UCMerced RESEARCH WEEK

Assessment as Research Symposium
Sharing Practices, Successes, and Lessons

RESEARCH WEEK

Presentations & Posters

by UC Merced faculty, staff, & students

Wednesday March 12, 2014

2:00 to 5:00 pm

Chancellor's Conference Room

(KL 232)

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2:00-2:05 – Opening Remarks with Provost Tom Peterson

2:05-2:20 – *Effect of Feedback in Support of Scientific Writing Skills for Technical Reports*

Leily Kiani and Carrie Menke – Assessment as Pedagogy Certificate Program, Physics

The effect of detailed feedback in student writing was measured by monitoring student habits regarding the review of commentary made on technical reports then drawing a comparison to students' writing improvement over time. The commentary consisted of clarifications for how the grading rubric was used and suggestions of alternative approaches. This included support of skills in writing mechanics, scientific style, clarity and professionalism. Habits were monitored by recording each time a student accessed feedback from their graded reports or requested feedback during class or office hours. Students' writing improvement was calculated using a Single-Student Normalized Gain Function from R.R. Hake (2002). Here an individual students' technical report grade improvement is normalized to their possible improvement from the first of five technical reports. We find that student utilization of feedback showed strong correlation with writing improvement after a threshold of 6 accesses to feedback.

2:20-2:35 – *The Impact of Student Wellness on Academic Success: Results from the Spring 2013 National College Health Assessment*

Kristin Hlubik, Brandon Boggs and Emily Langdon – Student Health Services, Student Affairs

The National College Health Assessment is a nationally recognized research survey that assists campuses in collecting data about student health habits, behaviors and perceptions. The 30 minute survey is completed by over 100,000 participants annually. The instrument has been used at UC Merced three times: fall 2008, spring 2011 and spring 2013. This presentation will discuss results from the spring 2013 data that was collected from 910 students. Stress and lack of sleep continue to be the wellness concerns that have the most significant impact on academic performance; impact on academic performance is defined as (1) receiving a lower grade on an exam, (2) receiving a lower grade in a class, (3) receiving an incomplete or (4) disrupting a thesis. Thirty-eight and 24% of students reported that their academic performance was impacted by stress and sleep, respectively. We will explore student populations that are most impacted by sleep and stress and discuss current programs in place to help prevent this trend from continuing.

2:35-2:50 – *Information Literacy and Collaborative Response: Core 1's 'Disaster Scenario' Assignment*

Tom Hothem – Core 1, Lower Division General Education

This presentation will examine two consecutive years of Core 1 assessment to survey student success in the analysis and presentation of information. As one of the course's two capstone exercises, Quantitative Assignment #2 asks students to develop an emergency vaccination plan in addressing the hypothetical (but not unthinkable) event of pandemic flu striking California. This assignment touches upon all eight course learning outcomes—which are patterned on the Eight Guiding Principles of General Education at UC Merced. But only when we increased attention to the outcome that students collaborate in sharing expertise, making connections, and assembling knowledge did we realize that their information literacy skills might dramatically improve in the process. Building on a suggestion from our 2011 assessment report that students could benefit from collaboratively completing the disaster scenario quantitative assignment (which, to date, they had completed individually), we revised it accordingly. Our 2012 assessment of the same assignment suggests that this revision paid dividends, as students improved considerably on all scales of our grading rubric. We speculate that, by working in teams rather than individually, students become more savvy analysts and presenters of information because teamwork requires them to aggregate and synthesize information that, working in isolation, they might otherwise neglect to scrutinize. Additionally, as an amalgam of perspectives (and "society in miniature"), in collaborating they might better cultivate the audience-savvy response that such a plan demands.

2:50-3:05 – *Using Assessment as a Tool for Program Design*

Nella Van Dyke and Amy Moffat – Sociology

In this presentation, we will provide two examples of how the UC Merced Sociology Program has used assessment as a tool for shaping our undergraduate course content and the program. For our first example, we describe how we utilized a pre-test/post-test survey design to assess students' ability to think critically about the causes and consequences of social inequality in our Introduction to Sociology (Soc 001) class. We found that students did much better on the pre-test questions than we had anticipated. We realized that UC Merced's undergraduates arrive with a greater knowledge of inequality than we anticipated, and as a result, we suggested to course instructors that they revise course content to reflect the more advanced than expected entry knowledge level of our undergraduates. In our second example, we describe an assessment of students' ability to communicate orally about sociological concepts, which we conducted by viewing and scoring student research presentations in our Advanced Sociological Research Methods (Soc 175) course. Students performed very well on this assessment, and confirmed the value of providing opportunities for students to work on their research presentation and public speaking skills. However, the results of the assessment suggested to us that it would be beneficial to both expand access to courses which provide training and opportunities for individual presentations, as well as provide more instruction on oral presentations in our current classes.

3:05-3:20 *Assessing Student Preference for Interactive vs. Video Library Tutorials*

Susan Mikkelsen and Elizabeth McMunn-Tetangco – UC Merced Library

Instruction librarians at UC Merced have used Guide-on-the-Side (GOTS) open source software to create a number of interactive tutorials. These tutorials are used by students as stand-alone learning objects made available through the library website, as well as pre-class learning activities completed prior to in-person library instruction. The literature confirms that interactive tutorials provide a more effective learning experience, however, anecdotal evidence suggests that students prefer, and are heavy consumers of video training modules. In the fall of 2013, a research study was conducted to determine if having first used both types of tutorials, students would subsequently choose an interactive GOTS tutorial or a passive video tutorial to learn a new library skill. Three sections of upper division writing students participated in the study. Data collected through Qualtrics surveys along with an analysis of students' reflective essays showed that study participants were evenly split on tutorial preference, and that an awareness of learning styles played a role in tutorial selection. The results of this study have informed library best practices for tutorial development; library tutorials are now made available in both interactive and video formats.

Break 3:20-3:40 – Posters and Refreshments

Using the Lens of Undergraduate Studies 10 to Understand Learning Challenges and Effective Learning Strategies for First Year Students

James W.G. Barnes and Jennifer Anaya Calvin E. Bright – Success Center

The Calvin E. Bright Success Center administers a First Year Success Course, Undergraduate Studies 10 (USTU-10), taught by faculty and staff from across campus. The course combines applied psychological and philosophical principles to help students identify goals, develop strategies and make choices that align with their academic, personal and professional goals. In this highly interactive course, instructors and peer instructors guide course participants using large group exercises, small group discussions and individual reflection. This poster presentation will feature analysis of course evaluation data, course learning outcomes and self reported perceptions of learning from over 400 first year students in 12 sections of USTU-10. These data illuminate first year student challenges as well as learning strategies and experiences that have positively affected the success of their academic, social and emotional transition to our University. Understanding the challenges of first year students and effective strategies to assist them in learning has broad applications for those who serve, guide or teach this population.

Using Scholarly Sources: Are students as prepared as they think they are?

Sara Davidson Squibb, Elizabeth McMunn-Tetangco, Susan Mikkelsen, Robin Milford – Library

When students reflect on their work, how accurately do they gauge its success? When students express a high level of preparedness does it reflect in the quality of the materials they produce? Chief among our concerns is the origin of the discrepancy between students' self-reported levels of preparedness in locating scholarly sources and the quality of sources reflected in their actual work.We analyzed student reflections, survey results, and annotated bibliog raphies for a small group of ten students in Writing 10. Drawing upon these resources, we compared students' reports of their own preparedness with the work they produced. What we found indicated that though students are frequently able to judge and express the quality of their work, there is also a frequent disconnect between students' stated confidence levels and their abilities. Students' reflections in their cover letters suggested reasons why they did not include scholarly resources. Our poster will explore our findings, refer to the means by which students determine if articles are scholarly, and make recommendations for others conducting this type of research in the future especially those who wish to determine why students do not always meet minimum requirements for the inclusion of scholarly sources.

Involving Undergraduates in Assessment

Adriana Signorini, Eric Chu & Kristen Renberg – SATAL Program

To support and sustain assessment activities, the Students Assessing Teaching and Learning (SATAL) program trains undergraduates in research design, data gathering and effective reporting. SATAL goes beyond assisting faculty and administrators with existing assessment projects by also engaging under graduates in new assessment research they design and conduct. Instrumental in UC Merced's successful 2011 accreditation review, in five years this popular, no-charge service has been used by most academic programs and many administrative units. Undergraduates, graduate students and faculty are encouraged to visit this poster to learn more about the program's support for faculty assessment of curricula, its impact on student learning and on participating SATAL undergraduates. We will also show how faculty can request SATAL services or how undergraduates might work in the program!

What helps learning in this class? Assessing teaching practices in predominantly freshman courses.

Eric Chu & Kristen Renberg –SATAL Program

Class interviews are a quick and easy way of identifying what works and what could use some changes in your classes. With the goal of exploring teaching practices that could positively impact predominantly freshman courses across schools, the Students Assessing Teaching and Learning (SATAL) Program compiled class interview results of 386 students from six entry level courses within the School of Social Sciences, Humanities and Arts (SSHA) and the School of Natural Sciences (SNS). SATAL students organized and aggregated the results from both schools to identify the top three teaching practices that students found most helpful in their entry level courses. The results indicated the top three responses for students in SSHA were "Homework," "Peer Reviews," and "Videos with Interaction," while SNS students found "Homework," "Discussion/Labs," and "Office Hours" most helpful. SATAL students found that these results align with seven principles of good practice in higher education. Undergraduates, graduate students and faculty are encouraged to visit this poster to learn more about students' responses.

Descriptive Prompts for Improved Student Comprehension and Performance in Meeting Program Learning Outcomes

Angela Winek, Michelle Toconis, Cher Finley, Grace Rocha, and Jane Wilson (Merritt Writing Program Assessment Committee)

The UC Merced Merritt Writing Program Assessment Committee is a subcommittee of the MWP Curriculum Committee, which works towards meeting the following outcomes: (1) supporting curriculum development and (2) assisting with development and implementation of Program Learning Outcomes for MWP courses. During the Fall 2013 semester, the MWP assessed the PLO 5 "Craft language that reveals aesthetic awareness." The student capstone portfolio cover letter prompt relating to the PLO "Craft" went through layers of revisions, in order to pilot the revised prompt with WRI 1 and WRI 10 students. Six MWP faculty members piloted the revised cover letter and administered a survey to assess students' perceptions of the prompt. The majority of the students indicated that the prompt made it easier for them to write their cover letters and improved the overall quality. In a direct assessment of 100 student "Craft" cover letters from participation in the pilot project, conducted by five MWP faculty using a shared rubric, 71% of the students "Met the Standard" or "Exceeded the Standard" of performance when composing their cover letters. These results indicate that use of a descriptive prompt leads to improved student comprehension and performance in meeting related MWP PLOs.

3:40-3:55 – *Do You Teach an At-Risk Course? Assessing the Impact of Supplemental Instruction with Linked Writing Courses in the Merritt Writing Program*

Robin Geery Wrona and Anne Zanzucchi – Merritt Writing Program

Rather than focus on at-risk students, what if we considered which courses were at-risk? At-risk courses tend to benefit from supplemental instruction, in that the course content and skills are identified as challenging such that all students would benefit from support. Two and a half years ago, the Merritt Writing Program (MWP) began offering WRI-11, Supplemental Instruction for Writing (SI), a class that provides academic support for students co-enrolled in freshman writing courses. The purpose of the SI course is to have students participate in learning activities related to writing, reading, and affective learning to promote better grade performance and retention in linked writing classes. This presentation will share highlights from a comparative study of grade performance for student enrolled in WRI-11 and co-enrolled in WRI-01 or WRI-10 and students enrolled only in WRI-01 or WRI-10. The findings of the study are positive and reveal that students who completed WRI-11 have a greater chance of passing their linked composition class (WRI-01 or WRI-10) and that many have significantly higher grades than students who did not take WRI-11. The conclusion of our presentation will outline some potential benefits of SI for upper-division writing-intensive courses, particularly those with advanced research outcomes.

3:55-4:10 – *GloCal Classroom Project: Active Learning Strategies to Promote Spanish.*

Mabel Bowser and Marco Valesi – Spanish

The overall goal of this presentation is to provide a description of two active approaches and methods for teaching and promoting Spanish as second or foreign language. Each approach or method has an articulated theoretical orientation and a collection of strategies and learning activities designed to reach the specified goals and achieve the learning outcomes of the teaching and learning processes.In a student centered learning environment, Professors Bowser and Valesi's students, for example, took ownership of their learning process deciding the topic and the text they worked with, helping to create rubrics and guidelines, giving and receiving feedback in work -groups. The GloCal Classroom Project also, hosting different academic and no academic personalities (professors, students, workers…) introduce contents that raise student's awareness of the interaction of language, culture and society and promote bilingualism and multilingualism. This active teaching system allows the creation of a circular system in which students suggestions are basic and the role of the instructor is to guide and support student's ideas collecting data through audios, writing analysis, educational activities, and reflections.

4:10-4:25 – DIY Tools for Grad Program Assessment: An Approach and Some Examples

Rick Dale – Cognitive & Information Sciences (CIS) Graduate Group

I am not an expert in assessment, but a few core conceptions of assessment seem clear to me. First, establishing clear operationalization of assessment goals is needed, so that assessment can be driven by quantification of desired characteristics of a graduate program. Second, assessment can consume massive amounts of admin and faculty time. One strategy for accommodating both of these concerns is to develop DIY tools in-house in order to rapidly extract year-to-year benchmark performance numbers. I outline a few strategies that CIS has taken to do this, including developing its own in-house evaluation form for graduate students. The form allows students to copy and paste their CV updates each year into a web system that stores information in a readily parsed fashion. The result is the ability to run reports in a manner very similar to Digital Measures for faculty, except relatively less annoying than Digital Measures. I'll showcase some results from the past two years of using this system, and discuss ways we plan to improve it.

4:25-4:40 – *Streamlining Program Learning Objective Assessment with Targeted Activities and Descriptive Rubrics*

Carrie Menke – Physics

The undergraduate physics program has five program learning objectives (PLOs): (1) physical principles, (2) mathematical expertise, (3) experimental technique, (4) communication and teamwork, and (5) research proficiency. With one PLO assessed each year, we have just completed our first cycle. Our approach strives to maximize the ease and applicability of our assessment practices while maintaining faculty's flexibility in course design and delivery. Objectives are mapped onto the core curriculum and identified coursework is collected as direct evidence. We have found that descriptive rubrics lend themselves to more efficient assessment, higher inter-rater reliability, and can be applied to course and program-level assessment. The presentation will outline our progress, success with a descriptive presentation rubric, and our on-going work with rubrics applied to more abstract PLOs that utilize students' written work.

4:40-4:55 – *Assessing the Feedback Initiative Impact in Undergraduates Courses. Since student feedback can be a powerful tool, it is worth teaching students how to do it well.*

Michael Pham and Valorie Smart – SATAL Program

The Students Assessing Teaching and Learning (SATAL) Program coordinated the Feedback Initiative (FI) combining evidence from the research in the field of giving and receiving feedback. This initiative provided students with a rubric and strategies needed to develop feedback skills to effectively navigate a variety of learning activities that require the ability to reflect and provide constructive feedback to peers as well as instructors. Five Merritt Writing Program (MWP) instructors offered 12 courses, and 221 students participated in the FI. To assess the FI, the SATAL program collected direct and indirect evidence using a variety of tools. These lines of evidence demonstrated that scaffolding students' comments by providing them a rubric and modeling how to improve their comments on the board were key activities noted by the students and instructors as very helpful. Students' engagement with the FI was very high (89%) and some of the criteria in the rubric were more helpful than others. Attend this presentation to learn useful strategies to help students provide valuable feedback.

4:55 -5:00 – Closing Remarks with Vice Provost/Dean of Undergraduate Education Liz Whitt