

SELECTING & DESIGNING MEASURES

A Guide to Getting Started



WHEN IT COMES TO SELECTING AND/OR DESIGNING MEASURES, I AM....

Just getting started with selecting or designing a measure

You are new to selecting or designing measures.

Reviewing an Existing Measure

You've got an existing measure you've selected or designed and they could use some editing and revising.

Happy with my existing measure, what's next?

You're feeling good about your measure and don't have many revisions or edits.

Whether you are new to selecting or designing a measure or are experienced with great measures established, there is always room for improvement and more steps to the process you can consider.

The next few pages will outline next steps for the various states you may find yourself in when working on selecting or designing a measure.

GETTING STARTED

WHICH MEASURE WORKS FOR YOU?

COGNITIVE MEASURES

Assesses knowledge or
reasoning

ATTITUDINAL MEASURES

Assesses attitudes, beliefs,
values, or preferences

PERFORMANCE MEASURES

Assesses products or
performance

Map your SLOs to the
appropriate measure!

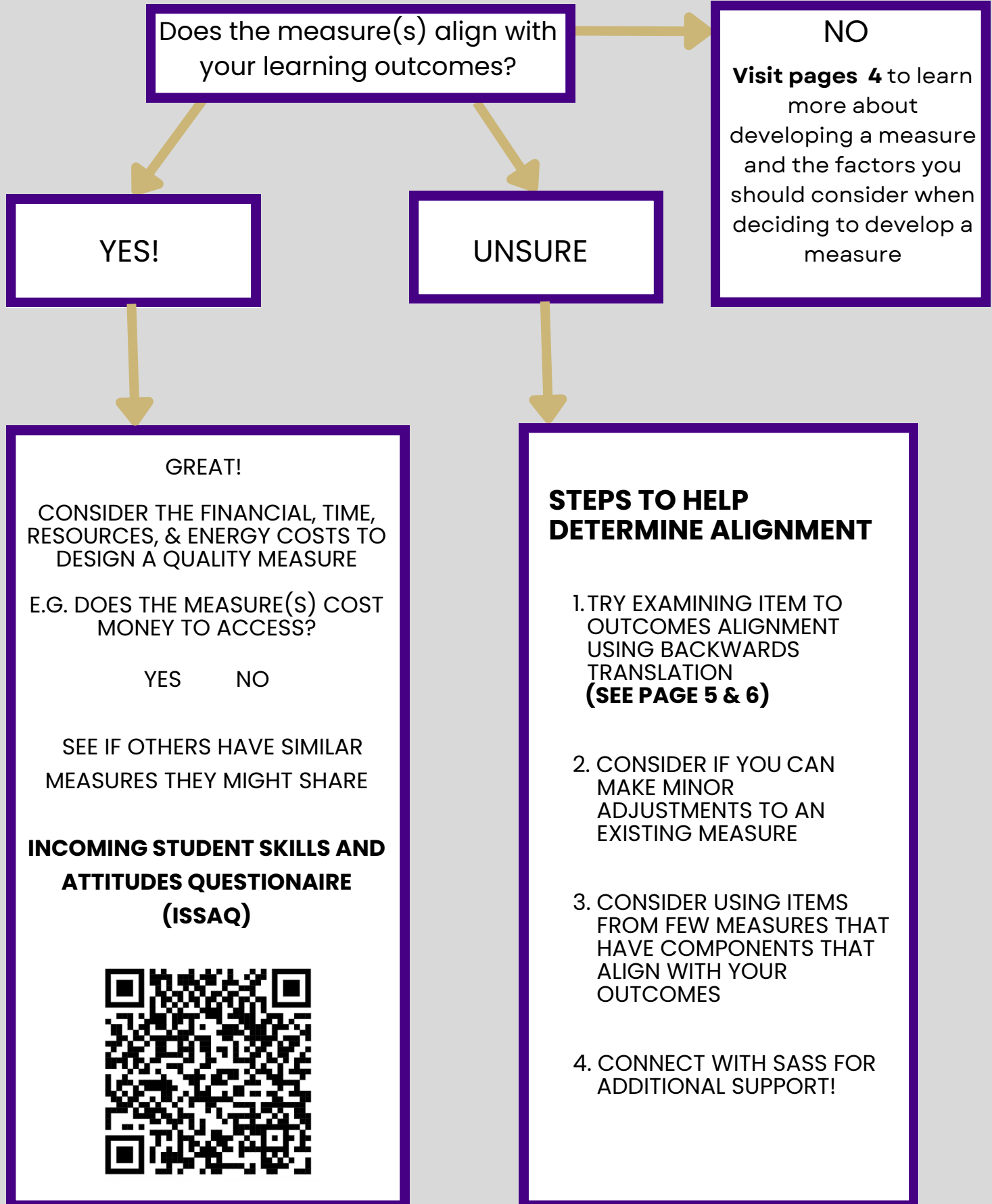
FIND EXISTING MEASURES

Repositories of Pre-Existing Measures

A resource to locate pre-existing measures.



EXAMINING AN EXISTING MEASURE



RESOURCES FOR SELECTING & DESIGNING MEASURES

Visit the “How to Develop an Instrument” section on the SASS Website



“WHAT’S A GOOD MEASURE OF THAT OUTCOME?”

A guide on how to find existing and psychometrically-sound measures



Selecting and Designing Instruments: Item Development

Intro to item writing & developing cognitive & attitudinal items



BACKWARDS TRANSLATION: MATCHING MEASURES TO OUTCOMES

Backwards translation is a tool we can use to evaluate the alignment between our outcomes and our measures.

When using backwards translation, the goal is to see whether your outcome(s) map to the measure(s) OR question(s). Ideally each outcome will map to more than one measure item/question to ensure coverage of that item via the measure, thus questions will map to multiple outcomes, and outcomes will have multiple questions mapped to them.

Below is an example of backwards translation for a Building Resiliency Workshop

Measure Items	Outcome 1 Identify examples of resiliency	Outcome 2 List skills or practices that help build resiliency	Outcomes 3 Report an increase in resiliency
Item 1 Identify which skills below are most likely to increase a persons resiliency.		X	
Item 2 Which of the following practices are known to help increase resiliency?	X	X	
Item 3 Which of the following is an example of a student showing resilience?	X	X	
Item 4 I have a hard time making it through stressful events			X
Item 5 I tend to bounce back quickly after hard times.			X

NOW YOU TRY!

Use the below template to assist you with backwards translation for your outcomes and measure items.

Remember:

- Each outcome should be mapped to at least one measure OR question
- Some questions may map to multiple outcomes
- Some outcomes may have multiple questions mapped to them
- Consider whether the breadth of the outcome is addressed by the number of questions

Measure Items	Outcome 1	Outcome 2	Outcomes 3

REVIEW YOUR MEASURE UTILIZING THE RUBRIC

Utilize the rubric to review and make final revisions to your existing measure and when you're done, be sure to create your Outcome Measures Section in the Assessment Improvement Report Template.

Criteria	Exemplary (3)	Proficient (2)	Developing (1)	Missing (0)
Measure Selection	Pre-Existing measures with high-quality psychometric properties have been chosen from literature and properties are reported	Pre-Existing measures with adequate psychometric properties have been chosen from literature and properties are reported	Pre-Existing measures with poor psychometric properties have been chosen from literature and properties are reported	Pre-Existing measures were chosen, but no psychometric properties were reported
Measure Development	Rigorous measure development process with validity and reliability evidence reported	Rigorous measure development process is detailed, but no evidence of psychometric properties	Unclear how the measure was developed	N/A
Use of Direct Measures	All outcomes are assessed with direct measures of the outcome (reflect what students know think and can do)	Most outcomes are assessed with direct measures of the outcome	Some outcomes are assessed with direct measures of the outcomes	No outcomes are assessed with direct measures of the outcomes
Measures to Outcomes Map	All outcomes are mapped to measures that represent outcome and match between the two is explained	Most outcomes are mapped to measures with match being explained in detail, other outcomes matches are vaguely explained	Some outcomes are mapped to measures with their match being explained in detail, other outcomes matches are vaguely explained	Superficial match between measures and outcomes
Equity Centered	Measure produces scores that allow for equally trustworthy inferences about outcomes across student populations and ample evidence supports this. Student feedback is solicited	Measure should produce scores that allow for equally trustworthy inferences about outcomes across student populations. Limited evidence is provided to support this claim.	No evidence that measure functions equally across different student populations. Language in report cautions against the use of scores to make inferences.	No mention of how the measure functions across different student groups.

REVIEW YOUR MEASURE UTILIZING THE RUBRIC

RATE YOUR MEASURE

Utilize the table below to rate your measure using the Assessment Improvement Rubric, providing justification for your rating and plans for future improvements. Be sure to consider how and when you plan to make necessary changes to the measure and who might need to be involved in these changes.

Criteria	Self Rating	Justification for current rating	Improvement Plan
Measure Selection			
Measure Development			
Use of Direct Measures			
Measures to Outcomes Map			
Equity Centered			

HAPPY WITH MY EXISTING MEASURE, WHAT'S NEXT? REPORTING ON YOUR MEASURE

Below is an example of how you could record and report on your measure and the measures selection or design process you went through. This is a great way to get ahead of the game if you are planning to submit an Assessment Improvement Report for your program.

OUTCOME MEASURES SECTION

Things to include:

- A brief description of the measure
- Whether your measure is direct or indirect
- Psychometric properties of your measure (e.g. validity, reliability)
- Range of possible scores and any desired score results