I Think I Can..., I Will:
Faculty Self-Efficacy for Developing a Meaningful Student Learning Assessment Process

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Who we are

Dr. Martin is the Director of Academic Assessment in the Center for Teaching and Learning at the University of Western States.

Dr. Williams is the Assistant Director of Course Development of the Innovation in Learning Center at the University of South Alabama.

Please identify your primary role at your institution.

1. Faculty Member

2. Assessment Professional

3. Instructional Designer/Instructional Staff

4. Administrator

5. Other

Session Outcomes

01 Barriers

Identify barriers associated with meaningful student learning outcomes assessment practices.

02 Self-Efficacy

Discuss self-efficacy as it relates to faculty engagement with student learning outcomes assessment from our pilot data collection of self-efficacy questionnaire.

03 Strategies

Discuss strategies for improving faculty self-efficacy as it relates to the student learning outcomes assessment process.

Session Outcome #1

Identify barriers associated with meaningful student learning outcomes assessment practices.

At your institution, how much faculty resistance would you say there is to assessment?

1 Are you seriously asking this question? of course, our faculty are resistant!

2 Some!

3 None at all - our faculty love assessment!

Threat?

PHOTO BY CASEY KANODE

Faculty may react to student outcomes assessment the way most of us react when we see a rattlesnake within striking distance.
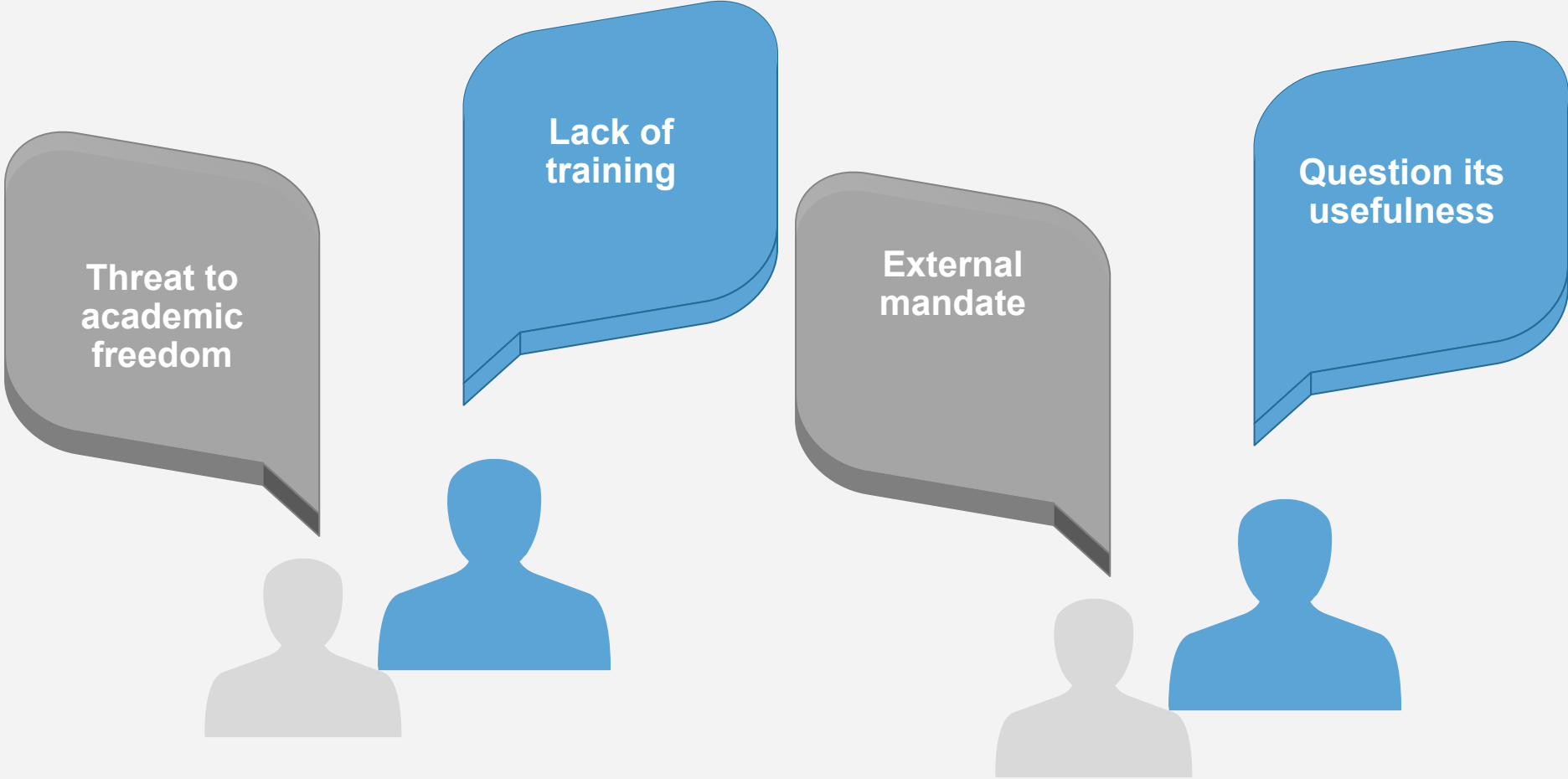
First, we perceive a threat, and then we react.

Reaction

Common faculty reactions to the perceived threat of assessment include metaphorically running away and throwing rocks or sticks at it. (Kramer, 2009, p. 8).

From the Literature...

Training & Resources

Faculty are trained to be content experts and scholars.

What other barriers do you encounter?

Session Outcome #2

Discuss self-efficacy as it relates to faculty engagement with student learning outcomes assessment from our pilot data collection of self-efficacy questionnaire.

Self-Efficacy as a Barrier?

A belief in one's ability or competence to perform a specific task (Gist, 1987).

In the case of assessment:

instructors' belief in their ability to fully engage with the cycle of assessment, that is, to plan, do, assess, and act.

Self-Efficacy as a Barrier?

We hypothesized self-efficacy is a barrier to engagement in quality assessment practices

→ Measure their current self-efficacy level (as a benchmark) to compare to the levels of assessment practices they perform (course, program, institutional)

Self-Efficacy as a Barrier?

We hypothesized self-efficacy is a barrier to engagement in quality assessment practices

→ Improve our faculty development model to include self-efficacy as it relates to assessment practices

→ Faculty learning of assessment runs parallel to improved student achievement of learning outcomes

Instrument Development

Integrated Bandura's self-efficacy theory using the *General Self-Efficacy Scale (GSE-6)* with specific items related to

1 Course Level Assessment

2 Program Level Assessment

3 Institutional Level Assessment
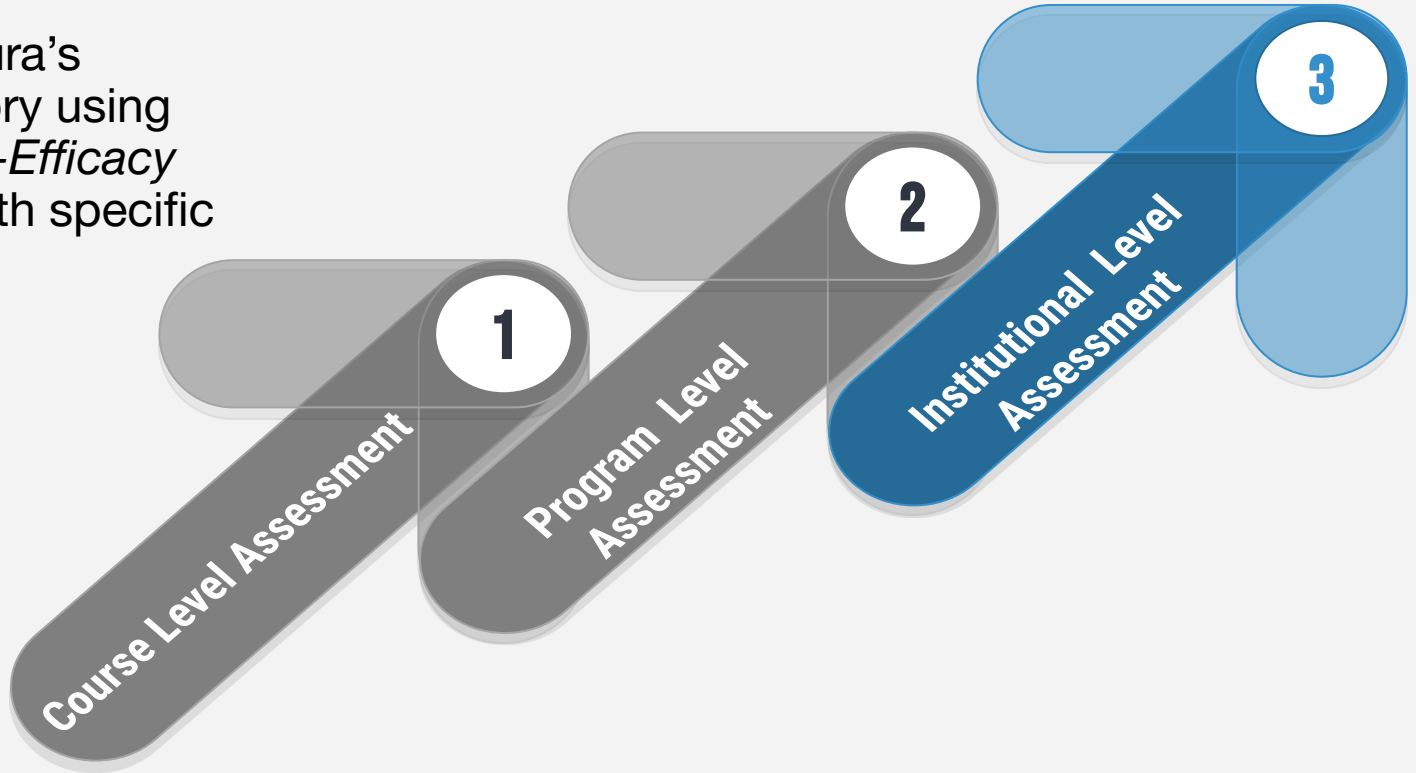
Goals of this Research to test our Hypothesis

Measure Self Efficacy **1**

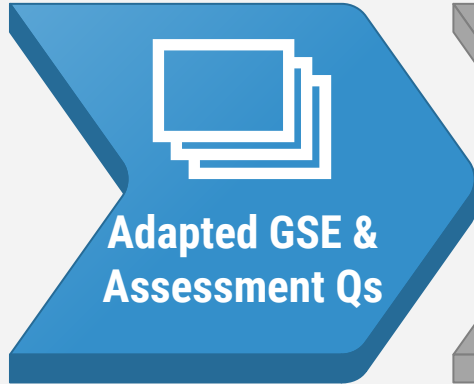to measure faculty self-efficacy as it relates to engagement with assessment processes.

refine our model of faculty development focused on evidence-based assessment practices.

Development **2**

What We Did

Adapted GSE & Assessment Qs

Expert Review

Administered to Faculty & Staff

Pilot Data

- Adapted GSE Scale
- Created Assessment Inventory for course, program, and institutional levels
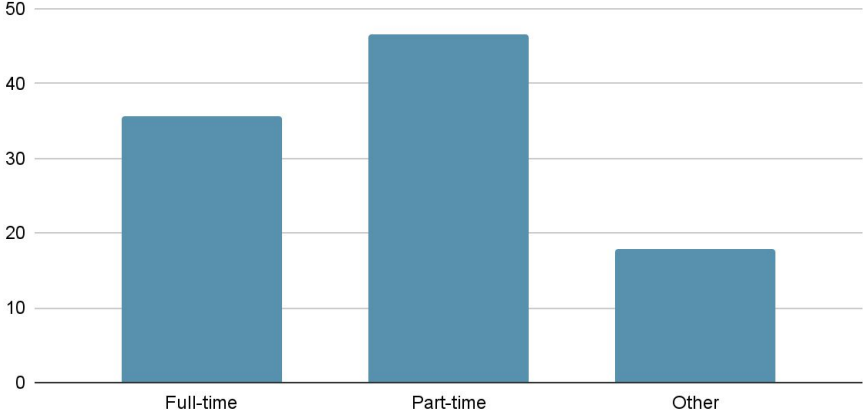
- Submitted to assessment experts for review

- Administered to Faculty and Staff engaged in assessment at Univ. of South Alabama in September/October 2021

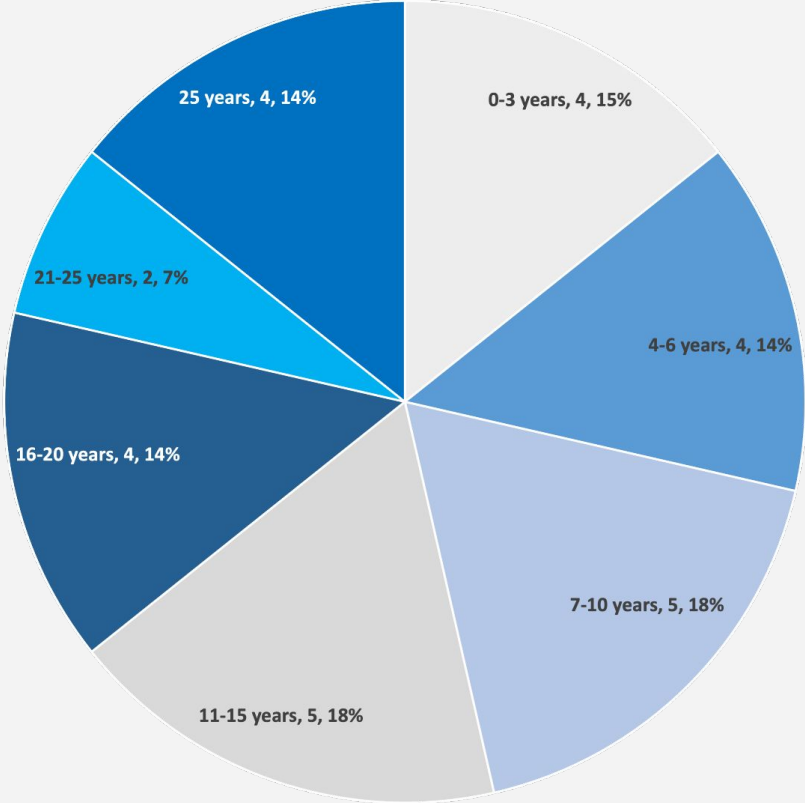- Pilot Data Presented Here with Implications for Faculty Development

General Self-Efficacy

	Count	Mean	Standard Deviation
I can always manage to solve difficult problems if I try hard enough.	34	3.45	0.57
If someone opposes me, I can find the means and ways to get what I want.	34	2.73	0.72
It is easy for me to stick to my aims and accomplish my goals.	34	3.42	0.50
I am confident that I could deal efficiently with unexpected events.	34	3.39	0.56
Thanks to my resourcefulness, I know how to handle unforeseen situations.	34	3.39	0.56
I can solve most problems if I invest the necessary effort.	34	3.52	0.67
I can remain calm when facing difficulties because I can rely on my coping abilities.	34	3.21	0.74
When I am confronted with a problem, I can usually find several solutions.	34	3.48	0.67
If I am in trouble, I can usually think of a solution.	34	3.45	0.67
I can usually handle whatever comes my way.	34	3.52	0.57

Course Assessment Self-Efficacy

	Count	Mean	Standard Deviation
I can write a quality student learning outcome.	34	3.19	1.05
I use learning taxonomies such as Bloom and Fink to develop student learning outcomes.	34	3.16	1.24
I regularly review the alignment between my student learning outcomes and my assessment methods.	34	3.19	1.08
I regularly use assessment data for course planning decisions.	34	2.84	1.13
I regularly discuss the assessment results with my colleagues.	34	3.00	1.18

Would you expect this result at your institution with your faculty?

I regularly use assessment data for course planning decisions.   34   2.84   1.13

1 Yes

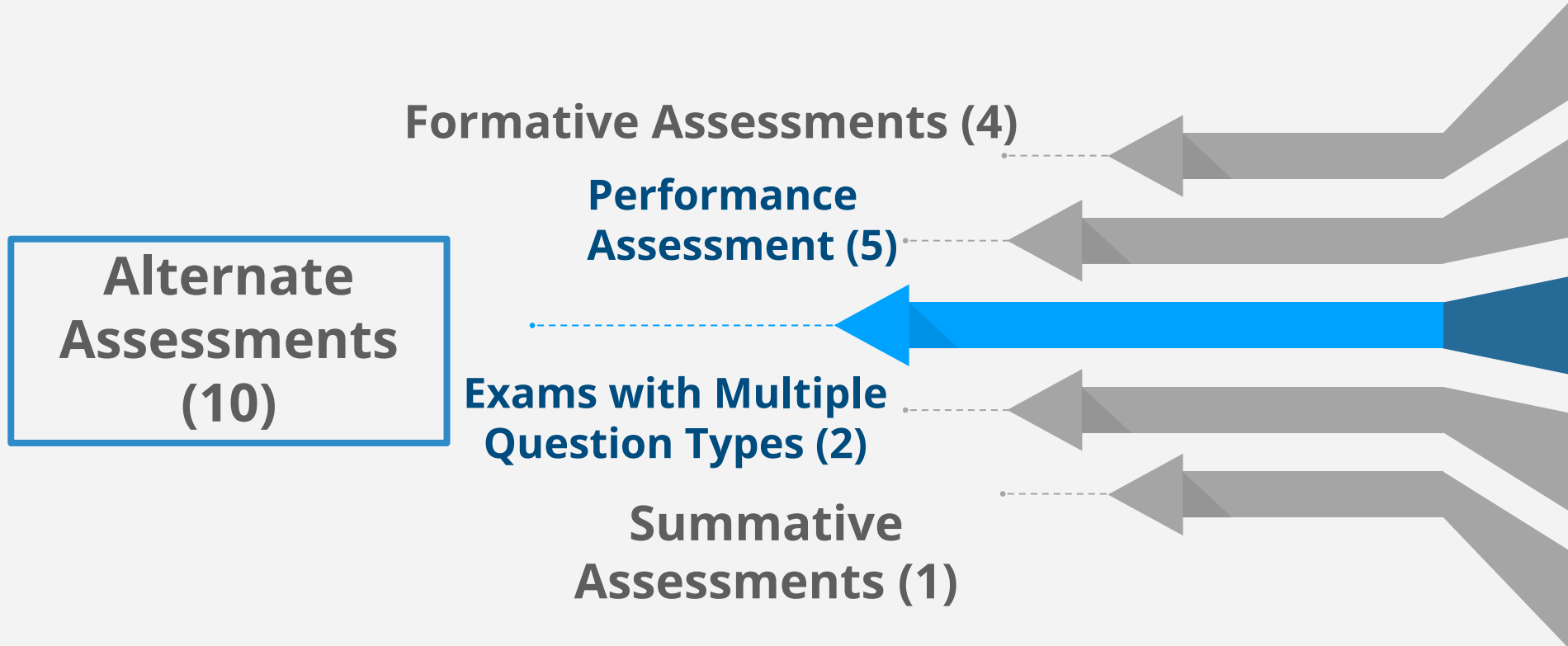**2** No

3 Maybe

Faculty Attitudes about Assessment

	Count	Mean	Standard Deviation
I am completely free to implement my own approach to course level assessment	34	4.21	1.01
I am completely free to implement my own approach to program level assessment.	34	3.07	1.25
Student assessment has improved the quality of education at this institution.	34	3.38	1.12
The effectiveness of teaching is enhanced when faculty regularly assess students.	34	4.31	0.89
Student assessment techniques accurately measure student learning.	34	3.17	1.07
Mandated student assessment limits the academic freedom of faculty.	34	3.03	1.18
Faculty have a professional obligation to regularly assess what students are learning.	34	4.30	0.92
An effective instructor is one who regularly assesses what students are learning.	34	4.50	0.82

Qualitative Data

We asked respondents the assessments they have implemented *and* the ways they have used assessment data at all 3 levels

➜ QDA Miner Cluster Extraction tool to open code responses to then develop categories (axial coding)

➜ Selected codes presented here

Categories of Codes: Course Level Assessments

Formative Assessments (4)

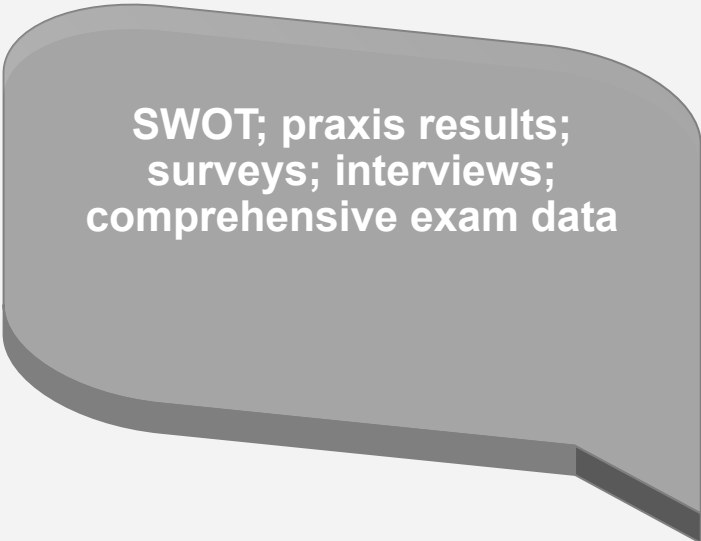Performance Assessment (5)

Alternate Assessments (10)

Exams with Multiple Question Types (2)

Summative Assessments (1)

(*N*) = number of supporting codes

Program Level Assessments

Code	Count
Assigned Paper	1
Departmental Exam	4
Annual Surveys on Performance	2
SWOT	1
Certification Exams (e.g. Praxis)	2
Portfolio	1
Curriculum Mapping	3
Committee Meeting Roles and Activity	6
Thesis Assessment	1
Review of Program Outcomes	1
Capstone Course Data	1
Program Assessment mapped to General Education Assessment	1
Interviews	1
Clinical Ratings/Internship Evaluation	1
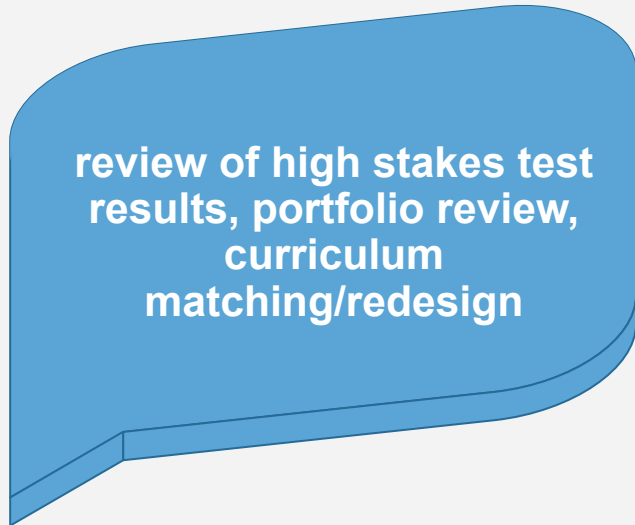
Small *N*

Biggest Category involved variety of aspects of assessment committees

Program Level Assessments

Session Outcome #3

Discuss strategies for improving faculty self-efficacy as it relates to the student learning outcomes assessment process.

Use of Data Strategies Used

What Strategies have you implemented to <u>use</u> assessment data to impact student learning?
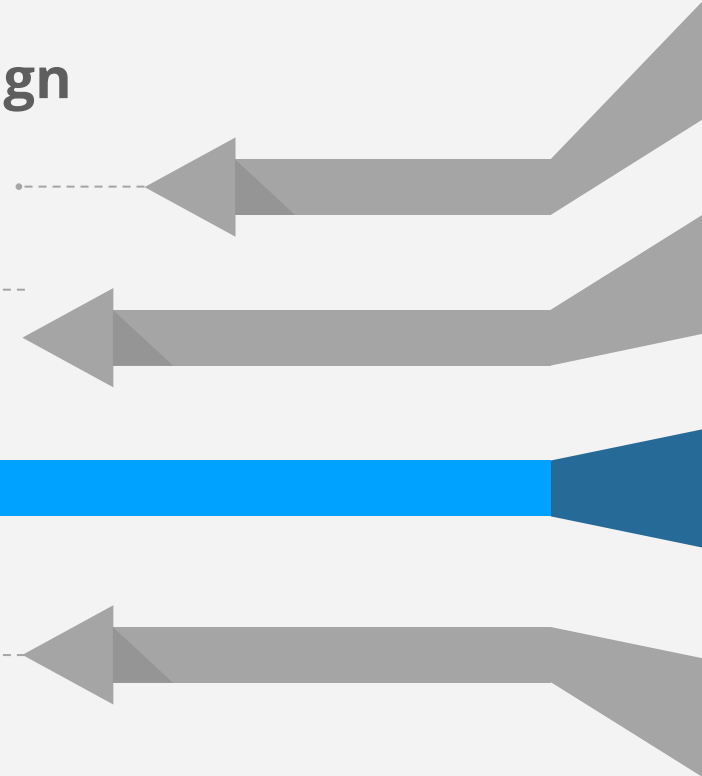
Categories of Codes: Use of Data - Course

Reviewed Assessment Design & Type (2)

Modality / Technology Factors (2)

Changed Instruction (4)

Reflected on their role as an instructor, focused on continuous improvement (1)

(*N*) = number of supporting codes

Background / Training in Assessment Practices

None

Teaching & Learning Center

Graduate Programs

→ Other sources included professional development and conference participation & part of job training in their specific college

Resources Desired to Improve Practice

Services from Teaching and Learning Center (3)

involvement of other colleagues (3)

Open Sessions, including alignment and curricular mapping (7)

commitment from administration, faculty reward (4)

more granular data and communication to department (4)

(*N*) = number of supporting codes

Our Model

Quality Learning Outcomes Assessment

Teaching, Learning, & Assessment

Practice Outcome Writing

Brainstorm Use of Data Strategies

Now adding self-efficacy implications?

Implications from the Pilot

Meet Faculty Where they Are - Explicitly Address Self-Efficacy

Move training away from external mandates to cross-campus departmental collaboration

Faculty learning of assessment runs parallel to improved student achievement of learning outcomes
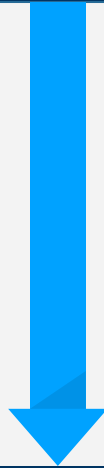
Next Steps

Expand questionnaire more broadly

Explicitly <u>assess</u> self-efficacy during and after faculty development sessions on learning outcomes assessment

Include more broadly the impact of COVID-19 on faculty perceptions and practice

Thank you!

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Alignment in Teaching, Learning, and Assessment
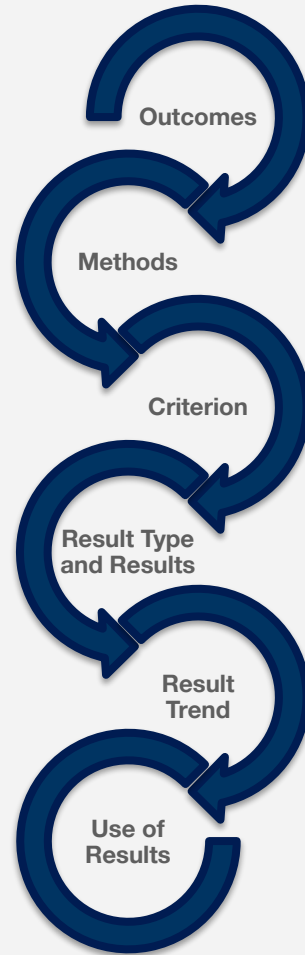
Characteristics of Student Learning Outcomes

Identify

Clear

Observable

Skills

Relevant

Use of Results Activity

Use of Results	Example #1	How to improve	Example #2	How to improve
Not Acceptable	Criterion met	Revise use of results to include a statement on how the results of the assessment were used.	Results will be monitored	Indicate the process for coming to the decision to monitor the results. For example, faculty met to review the data and determined no changes were needed for this academic year. Student performance related to this outcome will be monitored throughout the year.

Quantitative Results: Self-Efficacy

01 No relationship at this time between self-efficacy and course self assessment self-efficacy.
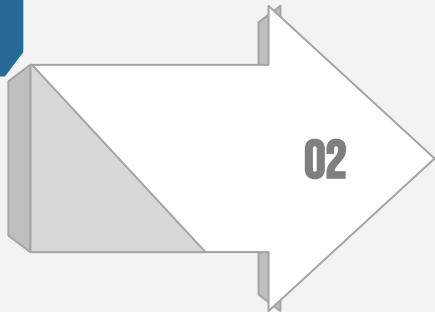
02 **Course assessment self-efficacy was correlated with**

Faculty have a professional obligation to regularly assess what students are learning *(r = .522; p<.001)*

Mandated student assessment limits the academic freedom of faculty *(r = -.415, p<.05)*