Scholarship of Teaching

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For questions regarding the WASC Self Study contact the WASC Coordinating Office

Statement of Questions Addressed

Introduction: Faculty Development in Teaching

The task of the WASC Subcommittee on the Scholarship of Teaching was to evaluate and to assess faculty perceptions of the intellectual environment of Cal Poly as a "center of learning," with specific reference to faculty development. More specifically, we asked these questions:

1. To what extent does the university support faculty development about learning theory, curriculum development, pedagogy, and assessment?

2. What changes with regard to faculty development in this area are most likely to improve and to increase student learning?

To answer our questions, we looked at existing administrative documentation and practices. We also looked at similar questions and answers from other campuses, particularly those generated in the context of the Carnegie Foundation for Teaching's "Scholarship Revisited" projects. Also, we asked each academic department at Cal Poly to engage in collegial discussion about the scholarship of teaching, and report summaries of their discussions. From all these sources we reached a series of conclusions about faculty development and the scholarship of teaching on the Cal Poly campus.

Our conclusions about whether the university supports "faculty development about learning theory, curriculum development, pedagogy, and assessment" are both positive and negative. Most prominent among the positive conclusions is the observation that collectively the Cal Poly faculty is highly committed to excellence in teaching and learning. Also positive is the fact that administrative documentation

and practices strongly support student learning and teaching excellence.

The negative findings of this report reflect a lack of follow-through in support for faculty development by the administration, and the faculty's lack of knowledge of available development opportunities. The discrepancy between the perception by faculty and actual faculty development opportunities suggests a failure to communicate effectively those opportunities. These problems may best be summed up by concerns of faculty over accessibility and time. In particular, faculty need easier access to resources on teaching and learning, and they also need more time to use such resources. Campus commitment to teaching has resulted in the scattered development of a variety of teaching resources that are in large part unknown to most faculty. And faculty workloads (teaching load, administrative load, research expectations, etc.) are so high that, in effect, faculty have very little time or opportunity to seek out and/or to utilize such resources. These findings have resulted in the subcommittee's recommendation that a variety of methods be used to centralize information on teaching and to ease time constraints on faculty.

As a corollary to our investigation, the subcommittee discovered a disturbing undercurrent of distrust among faculty. When departmental discussions took place, faculty distrust of both local and statewide university administration ran so strong that administrative efforts to improve opportunities for faculty development were often seen as exploitative rather than supportive. This is an issue that should be addressed in any attempt to improve teaching and learning at Cal Poly. For example, the campus Faculty Workstation Program, a one-million dollar initiative to place an up-to-date computer on every faculty member's desk, was intended to enhance the effectiveness of instruction by making modern communication and research tools universally available to faculty. Many faculty perceived it in this spirit. But many others perceived it differently: as a means to reduce operational costs and increase faculty production, as an attempt to offload clerical work to faculty, or as a demand that already overburdened faculty learn new ways of communicating and teaching. Because access to training has usually been available only as a work overload, many faculty are not using the new workstations effectively. As a result, for many faculty the net effect was one of working harder just to stay even. While the faculty workstation project has had a positive impact on the personal and professional productivity of many faculty members, then, it is also clear that it alone is insufficient to enable faculty to learn, reflect upon, and master the pedagogical implications of such technology.

Background: The Scholarship of Teaching at Cal Poly

As a primarily undergraduate institution, Cal Poly is dedicated to providing an excellent education to our students. Faculty are highly committed to teaching and understand that it is the primary focus of their work at Cal Poly. As such, both the administration and the faculty have focused attention on improving student learning through enhanced teaching. A series of studies and reports throughout the 1990s have emphasized the teaching nature of Cal Poly and have put forward numerous recommendations for improvement in teaching. Unfortunately, the implementation of

these reports has focused on higher expectations of teachers with very little support envisioned to help faculty meet these new goals with regard to accessibility and time.

Reports and Recommendations

The origins of many efforts to enhance teaching on campus can be found in a variety of documents produced by broad constituent groups within Cal Poly and the CSU. At Cal Poly, both the Visionary Pragmatism and Cal Poly Plan documents were developed out of a consultative process representing numerous campus constituents. The CSU Cornerstones document was developed at the system level, but again contained many campus constituents within the CSU including faculty, students, and administrators. Finally, the Walch Report was developed at Cal Poly by a broadly based faculty group.

The general focus of these reports has been to set forth goals for learning, student progress, and greater productivity at the university. In effect, most presented faculty with new goals and expectations regarding how they should teach. With the exception of the Walch Report, there was little consideration of how faculty should prepare themselves to do so. While faculty development in teaching and scholarship is an obvious component of improved student learning, it was not presented as a necessarily high priority in these reports.

Visionary Pragmatism

Cal Poly's Commitment to Visionary Pragmatism document, dated September 29th, 1995 set out many goals for improving teaching and learning on campus.

The Teaching Strategies and Review section, 4.7 through 4.10, includes comments on active learning methods, employing a variety of teaching strategies to meet different learning styles, utilizing teaching portfolios within the RTP process and merit salary deliberation, and measuring teaching effectiveness.

The GE&B section encourages faculty to innovate, to improve, and to respond to new requirements for general education.

The course design section on the evolution to four unit classes contains 6:12 which maintains, "the reduced number of classes taught during each term and each year by each faculty member encourages greater focus of time and energy."

Many of the recommendations in Visionary Pragmatism regarding curriculum, teaching methods and evaluation procedures have been adopted at Cal Poly.

CSU Cornerstones

The Cornerstones document was developed in 1997-98 as an overall strategic plan for the entire CSU. Following consultation with faculty, students, and administrators from all CSU campuses, the final text recognized the significance of faculty development within the University.

The introductory preface states, "We must continue to provide educational excellence in a teaching-centered collegiate institution" involving both the teaching faculty and the students. *Cornerstones* addresses both groups throughout the document.

Principle 4 of *Cornerstones* declares, "the California State University will reinvest in its faculty to maintain its primary mission as a teaching-centered comprehensive university. Faculty scholarship, research and creative activity are essential components of that mission." Other sections within principle 4 elaborate on this theme, but the basic principle is the primary point of interest to our committee.

Cal Poly Plan

The Cal Poly Plan was devised subsequent to the completion of the Visionary Pragmatism report and has been implemented over the past three years. The Plan focuses on student needs and learning and sets a clear direction for the university. The preamble states:

"Through the Plan, Cal Poly will seek ways to decrease student time to degree, increase student learning, enhance institutional productivity and productivity in teaching and learning, promote the more effective use of fixed resources, and implement comprehensive assessment and accountability procedures."

In the Student Learning and Progress section the Cal Poly Plan clearly sets forth a direction that affects faculty growth and development. The plan calls for making student learning less dependent on "seat time" in a classroom, utilizing electronic interaction among students and between students and faculty, and assuring quality and currency by developing learning out-comes. This section also calls for improved teaching effectiveness and the use of technology within a mediated instructional environment.

Many of the basic elements of the Cal Poly plan imply an obvious need for faculty development. Indeed, there have been several Cal Poly Plan proposals funded that did just that for specific colleges. Our committee, however, sees a need for the development of faculty to be a campus-wide initiative.

The Walch Study

In July, 1998, a specially appointed "Instructional Development Study Group," chaired by Vice President Emeritus David Walch, presented a report to the Provost describing the results of its study. The report detailed strengths and weaknesses in faculty development practices at Cal Poly, and made some pointed recommendations. The report called for establishment of a "Culture of Innovation" at Cal Poly and argued that the current campus culture systematically (though unintentionally) inhibits innovation in teaching.

In particular, the Walch report called for construction of a mechanism, which would provide time for faculty development, reward achievements in curriculum and pedagogical innovation, and enable team teaching and interdisciplinary studies. The

mechanism the report described was a Center for Learning and Teaching, staffed by faculty "fellows" on a rotating basis.

The recommendations in the report have not been implemented. As Dr. Walch wrote recently, "As I reflect on the report I believe the budget projections led to some of its undoing and reluctance to accept some of its recommendations."

Although some of the recommendations of the Walch report might need substantial funding, other parts might be put into effect through existing mechanisms, or merely through good will. As the only Cal Poly or CSU report to address faculty needs directly, the Walch report's recommendations should be taken as a starting point for further consideration of these issues. The Provost and administrators in Information Technology Services (ITS) assert that the Walch is of great value to them as they develop and implement initiatives and projects, even though they cannot implement the complete suite of recommendations due to budgetary constraints.

Implementation of the Reports

Many of the recommendations made in the above-listed reports have been put into operation at Cal Poly. Most notably, the switch to 4 unit classes, revision of GEB, required "student learning outcomes" for each course, and the encouragement of active learning and electronic interaction. Three individual campus organizations, ITS, Faculty Instructional Development Opportunities (FIDO), and the library are responsible for most of the scholarship of teaching and learning implementation on campus. Individual colleges provide additional opportunities for faculty development which is discussed later.

Nevertheless, support to facilitate faculty adherence to new campus teaching goals is perceived as uneven and incomplete. Cal Poly Plan resources have made possible faculty workshops on educational technology (ITS) and the use of the Internet through FIDO, the library, and various colleges. Resources have also been dedicated to increased committee work on General Education and Breadth (GEB) revision and the evaluation of course proposals vis-à-vis learning outcomes.

The subcommittee tried to determine faculty perceptions and reaction to campus efforts to support faculty development. As part of the "Campus Conversation", faculty were asked "How does the university support the Scholarship of Teaching through faculty development in the areas of learning theory, curriculum development, pedagogy, and assessment?" Response to this question was minimal with most faculty either unimpressed, unaware, or suspicious. While they approved of those programs with the most open-ended goals - including grants and awards for individual faculty development in teaching or discussion-format workshops and seminars – they were less enthusiastic about more structured programs.

Information Technology Services: ITS is a responsive and outcomes oriented division of the university that supports faculty, staff and students in their use of information technologies. It provides services that include:

1. User Support: the faculty workstation program, computing lab operations, ITS labs, help desk, etc.;

2. Integrated Media Services: media applications design and development support, media distribution and web services support;

3. Computing and Communication: central systems application management, networks administration, technical services, and telephone administration.

ITS offers a variety of workshops each quarter, including such topics as Using PowerPoint for Classroom Presentations, Using the CourseInfo and other systems directly related to faculty instructional efforts. Integrated Media Services (IMS) offers orientation sessions for faculty to develop skills and comfort in using the Multimedia Presentation Rooms, in designing and developing course modules. On an RFP basis, IMS also supports redesigning complete courses to assist faculty and instructional programs in using information technologies to achieve student learning outcomes and course goals.

Faculty Instructional Development Opportunities: FIDO was created to assist members of the faculty with their scholarship of teaching. Its principal programs include:

1. Maintaining Instructor Effectiveness, a course for faculty members offered twice a year,

2. FIDO Noon presentations, the brown bag lunch program where faculty share their teaching experiences, offered approximately eight times per year,

3. Teaching Excellence and Mentoring (TEAM), a program for peer mentoring among faculty across different departments (i.e., voluntary and separate from the RPT process);

4. Limited support for the CSU Summer Teacher-Scholar Conference, and conference oriented toward teaching issues, and

5. Basic orientation and support for new faculty.

Library: Instruction and training provided by the Robert E. Kennedy Library can be found in Services for Faculty. The Library Staff is available to assist faculty and student learning. Services include office calls, program development, instruction collaboration, multimedia authoring and trouble shooting, and summer workshops. Noteworthy is:

1. Office Calls: visit faculty members offices to collaborate on assignments to build research skill and information competency,

2. Program Development: work with faculty to expand and enhance their skill in database searching, online services, and computer applications,

3. Instructional Collaboration: assist in creating and designing effective library

assignments, identify relevant sources and strategies, and adapt existing "walking tour" to suite student/faculty needs,

4. Multimedia Authoring and Trouble-Shooting: assist faculty with Web pages, PowerPoint presentations and trouble shooting problems encountered within a completed project, and

5. Summer Workshops: provide faculty with the skill to integrate Information Competence within their coursework.

As identified, the administration offers a multitude of scholarship of teaching "opportunities," through ITS, FIDO, LIBRARY, and through an assortment of college-based programs. Though some colleagues are able to take advantage of the "opportunities" by working an overload, many do not have that choice. Without time released from our twelve-unit teaching load or a definition of RPT requirements that rewards Scholarship of Teaching, the "opportunities" are not real. As one junior professor said, "If I had the choice of learning to use the World Wide Web to teach or writing another article, I'd learn the Web. But I don't have that choice. Only the article counts for retention."

Conclusions – Cal Poly Background

The subcommittee reached the following conclusions concerning existing programs for faculty development at Cal Poly:

1. Faculty need better information on what is available. Many faculty appear unaware of most teaching resources on campus. Programs are scattered at every level, from the department level on up and it is difficult for faculty to find help or information that may be available to them.

2. Faculty development programs need to be designed by faculty. They are drawn to open-ended programs because they can tailor their learning to their own needs. More input from faculty should be encouraged during the formulation of these programs to insure that a faculty need is being addressed.

It should be noted that during the "campus conversation" year, the environment at Cal Poly was less than ideal. Faculty were working without a contract; negotiations broke off, fact finding occurred and working conditions were later imposed. In addition, the chancellor of the CSU system visited campus and made some inflammatory remarks about faculty to a group of business leaders. These remarks received considerable press and attention not only at Cal Poly, but across the system. While faculty continued to do their job, during this period morale reached a low point. Therefore, reading of this section and the next on the campus conversation should occur in the context of the situation at the time. (It should be noted that Cal Poly President Warren Baker later became actively involved in restarting negotiations and played a significant role in reaching a new system-wide faculty contract agreement. He received a commendation from the Academic Senate

for his leadership.)

See Appendix B for a list of current programs addressing improved teaching and learning at Cal Poly.

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Methodology

Cal Poly Campus Conversation

Administration interest in participating in the Carnegie project on teaching and learning led the subcommittee to combine our examination of practices at Cal Poly with a broader discussion of the "Scholarship of Teaching" as defined by the Carnegie project. To this end, the subcommittee initiated campus discussion of both issues – Scholarship of Teaching and Current Practices – through direct solicitation of faculty opinions. The subcommittee initiated this inquiry through a campus-wide discussion, or "conversation," by posing two questions:

How do faculty define the "Scholarship of Teaching?" (Three examples including the Carnegie definition were provided for discussion purposes – see Appendix A, "Statements regarding the Scholarship of Teaching.")

How does the university support the Scholarship of Teaching through faculty development in the areas of learning theory, curriculum development, pedagogy, and assessment?

While the discussion of the "Scholarship of Teaching" was more abstract than the discussion of "practices," it nevertheless focused on Cal Poly's philosophical approach to support for teaching and revealed a deep commitment to teaching as well as serious faculty resentment toward current policies.

Discussion of these two questions was initiated at the college level with the support of the deans and then departments were asked to devote one meeting to a full discussion of these issues. Individual department responses were posted on a university web site to encourage cross-departmental and cross-college discussion. While not all departments participated actively in the conversation, notably departments in the College of Science and Math, significant discussion took place in most colleges. Full responses from each participating department are available at WASC Website.

Discussion of the Scholarship of Teaching

With few exceptions, the discussion surrounding the definition of "Scholarship of Teaching" was strongly negative. While all departments on campus are deeply and demonstrably committed to teaching, there was confusion over the meaning of "scholarship" in this context, suspicion over its use in the RPT process, and outright

offense taken to the subcommittee statement that "the shared awareness of the faculty regarding what we consider good teaching" needed to be "raised."

Despite objections to the use of the term "scholarship of teaching," faculty nevertheless warmed to discussions of what constituted good teaching. It was clear that a great majority of faculty are committed to teaching and that, while they recognize the value of traditional scholarship, they understand that Cal Poly is first and foremost an institution dedicated to undergraduate education. They are interested in sharing their ideas and teaching experiences and in participating in workshops or discussion groups concerning teaching. They resent, however, an implication that the "public" sharing of teaching knowledge is required to prove that "good teaching" is taking place.

Responses to the definitions of "Scholarship of Teaching" revolved around the three following points:

1. Purpose of Teaching at Cal Poly. Faculty raised the important point that students were not mentioned in any of the definitions put forward by the subcommittee. Rather, the sole focus was put on "teaching," and faculty responsibility for teaching rather than for enabling/facilitating/helping students to learn. Rather than being "learning-centered," the definitions were perceived as being "teaching-centered." This point was made most explicitly by the College of Agriculture, although it was echoed in concerns raised elsewhere (College of Liberal Arts) that the undergraduate emphasis at Cal Poly assured a focus on teaching that might be lacking at research institutions. Several departments mentioned that the entire "scholarship of teaching" exercise was less appropriate to Cal Poly than to the research institutions due to our clear mission in undergraduate education.

2. What is Good Teaching? Many departments went into great detail in explaining how they teach and what they look for in a good teacher. Most attributes were somewhat indefinable including enthusiasm, passion, connection with students, openness, "uniqueness," while other attributes were more concrete including depth of knowledge, high standards, clear presentations, etc.

3. There was considerable resentment at the implication that "innovation" was a necessary requirement for good teaching. The most explicit objections were made by the Colleges of Architecture, Engineering, and Liberal Arts. In particular, faculty were skeptical that innovation alone would produce "good teaching." Implicit in the comments was offense at the suggestion that current teaching needed to be changed in order to become "good." Architecture and Liberal Arts also questioned the use of computer technology. Architecture in particular complained that there was too great an emphasis on technological innovation as a means to improve teaching. Liberal Arts likewise challenged the assumption that technological innovation automatically produced better teaching.

4. Meaning and Use of "Scholarship." Taking the traditional definition of scholarship, faculty interpreted this term to mean focused research and publication of information about teaching. A perception among some faculty favors "scholarship of discovery" over "scholarship of teaching," for peer evaluation purposes. Many departments believed that such activity was properly within the purview of the Education department, although UCTE viewed the scholarship of teaching as "an increased load on top of scholarship in general and the heavy teaching requirements at Cal Poly." Taking the study of pedagogy seriously, most faculty felt a scholarship of teaching was not only outside their own expertise but that pursuing such study seriously would preclude them from engaging in scholarship within their own disciplines.

5. In addition to questioning the entire concept of a "scholarship of teaching," faculty also raised serious concerns about its implementation and assessment. In addition to UCTE, Agriculture, Business, Engineering, and Liberal Arts all questioned how this would be incorporated into the already heavy workload of faculty. How would such activity be judged, assessed, and rewarded? What was meant by the terms "public" and "observable," used by the subcommittee, as well as the proposition that faculty "share learning with peers"?

6. Confusion over the meaning of "scholarship" in connection with teaching, and the inference of assessment implicit in terms such as "public, observable" etc., combined to alarm faculty and to create a highly polarized discussion. Some faculty felt threatened by increased demands and what two departments labeled a "devaluing" of traditional scholarship, while others expressed a deep resentment over a perceived long-standing undervaluing of teaching on campus. While much animosity was directed toward the administration from both camps, a considerable amount was also flung across the divide at other faculty often as the result of misunderstanding, miscommunication, and downright frustration.

Discussion of Cal Poly Support for the Scholarship of Teaching

There was a great deal of agreement across campus about the obstacles to good teaching. Faculty argued that it was impossible to take advantage of any support for faculty development as related to learning theory, curricular development, pedagogy, or assessment due to increasingly heavy workloads. There is simply no time for faculty to engage in such activities. Nevertheless, many campus efforts were lauded despite considerable difficulty in taking full advantage of the services offered.

Problems Noted

1. Heavy Workloads. Faculty find themselves confronted by increased

committee work (a particular source of frustration) and rising class sizes on top of an already heavy WTU assignment. While departments recognize the importance of shared faculty governance, there was an overwhelming resentment of what is perceived as useless, futile, and time-wasting efforts that take away from teaching. And adding to an already heavy course assignment, larger class sizes have made it almost impossible for faculty to deliver what they consider to be superior education. Many faculty primarily involved in delivering instruction to majors find that they are required to teach too many different courses, spreading their knowledge and energy too broadly for effective teaching to take place.

2. Faculty also feel that they are overburdened with continual demands for self-assessment including "reports, procedures, self studies, plans, PSSI's, FMI's, course unit changes, GE&B requirements, new technology, etc., to focus on perfecting undergraduate instruction/pedagogy." Some of these demands are the result of the reports discussed above (see Background) such as Visionary Pragmatism, Cornerstones, and the Cal Poly Plan. These requirements are perceived as detracting from the primary mission of the institution, teaching and learning.

3. Inferior Facilities. This concern was raised on several fronts:

    - The traditional classroom, including concern over broken chairs, window blinds, etc.
    - Multimedia Classrooms - inadequate number for faculty interested in using new technologies.
    - Laboratories - need new and better equipped labs.
    - Technical support to maintain facilities and assist with the lab preps.
    - While not directly connected to issues of learning theory, pedagogy, etc., these problems were perceived by faculty as serious impediments to teaching and learning at Cal Poly.

1. Quarter System. The rushed nature of the quarter system and the attendant repeated administrative paper work were mentioned by some as adding to faculty and student "burn-out."

Positive Efforts

1. Technology Support. Many faculty, despite considerable disagreements, have pursued the use of new technologies in the classroom. Resistance to technology has taken many forms but often centers on criticism of Distance Learning. Some colleges have provided faculty with support and training that is not tied to Distance Learning and have met with considerable success. There is limited but intense enthusiasm among faculty for new educational

technologies and many would like more training and multimedia facilities.

2. Support for innovative teaching and creativity. Existing services and workshops, including those offered through FIDO and UCTE, are roundly praised. Faculty would like release time or some type of support to take advantage of these services as well as to help in the development of new courses. For example, faculty were called upon to develop new courses for GE 2000 but, a lack of support to do so engendered some resentment. In particular, many faculty would like support to develop courses such as seminars, interdisciplinary courses, and to explore topics outside their traditional curricular responsibilities. Some colleges distribute release time for these purposes and faculty would like to see more focused support for course development.

3. Retreats, workshops, etc. Faculty would like to meet to "share" information about teaching. There are already some venues for such discussion that are unfortunately not very well attended. Nevertheless, if faculty had an inducement - release time, equipment, etc. - they would be more interested in participating.

Conclusions – Campus Conversation

The subcommittee has noted with some serious concern that there is a deep level of distrust and suspicion on the part of faculty toward the administration, other colleges, and other faculty. The words "suspect," "skeptical," "lack of trust," etc. continually surfaced in faculty discussions of the Scholarship of Teaching. One department "views [the subcommittee's] efforts as a road map to fee increases and merit salary increases;" another accused the subcommittee of engaging in Orwellian "newspeak;" and a third accused the subcommittee of hiding "an agenda [to require the use of information technology] behind soliciting support for the 'scholarship of teaching' initiative." Whether outraged, in despair, or completely "turned off," most faculty view the self-assessment exercise with suspicion as an imposition that will bring them few benefits and potentially great harm.

Alternatively, faculty are enthusiastic about their teaching and take it very seriously. They are indeed correct to point out that they already know a great deal about teaching - Cal Poly is an undergraduate teaching institution. While they have not consciously engaged in a scholarship of teaching, most faculty already have "experiential" knowledge of teaching. They have, in effect, lived the "learn by doing" motto of our university. We need to tap into that knowledge, reward it, and "grow" it through collegial collaboration and discussion.

Nevertheless, faculty find themselves faced with increasing numbers of students and assessment demands, and a diminishing amount of time to devote to teaching, let alone to pedagogy, learning theories, etc. There is a sense that our number one priority - teaching - is being eroded in favor of a confusing and contradictory set of demands that have little to do with either teaching or scholarship. While faculty have been willing to work on repeated taskforces, study groups, and strategic planning

efforts, they believe their work has gone for naught as the quality of the teaching environment has simultaneously eroded.

Cal Poly can make available resources to improve teaching if there is recognition that time must be found for faculty to participate. Whether through FIDO, Kennedy Library, or UCTE, services exist which may provide the foundation for further faculty development. Whether through release time, decreased committee requirements, or reduced workload, finding time for faculty is the key to facilitating their development.

Time is not the only problem, however. One of the biggest problems that the subcommittee inferred from the campus discussion about support for scholarship of teaching was that faculty do not have organized information about opportunities available to them, or clear paths by which to access whatever opportunities may exist.

If Cal Poly is to proceed with the Carnegie "Scholarship of Teaching" project, the issues provoking distrust and antagonism must be addressed or successfully uncoupled from this effort. In particular, what is meant by "scholarship" in the context of teaching and how will this relate (if at all) to faculty assessment for RPT and merit pay purposes? Is technological innovation a required component of scholarship? What is meant by "public" or "share"? Faculty suspicion is apt to grow as long as these questions remain unaddressed.

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Findings, Interpretations, and Analysis

Strategic Look Outward: Models and Solutions?

The subcommittee was concerned to find a way to bridge the gap between Cal Poly's expectations of faculty teaching and the support provided for these efforts by the University. Cal Poly's recent history and campus culture support excellent and innovative teaching, but faculty do not feel that they have benefited from appropriate support for development. The subcommittee turned to other campuses to see if models existed that could lead to better development practices at Cal Poly.

The subcommittee found that at most universities good teaching is the result of a process, not a formula. Faculty development is an ongoing and faculty-driven process. The process begins with a conscious university policy toward faculty development that is implemented through a unified program.

University Responsibility for Good Teaching

The institutions under review in the Strategic Look Outward were chosen for examination due to their conscious commitment and attention to the enhancement of teaching and learning. These institutions acknowledged that good teaching does not just "happen," and that good teachers are not just "born," but can be developed and they in turn can help others. Each of these universities adopted conscious policies toward supporting faculty development in teaching. In particular, most had

established "centers" where information and services were made available to faculty.

Philosophy - Overall, most universities view teaching as a reflective activity. Their emphasis is on thinking about student learning, and how faculty can best facilitate that. "Teaching is an enterprise whose primary aim is helping students to learn, we ask that you give some thought to the most fundamental question we can ask about a course or course materials: in your estimation, what will the students be able to do—intellectually, emotionally, or physically – as a result of their encounters with the course?" (Northwestern University)

All universities recognize that faculty have had little, if any, training in educational pedagogy. While they do not seek to turn all scholars into education specialists, there is an effort to acquaint faculty with as much educational theory as they desire. Often presented in short doses via workshops and seminars, basic information about pedagogy is nevertheless made available and faculty are allowed to explore particular issues at their own pace and for their own purposes. "Scholarship of teaching focuses on transforming and extending knowledge about pedagogy." (University of Maryland)

This approach allows a process through which faculty define their own needs and goals and then set about finding the appropriate means to become teaching scholars. Rather than setting forth a plethora of new "techniques," most universities first try to promote an educational philosophy or approach through exposure to various pedagogies followed by faculty reflection on personal and appropriate approaches. Once faculty educational philosophy has been clarified, then a wealth of techniques can be explored to facilitate teaching and learning that is satisfying and productive to both faculty and students.

Centers for Teaching and Learning – The most common method of implementing faculty development in teaching is the establishment of a campus center for teaching and learning. These centers embody an institutional commitment to develop resources on campus that are readily available for all faculty to use to enhance their teaching. Although the centers vary in scope and activities, all provide their campuses with a central focus for teaching activities. More importantly, they provide faculty with a clear picture of available facilities and the opportunity to interact with faculty from other disciplines concerning the common teaching enterprise. Listed below are programs typically associated with centers for teaching and learning.

It should be noted that faculty participation in all programs surveyed was voluntary, confidential, and removed from the tenure/promotion process. The implicit assumption was that successful participation in programs promoting teaching effectiveness would have a positive outcome on personnel processes through evidence of improved teaching performance.

Consultations – In all cases, consultations were at faculty request and were limited to those issues self-identified by the faculty member. In this manner, faculty see the process as meeting their own concerns and not those of an "outside" board or

review panel. Faculty may request a private consultation with education specialists on a range of issues including:

- Implementation of midterm student evaluations (Illinois State University)
- Analyzing student evaluations (Michigan Tech)
- Videotaping classroom sessions (several)
- How to design a teaching portfolio (several)
- Course analysis (Northwestern University)
- Conducting a Class Interview (University of Washington)
- Individual Classroom Observation (University of Minnesota)

In addition to these services, faculty may ask for any other review/evaluation that might serve their own individual needs.

Courses and Workshops – Some universities offer regular non-credit courses for faculty to enhance teaching effectiveness while others run regular workshops and forums for discussion. Courses offer the most intense training and require the greatest commitment from faculty, while workshops and especially forums are much less demanding.

One of the most demanding offerings is the Penn State Course in College Teaching, a semester-long noncredit in-service course available to all Penn State faculty and instructors. Run as a seminar, the course focus is on pedagogy, teaching experiences, and discussion of current literature on teaching. The course is tightly structured with regular assignments and it introduces faculty to a range of material on teaching pedagogy, organization, and philosophy. Penn State claims it is a popular course and two sections are offered each semester (fall, spring, and summer).

A more common approach is the offering of regular informational workshops and one-time seminars covering a range of issues including

- Teaching Diversity – often in conjunction with Ethnic Studies and Women's Studies programs. Workshops address both issues of incorporating diversity into course content and addressing needs of a diverse student population. (see SUNY Albany and University of Minnesota)
- Technology – a wide range of workshops, etc. on instructional technology from the most basic use of email in classes to more complicated presentation software (Powerpoint) to putting classes on the web.
- Pedagogy – Basic introduction to some approaches such as "disciplinary reflectiveness," "Active Learning," and "service learning" as well as more familiar issues such as "Enhancing Your Students' Critical and Creative

Thinking Skills," and "Promoting Student Response to Learning."

- Portfolios – Most schools included workshops on the development of teaching portfolios.
- Workshops for New Faculty – Sometimes considered orientation seminars. Northwestern's is focused around "what do the best teachers do?"
- Mid-Career symposium – The only example specifically aimed at mid-career faculty was offered at University of Minnesota and is described as "a special program for experienced or mid-career faculty to assist them as they continue to adapt their teaching styles and course designs to the demands of today's students and to new technologies intended to enhance classroom teaching."
- Summer Workshops – Extended development of a project over a multi-day period, usually connected with work on a specific course. (Maricopa Institute for Learning)

Forums – Usually university-wide events featuring an outside speaker on a pedagogical issue. Other examples included Films at Noon, a monthly event at University of Iowa for faculty to get together to watch a video about some aspect of teaching and learning.

Faculty Communities – Although this was one of the most controversial topics in the Cal Poly Campus Conversation, there is a clear recognition that faculty should share their teaching expertise and knowledge in a public arena. Most universities encourage campus teaching groups (sometimes teaching circles) where faculty can share their knowledge in a relatively risk-free environment. Whether through a web chat site, informal lunch time discussion groups, or a teaching fellows program, faculty can learn about teaching much more quickly if they share their information.

Resources – In addition to the services listed above, most universities also made available to faculty resources on recent pedagogy and technology. Such resources included

- Teaching library including articles, books, and handbooks about teaching methods, etc.
- Online resources, usually including links to other campuses or to online publications.
- Student evaluation questionnaires to be used by faculty or simply for consultation.
- Software available for faculty use in instruction.
- Videos on teaching methodologies.
- Campus publications (UCI)

In short, the methods used by universities to enhance teaching effectiveness are varied. Most importantly, universities have put these resources at the disposal of faculty, encouraged their use, and have in most cases allowed faculty voluntary and appropriate participation. They leave faculty, not the university, in control of their own development as Teaching Scholars.

Rewards for Faculty Development?

Most universities view support for teaching effectiveness as a means to improve faculty success in the promotion and tenure process. Participation in such programs is viewed in much the same way as participation in other faculty development areas – laudable, but evidence of completion of a project or improvement in job performance is necessary for promotion, pay raise, etc. As a book or written article is expected as the result of a grant or sabbatical, improved student evaluations/other measures of teaching success are expected as the result of participation in teaching effectiveness programs.

Grants - While "rewards" may be deferred, most universities nevertheless provide incentives and resources for faculty to participate in improving teaching and learning. The cases surveyed all linked grants/awards to innovation in pedagogy and experimentation in teaching methods. In most cases, faculty were awarded outright funds for the development of new courses or the redesign of old courses. Some of the criteria for awards were:

- "innovations and experimentation in teaching, whatever form those may take: new courses, new course materials (electronic or otherwise), new methods of assessment or evaluation." (Northwestern University)

- "innovative pedagogical projects and programs that enhance the teaching of individual members of the instructional community, help promote a vital teaching community, and improve students learning." (Illinois State)

- "improve undergraduate education through increased student-faculty contact, communication of high expectations, encouraging active learning, creating learning communities, collaborating across disciplines, assessing progress and giving effective feedback, respecting diverse learning styles, making smart use of information technology." (Penn State)

- There are also efforts to support faculty-defined projects such as bringing in outside specialists for consultation, documentation of instructional methodologies, development of teaching resources. (Georgia State University)

- Travel grants were also available at some institutions for the specific purpose of allowing faculty to "travel to conferences and workshops with an emphasis on teaching" for the purpose of obtaining and sharing information about teaching and learning. (Illinois State)

Awards - In addition to encouraging improved teaching through grants for course development, teaching awards were also used to communicate expectations and eventual success. While all universities confer teaching awards, a growing number are earmarked for faculty involved in innovation. For example, Illinois State University revised its awards process, "For the first time this year, a list of criteria for good teaching has been developed by the University Teaching Committee based on extensive research literature on teaching effectiveness."

How to Make Time?

Unfortunately, the Strategic Look Outward shed little light on this problem. Even where grants existed for course development, they usually took the form of outright funds rather than release time. Some workshops were offered during the summer months, when faculty have "more" time, but this solution clearly does not address the effects of Cal Poly's normal workload on teaching and course development.

Some universities (Maricopa, Northwestern) provided full time teaching fellowships to allow faculty to immerse themselves in teaching scholarship. These examples were fully funded by outside donors and also came with an obligation to take a central leadership role in the work of a center for teaching and learning.

Conclusions – Strategic Look Outward

The subcommittee discovered a paradoxical situation with serious implications for Cal Poly. The universities with the greatest institutional commitment to enhancing faculty teaching were the research universities as opposed to those primarily dedicated to undergraduate teaching. In effect, faculty with the greatest teaching responsibilities have received little institutional support for their efforts; faculty with the greatest research responsibilities have instead received the greatest institutional support for enhanced instruction. Seen another way, research universities provide faculty with support for areas in which they are expected to excel to reach promotion (research) as well as in under-emphasized areas (teaching), and teaching institutions provide little support for either.

These findings present Cal Poly with a challenge and an opportunity. While there are few models for us to emulate, we also have the opportunity to develop a program or set of policies with great implications for many teaching institutions across the country. We may use a range of programs already available on campus (FIDO, UCTE, Library Workshops, etc.), supplement them with some ideas from other campuses, and even centralize our efforts through a comprehensive teaching and learning institute. Nevertheless, we are still faced with the challenge to make it possible for faculty to utilize these resources.

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Discussion, Recommendations, and Conclusions

Goals

Cal Poly needs to bridge the gap between expectations of teachers and the support they receive to meet these expectations. While we have been faced with increasing responsibilities in the form of greater numbers of students, rapidly evolving educational technology, and the growing demand to justify our efforts through "learning outcomes," we have been given at best scattered support to meet these demands. This gap has created a polarized and distrustful environment that cannot lead to good teaching practices. It must be bridged.

Recommendations

1. The subcommittee recommends that the Cal Poly administration articulate a proactive policy in support of faculty development in teaching. As a result of several initiatives over the past few years to increase teaching effectiveness, there is a widespread feeling on campus (see Campus Conversation) that faculty are being "told" how to teach. Learning outcomes, new technologies, and increased statewide demand for education have all resulted in increased expectations of faculty with little acknowledgement of support to meet those expectations. University faculty should be recognized as professionals, experts in their own fields, who can best make the decisions about how to reach learning outcomes in their own classes. The administration needs to make clear its faith in individual faculty and its readiness to provide them with the support to maintain quality education at Cal Poly.

2. The subcommittee recommends the centralization of information on all programs and resources on campus in support of teaching. As noted throughout this report, scattered and noteworthy attempts at supporting teaching have been made across campus on all levels. Information about these efforts needs to be centralized so that faculty can easily gain access to resources that could help them. Too many faculty are unaware of workshops, programs, etc. or find it difficult even to begin to find such information.

3. The subcommittee recommends that faculty be provided with the time to pursue faculty development with regard to teaching. Faculty are overextended with heavy teaching loads and increasing responsibility in shared governance. There has long been a recognition that Cal Poly faculty generally lack the time for serious scholarly development and it must be recognized that they likewise have little time for the "Scholarship of Teaching."

Implementation

The subcommittee suggests the following measures in order to meet the goals and recommendations listed above.

1. Establish an interdisciplinary Teaching/ Learning Center in the office of Academic Affairs governed by a faculty committee and with administrative, clerical and technical support and dedicated space on campus, including offices for private faculty consultations, at least one

conference/classroom, and computer/network/multimedia tools.

The Center would function as a clearinghouse for instructional development activities available throughout the campus.

The Center would also work directly with faculty on a consultative basis.

The Center would also host "Fellows," regular Cal Poly faculty members working on specific pedagogical projects and who rotate through the center on an assigned-time basis. Fellows would have responsibility for hosting public seminars, mentoring colleagues, conducting learning studies, and developing curriculum/pedagogy proposals.

2. Widen criteria for sabbaticals so that sabbatical leave time can be used to pursue Scholarship of Teaching rather than only Scholarship of Discovery. Consider allowing sabbatical leave time to be used for Teaching/Learning Center fellowships. Consider liberalizing rules for allotting sabbatical leave time so that it can be used in increments other than whole terms: for example, four units at a time.

3. Allow faculty to designate a portion of their workload to the Scholarship of Teaching. Faculty could be allowed to forego service or scholarly development in favor of teaching development for a limited and specified period of time without adverse consequences for RPT.

4. Strengthen support for existing programs that help develop better teaching. Develop minor funding for campus units that are currently providing services to faculty. Small additional funding could expand and enhance services for faculty. Such funding could include student assistants working under current staff to assist faculty in numerous ways. The campus units for consideration would be the Library, IMS, and ITS.

5. Consider additional methods for improving support for teaching on campus. Many of the programs listed in the "Strategic Look Outward" section of this report could be adapted and used at Cal Poly. In addition, other methods such as a teaching improvement mini-grants program could be used at Cal Poly. The subcommittee intends its recommendations as a broad call for further thought, discussion, and consideration of these issues.

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Please send your suggestions and responses to the WASC Coordinating Office.

Appendices

The following appendices provide support materials for the WASC Scholarship of Teaching Subcommittee Report. The materials are displayed in the manner in which they were received. There were no changes to the materials that were provided by the various departments and faculty.

Systematic On-campus Evaluation of Faculty Perception of the Scholarship of Teaching and Their Needs

The campus faculty was contacted to provide assistance to the Scholarship of Teaching Subcommittee regarding their interpretation of the definition of the scholarship of teaching, and to identify three issues that the campus must address to enhance the Scholarship of teaching at the Cal Poly. All departments were requested to provide feedback to the committee. Department results were presented as submitted on the Web. The committee analyzed the submissions and reported their findings in their WASC report. **Support material is provided in Appendix A.**

The analysis of Campus Conversations led the committee to conduct a survey to determine in general what was available to the teaching faculty to improve their teaching and learning.

Subsequently all colleges were surveyed to determine the extent of on campus and college faculty development activities that were available to improved teaching and learning. **Support material is provided in Appendix B.**

Appendix I.2.A

Note: Appendices I.2.A-1-5 are available in the Academic Programs Office on hard copy only.

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Campus Conversations: Scholarship of Teaching

The Chair of the Scholarship of Teaching Subcommittee, Vice Provost for Academic Programs, and committees on the Scholarship of Teaching developed a letter for campus faculty requesting them to reexamine The Scholarship of Teaching (Appendix I.2.A-1). The letter was sent to all college deans, and department chairs and heads for distribution to the faculty. It requested that each academic department initiate discussions of its own concerning the concept of scholarship of teaching in light of those offered in the letter.

All college deans and department chairs and heads were briefed by a representative of the Scholarship of Teaching committee prior to the campus mailing. Individual assignments included

College of Agriculture – J. R. Vilkitis

College of Business – T. Swartz

College of Engineering – S. Moustafa

College of Liberal Arts – N. Clark, and D. Smith

College of Science and Math – R. Brown

College of Architecture – A. Cooper

UTCE – C Scheftic

In addition committee members gave presentation to those departments desiring additional information prior to their deliberations. Due to time constraints the committee allowed departments to carry on discussion through department email alias rather than through actual meetings (Appendix I.2.A-2).

Five of the six colleges responded (Appendix I.2.A-3). Committee representatives summarized their college's response and presented the finding to the whole committee (Examples for the College of Agriculture, College of Engineering, and Liberal Arts, Appendix I.2.A-4). The committee in its deliberations of the materials concluded that resources to improve teaching and learning, faculty time and rewards for good teaching were the major issues that needed to be addressed to improve teaching and learning on the Cal Poly campus.

Department responses can be found in Appendix I.2.A-5.

Appendix B

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Current Campus Activities: Teaching and Learning

In its deliberations the committee identified resources for Effective Teaching (university wide and within the colleges), Time to Engage/Improve, and Rewards as three major categories that impeded faculty development on campus. To ascertain what activities were being implemented campus wide or within the colleges a matrix (Figure 1) was developed by the Chair based on committee discussion and distributed to committee members to verify which items within the categories were being employed within their college. Committee members were requested to visit with faculty members, administrators in their deans' office, etc., in filling out the matrix. In addition they were encouraged to add items that were being employed but

not identified in the matrix. David Walsh who chaired the study group, which was responsible for "Establishing a Culture of Innovation", report (Walsh Report), contributed to the assessment. His comments in addition to those of the committee were used to fill in the University Wide column in the matrix. Figure 1 is the result of the committee’s activity.