



Academic Planning

*The cornerstone to the implementation of a
learning-centered environment*



Common Themes



Learning-centered...

- Mission and Vision – **Andy Feinstein**
- Assessment Tools – **Peggy Kelly**
- Assessment as Learning – **Don Straney**
- Collaborations – **Ed Hohmann**
- First Year Experience – **Dale Turner**
- Students Taking Charge of their Learning – **Kyle Brown**



Academic Planning

The cornerstone to the
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Academic Planning Committee



- Ad-hoc committee charged to provide a vision for our academic future and guide the university's strategic planning process
- A sketch plan was developed early March
- Open forums were held on March 9th and 10th to solicit input
- This sketch plan embraces:
 - A polytechnic **learn-by-doing** approach to education
 - Strengthening our diverse, **learning-centered** community
 - Deepening our **engagement** in the **multiple communities** we serve

Mission Statements



- Mission statements are enduring statements of purpose that distinguish one enterprise from another
- It Identifies the scope of a unit's operations in product and market terms
- It addresses the question, *what is our institution?*
- A declaration of attitude more than a statement of specific details



“A business is not defined by its name, statutes, or articles of incorporation. It is defined by the business mission. Only a clear definition of the mission and purpose of the organization makes possible clear and realistic business objectives”

Peter Drucker



**Examples of Learning-Centeredness
within College Planning**

College of Agriculture



Learn by doing, in the field as well as the classroom

*Our **hands-on approach to learning** makes course work fun, involving, and connected to the real world. You'll learn the principles of good science, and apply them in lab and field work. See your foal bred and born in Animal Science. Turn a desert into paradise in Plant Science. Test nutritional therapies. Delve into DNA. Merchandise an apparel line. Join the Western Collegiate Food Marketing Team to hone your business skills. Teach Agriculture in a real classroom.*

College of Business Administration



*The College of Business Administration at Cal Poly Pomona is a diverse community of students, teacher-scholars, and staff, committed to **active learning** through the application of theory in practice. The College partners with its stakeholders to develop individuals with the knowledge and skills to be successful and to contribute in a dynamic global business environment.*

College of Education & Integrative Studies



*The College of Education and Integrative Studies is a **learning community** focused on meeting the present and future needs of students and our communities. We educate students to become highly qualified and significant leaders in society. We are committed to the principles of diversity, ethics and social justice, and **life-long learning**. Central to our mission are **innovative and integrative thinking**, reflective practice, collaborative action and **learning by doing**.*

College of Engineering



Going from Good to Great!

We envision ourselves as the institution most widely recognized by both the engineering and education professions for excellence in providing productive practitioners to the technical community. Guided by a commitment to ever-increasing quality in producing tomorrow's leaders, we follow these principles:

- *Meeting societal needs is the goal, knowledge is the tool, a **learning-centered environment** is the vehicle.*
- *Faculty are engineers who are educators, with significant engineering experience being a requisite for good teaching.*
- *Curricula are rigorous, up-to-date, relevant, and globally competitive as part of our campus **learning-centered environment**.*
- *University-Technical Community ties that produce benefits for all parties.*
- *Facilities are consistent with best engineering practice.*
- *Planning for the future is strategic in nature.*

College of Environmental Design



*The College of Environmental Design (ENV) **seeks to connect people, places and the environment** in an effort to improve communities and resolve pressing problems facing society. With a unique integration of the arts, architecture, landscape architecture, regenerative studies, and urban and regional planning, as well as a **“learn by doing”** approach grounded in the polytechnic tradition, ENV is a leader in design excellence and innovative problem-solving for communities in Southern California and around the globe. This leadership is demonstrated by ENV’s nationally-ranked educational programs and award-winning research, scholarship, creative activities, and outreach.*

Collins College



We are dedicated to advancing the field of hospitality management through:

- *our collaborative **learn-by-doing** approach;*
- *our profound appreciation of diverse backgrounds, ideas, and cultures; and*
- *our strategic integration of scholarship, service, and **applied learning***

to benefit our stakeholders and the global hospitality industry.

College of Letters, Arts, & Social Sciences



C.L.A.S.S. is a *learning centered college*.

*By this we mean that everything from the teaching of classes to the way you are treated when you enter a department or the Dean's office is **informed by the learning/teaching dynamic**. Nothing is more important to us than your success as a student and lifelong learner.*

College of Science



The College of Science at Cal Poly Pomona will:

- Create an *academically stimulating environment of scientific discovery* and innovation that provides undergraduate and graduate students with fundamental skills and knowledge needed to successfully meet the challenges of a rapidly changing technological and multicultural world;
- Maintain modern and evolving programs and curricula that emphasize a *learn-by-doing* philosophy in teaching scientific principles;
- Advance scientific knowledge by maintaining a dynamic, creative, and professionally active faculty of teacher-scholars;
- Serve both the university and the needs of the local and global communities by seeking and establishing partnerships with local and national community organizations, governmental bodies, educational institutions, and industry leaders.

The College of the Extended University



*The College of the Extended University extends Cal Poly Pomona's boundaries and expertise by **integrating, educating, and empowering lifelong learners** from diverse populations in traditional and alternative settings.*

University Library



*As the central intellectual and cultural resource of the campus community, the purpose of the Cal Poly Pomona University Library is to provide all students, faculty, staff, and administrators with effective and equitable access to the recorded information necessary to support the university's instruction, research, and public service mission, to respond to the need of all members of the university community to be library and information literate, and to provide a **rich independent learning environment where information can be explored** and assimilated to knowledge.*

Mission Statement Messages in Our Learning-Centered Environment



Learn-by-doing
Engagement
Multiple communities
Hands-on approach to learning
Rich, independent learning environments
Information exploration
Empowering lifelong learners
Stimulating environments of scientific discovery
The learning/teaching dynamic
Connecting people, places and the environment



Toward Learning Centeredness:

Assessment as Learning

Progress on

Assessment as Learning



Missions define the learning outcomes we have for students.

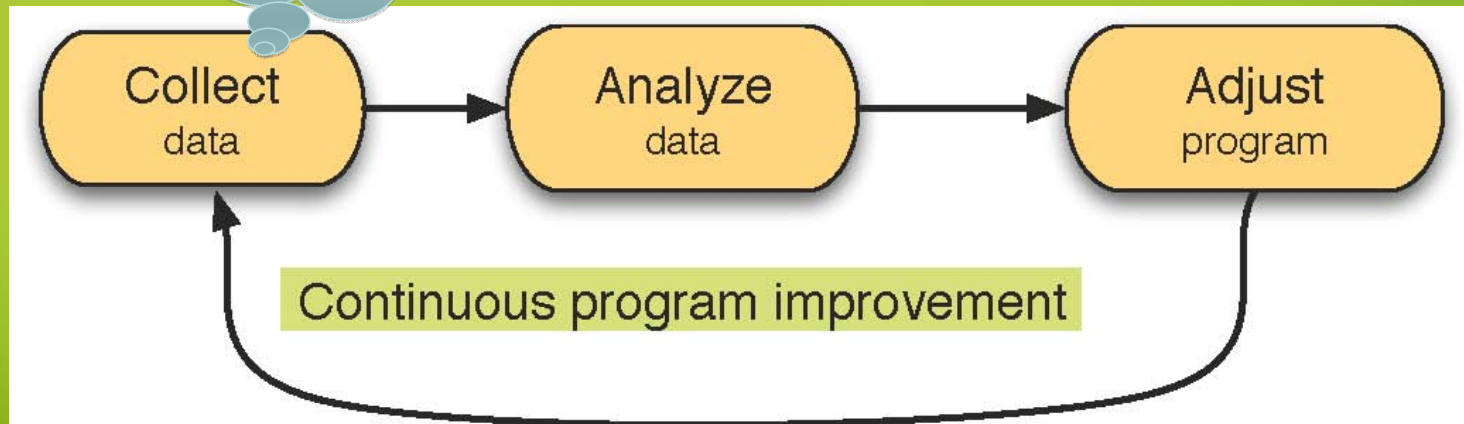
Assessment tells us:

- 1) how well we achieve learning outcomes
- 2) where we need to make improvements.

The Assessment Cycle



What data are learning centered?





Learning-Centered Assessment Tools

Assessment Tools



The focus is on output (what the student knows and understands), not input (what the faculty member does).

Effective assessment requires the use of multiple sources of information to **gather data on student learning**. Examples of some recognized assessment tools include:

- Objective exams (multiple choice, true/false)
- Essays or explanatory narrative
- Hands-on demonstration of skills
- Project-based problem solving
- Student performance in context, etc.

Assessment Tools - Structures



- Assessment Implementation Task Force (Univ. Level) – Mapping university learning outcomes to program learning outcomes
- CBA – Assurance of Learning & Curriculum Improvement
- CEIS –
 - College Assessment Committee
 - All-University Committee on Teacher Education

Assessment Tools - Use of Rubrics



Scoring rubrics makes the assessment criteria transparent to the student. What is to be assessed and the levels of expectations are known.

- CBA – Rubrics developed for capstone presentation
- CLASS – Rubric for jury to judge final performance
- Many Colleges– Rubric to evaluate internship or coop experience performance

Assessment Tools - Assessing by Doing



- Collins College – Students create a customer satisfaction survey; define elements of measurable service in an organization, observe, and evaluate
- CLASS – Performance in the arts; performance of writing; performance in the community, etc.
- Agriculture – Crop Ecology comprehensive exam includes a very large group project and presentation; HACCP proficiency must be demonstrated in a real food plant; FMAM – Capstone includes the development of a business plan

Assessment Tools - Portfolios



A portfolio is a compilation of work organized by a specified set of criteria as a unique and individual demonstration of learning.

- IGE Program
- Art
- Many CLASS Majors

Assessment Tools - Common Assessments



Common assessments ensure program consistency, improve validity of assessment data, and contribute to applicability of data-driven decisions.

- Graduation Writing Exam - University-wide assessment with scoring rubric
- CBA - Common exams for core courses
- CEIS– Signature assignments with common scoring rubrics
- Science – Calculus gateway exam

Assessment Tools – Focus Groups



Program improvement data also include satisfaction surveys, individual interviews, and focus groups.

- Library – Is the University Library providing the products and services that students and faculty currently require and want?
- ENV – MS in Regenerative Studies – Provides feedback on the curriculum and augmented assessment by faculty & visiting juries.

Assessment Tools - Survey Research



- Business - Survey of graduating seniors using online survey tool to assess program satisfaction
- Extended University - Survey tool used to (1) evaluate course/experience, and (2) evaluate quality of instruction
- Collins – Research using outcomes survey to measure student shared experiences and effectiveness of the restaurant operations laboratory.
- Agriculture – Exit surveys used to assess program in addition to national senior survey comparing CPP to 48 other institutions
- Education – Survey employers, alumni, cooperating teachers, and students

Assessing (Learning) by Doing



...To be a learning-centered community, student assessment must be clear, explicit, rigorous, relevant, and outcomes driven. The tools include:

Rubrics

Performance Assessment

Portfolios

Common Assessments

Focus groups

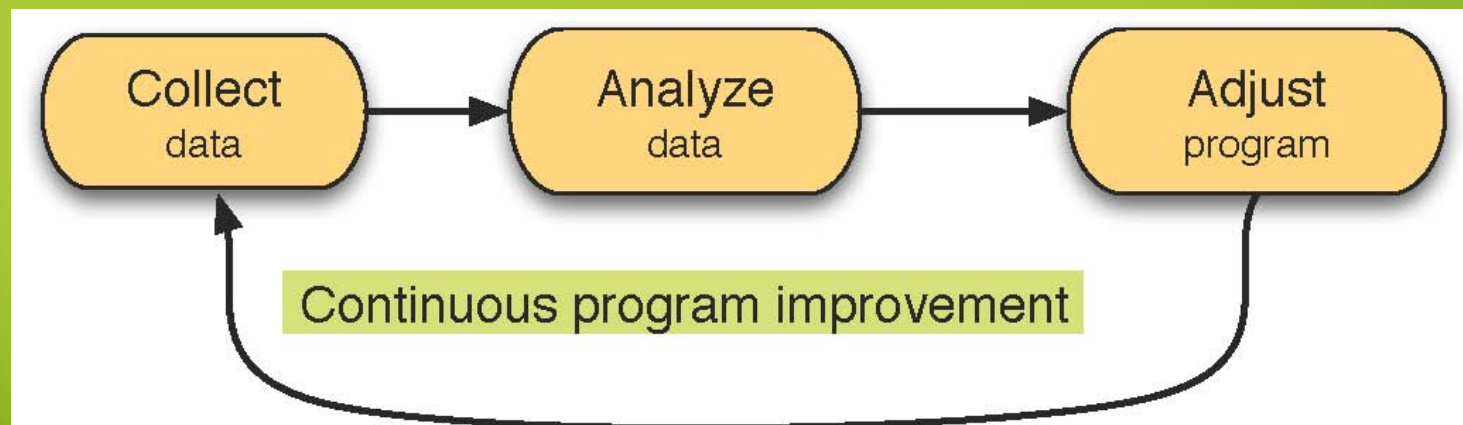
Surveys



Toward Learning Centeredness:

Assessment as Learning

The Assessment Cycle



Closing the Loop



Closing the loop is a key element in most accreditation standards, including WASC

“The institution achieves its [mission] and attains its [learning outcomes].... It demonstrates that these core functions are performed effectively.”
(WASC, Standard Two)

Closing the Loop



Examples of assessment results used for program improvement:

- Student Learning
- Program Effectiveness

Changes to Improve Student Learning



- Architecture: New course and adjustments to others in digital media
- Philosophy: Senior Seminar restructured to improve student writing performance
- Biological Sciences and Foods and Nutrition: Requirements restructured to build skills in analyzing research data
- College of Business: MAT 125 added as a requirement to improve quantitative skills

Changes to Improve Student Learning



- Foods and Nutrition: New pre-requisites to improve student performance in Medical Nutrition Therapy
- Teacher Education: Adopting a Professional Development School model to better prepare teachers to work with second language learners, special needs students and students at risk.

Changes to Improve Program Quality



- Collins College: Improve connections with alumni
- Art: Improve employment prospects for Art History graduates
- History: Improve course availability
- Computer Science and Biological Science: Improve academic advising



Learning-Centered Collaborations

Collaborations that Leverage



- Lyle Center – Works with Env, Architecture, Engineering, Science and Agriculture
- Science & Engineering – Developing CM3D grant
- Civil Engineering & Architecture – Designing a bridge between buildings 9 and 17
- Civil & Chemical/Materials Engineering – Developing online course on wood design

New Collaborations



..... Learning-centered collaborations in an era of limited resources

- Engineering & SDSU – “Project Lead the Way”
- Science & Engineering –
 - Electron microscope facility
 - Subsonic and supersonic wind tunnel
 - ATPi Center to facilitate commercial ventures

More ...New Collaborations



..... Learning-centered collaborations in an era of limited resources

- Education, Science & Engineering – PLTW in Pomona USD
- Ag, Engineering, Science, & Grad Programs – Developing safety standards for labs
- Cross CSU Collaboration (Chico, Pomona, LB) Collaborate with CalTrans pavement project
- CLASS Supporting Engineering students in oral presentation skills
- Education implementing professional development schools (PDS) model with 3 school districts



Learning-Centered First Year Experiences

College-Based FYE Programs: A Case Study in Learning-Centeredness



Partnership of University and Colleges

University-wide Outcomes

College-based Courses

GE Requirement OR

Major Requirement

Student Affairs Partners

College Peer Mentors

Assessment data collected for all programs

College Specific assessment data collected

FYE Learning Outcomes



1. Students will demonstrate a commitment to and a responsibility for their own education.
2. Students will understand the relationship of their education to their personal and professional development.
3. Students will develop the skills to work cooperatively in diverse communities and build a strong support network of faculty, staff, and peers.
4. Students will develop information literacy skills to enhance their academic and personal success.
5. Students will develop an appreciation of intellectual inquiry.
6. Departments and Colleges will demonstrate a commitment to and a responsibility for their students' success.

College FYE Courses



College of Agriculture—Agriculture 100: Orientation to the College of Agriculture

College of Business Administration—Developing a 4 unit FYE course

College of Education and Integrative Studies—IGE Sequence

College of Engineering—EGR 100/L: Engineering, Society, and You

College of Environmental Design— ENV 101 & ART 150A

Collins College of Hospitality Management—HRT 101: Introduction to the
Hospitality Industry

College of Letters, Arts, and Social Sciences—CLS 101/ A: Freshmen Seminar

College of Science—SCI 101/A & 102/A: Science and Mathematics: Freshman
Experience I & II

Examples of Assessment for Continuous Improvement: EGR 100/100L



Salient Student Survey Results

- 83% of students would recommend the class to others.
- Time management, learning styles, and learning about what engineering is were seen to be the most useful aspects of the class.
- 70% or more of respondents somewhat agree or strongly agree with the following:

I have learned about how engineers impact society.

I understand faculty expectations for college-level academic work.

I have learned about campus resources and how to use them.

I have learned to use on-line and library resources to improve student learning.

I have learned about the different disciplines in engineering and career options.

Examples of Assessment for Continuous Improvement: CLS 101/101A



Salient Student Survey Results

- 70% or more of respondents somewhat agree or strongly agree with the following:

This class offered useful information.

I learned a lot about Cal Poly Pomona.

A variety of discussion and interactive techniques were used.

I got to know my FYE professor and classmates well.

I would recommend this class to another student.

I learned about different study skills.

- Assessment of Academic Inquiry: FYE students significantly improved analytic writing skills over the course of the quarter.
- A Problem: 30% of students misidentified the common FYE text as a novel.

Examples of Assessment for Continuous Improvement: SCI 101/A & 102/A



Salient Student Survey Results

- 101/A

- 70% would recommend the course to other students.

- Students found peer mentors valuable.

- Students learned about time management and campus resources.

- 102/A

- 83% would recommend the course to other students.

- Students found career and internship information useful.

- Students profited from guest speakers.

- A Problem: Too much busy work

Campus FYE Assessment Data: GPA & Persistence



GPA Data For Engineering, CLASS, and Science (2007-08)

- FYE students had a higher overall GPA in Fall vs. Non FYE students (2.81 vs. 2.62).
- This GPA advantage persisted into Spring (2.56 vs. 2.50).

Persistence Data For Colleges with FYE Programs (Fall 2007-Fall 2008)

On average the persistence of students in an FYE program is higher than non-participants:

- FYE—83%
- Non-FYE—79%
- Students who changed majors (5%)—88%

Future Campus Wide Assessment Efforts



Continue to compile and analyze data about:

- Grade Point Average
- Persistence
- At risk students

AY 2009-2010 Compile and analyze data about:

- Completion of personalized roadmaps
- Participation in on-campus activities
- Analytic writing skills



Examples of Students Taking Charge of Their Learning

Taking Charge – Upon Arrival



- Collins FYE – HRT 101 identifies options & choices for students
 - Professional Interest Inventory helps student plan career
 - Investigate curriculum to identify relevant courses
 - Create academic plan that directly responds to interests
- Science FYE - Taking charge of learning is the cornerstone
 - Connect faculty and students early
 - Make connections with peers
 - Help new students look forward and plan their future at CPP and beyond as productive citizens
- CLASS – Psychology & Sociology Peer Mentor Program
 - yearlong course develops mentors for incoming students
 - stresses importance of being an intentional learner

Taking Charge – Upper Division/Grad



- Agriculture – Animal Health Science, Food Science & Technology
 - Students develop their own learning outcomes for internship/externship experiences.
- ENV Topic Studios – Landscape Architecture & Architecture
 - Students choose topics for investigation in advanced courses,
 - Empowers students to develop specializations in highly-structured accredited curricula.

Taking Charge – Upper Division/Grad



- Business - Merrill Lynch Partnership with The School and Arts and Enterprise.
 - Students lead high school students, in helping small businesses.
 - Participating students develop leadership skills and learn self-reliance in developing solutions
- CEIS – Capstone projects in EWS and IGE
 - Created by student as a demonstration of knowledge and understanding of the field
 - Shows how learning has transformed their thinking and influenced new directions of study (lifelong learning).

Taking Charge – Co-Curricular



- Assessment of Advising
 - Campus-Wide Initiative
 - Charges students to understand and Access Advising Services
- Study Abroad Opportunities
- Student-Organized Learning Events
 - Lecture Series
 - Exhibitions
 - Community Dinners



Questions?