

Work Group: Exploring and Developing Measures for Assessment

2017 NACADA Assessment Institute
Daytona Beach, Florida

Focus of Work Group

- Timing of assessment of outcomes
- Methods and processes to assess outcomes
- Development of outcome measures
- Identification of existing institutional data that can inform outcome assessment
- Identification of currently used tools that can inform outcome assessment

Focus of Work Group

In order to be prepared for this work group, participants need to have:

- Identified student learning outcomes you want to assess
- Identified process/delivery outcomes you want to assess (as appropriate)
- Mapped student learning outcomes (identification of opportunities for students to learn/achieve the identified outcome, identification of by when/deadline for students to achieve outcome)

Initial Considerations

Identify

**Process/Delivery
Outcomes** and
**Student Learning
Outcomes**

Map: when &
where PDOs
and SLOs will
occur

**Multiple
Measures:**
Who or what
will be
measured and
when and how
the data will
be gathered

Initial Considerations *continued...*

Assessment vs. Evaluation...

“Assessment of higher education, like higher education itself, is a practice of reflecting, learning, and making new knowledge upon which decisions can be made.” (Keeling, et. al, p. 101)

It's the **overall** look at a whole program

- Evaluation is a part of this process - looks at an individual event, workshop, or service

Initial Considerations *continued...*

Multiple measures means going beyond...

- a simple satisfaction survey or advisor evaluation
- an individual measure that *evaluates* (rather than *assesses*) a *single* dimension of a *single* phenomenon

Remember, **assessment is the overall look at a whole program** and evaluation is a part of this process - you evaluate an individual event, workshop, or service while you assess the entire academic advising program to see if the desired SLOs have been achieved

Initial Considerations *continued...*

Need *multiple* measures to measure *multiple* dimensions of a *single* phenomenon and to confirm *validity* of any single outcome measure

1 PDO/SLO = 3 distinct measures

Initial Considerations *continued...*

- Why Multiple Measures?
 - No assessment is perfect and precise
 - Goal is to “*strive to make assessments sufficiently truthful that we will have reasonable confidence in our findings and can use them with enough assurance to make decisions...*” (Suskie, 2009, p. 38)
 - “Union of Insufficiencies” (Shulman, 2007)

Initial Considerations *continued...*

“One of the most dangerous and persistent myths in American education is that the challenges of assessing student learning will be met if only the right instrument can be found...”

Schneider & Shulman in Suskie (2009)

Initial Considerations *continued...*

Each of the multiple measures utilized should vary in type

- Qualitative
- Quantitative
- Direct
- Indirect

Helps ensure validity

Types of Measures

Qualitative

- exploratory
- small samples
- open-ended
- emerging information
- subjective, inductive interpretation of data
 - examples
 - focus groups
 - case studies
 - naturalistic observation

Information/data in form of rich, in-depth responses (words)

Example question: What have you learned from your academic advising appointments?

Types of Measures *continued...*

Quantitative

- descriptive
- large samples
- structured
- objective, deductive interpretation of data
 - examples
 - questionnaires
 - surveys
 - experiments

Information/data in form of numbers, measures (statistics)

Example question: On a scale of 1 (very dissatisfied) to 5 (very satisfied), rate your level of satisfaction with your advising appointment today.

Qualitative vs. Quantitative

“**Qualitative assessments** use flexible, naturalistic methods and are usually analyzed by looking for recurring patterns and themes.”

“**Quantitative assessments** use structured, predetermined response options that can be summarized into meaningful numbers and analyzed statistically.”

Suskie (2009)

Types of Measures *continued...*

Direct

- may be qualitative or quantitative
 - direct observation of advising interaction
 - pre-test/post-test of variable leading to desired outcome
 - standardized test or inventory measuring student *learning*
 - tracking of student data (enrollment rates, retention rates, GPAs, transcript analysis, etc.)
 - counts of use of services
 - advisor:student ratios

Example question: How many credits minimum are required to graduate?

Types of Measures *continued...*

Indirect

- may be qualitative or quantitative
 - focus groups
 - surveys, questionnaires
 - interviews
 - reports
 - tracking of student perceptions (satisfaction, ratings of advisors, ratings of service, etc.)
 - tracking of advisor perceptions (student preparedness, estimation of student learning, etc.)

Example question: After meeting with my academic advisor, I now feel more confident about registration (Strongly agree, agree, disagree, strongly disagree).

Direct vs. Indirect

“**Direct evidence** of student learning is tangible, visible, self-explanatory, and compelling evidence of exactly what student have and have not learned. It might also be defined as the kind of evidence that a skeptic would accept.”

“**Indirect evidence** consists of proxy signs that student are probably learning. Indirect evidence is less clear and less convincing than direct evidence.”

Suskie (2009)

Examples of Existing Instruments

To be used as just one measure among multiple measures

- ACT Survey of Academic Advising
- Noel-Levitz Student Satisfaction Inventory (SSI)
- Winston and Sandor's Academic Advising Inventory (AAI)
- NACADA Assessment of Advising Commission

www.nacada.ksu.edu/Commissions/C32/index.htm

Other Sources

To be used as just one measure among multiple measures

- Data from National Survey of Student Engagement (NSSE), Beginning College Survey of Student Engagement (BCSSE), Faculty Survey of Student Engagement (FSSE)
- Data from other nationally normed, standardized instruments (e.g., ACT, Noel-Levitz)
- Buros' Mental Measurements Yearbook list
- Existing institutional data

Dangers of Satisfaction Surveys

There is often a difference between an advisee receiving good, effective academic advising and being satisfied with the advising process:

- if any negative information is exchanged during the advising interaction, the student may respond negatively to the survey items even though the information provided was correct and the process of the interaction was appropriate
- the student will likely rate the advising provided based on the type of interaction desired (e.g., informational, relational)

Dangers of Satisfaction Surveys

It takes knowledge, skill, and time to develop a valid and reliable survey tool:

- Need to begin with qualitative data, then code data, and finally develop quantitative items
- Qualitative questions need to be based on literature review, previous research findings, desired programmatic goals
- Quantitative items used cannot be leading, compound, foreign in meaning to participants
- Quantitative items must be piloted, reviewed, revised, and piloted again
- Final items tested for validity and reliability

Measures May (and should) Include Existing Institutional Data

Information from Institutional Research, Admissions, Registrar, etc. can provide tracking data, GPAs, retention rates, and other information you can utilize as assessment data

- can be a source of some of the multiple measures utilized (in addition to formal instruments, satisfaction surveys/inventories, and others)

Institutional Data

- Why reinvent the wheel, so to speak, if there are existing institutional data that relate to a question you would like answer regarding your advising program?
- Become knowledgeable regarding what type of data your institution is already collecting
- Get to know your institutional data people, and include them as a stakeholder in the assessment of your advising program
- Remember that any single type of data should be utilized as just one measure among multiple measures for each phenomena you are evaluating within your overall assessment effort

For both PDOs and SLOs, you need to identify the **minimum criteria for success** of the outcome measure, e. g.,

- number of students exhibiting a specific learning performance
- percentage of students exhibiting a specific learning performance
- advisor rating of student performance
- student rating of specific aspect of advising process
- advisor rating of specific aspect of advising process
- etc.

In other words, what minimum threshold needs to be met to say that your desired PDO or SLO has been achieved?

Determining minimum criteria /threshold for success for an outcome measure

- existing institutional data
- peer institution benchmarking
- accreditation requirements
- published literature
- pilot data
- other?

If none of the above exist... use the first cycle of assessment of a given outcome as baseline data gathering process

Remember

“In a way, good assessment is teaching to the test. Assessment is part of a process that identifies what we want students to learn, provides them with good opportunities to learn those things, and then assesses whether they have learned those things.” *(Suskie, 2009)*

An Additional And Important Consideration

- even if your outcome data supports the achievement of the desired SLO – how do you know that the student learning was a result of academic advising???
- you have to ask students “where did you learn the information,” “how did you know to do the behavior,” and/or “how did you develop the appreciation” in regard to the SLO
 - can do this in a focus group or in a small sample follow-up survey

Technology and Data Analytics

Technology in Assessment

- Learning Management Systems
- Databases
- Survey Programs
- Institutional Data
- Additional Technology

Data Analytics

- Descriptive Analytics
- Predictive Analytics
 - Role in Retention

Using Technology in and for Assessment

- Advising units need to document through data and assessment, what it can help higher educational institutions achieve, in pursuit of retention and college completion
- By using appropriate technology, we can assist in the student learning process and more efficiently and effectively acquire those data we need for assessment

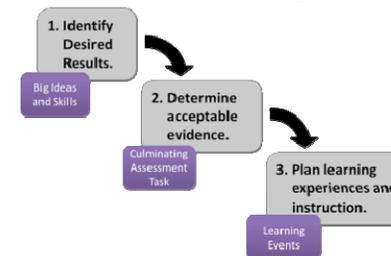


Using Technology in & for Assessment

- Do your goals for advising align with the technology you use to deliver advising?
- Do your advising goals maximize the limits of technology for advising?
- If advising is teaching, how can you use technologies designed for teaching and learning to advance your advising practice?

Using Technology in and for Assessment

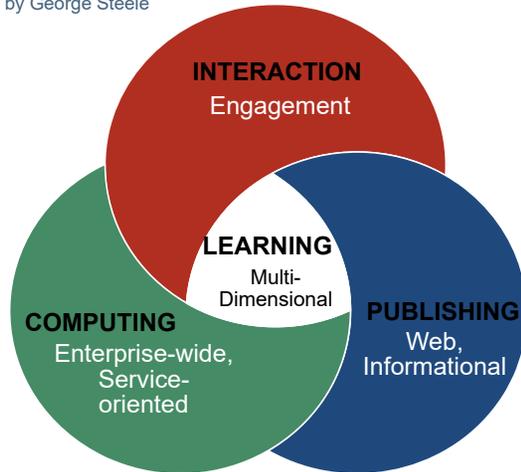
Backward Design



Wiggins, G. P. & McTighe, P. (2005). Understanding by Design. ASCD. Retrieved from <http://www.understandingbydesign.org/>

Tech in Advising Model: Tools

Concept by George Steele



Using Technology in and for Assessment

- Use technologies that best apply to delivery of practices related to services, engagement, and learning
- Produce data, through use of technology, that contributes to the analytical understandings our institutions are engaged in to better understand and manage retention and completion efforts
- Contribute to our efforts to assess our academic advising programs, so we can improve our delivery and produce meaningful data for the analytics our institutions' are engaged within to better understand and manage retention and completion efforts; and by doing so highlight the importance of academic advising to institutional missions

Summary and Conclusions

Four Characteristics of Useful Assessments

- They **yield reasonably accurate and truthful information** on what student have learned, so that we can use the assessment results with confidence to make plans and decisions
- They have a **clear purpose**, so that the assessment results are valued and don't end up sitting on a shelf
- The **engage faculty and staff**, so the assessment becomes a useful part of the fabric of campus life
- They flow from and focus **on clear and important student learning goals** (outcomes), so the results provide information on matters the college or university cares about

Suskie, 2009

Summary and Conclusions

- Evaluation of one outcome is not assessment
- Need multiple measures for multiple outcomes concerning multiple phenomena
- Measures should be qualitative, quantitative, direct, and indirect
- Outcomes should include process/delivery outcomes (PDOs) and student learning outcomes (SLOs)
- Measures should be developed as desired outcomes are identified
- The mapping process will determine ideal points for outcome measures