

Investigating Student Learning through Faculty Inquiry

By Shelagh Rose

In an effort to assist faculty in their research on student learning, a model called a Faculty Inquiry Group (FIG) was created by the Carnegie Foundation. These professional communities create a space for faculty to articulate the most important outcomes for student learning and to collaborate in an attempt to understand how to help students better achieve them. Faculty involved in a FIG can choose from a range of activities designed to increase understanding of student learning such as collaborating in the design of curriculum, assignments and assessments; using classroom research to increase understanding of the student experience; or sharing classroom experiences with colleagues. Scholarly inquiry into student learning through FIGs also has the potential to assist us greatly in our efforts to define and achieve student learning outcomes.

For several years now, Pasadena City College has been part of this movement of faculty inquiry into student learning. In 2005-2006, Math faculty members Jay Cho and Ann Davis led the first official FIG on our campus as part of the Carnegie-run SPECC (Strengthening Pre-collegiate Education in Community Colleges) project. Ann and Jay, who were teaching a summer bridge Math 402 course for the XL program, followed a research-based approach to improving student learning in their prealgebra course. They started by identifying the problem: very low success rates in the math component of the summer bridge program. They then hypothesized that curricular change, specifically making the math more meaningful to the

students' lives, would result in improved success rates.

At this point, Ann and Jay recruited six colleagues to work on the establishment of learning outcomes for Math 402 and development of effective instructional practices and alternative forms of assessment. The FIG met bimonthly throughout the fall and spring semesters to work on these goals but perhaps more importantly to engage in often difficult discussions about which concepts to cover and how best to teach and assess them. The final step was gathering evidence in the form of pre-and post FIG success and retention rates, both of which improved. Ann recalls one of the most important aspects of this experience was the opportunity "to meet with colleagues who share a passion for your subject and actually dedicate the time to argue, explore and solve problems." Faculty interested in learning about Ann and Jay's math FIG can read about it on the Carnegie site *Windows on Learning* (<http://www.cfkeep.org/html/stitch.php?s=2814408673732&id=94404660812025>).

Since the initial group led by Ann and Jay in 2005-2006, there have been others in a variety of disciplines, including Math and English, which focused on defining outcomes and designing curriculum for existing courses. Inquiry groups can also lead faculty to realize the need for new courses as was the case when the findings of a Natural Science inquiry group resulted in the creation



and curriculum design of a new student support course.

Faculty have also collaborated across divisions in interdisciplinary FIGS to pilot new technology. In Spring 2008, for example, faculty from English, ESL, Math, and Natural Sciences participated in an inquiry group that focused on how to effectively implement the use of Class Response Systems or “clickers” in the classroom. Prior to introducing the clickers to their students, the participants read a series of articles discussing their use in instruction. As they integrated them into their teaching, the faculty met to share ideas such as using clickers to make the class more interactive or to get immediate student feedback on comprehension of concepts. Bryan Wilbur from the Geology department described his participation in the FIG as a “tremendous experience” not only because he was able to “interact with faculty across the campus doing a similar sort of scientific experiment” but also because it was an opportunity “to think a lot more about how I teach.”

The widespread and successful use of Faculty Inquiry Groups at PCC makes us part of a much larger trend in higher education toward faculty inquiry, a movement that was actively promoted by Lee Shulman, president of the Carnegie Foundation for the Advancement of Teaching from 1997-2008. Shulman’s passion during his tenure was the advancement of the field of inquiry now called the Scholarship of Teaching and Learning (SoTL) as he argued that “Viewing teaching as scholarly work is essential. Teachers so often have to carry out their work in isolation from their colleagues. The result is that those who engage in innovative acts of teaching do not have many opportunities to build upon the work of others” (Carnegie). In his efforts to reverse this trend toward isolationism in instruction, Schulman has encouraged faculty to use models such as FIGS “to render teaching public, subject to critical evaluation, and usable by others in the field.”

Building upon Shulman’s work, Randy Bass, assistant provost for Teaching and Learning Initiatives and professor of English at Georgetown University, leads the Visible Knowledge Project, designed to investigate how technology impacts learning in the humanities. In his project, Bass focuses attention on the process of learning and the role of the instructor in supporting and enabling students to think critically about the subject matter. Bass acknowledges the

public cry for accountability in education and contrasts the widespread use of standardized testing in K-12 with the kind of work he and others have been doing in higher education to investigate the learning occurring in their own classrooms and how it relates to instructional practice. He applauds the efforts of faculty across disciplines who “have posed research questions about student learning, gathered evidence from their classrooms, and gone public with their findings in countless conference presentations, course portfolios, and scholarly journals,” for it is these scholarly inquiries into student learning that will save higher education from standard testing.

References

- Bass, Randy. “The Scholarship of Teaching and Learning: What’s the Problem.” *Inventio: Creative Thinking about Teaching and Learning* 1.1 (Feb 1999).
- Shulman, Lee. "The Carnegie Foundation of the Advancement of Teaching Newsroom". The Carnegie Foundation for the Advancement of Teaching. 5 May 2009 <<http://www.elfrank.com/CV/Carnegie%20Foundation%20News%20Room.htm>>.

Interested in Starting a FIG?

The faculty inquiry process has been shown to be an extremely valuable tool in our efforts to close the SLO loop of creating outcomes, gathering and evaluating assessment data, and either dialoguing about practices leading to successful results or taking actions to improve student learning. The SLOARC, therefore, would like to support the efforts of faculty interested in initiating a FIG at either the course or program level. Whether you already have a concept for a FIG and would like assistance in organizing and facilitating it or would like to meet to brainstorm possible areas or inquiry in your field, please contact the SLOARC to discuss your ideas.