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Making a Difference with Assessment

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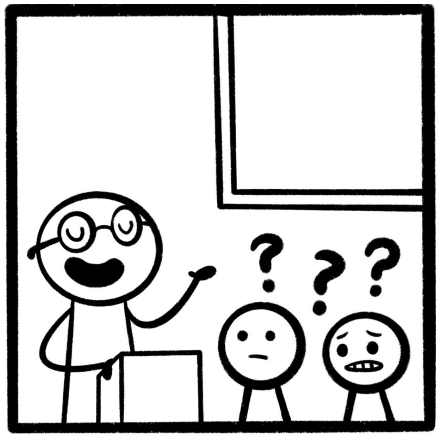
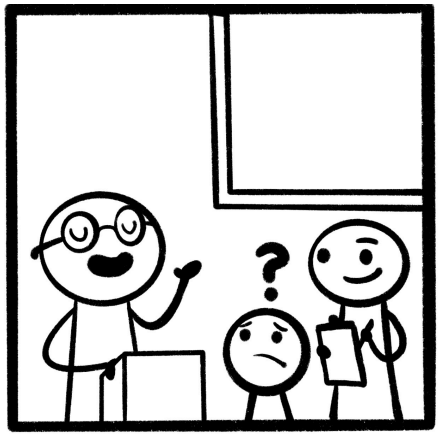
Marsha C. Lovett
Assoc. Vice Provost, Teaching Innovation & Learning Analytics
Director, Eberly Center
Teaching Professor, Psychology

Making an impact with assessment

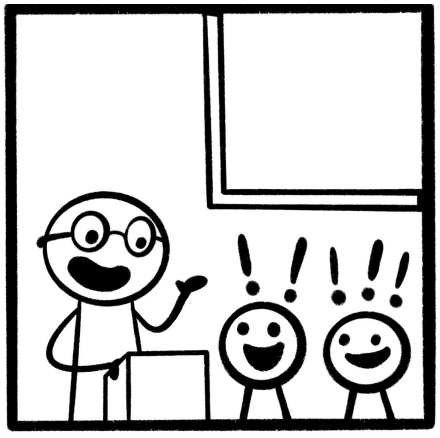
Instruction by Intuition



Measurement of Student Performance



Data-Informed Learning Improvement



The “Standard” Assessment Cycle

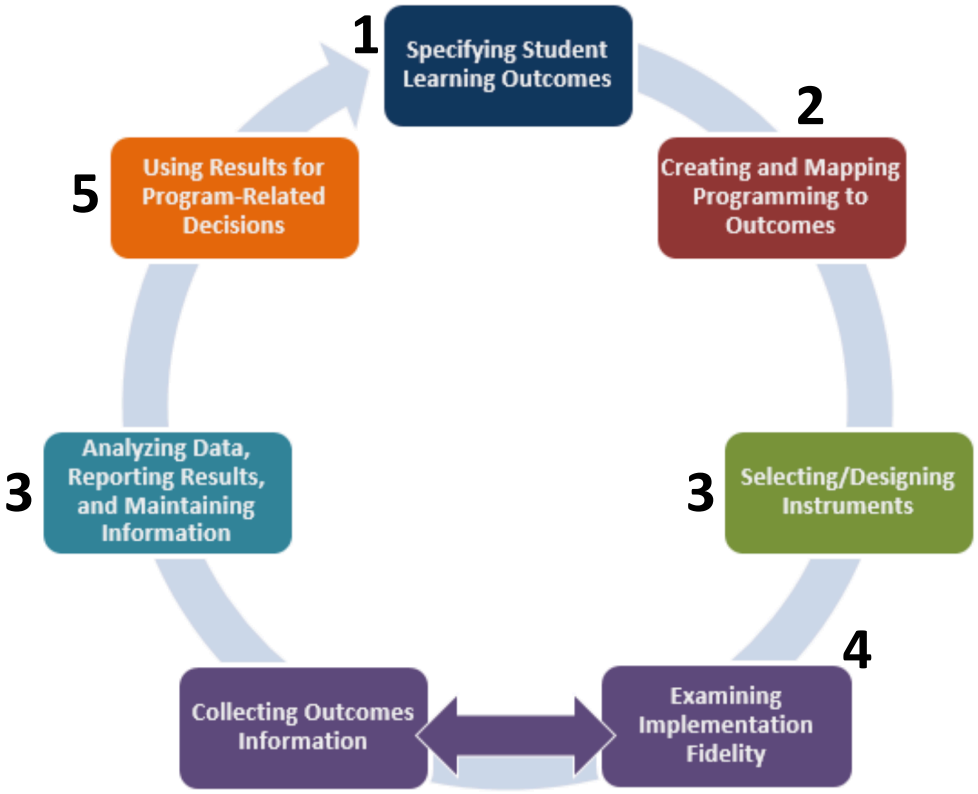
Image: www.jmu.edu/studentaffairs/staff-resources/saac/assessment-cycle.shtml

5 Ways to Make a Difference: Strategic Assessment

Strategic assessment: Implementing the cycle to target learning improvements that matter

1. Focus on worthy outcomes
2. Use past research to design the intervention/program
3. Address equity in instruments and analyses
4. Ensure students are getting the appropriate “dose”
5. Don’t forget to re-cycle!

The *Strategic* Assessment Cycle



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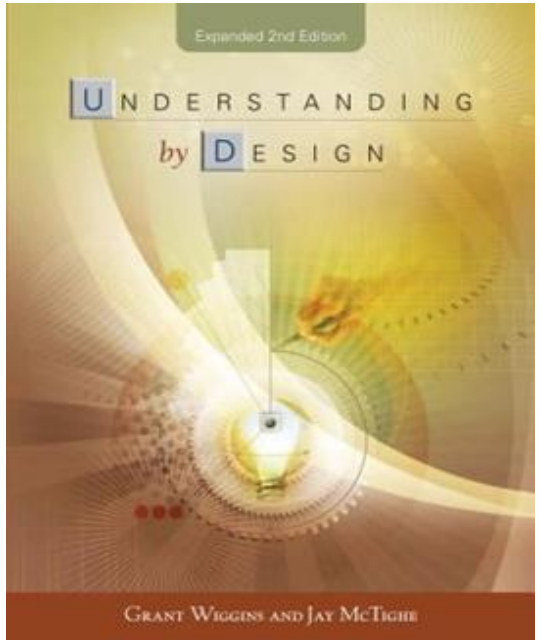
1. Focus on *Worthy* Outcomes

Standard assessment: Program outcomes should be student-centered, measurable…

Strategic assessment: Program outcomes should represent *worthy goals:*

- Transferrable
- Authentic
- Meaningful

What's a worthy outcome you've worked to assess? Type a one-line response in chat.



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1. *Worthy* Outcomes: Challenges & Strategies

Challenge: Choosing outcomes is the subject matter expert's role

Strategies: Channel the student's perspective

Ask questions; think post-graduation

Challenge: Worthy outcomes tend to be harder to measure

Strategies: Look to authentic tasks, AAC&U's VALUE rubrics*,
broader literature

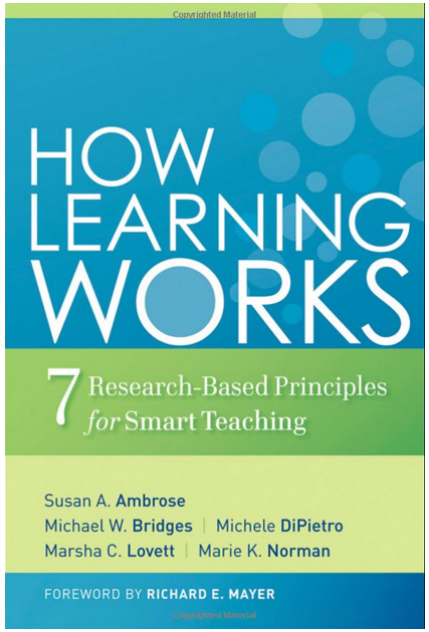
*AAC&U VALUE rubrics: https://www.aacu.org/value-rubrics

2. Use research to design intervention/program

Standard assessment: Program should be mapped to outcomes

Strategic assessment: Apply learning science to design program with evidence-based instructional strategies, e.g.,

- Identify component knowledge and skills
- Provide targeted practice and feedback
- Include motivational hooks



Ambrose et al. (2010). *How Learning Works.* San Francisco, CA: Wiley.

2. Program Design: Challenges & Strategies

Challenge: Program designers may suffer “expert blind spot”

Strategies: Have them do the task and note their process/skills used

Identify where have students struggled in past

Challenge: This approach takes more time, is more difficult…

Strategies: Re-design a piece at a time (pick: quick win or tough nut)

Partner with faculty development colleagues*

Have you partnered with the teaching center on learning improvement?

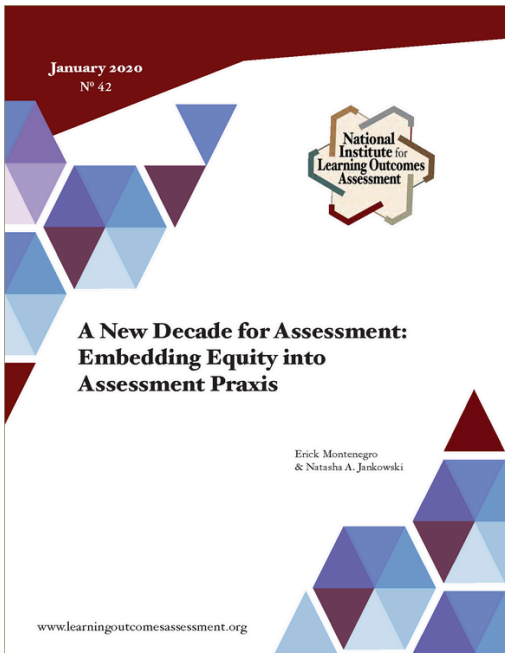
1=not at all, 2=sometimes, 3= a lot, 4=don’t have a teaching center

*Kinzie, Landy, Sorcinelli, & Hutchings (2019). Better Together… *Change, 51*(5), 46-54.

3. Address equity in instruments and analyses

Standard assessment: Instruments should be aligned with outcomes, be well constructed, and have solid psychometric evidence

Strategic assessment: When selecting or designing instruments, “check biases and ask reflective questions… to address assumptions and positions of privilege”



Montenegro, E., & Jankowski, N. A. (2020). A new decade for assessment: Embedding equity… Urbana, IL: … NILOA.

3. Equitable instruments: Challenges & Strategies

Challenge: Biases are often implicit and hence hard to detect/correct

Strategies: Vary types of evidence used

Actively involve students in the assessment process

Challenge: This approach is new, unfamiliar

Strategies: Consider this a great new tool for your toolkit

Take on a growth mindset

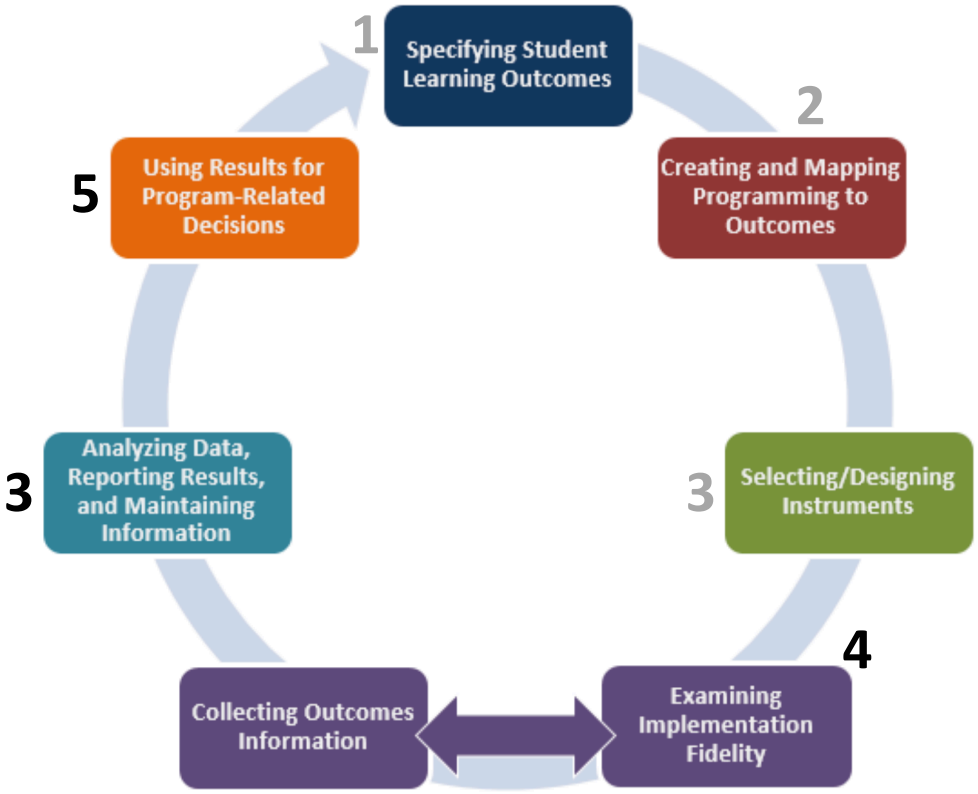
3. Equitable instruments…

IMPORTANT NOTE!

Addressing equity is important *throughout* the assessment cycle

Where in the cycle are you incorporating equity-minded assessment?

The *Strategic* Assessment Cycle



1. Focus on worthy outcomes
2. Use past research to design the intervention/program
3. Address equity in instruments

4. Ensure students are getting the appropriate "dose"
3. Address equity in analyses
5. Don't forget to re-cycle!

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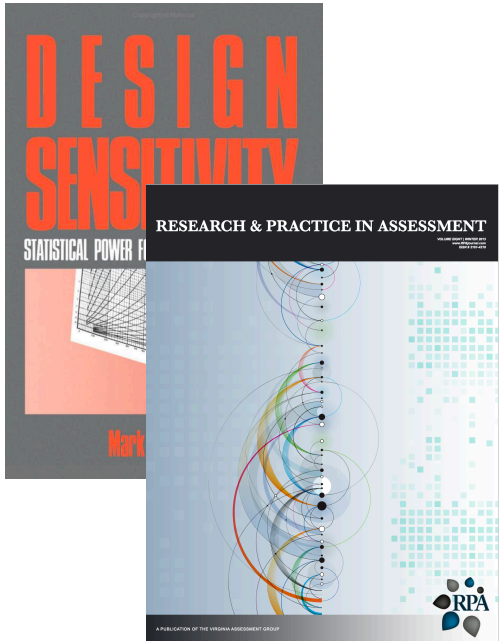
4. Ensure students are getting appropriate “dose”

Standard assessment: Implementation fidelity may be assumed or only informally examined

Strategic assessment: Implementation fidelity, *including strength of the intervention,* is explicitly assessed



Gerstner & Finney (2013). Measuring the Implementation Fidelity…, *RPA, 8*, 15-28. Lipsey (1990). *Design Sensitivity*. Newbury Park, CA: Sage.

4. Appropriate “dose”: Challenges & Strategies

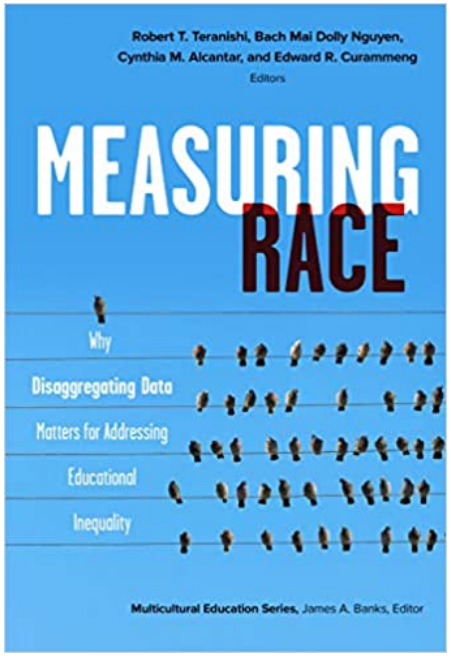
Challenge: Implementation fidelity takes time and resources
Strategies: Enlist program implementers to reflect on fidelity
Review other artifacts (e.g., materials, attendance sheet)

Challenge: Program needs to be short, so “dose” is naturally small
Strategies: Reduce # or breadth of objectives to maximize dose per objective

REPRISE of 3. Address equity in… analyses

Standard assessment: Appropriate analyses are conducted based on the structure of the data, question at hand, etc.

Strategic assessment: Data are disaggregated based on carefully considered variables such as race and ethnicity, gender, first-gen, etc.



Teranishi, Nguyen, Alcantar, & Curammeng (2020). *Measuring Race…* New York: Teachers College Press.

REPRISE of 3. Equitable *analyses*: Challenges & Strategies

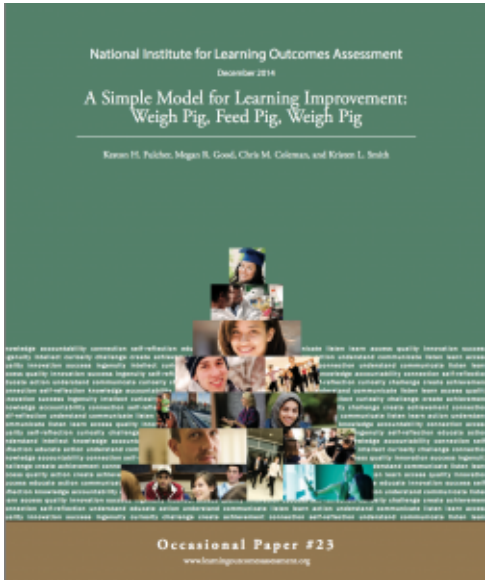
Challenge: Data on race/ethnicity not collected appropriately
Strategies: Investigate what you have and use it if you can
Partner with others (IR, data council) to improve…

Challenge: Small N for some student sub-populations
Strategies: Consider qualitative approaches
Look at trends over time

5. Don’t forget to re-cycle!

Standard assessment: Assessment stops when the report is submitted OR Assessments continue without substantive program change…

Strategic assessment: Baseline assessment data inform change to the program and then post-intervention data assess impact of the change



Fulcher, Good, Coleman, & Smith (2014). A simple model for learning improvement… Urbana, IL: … NILOA.

5. Re-cycle! Challenges & Strategies

Challenge: What if “second cycle” reveals no improvement?
Strategies: That’s useful information! Use it to diagnose and then iterate

Challenge: Maintaining stamina across multiple cycles
Strategies: Be proactive in establishing buy-in – “assessment champions”
Provide support to reduce barriers that might derail

Concluding Thoughts

Strategic assessment: Implementing each stage in the assessment cycle to target learning improvements that really make a difference:

1. Focus on worthy outcomes
2. Use past research to design intervention/program
3. Address equity in instruments and analyses
4. Ensure students are getting the appropriate "dose"
5. Don't forget to re-cycle!

Consider how you can deepen your implementation of these practices…

Pick one to focus on and see how it goes – for you and for improving students' learning outcomes

Questions? Comments? Other ideas?

References & Resources

Assessment Cycle Image: www.jmu.edu/studentaffairs/staff-resources/saac/assessment-cycle.shtml

1. Focus on worthy outcomes

Wiggins, G., & McTighe, J. (2005). *Understanding by Design.* ASCD: Alexandria, VA.

AAC&U VALUE rubrics: https://www.aacu.org/value-rubrics

JMU's Ethical Reasoning work: https://www.jmu.edu/ ethicalreasoning/er-creative-output/scholarship.shtml

2. Use research to design program

Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., & Norman, M. K. (2010). *How Learning Works: 7 Research-Based Principles for Smart Teaching.* San Francisco, CA: Wiley.

Kinzie, J., Landy, K., Sorcinelli, M. D., & Hutchings, P. (2019). Better together: How faculty development and assessment can join forces to improve student learning. *Change, 51*(5), 46-54.

3. Address equity in instruments

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4. Ensure students are getting appropriate "dose"

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Swain, M. S., Finney, S. J., & Gerstner, J. J. (2013) A practical approach to assessing implementation fidelity. *Assessment Update, 25*(1), 5-8.

3. Address equity in analyses

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5. Don't forget to re-cycle!

Fulcher, K. H., Good, M. R., Coleman, C. M., & Smith, K. L. (2014, December). A simple model for learning improvement: Weigh pig, feed pig, weigh pig. (Occasional Paper No. 23). Urbana, Il: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment (NILOA).

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