and will be teaching 230.359 in Fall 2015. I will assess the efficiency of the customizable administrative panel and the quality of training modules as outlined in the Assessment section above. Since this training module will substantively improve the usage of the existing website, it will help other faculty members who plan to use a similar web-site structure. I expect the fellow to work 15 hours per week during the academic year and full time during the summer.