

# Using Assessment Results: Setting Benchmarks

Faculty Senate Assessment Committee  
Based upon MSCHE workshop by Jodi Levine Laufgraben

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# Today

## Goals

- Assist departmental assessment leadership in setting expectations for student performance

## Outcomes

- Define benchmarking in assessment of student learning
- Describe various methods for benchmarking student work
- Apply different methods of benchmarking to assessment results

# Benchmarking

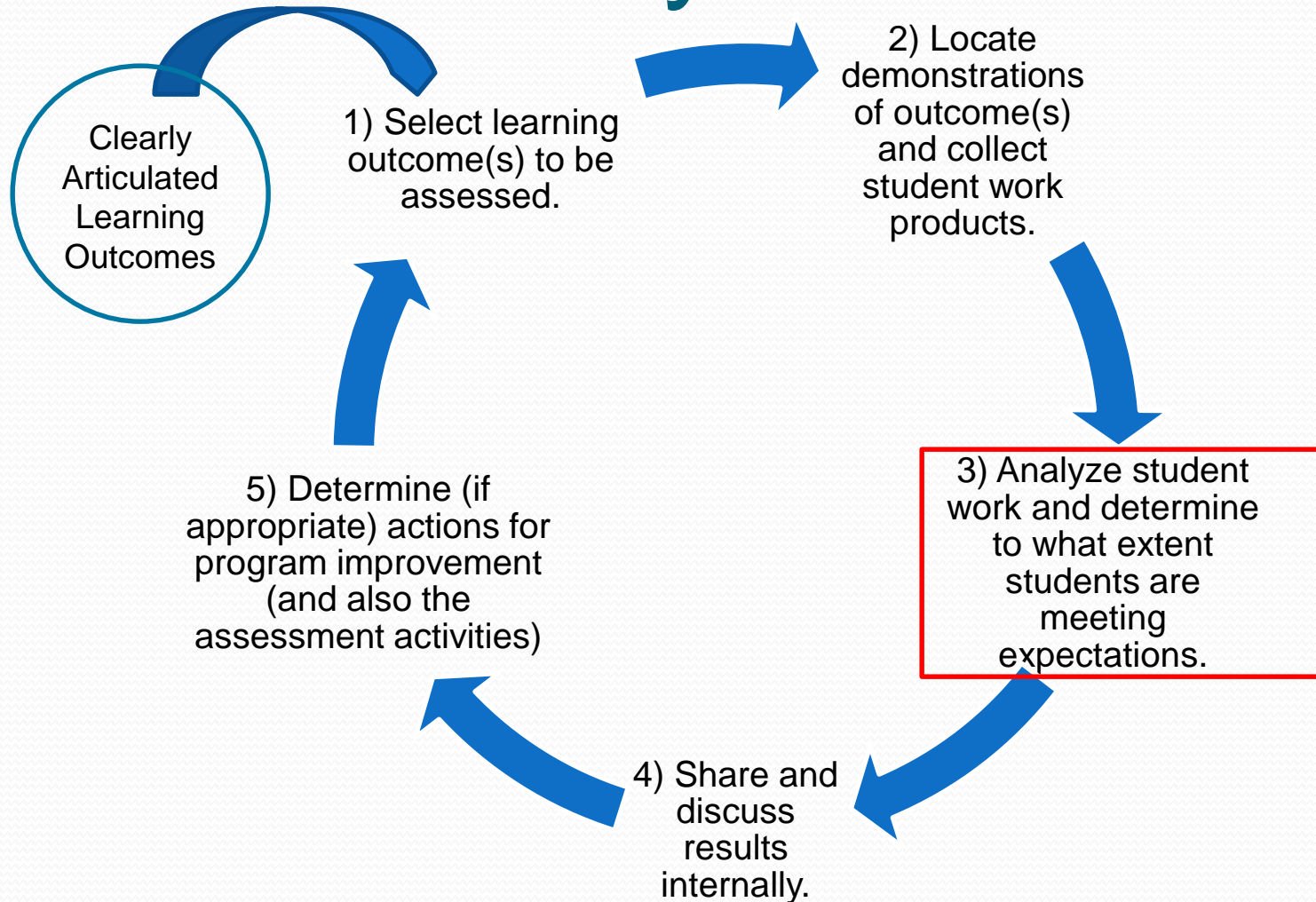
- something that serves as a standard by which others may be measured or judged

<http://www.merriam-webster.com/dictionary/benchmark>

(accessed 18 March 2016)

- For student learning assessment, this is sometimes called **setting target levels of performance** or **setting expectations**

# Assessment Cycle



# Benchmarking and FSAC Rubric

|             |                      |   |  |  |  |
|-------------|----------------------|---|--|--|--|
| Methodology |                      | each learning outcome being measured.   | measured   | grades not specifically linked to outcomes, faculty evaluations that do not link to student work.  |  |
|             | Collection           |   | Student work either is an appropriately collected sample (simple random or systematic), a population, or otherwise suitably selected to ensure that results are representative and the amount of work is feasible for the assessment committee | Assessment materials do not include student work and/or are gathered on a volunteer or an ad hoc basis. The collected materials are either too little or too much for the committee to reasonably examine. |  |
|             | Collaborative Effort | Evaluation and analysis of student work is shared by multiple faculty members and, when appropriate, procedures for improving rater agreement (inter rater reliability) are indicated | Evaluation and analysis of student work is shared by multiple faculty members.   | Assessment of student work or other assessment materials takes place in isolation and/or analysis of results is primarily handled by a single individual   |  |
| Performance | Performance          | Target level or performance expectations are indicated for students at various points within the program reflecting expected development  | Target level or performance expectations are indicated for the assessment and appear appropriate.  | Criteria for different levels of performance have been indicated, but expectations are not clearly identified or are inappropriate (much too high or too low).   |  |

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Performance targeting is one of the criteria in the FSAC rubric (page 2, last row)

# Benchmarking Answers the Question....

Midn X scores 55 on an exam.

Did Midn X “do well”?

To answer this question, we must compare this score to “something else” (the benchmark) and decide where *should* the performance of Midn X be

# Local Standard

Suppose 35 is passing and 80 is a perfect score

Question answered:

**Are our students meeting our expectations?**

Challenges:

- Establishing sound performance criteria
- Being sure criteria are externally informed

# External Standard

Suppose 35 is passing and 80 is a perfect score on a published exam (99<sup>th</sup> percentile)

Question answered:

**Are our students meeting external standards?**

Challenges:

- Do the external standards match with our internal learning outcomes?

Aspiration

- How well do our students do compared to peers?



# Value-Added Benchmark

Suppose Midn X scored 25 a year ago

Question answered:

**Are our students improving?**

Challenges:

- Is growth due to us?
- Imprecise assessments can mask growth
- Is this questions relevant?

# Historical Trends Benchmark

Suppose our class average is 65 now and 40 three years ago

Question answered:

**Are our teaching and curricula improving?**

Challenges:

- Using the same assessment
- Changes in students and curricular over time

# Strengths and Weaknesses Benchmark

Suppose Midn X scored a 65 for content knowledge and a 45 for real-world applications

Question answered:

**What are our students' relative strengths and areas for improvement?**

Challenges:

- Getting “sub-scores” that are truly comparable

# Which standard or benchmark should you use?

- Each has advantages/disadvantages
- Each gives a somewhat incomplete picture
- Multiple perspectives give the most balanced picture of student learning
- Remember the original goal and purpose of assessment

# Setting Performance Targets

- Is Midn X's 55 good enough?
  - Why is 35 passing?
  - Why is being above average good enough?
- What level is minimally adequate? Why?
- What level is exemplary? Why?
- How many students should be minimally adequate?  
How many students should be exemplary?

# Setting Benchmarks

- Have others set standards?
  - Disciplinary associations
  - On-line searches
  - Colleagues in peer institutions/programs
- Who might you involve in discussion?
  - Students
  - Faculty in your program
  - Faculty in more advanced programs
  - Employers

# Use Samples of Student Work to Set Benchmarks

- What does an “A” look like?
- Would this paper embarrass us?
- Would this paper make us proud?
- Why?

# Express Targets as Percentages, Not Averages

- “90% will score 65 or better”
- NOT “The average will be 65”



# Your Targets May Vary

- Is this competency essential?
  - Calculating dosages
  - Delivering effective oral presentations
- Can a target be achieved along the way?
- How can performance expectations be communicated?

# Resources:

- Faculty Senate Assessment Committee Members
  - Engineering & Weapons:
    - Dr. Steve Graham and Dr. Deborah Mechtel
  - Humanities & Social Sciences:
    - Dr. Michelle Allen-Emerson and Dr. Silvia Peart
  - Math & Science:
    - Dr. Nick Frigo and Dr. Shirley Lin
  - Professional Development:
    - LT C. Hirsch, LT C. Ronchetti (incoming)
  - Leadership Education & Development:
    - CDR Joe McInerney, CDR Lon Olson (incoming)
- Office of the Academic Dean & Provost
  - Dr. Katherine Cermak
- Website: [www.usna.edu/Academics/Academic-Dean/Assessment/](http://www.usna.edu/Academics/Academic-Dean/Assessment/)
  - Workshops on assessment in conjunction with Center for Teaching and Learning
  - One-on-one consultations with departments, faculty, and staff
  - Yard-wide assessment events