

Building a multi-perspective digital library to facilitate teaching computing research  
methods across the curriculum

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The work funded by the SIGCSE grant represents one phase of a multi year project that started with an ITiCSE working group in 2006. The project aimed to create a common ground for the discussion of teaching computing research methods (CRM). In this phase of the project, we planed to construct a sense-making multi-perspective digital library, CRM-MPDL (Computing Research Methods Multi-Perspective Digital Library), on teaching CRM. The initial design for the MPDL was to be completed by an ITiCSE working group in 2007.

We got matching funds from CSUEB. CSUEB's money bought a server on which we planned to house the CRM-MPDL. SIGCSE's money funded a graduate student, Ifiyenwa Okoeye, full time in the lab. In summer and fall of 2007, we worked on the faculty perspectives in the digital resource. Ifiyenwa explored Greenstone as well as getting very involved with the faculty perspectives work.

In parallel, Ifiyenwa being full-time in the lab anchored a growing undergrad research community that jelled around the project. They found the wiki (in specific the twiki platform and the CRM-MPDL content and focus on the wiki) very compelling. In fall, we started a model project of the sort we wanted to see on the server. We were already beginning to question whether moving to a platform such as Greenstone might be premature. For the MPDL we now have student scenarios, we have an MS student in Information Science who is knee-deep in data analysis.

The Mutual Discovery twiki houses course materials in the form of inquiry based labs. Students keep lab journals very similar to any science laboratory course. The Mutual Discovery twiki became a valued teaching and learning tool. The faculty learned about student cognitive processes and the students learned from each other. Ifiyenwa's role in the Mutual Discovery work was not as a technical resource so much as a theory person. There were

a variety of undergrad and beginning MS students involved in the Mutual Discovery work who were funded in other ways who didn't have her by then extensive background - Ifiyenwa started with Hilary as an undergrad. and worked with her for two and a half years.

Mutual Discovery stuff really set the student community on fire. Students commented on each other's labs, realized what they might have missed and became competitive about having the best writeups.

Local industry has also gotten very involved. California Higher Education is in total crisis and cannot afford to support the project, so a local vendor has donated a server, and another vendor has donated hosting to support the project long-term. The local agile community has become interested in the educational model; it's the students who carried the message to them.