

**ACADEMIC SENATE
of
CALIFORNIA POLYTECHNIC STATE UNIVERSITY
San Luis Obispo, CA**

AS-727-11

**RESOLUTION ON A WORKING
DEFINITION of LEARN BY DOING**

Background:

In Fall 2007, the Academic Senate discussed the Institutional Report, in which Cal Poly identified “Learn by Doing” as one of the four major themes to be examined in the University’s self study for WASC. As part of the WASC reaccreditation process, a task force made up of faculty, staff, and students was formed in 2008 to help guide the self-assessment of Cal Poly’s Learn by Doing approach. Pages 11-16 of the *WASC Capacity and Preparatory Review Report* describe this two-year process, which included an effort to develop a measurable definition of Learn by Doing based on: an analysis of pedagogical theories and current Learn by Doing practices at Cal Poly; campus surveys and focus groups conducted for all campus constituencies; and student research. All campus constituencies were invited in October-November 2009 to comment on the draft *WASC Capacity and Preparatory Review Report* before the submission to WASC of the final draft the following December.

During the February 2010 visit by the WASC Visiting Team, open forums were held for all campus constituencies to discuss the report with the reviewers. Following their visit to Cal Poly in early 2010, the WASC Visiting Team members urged Cal Poly “to develop measurable ways of demonstrating the educational effectiveness of this practice” (*Report of the WASC Visiting Team*, p. 30). Thus, in fall 2010, the WASC Working Groups and the Academic Senate formed WASC/Senate task forces to begin to address the WASC Visiting Team’s recommendations. Foremost on the group’s agenda was a single, inclusive, and most importantly, measurable definition of Learn by Doing that could be used to assess the effectiveness of Learn by Doing across disciplines. Having a good working definition of Learn by Doing is critical to the overall assessment process at Cal Poly. In early February 2011, the task force proposed a definition of Learn by Doing to the Academic Senate as a first reading. The Senate debated the definition and provided feedback to the task force.

- 1 WHEREAS, The Cal Poly community has never adopted a working definition of “Learn by
- 2 Doing”; and
- 3
- 4 WHEREAS, Learn by Doing was one of the four major themes of Cal Poly’s WASC Self Study
- 5 Committee approved by WASC; and
- 6
- 7 WHEREAS, The WASC Review Team encouraged Cal Poly to provide an operational
- 8 definition of our Learn by Doing educational philosophy following its initial review
- 9 in early 2010; and

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WHEREAS, The WASC Learn by Doing Task Force may use this definition of Learn by Doing to provide evidence of the many, diverse ways in which Cal Poly's signature pedagogy contributes to student learning at Cal Poly; and

WHEREAS, Learn by Doing is an educational model that represents all disciplines at Cal Poly and thus is in need of a definition that reflects this diversity; therefore it be

RESOLVED: That the Academic Senate of Cal Poly adopt the following definition of Learn by Doing:

At Cal Poly, Learn by Doing is a deliberate process whereby students, from day one, acquire knowledge and skills through active engagement and self-reflection inside the classroom and beyond it.

Proposed by: WASC/Academic Senate Learn by Doing Task Force
Date: November 15 2010
Revised: January 24 2011
Revised: March 9 2011

Appendix A

Mission and vision inclusion:

Learn by Doing is an integral part of the mission and vision of most academic units at Cal Poly. Following are some examples from each college:

1. College of Agriculture and Environmental Sciences: <http://cafes.calpoly.edu/>

At the heart of a Cal Poly education is our renowned learn-by-doing tradition. Our students have access to state-of-the-art laboratories as well as the university's 10,000 acres of ranchland, orchards, vineyards and forests - Cal Poly's 'living laboratories.

Together, they provide the hands-on opportunities that are the essence of the Cal Poly experience.

2. College of Architecture and Environmental Design: <http://www.caed.calpoly.edu/prospective/index.html>

All of our majors are built around educational experiences that are heavily focused on the use of rigorous, time-intensive design studios and project labs as a central arena for the development and integration of multiple skills. The studios and labs are bolstered by a core component of course knowledge in the materials, technology and contemporary challenges of the built environment professions.

All our majors place a strong emphasis on the rich tradition of an innovative approach to learn-by-doing within a comprehensive university context. We foster connections with the arts and sciences, humanities and the polytechnic professions.

3. College of Business: <http://www.cob.calpoly.edu/>

We are an engaged learning community that contributes to business and society through discovery and application.

Industrial Technology: <http://www.cob.calpoly.edu/academic/industrial-technology/>

To offer a continually improved “learn by doing” educational experience for our students that will provide them with practical technical knowledge and skills, organizational intelligence and the confidence to lead.

4. College of Engineering: <http://ceng.calpoly.edu/about/>

Learn by Doing:

A leader in engineering education, the College of Engineering promotes ‘project-based learning’ to link theory with hands-on practice. Graduates

are well prepared to enter graduate school or the engineering profession. In fact, Cal Poly engineers are highly sought by industry because they are known to ‘have two feet on the ground and two hands on the problem.’

5. College of Liberal Arts: http://cla.calpoly.edu/cla_deansoffice_stratplan.html

Mission

The College of Liberal Arts promotes excellence through teaching, scholarship and service in the arts, humanities, communications, and social sciences. The CLA encourages intellectual discovery and individual growth by promoting diversity, social responsibility and life-long learning-by-doing in both the local and the global communities. CLA occupies a pivotal position in the comprehensive university, providing Cal Poly students with a broad and substantive understanding of the individual, developing their capacity for critical inquiry and discourse, fostering intellectual curiosity and the pursuit of knowledge, promoting creative thought and aesthetic appreciation, and integrating technology into a broader, human context.

Values

The College of Liberal Arts upholds open and critical disciplinary and interdisciplinary inquiry, effective communication, creative thinking, aesthetic endeavor, and their application to contemporary issues. We advocate cultural and intellectual diversity, sustainability, professional ethics, self-awareness, and responsible citizenship. We espouse the integration of humane and aesthetic values with technological proficiency in support of the University’s mission. As essential and engaged members of our comprehensive polytechnic university, we embrace the university’s commitment to the learn-by-doing philosophy through our research, theory, and practice.

6. College of Science and Mathematics:

School of Education: <http://www.soe.calpoly.edu/>

Since its inception in 1933, professional education at Cal Poly has expanded from a single undergraduate program in agricultural education to multiple undergraduate and post-baccalaureate credential programs, and a range of master degree options. As a professional school on a polytechnic campus, the School values and emphasizes an on-going experiential process of theory and research integrated with active, applied, and reflective learning. In addition, the School has a special focus on mathematics, science, and technology education to help meet the critical need for a highly qualified, technologically prepared workforce for California.

Appendix B

Operational components (defined at the program level):

Operational Definition:

At Cal Poly, Learn by Doing is a deliberate process whereby students, from day one, acquire knowledge and skills through active engagement and self-reflection inside the classroom and beyond it.

1. **“deliberate process”**

- a. What is the process in your program?
- b. Is it deliberate?

2. **“from day one”**

When does the process start for the student relative to entering Cal Poly?

3. **“acquire knowledge and skills through active engagement and self-reflection”**

- a. What is active engagement in your program?
- b. How are knowledge and skills acquired through active engagement?
- c. What is self-reflection in your program?
- d. How is self-reflection incorporated in the process?

4. **“inside the classroom and beyond it.”**

- a. How is LBD done in the classroom?
- b. How is LBD done beyond the classroom?

State of California
M e m o r a n d u m

To: Rachel Fernflores
Chair, Academic Senate

Date: June 28, 2011

From: Jeffrey D. Armstrong
President



Copies R. Koob, P. Bailey,
D. Christy, L. Halisky,
T. Jones, E. Smith,
D. Wehner

Subject Response to Academic Senate Resolution AS-727-11
Resolution on A Working Definition of Learn By Doing

I formally acknowledge receipt of the above-entitled Academic Senate resolution.

Please express my appreciation to the committee members for their work on this issue.