Assessment Unpacked: Why? How? & Now What?

A Campus-wide Conversation

Lehman College 05.06.19

The "Why"



Last year the you process, we look interests, looked prices, marveled Basically we did a along with a few i checking that the question that nev is like?" I suspect

Assessment Is an Enormous Waste of **Time**

By Erik Gilbert | MARCH 20, 2019 ✓ PREMIUN

determines that there is a health benefit to a food, say carrots, there is immediately a rush to figure out what specific component of the food is good for you. The idea is to find

The New York Times

The Misguided Drive to Measure 'Learning Outcomes'







I teach at a big state university, and I often receive emails from software companies offering to help me do a basic part of my job: figuring out what my students have learned.



g one thing — student learning — it can show us colleges. But what if learning isn't the most hen the underlying assumption behind

doubt many of you will spend part of the month of January looking o assessment material from the fall semester. Equipped with some pre- and post-tests, a couple of artifacts, a rubric, a curriculum map, and, perhaps, a little bourbon, you will study your data carefully, make a few quick inferences and then identify a minor problem that you can address by making equally minor changes to your course of

An Insider's Take on Assessment: It May

Be Worse Than You Thought

"Make sure the stakes are real, and meaningful to me. If you need me to engage in some reporting exercise because that's what you need to keep your boss off your back, and if you make it clear that I need to do this because you're my boss and you need it, I can certainly do it."



"Will do assessment for accreditation"

THE CHRONICLE OF HIGHER EDUCATION

Tips for Managing Curmudgeons

How to approach faculty members who find your administrative buzzwords insufferable

By Alex Small | OCTOBER 24, 2016

am a proud curmudgeon. Whatever hip new thing you're promoting, I'm probably uninterested. Whatever buzzword you might be enamored of, I probably hate it. And whatever bureaucratic activity you want me to engage in, I almost certainly think it's pointless.

Despite my complete lack of buy-in for whatever you're into, I'm also willing to work hard for my department and students, even if that means jumping through your hoops. I have worked successfully to move policy proposals through the governance system, I've overseen a curriculum overhaul in my department. I've coordinated class schedules, and I have spearheaded a successful effort to expand the number of majors in my department. In those efforts



I've cleared numerous bureaucratic hurdles, generated enough paperwork to chop down the Amazon rain forest, and even worked a few buzzwords into some of the paperwork.

Accreditation requirements

WSCUC

- "...the Commission calls upon institutions to take the next step on the assessment journey: moving from a focus on creating assessment infrastructure and processes to a focus on results and the findings about the quality of learning that assessment generates."
- 6 out of 39 CFRs explicitly calls out "assessment"
- 4 of 8 required components in the selfstudy have a big focus on assessment

MSCHE

- "The institution's student learning programs and opportunities are characterized by rigor, coherence, and appropriate assessment of student achievement throughout the educational offerings, regardless of certificate or degree level or delivery and instructional modality."
- 16 of 46 required criteria explicitly calls out "assessment"
- Standard V: "Educational Effectiveness Assessment"

Measurement

Appraisal

Standardized testing

Assessment

Rating

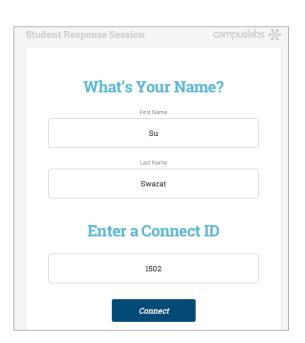
Judgment

Evaluation

Assessment is _____

www.srs.campuslabs.com

Connect ID: 1502



What I got five years ago...



"Assessment infringes upon academic freedom."

"Assessment is just another way to evaluate faculty performance"

"Assessment is hard for us -Stats are not our thing."

"Assessment is purely administrative. I have been here for 35 years - I will outlast you."

September 2014

Why do assessment...really



- To improve student learning and experiences
- To encourage faculty collaboration and communication about teaching and learning
- To ensure integrity of curricular and cocurricular offerings
- To confirm, demonstrate and celebrate success
- To inform evidence-based decision making
- To support accreditation/compliance requirements

What is assessment...really

Assessment (of student learning) is an ongoing, iterative process consisting of four basic steps:

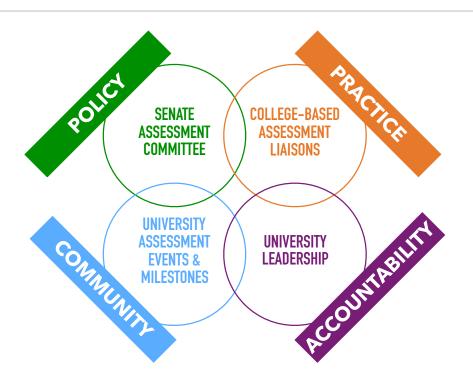
- I. defining learning outcomes;
- 2. choosing a method or approach and then using it to gather evidence of learning;
- 3. analyzing and interpreting the evidence; and
- 4. using this information to improve student learning.



**Source:WSCUC 2013 Handbook of Accreditation

CSUF Six-Step Assessment Process

What does it take to build meaningful assessment



Assessment as an institutional priority

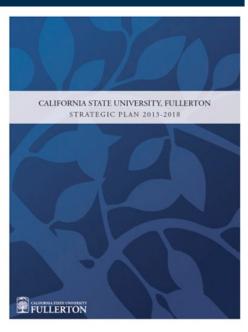


Develop and maintain a curricular and co-curricular environment that prepares students for participation in a global society and is responsive to workforce needs.



ASSESSMENT

In 2016-17, CSUF achieved 100% participation across all divisions in assessment reporting of degree programs, co-curricular activities and business practices. The assessment is designed to improve student success and institutional effectiveness.



Assessment policy and guidelines

University Policy Statement 300.022

"Assessment shall be intentional, ongoing, timely, student-centered, program-controlled, collegial, respectful of diversity and academic freedom, integrated, and institutionally supported."

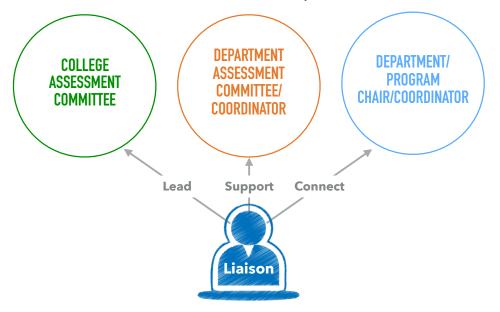


University-wide Learning Goals



Assessment leaders distributed across campus

Structure, reward and roles determined by the situations of each unit



Assessment celebrated on campus



The "How"

CSUF six-step assessment process

What do we want our students to learn and/or our units to accomplish?

How are we documenting the assessment AND improvement activities/results?

What changes are we making?
Are the changes working?



How are we doing? How do we know?

What evidence do we need to know to determine whether we are successful?

How do we use data to confirm/improve our practices?



Step I: Develop student learning outcomes

- A statement
- Significant and essential learning that students achieve at the end of a program
 - What students should be able to accomplish at the end of a course, curriculum, or any educational experience
- Useful to both students and faculty



What is a SLO

Knowledge

Facts Concepts Theories Principles

Skill

Critical thinking Communication Teamwork Quantitative reasoning ...

Attitude

Civic engagement
Cultural competency
Professionalism
Life-long learning

SLOs for today's workshop:

Describe the components of a basic assessment cycle

Evaluate the strengths and weaknesses of an assessment plan

Open to explore ways of implementing meaningful assessment at Lehman



SLOs at different levels

Accreditor

Quantitative Reasoning

University

Graduates are able to apply quantitative reasoning to real-world problems.

Program

Students are able to use statistical tools to interpret data from research studies.

Course

Students are able to calculate and interpret a variety of descriptive and inferential statistics.



Goals...Outcomes...Objectives...

Goals

Broad, general statements about knowledge, skills, attitudes, etc. expected in students

Outcomes

Clear, specific "operational definitions" of goals Learner-centered

Objectives

Intended instructional strategies or learning opportunities

Instructor-centered



Where do SLOs come from

Accreditor

University

Program

Course

Alignment

- Engage faculty!
 - General vs. Discipline-specific
 - "Top-down" vs. "Bottom-up"
 - Adapt from existing best practices
- Involve important but often forgotten stakeholders (students, alumni, employers, etc.)



What is a good SLO

- Learner-centered, not instructor-centered
- Aligned with the mission and goals of accreditor, university, college, etc.
- Focus on "high-priority learning"
- Real (not aspirational)
- Simple language
- Specific, clear and concise
- Demonstrable and measurable
- Discrete (no "double-barrel" statements)
- Manageable (more is not better)



Sound SLOs are Active



LEVELS of SLOs (Bloom et al., 1956)	BLOOM'S TAXONOMY EXAMPLE ACTION VERBS
Evaluation	Assess, Conclude, Criticize, Justify, Value
Synthesis	Assemble, Create, Design, Produce, Reconstruct
Analysis	Analyze, Compare, Differentiate, Experiment, Solve
Application	Apply, Demonstrate, Modify, Practice, Use
Comprehension	Convert, Explain, Interpret, Paraphrase, Report
Knowledge	Define, Describe, List, Name, Outline

Case Study: Step 1

"S" in SLOs ≠ Secret

- Disseminate SLOs:
 - through multiple venues
 - to all major stakeholders
- Use SLOs:
 - Guide curriculum and course planning
 - Focus assessment and improvement effort
- Make SLOs meaningful to the students:
 - through exercises: Rate/Map out/Paraphrase/Sell



Curriculum mapping: I/D/M

Course	SLOI	SLO2	SLO3	SLO4	SLO5
100	Introduced		Introduced		
101		Introduced			Introduced
200	Practiced			Introduced	
230			Practiced		
300	Practiced	Practiced			Practiced
350		Mastered			Mastered
401	Mastered		Practiced; Mastered		



Can be program requirements other than courses



Add Course Learning Outcomes

Course	SLOI	SLO2	SLO3	SLO4	SLO5
100	Introduced CLO1/CLO2		Introduced CLO3		
101		Introduced CLO3			Introduced CLO1
200	Practiced CLO5			Introduced CLO2/CLO4	
230			Practiced CLO1/CLO3		
300	Practiced CLO4	Practiced CLO5			Practiced CLO7/CLO8
350		Mastered CLO1			Mastered CLO2
401	Mastered CLO3/CLO4		Practiced; Mastered CLO4/CLO8		



Curriculum map: Coverage

Course/Learning Experiences	Obj 1 (Identification of 80s Components)	Obj 2 (Research Methodology)	Obj 3 (Writing Critically)	Obj 4 (Oral Comm)
PCUL201(Introduction to the 80s)	3	0	1	0
PCUL301 (80s Music)	3	0	1	2
PCUL302 (80s Fads)	3	0	1	0
PCUL303 (80s TV and Movies)	3	0	0	2
PCUL304 (80s Technology)	3	1	1	0
PCUL361 (Methods and Analysis)	0	3	1	0
PCUL401 (80s Politics and Culture)	1	1	3	0
PCUL402 (Profiles of 80s Icons)	1	0	1	3
PCUL403 (The Music Video)	2	0	0	0
PCUL404 (The 80s and Today)	0	2	3	0
PCUL480 (Capstone)	0	2	2	2

Table 2. Curriculum Map of Pop Culture Program (Oral Communication is Objective 4).

Coverage of objective: 0 = No Coverage, 1 = Slight Coverage, 2 = Moderate Coverage, 3 = Major Coverage



Add year of assessment

Curriculum Map: Student Learning Goals, CAS Core Courses, and Year of Assessment

Year	SLG	101	201	215	394	300	301	305	310	325A	325B	321	322	323	AdvPr	490	491
1	Describe and explain relevant theories, concepts, and related research findings.	1	1	*	*	*	*	*	*	D/M	D/M	D/M	D/M	D/M		М	М
	1b. Identify and describe normative development.	1		*		*			*	D/M	D/M	D/M	D/M	D/M			
5	1c. Describe individual, cultural, and environmental differences.	- 1	1	*	*	*	*	D	*	D	D	D	D	D	*	М	М
	4c. Identify funding, services, and advocacy strategies at the local, state, federal, and international levels that support children, adolescents, families and communities	*	1	*	D	*	*	*	*	*	*	*	*	*	М	*	м
3	2a. Identify, access, analyze and synthesize relevant sources	*	*	*	*	1	1	I/D	D	D	D	D	D	D	D	М	М
	2b. Critically analyze research studies.	*	*	*	*	1	1	I/D	*	D	D	D	D	D		М	М
4	3a. Write effectively in APA style, taking purpose and audience into account		*	1	*	I/D	I/D	I/D	*	D	D	D	D	D	*	М	М
	3b. Make effective oral presentations, taking purpose and audience into account			*		-	1	-	*				*	*	D	М	М
2	4a. Apply theories, concepts and research findings to promote child well-being	1	1	*	- 1	*	*	*	*	D	D	D	D	D	М	М	М
	4b. Identify relevant ethical and legal issues and the impact of possible actions in real-world situations				D/M			I/D	*	*		*		*	м		M

I: Introduced D: Developed M: Mastered

Source: CSUF

Case Study: Curriculum Map



Step 2: Identify methods and measures

- We are already and always assessing student learning
- The evidence/measures already in place is NOT always the best place to start
 - Do the measures address the SLO?
 - What are the action verbs in the SLO?



Direct vs. Indirect

Direct

Student behaviors or products that demonstrate their mastery of SLO

Exam/Quiz
Paper/Presentation
Project/Portfolio
Recital/Exhibition
Peer evaluation

...

Indirect

Reported perceptions about student mastery of SLO

Self-reflection essay
Self-report survey
Interview
Focus group
Report by alumni, employer, etc.

Direct evidence helps tell us "what", and indirect evidence helps tell us "why".



Formative vs. Summative

Formative

Evidence of student learning gathered during a course/program for the purpose of guiding teaching and learning improvements

One-minute paper "Muddiest" point In-class problem solving

• • •

Summative

Evidence of student learning gathered at the conclusion of a course/program for the purpose of measuring student proficiency

Final exam
Thesis/Dissertation
Capstone project

• • •

Program assessment:

Formative in principle = Assessment for improvement Summative in practice = Prioritize summative measures



Choosing the right measure

- Valid: Are you measuring the outcome?
- Reliable: Are the results consistent?
- Actionable: Do the results clearly tell you what students can or cannot do?
- Triangulation: Are there multiple lines of evidence for the same SLO?
- Meaningful and engaging: Are faculty engaged? Do students care?
- Sustainable: Can the process be managed effectively within the program context?



Triangulating direct and indirect measures

Chemistry - B.S. program:

SLO: Student can explain the fundamental chemistry principles.

DIRECT

- Final exam questions (Multiplechoice/Short-answer)
- Senior project (paper/presentation)
- ACS exam
- Concept inventory
- ...

INDIRECT

- Graduation survey
- Alumni survey
- Employer focus groups
- ..



Triangulating direct and indirect measures

Nursing - D.N.P. program:

SLO: Student are able to work effectively in a team.

DIRECT

- Scenario-based exam questions
- Team project score
- Team member peer evaluation
- Instructor observation
- ..

INDIRECT

- Self-reflection journal
- Self-assessment survey
- Student interviews
- ..



Collect meaningful evidence in a feasible way

- What measures do we already have in place? Can they be revised or repurposed for assessment?
- Prioritize embedded measures
- Grading is not assessment, but assessment could contribute to grading
- Look for capstone courses, culmination experiences, etc.
- Look for measures that yield multiple lines of evidence or collect information for multiple purposes

Case Study: Step 2



Step 3: Determine criteria for success

• A performance standard:

- What level of performance is good enough?
- Pre-determined!
- Supported by historical data, reasonable expectations, theoretical frameworks...



Criteria for success examples

SLOs for today's workshop	Methods/Measures	Criteria for Success
Describe the components of a basic assessment cycle	Short answer question at the end of the workshop	90% or more participants correctly describe the components
Evaluate the strengths and weaknesses of an assessment plan	A survey asking participants their self-perceived ability to evaluate an assessment plan	At least 80% of participants respond with options "high" or "very high"
Open to explore ways of implementing meaningful assessment at Lehman	A focus group with participants about their opinions of assessment	The focus group participants have the consensus that the campus is open to meaningful assessment

Case Study: Step 3



Step 4: Collect and analyze data

- Sampling!
 - Relevant, Representative, and Reasonably sized
 - Determined by the outcome and program context
 - Very large sample size is rarely needed.
 - Moderate sample size is sufficient (e.g. "50-80" rule; 20-30%).
 - If homogenous student population, small samples are sufficient.
 - If possible, plan for sufficient sample size to disaggregate data by student groups



Rubrics is a useful tool

- Scoring guides that explicitly classify learning products/behaviors into categories that vary along a continuum.
- No one format -Flexible!
- Holistic vs. Analytic

/Criteria\ (Capstone	Capstone Milestones			
\	4	3	2	1	
Explanation of issues	Issue/problem to be considered critically is stated clearly and described comprehensively, edivering all relevant information necessary for full understanding	Issue/problem to be considered emically is stated, described, and clarified so that understanding is not seriously impeded by omissions.	issue/problem to be considered critically is stated but description leaves some terms undefined, ambiguities unexplored, boundaries undetermined, and/or backgrounds unknown.	Issue/problem to be considered critically is stated without clarification or description.	
Evidence Selecting and using information to investigate a point of view or conclusion	Information is taken from source(s) with enough interpretation/ evaluation to develop a comprehensive analysis or synthesis. Viewpoints of experts are questioned thoroughly.	Information is taken from source(s) with enough interpretation/evaluation to develop a coherent analysis or synthesis. Visconsists of accounts are arbitant to	enough to develop a coherent analysis or	Information is taken from source(s) without any interpretation/evaluation. Viewpoints of experts are taken as fact, without question.	
	шогоодшу.	<u> </u>	iled		
Influence of context and assumptions	Thoroughly (systematically and methodically) analyzes own and others' assumptions and carefully evaluates the relevance of contexts when presenting a position.	perfor descri		Shows an emerging awareness of present assumptions (sometimes labels assertions a assumptions). Begins to identify some contexts when presenting a position.	
Student's position (perspective, thesis/hypothesis)	Specific position (perspective, thesis/hypothesis) is imaginative, taking into account the compleaties of an issue. Limits of position (perspective, thesis/hypothesis) are acknowledged. Others' points of view are synthesized within position (perspective, thesis/hypothesis).	Specifically thesis by pothesis by the sin account the complexities of an issue. Others points of view are admowledged within position (perspective, thesis/hypothesis).	thesis/hypothesis) admowledges different sides of an issue.	Specific position (perspective, thesis/hypothesis) is stated, but is simplisti and obvious.	
Conclusions and related outcomes (implications and consequences)	Conclusions and related outcomes (consequences and implications) are logical and reflect student's informed evaluation and ability to place evidence and perspectives discussed in priority order.	Conclusion is logically tied to a range of information, including opposing viewpoints; related outcomes (consequences and implications) are identified clearly.	Conclusion is logically tied to information (because information is chosen to fit the desired conclusion), some related outcomes (consequences and implications) are identified clearly.	Conclusion is inconsistently tied to some of the information discussed; related outcome (consequences and implications) are oversimplified.	



Rubric for whining: Holistic

	Scores/Levels/Scale									
I	2	3	4	5	6					
The whine is little more than a whimper; Nobody noticed or cared; The whine has no purpose or target.	The whine is barely audible; A few people join the whine, but nobody really pay attention to it; The whine gets little attention from the target.	The whine is heard but fades out, and the pitch is flat and lifeless; One or two people join the while; There is a purpose to the whine, but it fails to achieve its goal.	The pitch of the whine varies, and the whine can be heard over the teacher's voice; Some people join the whine; The whine achieves its goal from the target through sympathy, guilt or frustration.	The pitch of the whine is high, and the whine is audible over classroom noise; Many people participated in the whine. There is a clear target of the whine.	The whine seems endless, with a pitch oscillating through entire frequency range; It has full audience participation; The target of the whine responds immediately to the full intention of the whine.					



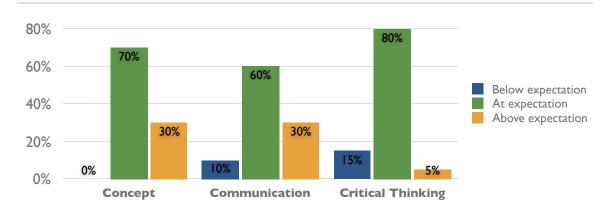
Rubric for whining: Analytic

			Sc	ores/Levels/Scale		
Criteria/ Categories	ı	2	3	4	5	6
Purpose	There is no purpose of the whine. The whine is not directed at a target.	The whine doesn't seem to have a purpose. The whine gets little attention from the target.	There is a purpose to the whine, but it failed to achieve its goal. The whine may establish some sympathy for the whiner.	There is a purpose to the whine. The whine achieves its goal from the target through sympathy, guilt, or frustration.	The purpose of the whine is clear. There is a clear target of the whine. The goal of the whine is achieved.	The purpose of the whine is to get a group response. The target of the whine responds immediately to the full intention of the whine. The whine may have multiple purposes or targets.
Audience	Nobody noticed; nobody cared.	A few people joined your whine, but nobody really paid attention to it .	The whine was noticed by some people. One or two people joined the whine.	Most of the people turned to hear the whine. Some people join the whine.	Everybody in the area noticed the whine. Many people participated in the whine.	There is full audience participation. The audience extends beyond the boundaries of the initial whine.
Quality	The whine is little more than a whimper.	The whine is barely audible.	The whine is heard but fades out. The pitch is flat and lifeless.	Whine lasts five seconds or more. The pitch of the whine varies. The whine can be heard over the teacher's voice.	Duration of the whine is enough to evacuate audience. Pitch of whine is high, like fingernails on a chalkboard. Whine is audible over classroom noise.	The whine was seemingly endless, carrying on for days. The pitch of the whine oscillated though entire frequency range, beyond human hearing causing neighborhood dogs to whine.

Case Study: Step 4



Step 5: Plan and execute improvement actions



- Outcome met?
 - Celebrate success!
- Outcome not met?
 - Have no fear report and share, but have a plan to figure out why and improve.



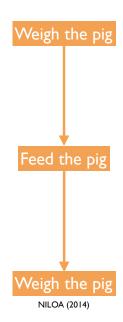
Ask questions about assessment findings

- Does the assessment measure align with the rubric?
- Does the assessment measure align with course activities?
- Are there sufficient opportunities to develop the SLO in the curriculum?
- Is the student sample appropriate/sufficient?
- Does the assessment measure allow students from different background to perform at the same level?



Small changes matter!

- Types of changes:
 - Curriculum
 - Pedagogy
 - Faculty support
 - Student support
 - Resources
 - Assessment plan
 - More data collection?
- Don't forget to re-assess the improvement actions!





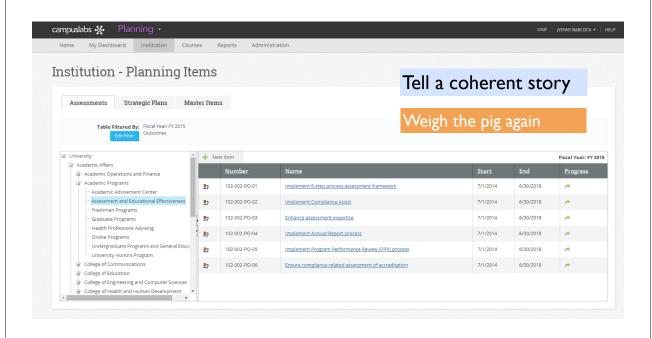
Improvement actions example

Business Communication program

- Assessment finding:
 - Student writings of a case analysis were graded using the CLASS rubric, and found that students had the greatest deficiencies in "Strategy".
- Improvement actions:
 - Collected additional demographic data to narrow down student groups who have the greatest needs;
 - Offered faculty development workshop on case analysis;
 - Emphasized use of topic sentences and supporting evidence in class;
 - Provided sample professional documents for use in classroom and homework exercises.
- Re-assessment:
 - Using the same rubric, writing communication scores improved 17% in three years.



Step 6: Document assessment activities



Case Study: Step 5 & 6



Find the best system for the institution

· Questions to ask the vendors:

- Does the software support strategic and/or assessment planning?
- Does the software integrate with accreditation requirements?
- What level of assessment data does the software collect and manage?
- Does the software integrate with existing LMS system?
- What is the data reporting capacity at what level; disaggregation vs. aggregation; customizability...
- What is the availability and quality of customer service?
- What is the cost Initial vs. ongoing?
- Can the software by customized to fit the institution's process?

Questions to consider by the institution:

- Who will manage the software coordination; maintenance; reporting?
- Who are the campus users?
- Who will train the campus users?
- How will the data be used?

The "Now what"

Toward a culture of assessment learning



A sustainable multi-year assessment plan

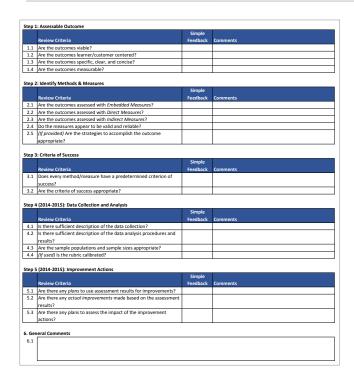
Some best practices:

- Limit to 5-7 SLOs
- Determine a realistic assessment plan cycle, i.e. how long to complete meaningful assessment of all SLOs
- Create a multi-year assessment plan that assesses I-2 SLOs a year
- Consider overlapping assessment (of new SLO) and improvement (of assessed SLO) activities

Things to consider:

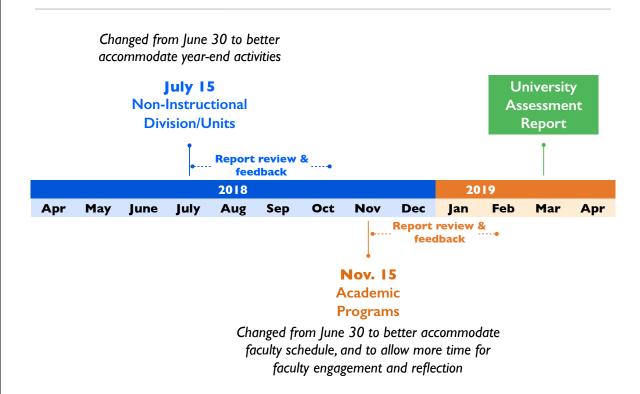
- Timeline
- Process
- Participants: Engage all!
- Steps to turn assessment results into improvement actions
- Self-evaluation/Reflection of the assessment process

Don't let assessment reports go into the blackhole



- Annual peer review of assessment reports by Assessment Liaisons
- Individualized feedback to programs
- Identify best practices and areas of improvement
- Aggregated results for university and accreditation reporting

Be responsive to campus needs

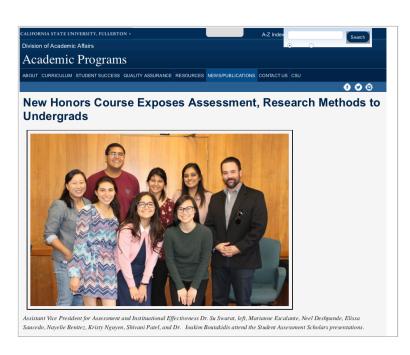


Apply the same process everywhere

- GE assessment Faculty Learning Community
- High Impact Practice assessment
- Program performance review
- Assessment of campus initiatives (strategic plan; GI 2025)



Give students an active role in assessment



- Student Assessment Scholars program
- Culturally responsive assessment

Develop campus assessment expertise



- Workshops & training
- Assessment Inquiry grants
- University assessment report
- Annual assessment forum



A culture of assessment is not a fantasy

"Assessment is _____."

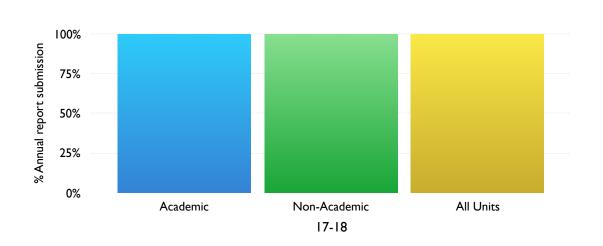


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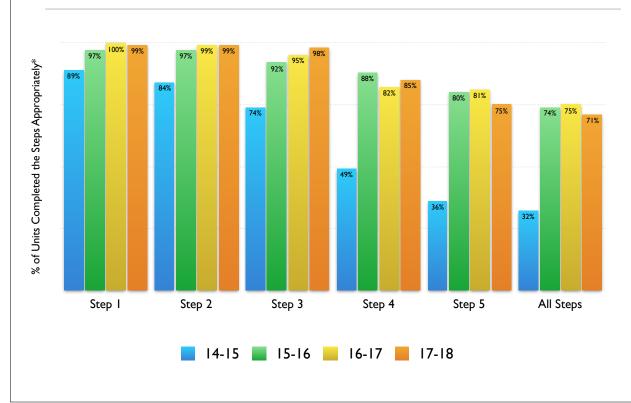


March 2015

CSUF campus participation in assessment



CSUF campus quality of assessment





sswarat@fullerton.edu

www.fullerton.edu/data