Assessment Tools/Measures

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Learning Outcomes

Attendees will be able to:

- Critique assessments for equity
- Differentiate between various types of assessment
- Identify or develop alternative assessments

Assessment

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Think of a single word that defines or explains assessment

- Take a minute
- Type into chat

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Dr. Shamini Dias: Friday (May 14, 2021) SLO Talk – Topic: Equity in Assessing Learning.

Assessment – Improvement/Growth

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- Identify what we want students to be able to know, think or do
- Determine the extent to which they can do or know those things
- Adjust teaching practices and curriculum

Equity Considerations

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- NILOA Papers (National Institute for Learning Outcomes Assessment)

- Culturally responsive assessment
  - "Being attentive to how students may understand questions, tasks, and assignments differently, as well as feedback regarding their learning, is not only beneficial to students but to internal improvement efforts as well."
  - Montenegro, E., & Jankowski, N. A. (2017, January). *Equity and assessment: Moving towards culturally responsive assessment*(Occasional Paper No. 29). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment (NILOA).

- Embedding equity into assessment
  - "We need to first understand how systems of power and oppression influence how students experience college, engage with the learning process, and build knowledge before we can understand how to better assess their learning."
  - Montenegro, E., & Jankowski, N. A. (2020, January). A new decade for assessment: Embedding equity into assessment praxis (Occasional Paper No. 42). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment (NILOA).

What is Equity-Minded Assessment?

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Various viewpoints:

- Culturally responsive
- Socially just
- Critical perspective (inquiry)
- Decolonized assessment
- Relevant to indigenous people and their cultures
- Assessment that does no harm

Culturally Responsive Assessment Practice

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1. Be mindful of the student population(s) being served and **involve students in the process of assessing learning**;

2. **Use appropriate student-focused and cultural language** in learning outcomes statements to ensure students understand what is expected of them;

3. Develop and/or use assessment tools and **multiple sources of evidence that are culturally responsive** to current students; and

4. Intentional improvement of student learning through **disaggregated data-driven change that examines structures, demonstrations of learning, and supports which may privilege some students' learning** while marginalizing others.

Critical Assessment Practice

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1. Disregarding the objectivity myth and accepting that **assessment is inherently subjective** and guided by the biases and experiences of those conducting assessment;

2. **Varying the types of evidence used to assess learning outcomes** to not privilege specific ways of knowing or preferred ways to demonstrate knowledge;

3. **Including the voices of students**, especially those who belong to minoritized populations or those whose voices can often be left unheard, throughout the assessment process; and

4. **Using assessment to advance the pursuit of equity** across previously identified institutional parameters that demonstrate disparate outcomes across student populations.

Overall Recommendations for Equity-Minded Assessment

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1. **Check biases and ask reflective questions** throughout the assessment process to address assumptions and positions of privilege;
2. **Use multiple sources of evidence** appropriate for the students being assessed and assessment effort;
3. **Include student perspectives** and take action based on perspectives;
4. **Increase transparency in assessment** results and actions;
5. Ensure collected **data can be meaningfully disaggregated and interrogated**; and
6. **Make evidence-based changes** that address issues of equity that are context-specific.

Assessment –When/Why?

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- **Diagnostic** (entry) – What does a student know *prior* to the learning activity

- **Formative** (development) – Estimate of student learning *during* the learning process
  - Help to understand strengths and weaknesses
  - How to improve over the course

- **Summative** (mastery) – What has the student retained/learned at the *end* of the learning process

Assessment – Evidence

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- **Direct measure** – assessing samples of actual student work
- **Indirect measure** – reports of perceived learning (surveys, reflections, time on task)

Level of thinking

- What is the level of thinking expected from lower order to higher order skills (per revised Blooms taxonomy)

Bloom's Revised Taxonomy

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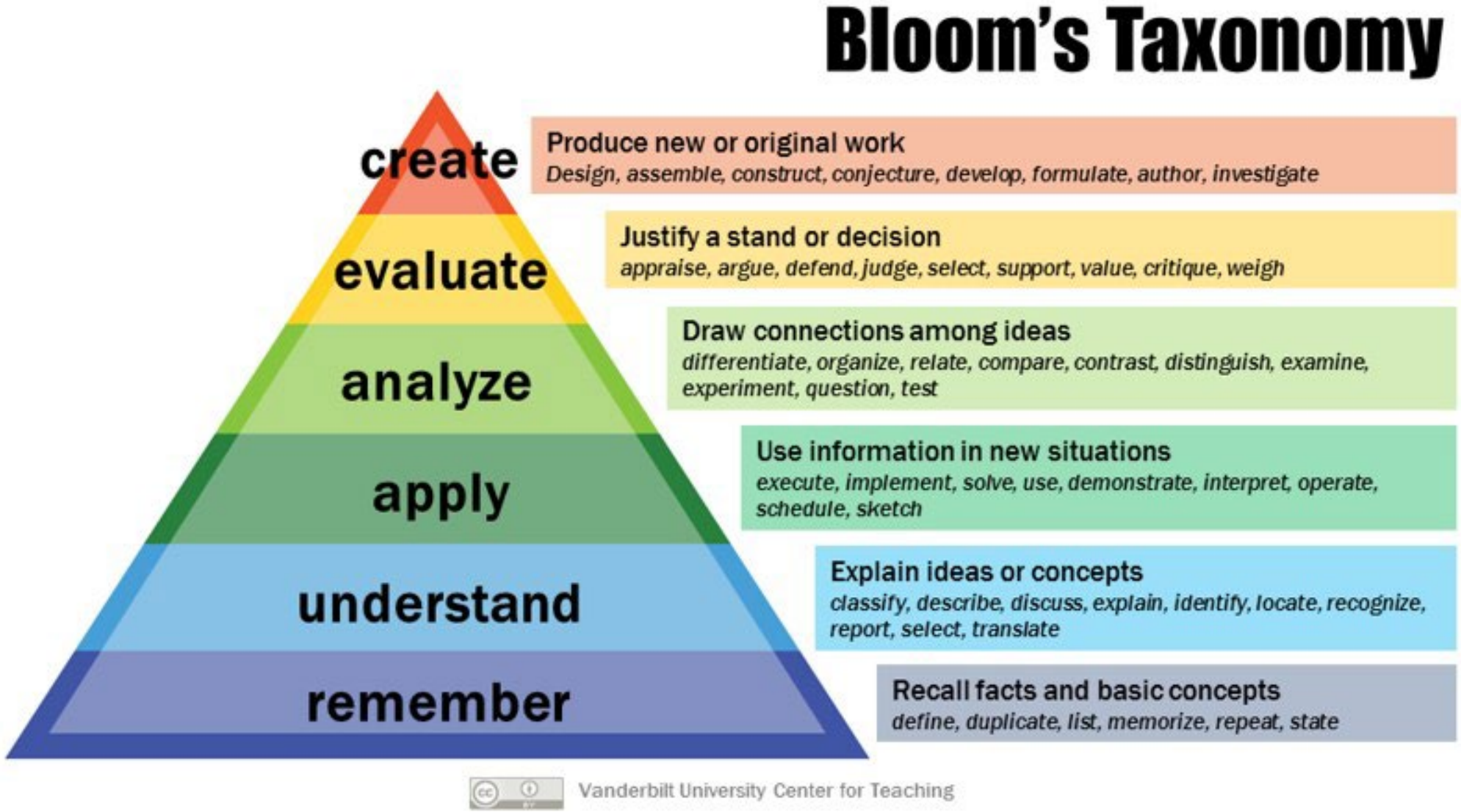

Verb Wheel

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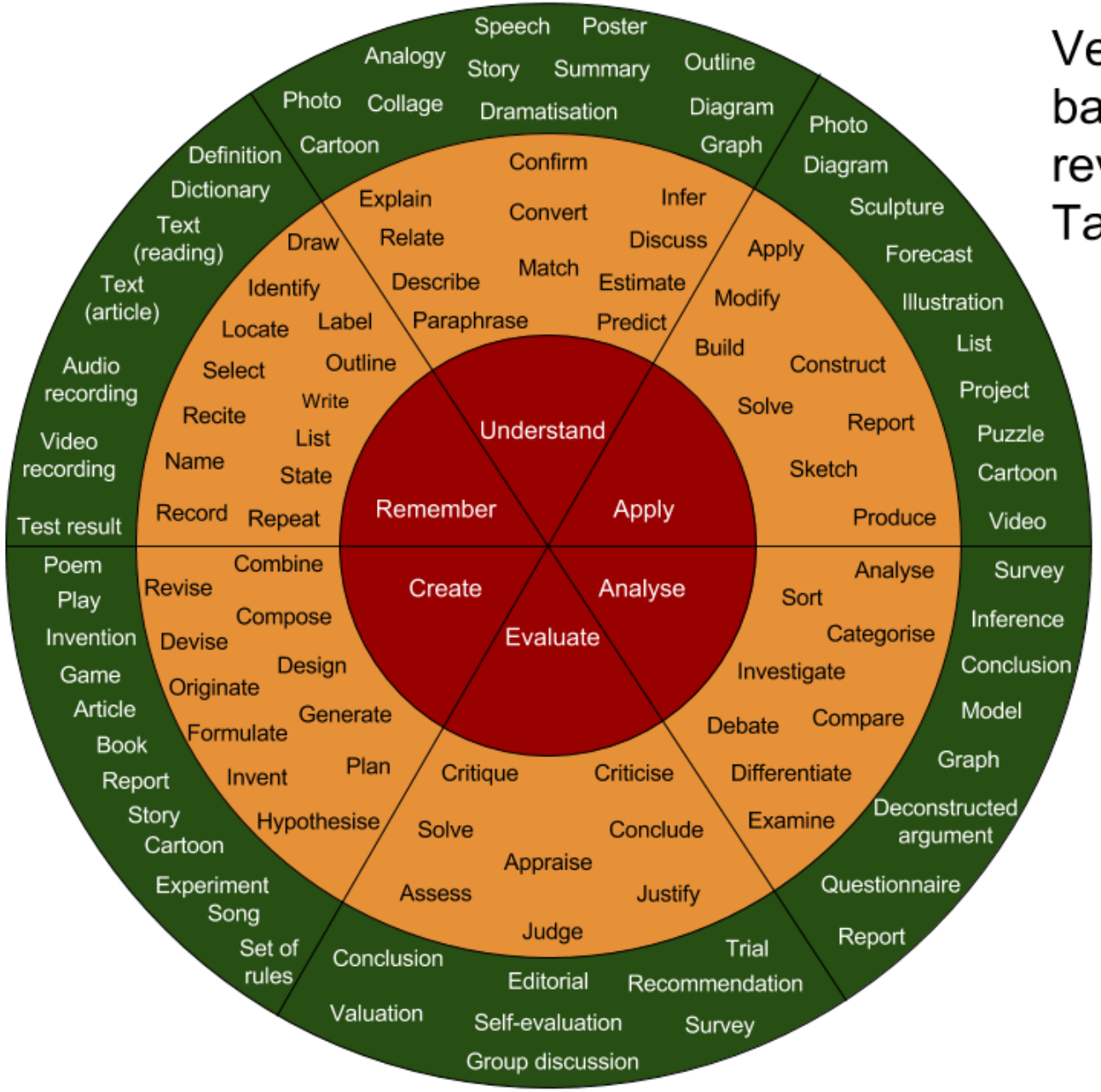

Verb wheel based on the revised Bloom's Taxonomy

- Domain
- Verb (measureable, observable)
- Learner artefact/evidence

Lower order

Higher order

Remade by Dr Ashley Tan
Twitter: @ashley

CC BY NC SA

Reference: http://bit.ly/oldbtref
This resource: http://bit.ly/newbtref

Support Outcomes Taxonomy

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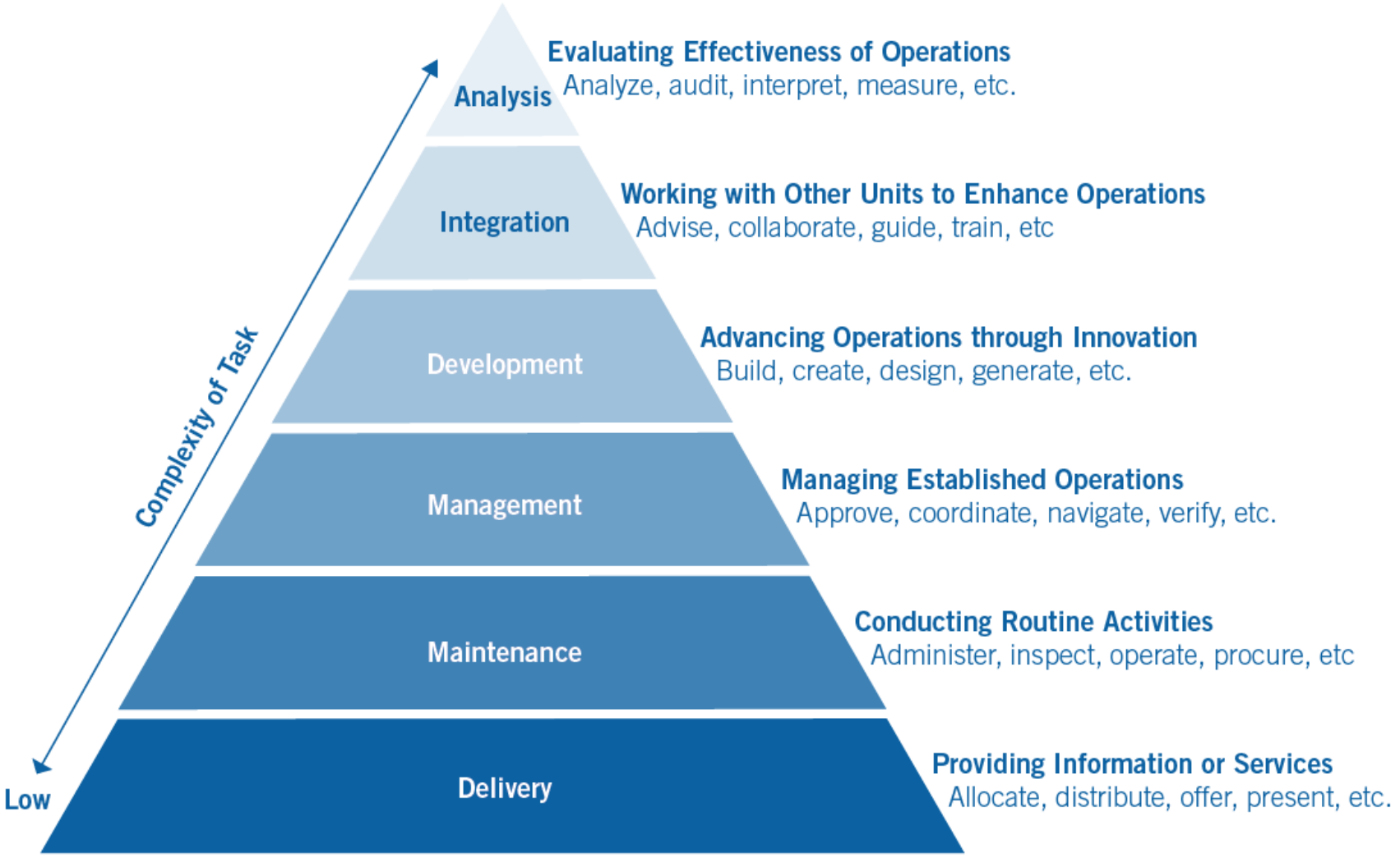
BMCC Shults Dorime Williams Support Outcomes Taxonomy



Support Outcomes Verb Wheel

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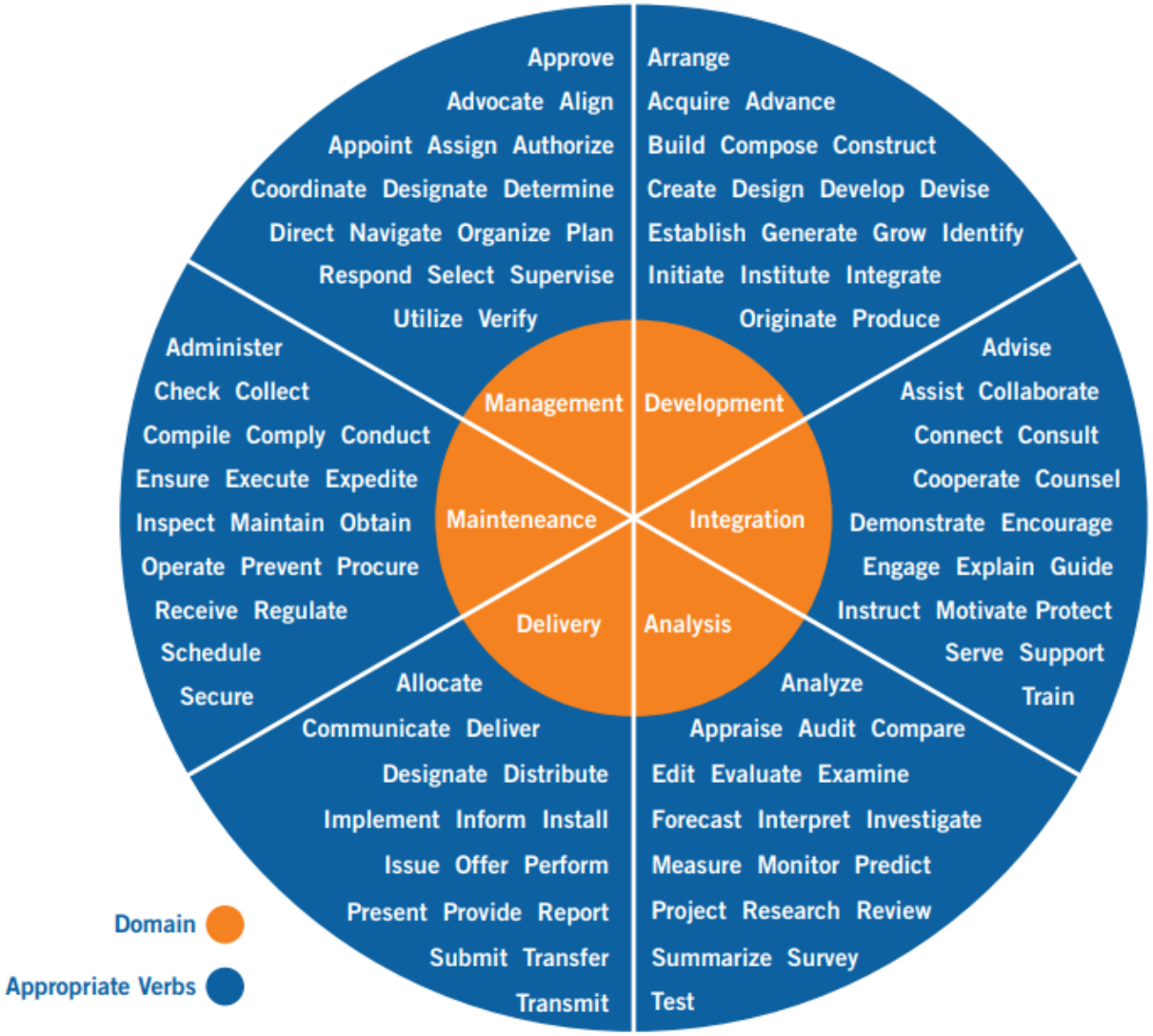
BMCC Support Outcomes Verb Wheel



Direct Measures	Indirect Measures
Activity Accuracy, Activity Volume, Benchmarks	Focus Groups
Industry standards, Log Data, Pre-test/Post-test	Qualitative Data
Rates, Ratios, Quality Assurance, Transactions	Surveys (e.g opinions, satisfaction

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POLL: Types of assessment

What types of assessment have you utilized: traditional, authentic, interactive, CATs, LATs, equity-minded, other?

- Not sure
- One of those types listed
- Two of the types listed
- Three of the types listed
- Four or more of the types listed

Types of Assessments

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- **Direct/Indirect**
- **Equity-minded**
- **Traditional** – selected response
- **Authentic** – constructed response
  - Perform real world tasks that demonstrate meaningful application of essential knowledge and skills
  - Rubric
- **Interactive Learning**
- **Classroom Assessment Techniques** (CATs)
- **Learning Assessment Techniques** (LATs)
- **Self Reflective Assessment**

Authentic Assessments

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Traditional	Authentic
Selecting a response	Performance or product
Contrived	Real life
Recall/Recognition	Construction/Application
Teacher structured	Student Structured
What students know or do not know	What students can or cannot do

Authentic Assessments

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- Abstract
- Annotated bibliography
- Biography/autobiography
- Blog
- Book talks
- Brochures
- Case study
- Conducting
- Create musical composition
- Debate
- Diagram
- Description of a process
- Diary
- Dramatic readings
- Dramatic performances
- Editorials
- Essays
- Film analysis
- Flowchart
- Games
- Group discussion
- Interviews
- Letter to the editor
- Literary analysis
- Memo
- Movie/book review
- Multimedia presentation
- Musical auditions
- Narrative
- Oral report
- Outline
- Pamphlets
- Panel discussions
- Personal letter
- Photo compositions
- Podcast
- Poems
- Portfolio
- Projects
- Research proposal
- Research reports
- Review of book
- Role plays
- Satirical pieces
- Speeches
- Stories
- Summary
- Taxonomy

Interactive Assessments

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- Provide opportunity for students to apply concepts and articulate new knowledge

- Minute Paper/Question of the Day
- Entry/Exit Tickets
- Ice breakers
- Think-Pair-Share
- Case Studies or Problem Based Learning
- Debate
- Interview or Role Play
- Interactive Demonstrations
- Jigsaw

Minute Paper/Question of the Day

- Students write a response to an open question
- 1-2 minutes
- Done any time
- Focus on key questions and ideas
- Ask students to make predictions

Muddiest Point

- Similar to minute paper
- Focuses on areas of confusion

Entry and Exit Tickets

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- Short prompts that provide a quick student diagnostic
- Paper or online (survey or LMS)

- **Entry tickets**
  - Focus on the day's topic
  - Recall background information

- **Exit tickets**
  - Students' understanding at the end of a class
  - Opportunity to reflect on learning
  - "What questions do you still have about today's class/topic?"

Think-Pair-Share

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- Students consider a question on their own
- Students discuss in pairs
- Discuss together with the whole class

- Works well with problem-solving, critical analysis
- Opportunity to give voice to quieter students
- Provide support for higher levels of thinking

Case Studies

- Scenarios with “real-life” situation
- Presented in narrative form
- Involve problem-solving
- Often presented sequentially
  - students receive additional information as the case unfolds
  - continue to analyze or critique the situation/problem
- Discussions by groups of students or the entire class
- Links to course readings or resources
- Publically available
  - National Center for Case Study Teaching in Science- Univ. at Buffalo

Problem-based learning activities

- Similar to case studies but usually focus on quantitative problems
- Publically available
  - Problem Based Learning Clearinghouse – Univ. of Delaware

Interview or Role Play

- Take the perspective of historical figures, authors, others
- Interact in character
- Provide specific tasks

Interactive demonstrations

- Students think, predict and analyze
  - Introduce the goal/description
  - Students predict what may happen
  - Conduct demonstration
  - Students discuss and analyze the outcome

Jigsaw

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- Cooperative learning
- Students in teams
- Solve a problem or analyze a reading
- Each team works on different portion of the assignment
- Each part is necessary to solve the problem or answer the question
- Bring the various parts together to solve the problem or answer the question

Classroom Assessment Techniques (CATs)

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- Course Related Knowledge and Skills
- Learning attitudes, values and self-awareness
- Learner reactions to teaching

- Examples to quickly gauge students' comprehension:
  - Minute Paper/Muddiest Point
  - Problem Recognition Tasks
  - Directed Paraphrasing
  - Application Cards
  - Student Generated Test Questions

Learning Assessment Techniques (LATs)

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- Similar to CATs

- Involves 3 processes
  - Plan – identify learning goal/outcome

  - Implement - active learning activity with assessable product

  - Respond - analyze/report results and make changes

Problem Recognition Tasks

- Problems that can be solved most effectively by only one or a few methods
- Identify the best method
- Works best when only one method can be used to solve a problem

• Directed Paraphrasing

- Identify a real audience
- Select an important theory, concept or argument
- Students explain in their own words

Application Cards

- Identify a concept or principle
- Ask students to come up with applications from
  - Their life
  - Current news
  - Their knowledge of particular organizations
  - Systems discussed in the course

Student Generated Test Questions

- Share guidelines with students
- Ask them to write and answer 1-2 questions

Self-Reflective Assessments

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- Structured written assignments in which students:
  - Evaluate work
  - Reflect on learning
  - Consider how work is personally relevant

- ePortfolio

How to evaluate?

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- Rubrics
  - Scoring tool that describes the criteria used to evaluate a specific task
- Why use?
  - Clarity: explicit expectations
  - Feedback: specific and focused
  - Equity
  - Consistency in assessment
- NOTE: Session 2 options include Rubric Workshop

Resources

- Angelo, T. & Cross, K.P. (1993). Classroom assessment techniques: A handbook for college teachers (2nd Edition). San Francisco, CA: Jossey-Bass.
- Armstrong, P. (2010). Bloom's Taxonomy. Vanderbilt University Center for Teaching. Retrieved [todaysdate] from https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/
- Barkley, E. F., & Major, C. H. (2016). *Learning assessment techniques: A handbook for college faculty*. San Francisco, CA: Jossey-Bass.
- Montenegro, E., & Jankowski, N. A. (2017, January). *Equity and assessment: Moving towards culturally responsive assessment*(Occasional Paper No. 29). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment (NILOA).
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- Administrative and Educational Support Taxonomy: https://www.bmcc.cuny.edu/wp-content/uploads/ported/iresearch/upload/AESTaxonomy_Aug2017.pdf
- Alternative Assessments – Best Practices: https://www.ryerson.ca/content/dam/learning-teaching/teaching-resources/assessment/alternative-assessments.pdf
- Assessment Commons: http://assessmentcommons.org/view-all-resources/
- Assessment tools for the Making SLOs Meaningful for Student Equity workshop: http://www.laspositascollege.edu/slo/assets/docs/assessment_tools.pdf
- Assessing Student Learning and Performance: https://www.cmu.edu/teaching/assessment/assesslearning/index.html
- Authentic Assessment Toolbox: http://jfmueller.faculty.noctrl.edu/toolbox/whatisit.htm
- Bloom's Old and new: https://web.uri.edu/assessment/files/Bloom%E2%80%99s-Old-and-New-Versions.pdf
- Case Studies: National Center for Case Study Teaching in Science: https://sciencecases.lib.buffalo.edu/
- Classroom Assessment Techniques: https://www.cmu.edu/teaching/assessment/assesslearning/CATs.html
- Learning Assessment Techniques (LATs): https://www.celt.iastate.edu/teaching/assessment-and-evaluation/learning-assessment-techniques-lats/
- Interactive Classroom Activities: https://www.brown.edu/sheridan/teaching-learning-resources/teaching-resources/classroom-practices/active-learning/interactive
- Problem Based Learning Clearinghouse: https://www.itue.udel.edu/pbl/problems
- Revised Bloom's Taxonomy: https://www.celt.iastate.edu/teaching/effective-teaching-practices/revised-blooms-taxonomy/
- Self-Reflective Assessments and Rubrics: https://www.youtube.com/watch?v=LC6CGzPAlAg
- Icebreakers: https://offers.tophatlecture.com/rs/566-JGI-821/images/TopHat_Assets_Icebreakers.pdf
- Instructional verbs: https://www.cambridgeassessment.org.uk/Images/295559-linking-instructional-verbs-from-assessment-criteria-to-mode-of-assessment.pdf

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Questions/Support?

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