Effective Use of the VALUE Rubrics

2026 Institute on Authentic Assessment

Steve Jones, AAC&U Senior Fellow

AAC&U

Getting to Know Each Other

- Name
- Institution
- Your Role(s)
- Any Previous Experience With VALUE?
- What You're Hoping To Get From This Session

A Bit About Me …



- Steve Jones
- Recently retired from U.S. Air Force Academy
  - Long-time faculty member & administrator
  - Long-time AAC&U member
  - Frequent attendee at AAC&U Summer Institutes
- Current AAC&U Senior Fellow
- Long-time VALUE Advocate
  - Collaborated on initial rubric creation back in 2008
  - Led scoring calibration sessions for AAC&U
  - Led effort to revise Quantitative Literacy VALUE rubric (released this Spring)

Concurrent Session #1D

VALUE 101: A Primer on AAC&U's Assessment Resources

Kate Drezek McConnell, Facilitator

AAC&U's Valid Assessment of Learning in Undergraduate Education (VALUE) initiative was developed to help educators and institutions clearly articulate and measure the knowledge and skills that students need and that parents, policy makers, and employers demand. At the heart of VALUE are sixteen rubrics educators can use to assess students' original work. The VALUE rubrics are open educational resources that provide an empirically sound methodology for reliably and verifiably evaluating student performance across broad, cross-cutting learning outcomes. This overview of "everything VALUE" is designed for newcomers to AAC&U's assessment approach and those simply looking to learn more. We will explain the principles and assumptions behind VALUE's distinctive approach to assessment and introduce the full suite of VALUE resources, from the rubrics to the tools for assignment design, and she examples of how VALUE has transformed teaching, learning, and assessment at institutions around the world.



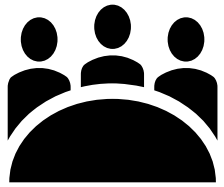
The Plan For This Session …

1. Introduction to VALUE (if needed)
2. My Central Premise
3. Five Tips For Effective Use of the VALUE Rubrics
4. Your Own Ideas

Introduction to VALUE

VALID ASSESSMENT OF LEARNING IN UNDERGRADUATE EDUCATION

Where and Why Did VALUE Begin?



1

AAC&U led teams of faculty to examine existing rubrics and review research on the Essential Learning Outcomes.



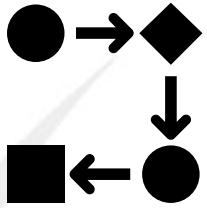
2

Based on their research, the teams established 5 to 6 dimensions for each learning outcome.



3

The rubrics were initially tested at about 150 institutions.



4

Feedback was incorporated through iterative refining and retesting of the rubrics.

The VALUE Approach to Assessment



It is methodologically sound, authentic, and creative method, providing direct evidence of the quality of student learning across critical skills and abilities.



Assessment results point to information and actions that can be taken by those directly involved in teaching and learning as well as policymakers.



They represent broadly shared expectations for learning applicable across undergraduate education.

Intellectual and Analytical Skills

- Creative Thinking
- Critical Thinking
- Inquiry and Analysis
- Problem Solving

Communication Skills

- Oral Communication
- Reading
- Written Communication

Integrative and Applied Learning

- Information Literacy
- Integrative Learning
- Quantitative Literacy
- Quantitative Literacy 2.0

Civic and Intercultural Learning

- Civic Engagement (Local and Global)
- Ethical Reasoning
- Global Learning
- Intercultural Knowledge and Competence

QUANTITATIVE LITERACY VALUE RUBRIC 2.0

For more information, please contact value@aacu.org

Definition

The creation of this VALUE rubric was informed by AAC&U's collaboration with the National Numeracy Network and the robust scholarly literature that explores the concept of quantitative literacy (QL). Our definition of QL is most influenced by Karaali et al. (2016), who argued that QL consists of four components: (1) an ability or habit of mind (2) grounded in the domain of numerical information (3) where students can analyze or use that information (4) within a particular real-world context. With these components in mind, we define Quantitative Literacy—sometimes referred to as Numeracy or Quantitative Reasoning—as follows:

"The skills needed to represent, analyze, and draw conclusions from quantitative information in meaningful, real-world contexts."

Framing Language: Quantitative Literacy Across the Disciplines

Current trends in higher education demonstrate that faculty are recognizing the steadily growing importance of Quantitative Literacy (QL) in an increasingly quantitative and data-dense world. AAC&U's recent surveys (2021, 2023, 2025) have shown that concerns about QL skills are shared by employers, who recognize that many of today's students will need a wide range of high-level quantitative skills to complete their work responsibilities. Virtually all of today's students, regardless of career choice, will need the ability to analyze and draw conclusions from numerical information.

This rubric captures the multifaceted nature of QL, describing it in terms of five dimensions of performance. It is intended for the assessment of student work samples from a variety of disciplines and was designed to be as content-agnostic as possible. It can be used to evaluate single work samples or collections of student work in a variety of formats (e.g., written papers, video presentations). The team that created this revised version of the rubric hope that it will aid in the assessment of QL as a learning outcome as well as support institutions and individuals in the effort to more thoroughly embed QL across the curriculum in higher education.

Key Terms

The key terms and descriptions that follow were developed to clarify the language used within this rubric only.

- **Analysis**: The act of examining something to discover more about it (e.g., the analysis of data).
- **Assumption**: An assertion that one believes to be true.
- **Conclusion**: A reasoned judgment made after conducting an analysis.
- **Consistent (with)**: Compatible or in agreement with
- **Contexts:** Contexts may include (but are not limited to) practical, disciplinary, sociopolitical, ethical, and/or societal considerations as well as one's own position/role in the interpretive process.
- **Implication**: The effect or impact that a conclusion can have.
- **Insight**: A clear, deep understanding of a question or problem.
- **Meaningful**: Significant, consequential
- **Reasonable**: Based on sound judgment; fair
- **Relevant**: Pertinent; appropriately connected to the problem at hand
- **Results**: The outputs of the analysis or analyses.
- **Tools and Technologies:** Typically used to analyze data and may include (but are not limited to) equations, theories, algorithms, calculators, procedures, software, research databases, and artificial intelligence.

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*Evaluators are encouraged to **assign a zero to any dimension when there is no evidence** of the performance descriptors in the student work.*

	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Context *Identifies information that is contained in or surrounds a quantitative question or problem and that connects it to real-world circumstances or contexts, influencing how quantities can or should be interpreted.*	Identifies information that **clearly** connects the quantitative question or problem to real-world circumstances. **Additionally, incorporates that information in a meaningful way** when interpreting quantities.	Identifies information that **clearly** connects the quantitative question or problem to real-world circumstances. **Additionally, acknowledges that the information can influence how quantities are interpreted.**	Identifies information that **clearly** connects the quantitative question or problem to real-world circumstances.	Identifies information that connects the quantitative question or problem to real-world circumstances in a **basic or limited way.**
Representation *Accurately converts quantitative information into alternative forms (e.g., equations, words, graphs, diagrams, tables) that provide deeper insight and/or enable subsequent analysis.*	**Accurately** converts **relevant** quantitative information into one or more alternative forms. **Additionally, identifies how** the alternative form(s) **provide deeper insight and/or enable subsequent analysis.**	**Accurately** converts **relevant** quantitative information into one or more alternative forms **that provide deeper insight and/or enable subsequent analysis.**	**Accurately** converts **relevant** quantitative information into alternative forms that maintain the representation **without enabling new insights**.	**Attempts** to convert quantitative information into an alternative form.
Analysis Using Tools and/or Technologies *Completes an analysis using tools and/or technologies that are reasonable for the work being performed.*	**Effectively** completes analysis using tools and/or technologies that are **reasonable** for the analysis. **Additionally, explains the suitability** of the tools and technologies chosen for the work being performed.	**Effectively** completes analysis using tools and/or technologies that are **reasonable** for the analysis.	**Attempts** to complete analysis using tools and/or technologies that are **reasonable** for the analysis.	**Attempts** to complete analysis using tools and/or technologies that are **unreasonable or incompatible** with the analysis.
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Insights or Implications *Connects conclusions to meaningful insights or implications within real-world circumstances or contexts.*	Connects conclusions to **relevant** insights or implications. **Additionally, connects insights or implications to the context** of the analysis presented or beyond.	Connects conclusions to **relevant** insights or implications.	Connects conclusions to **general or surface-level** insights or implications.	**Restates** conclusions as insights or implications.

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Any Questions So Far?

My Central Premise



Over the past few years, we've emphasized that implementation quality is critical in terms of realizing the benefits of HIP participation. This is not a surprise as the caveat applies to every effort a college or university makes to engage students in meaningful, relevant learning experiences inside and outside the classroom, on and off the campus.

Five Tips For Effective Use of the VALUE Rubrics

Tip #1: Start by identifying desired outcome(s).

Tip #2: Ensure assignments are well-aligned with rubric.

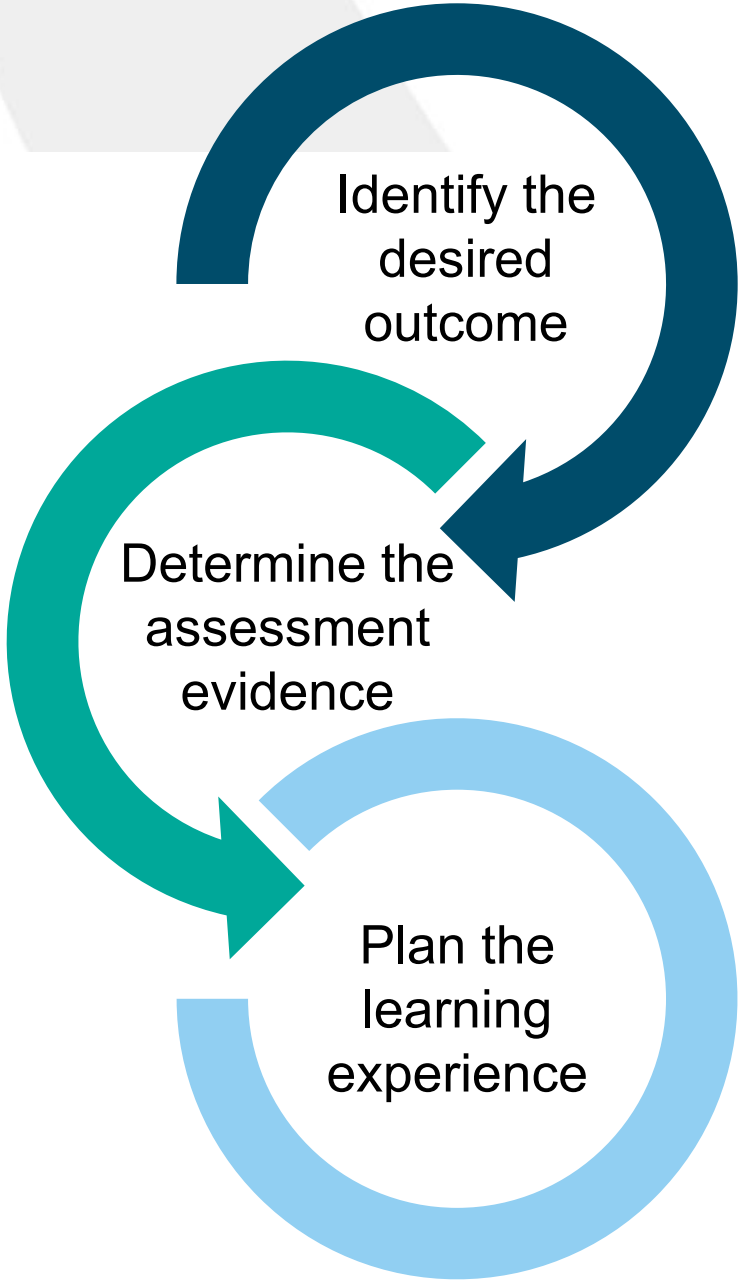
Tip #3: Ensure scorers are well-calibrated.

Tip #4: Summarize data appropriately.

Tip #5: Get the right people in the room to discuss the results.

Tip #1: Start by identifying desired outcome(s)

What knowledge, skills, or attitudes do you want students to develop?

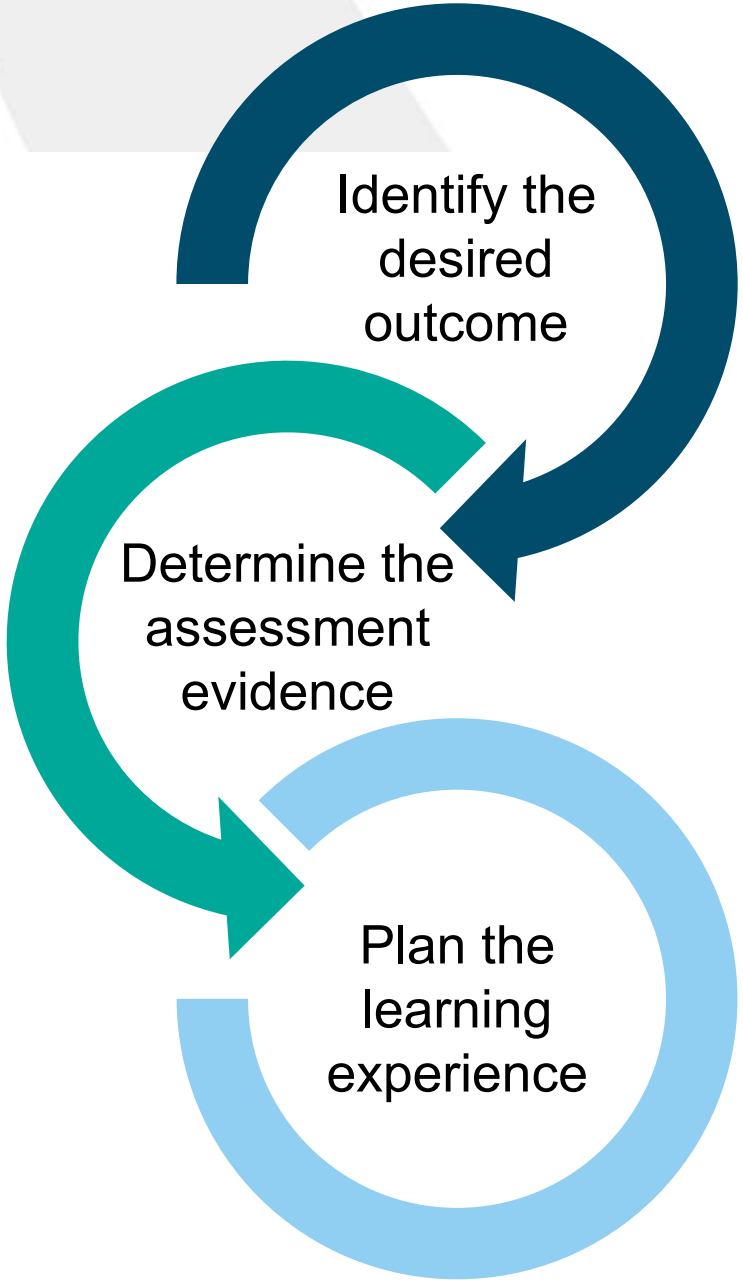


Wiggins & McTighe, 1998

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Tip #1: Start by identifying desired outcome(s)

Note that the desired outcome is <u>different</u> than the learning experiences provided to achieve it.

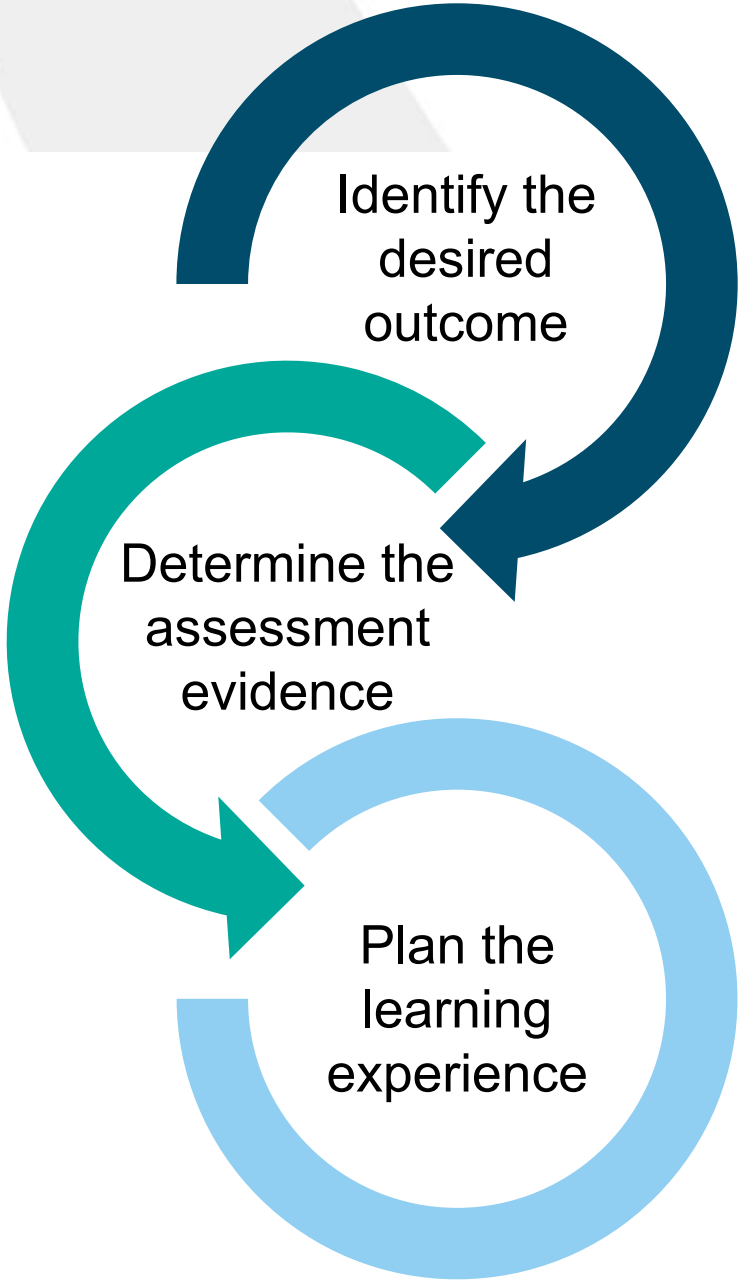


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Tip #1: Start by identifying desired outcome(s)

Note that you may also need to clarify what your outcome really means.

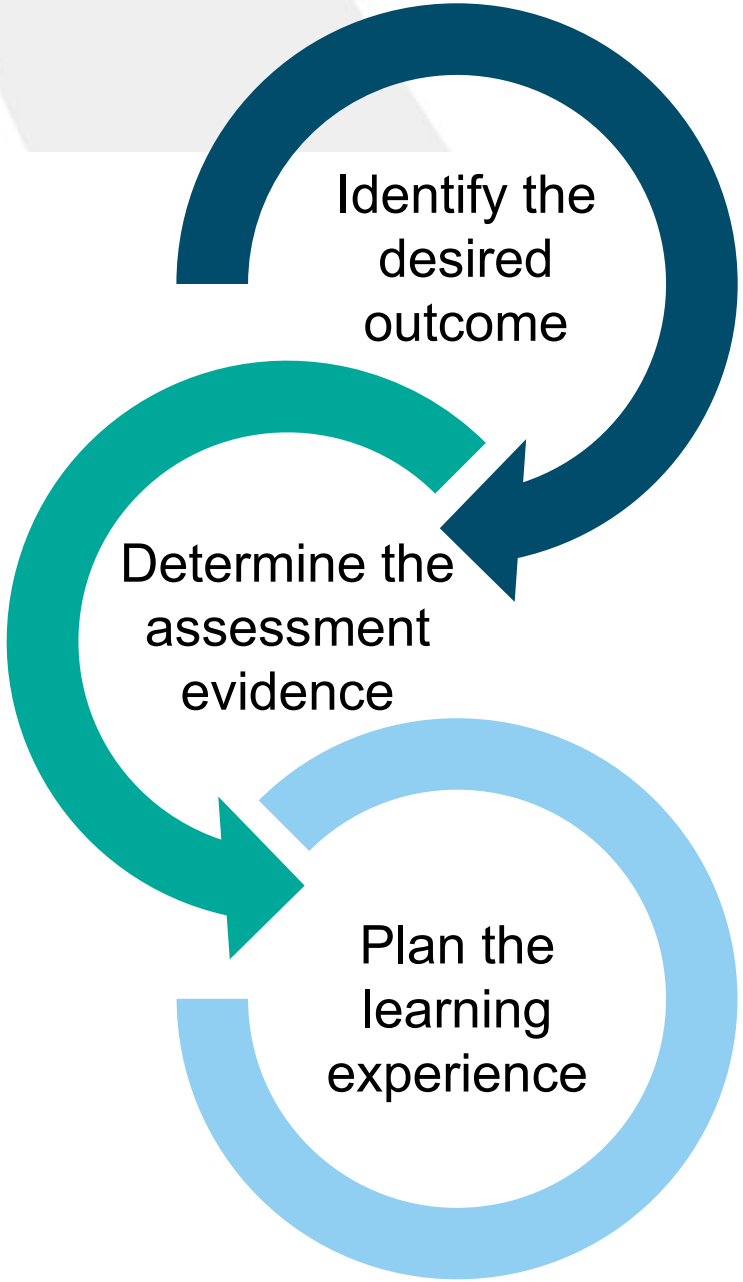


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Tip #1: Start by identifying desired outcome(s)

<u>To ponder</u>: What outcome(s) is your team trying to cultivate in your students?

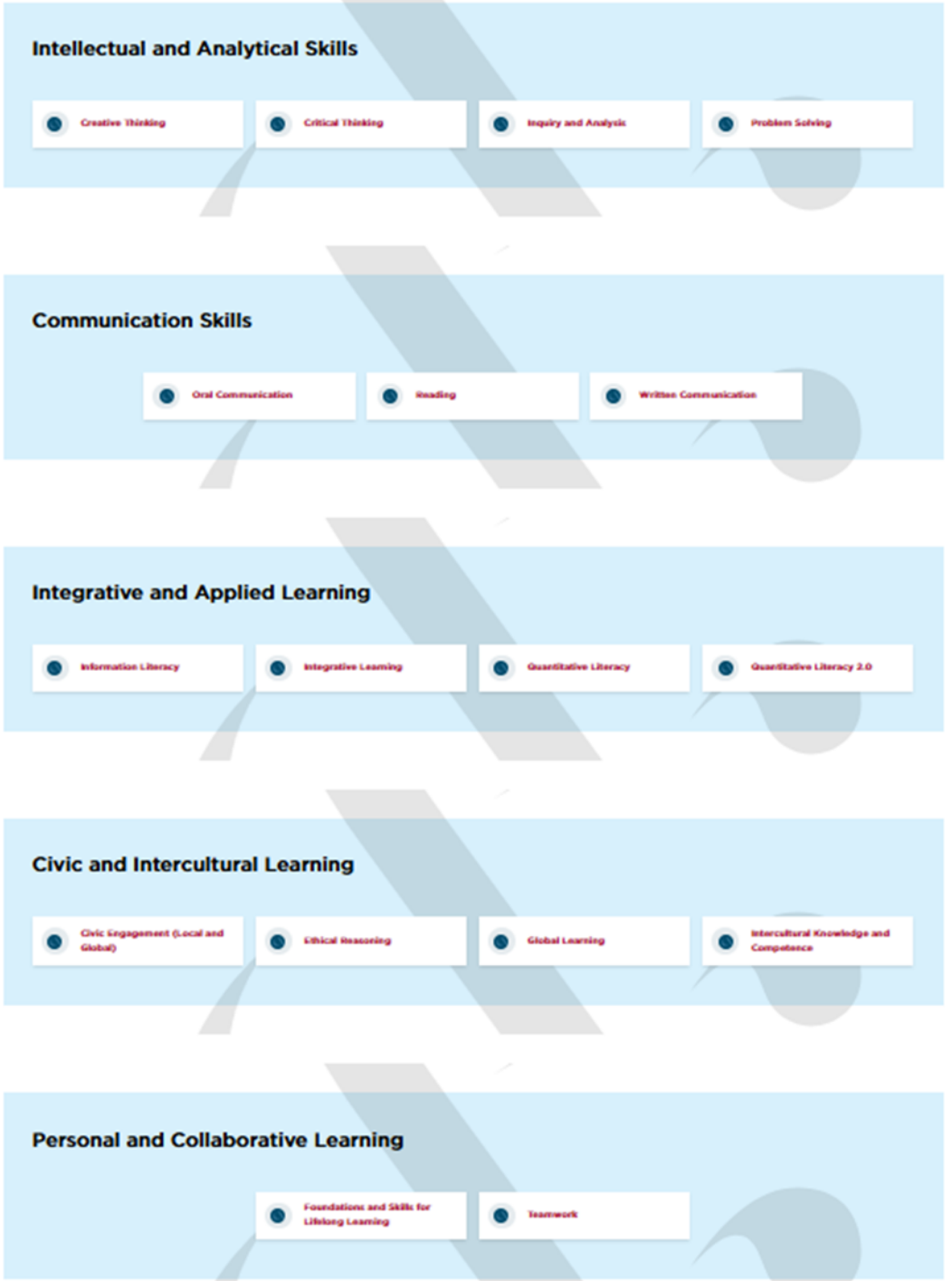


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Tip #1: Start by identifying desired outcome(s)

Now, look for a VALUE rubric that might meet your needs.



If you can't find what you need, consider "hacking."

- Change format
- Edit descriptors
- Combine dimensions

value RUBRICS

QUANTITATIVE LITERACY VALUE RUBRIC 2.0

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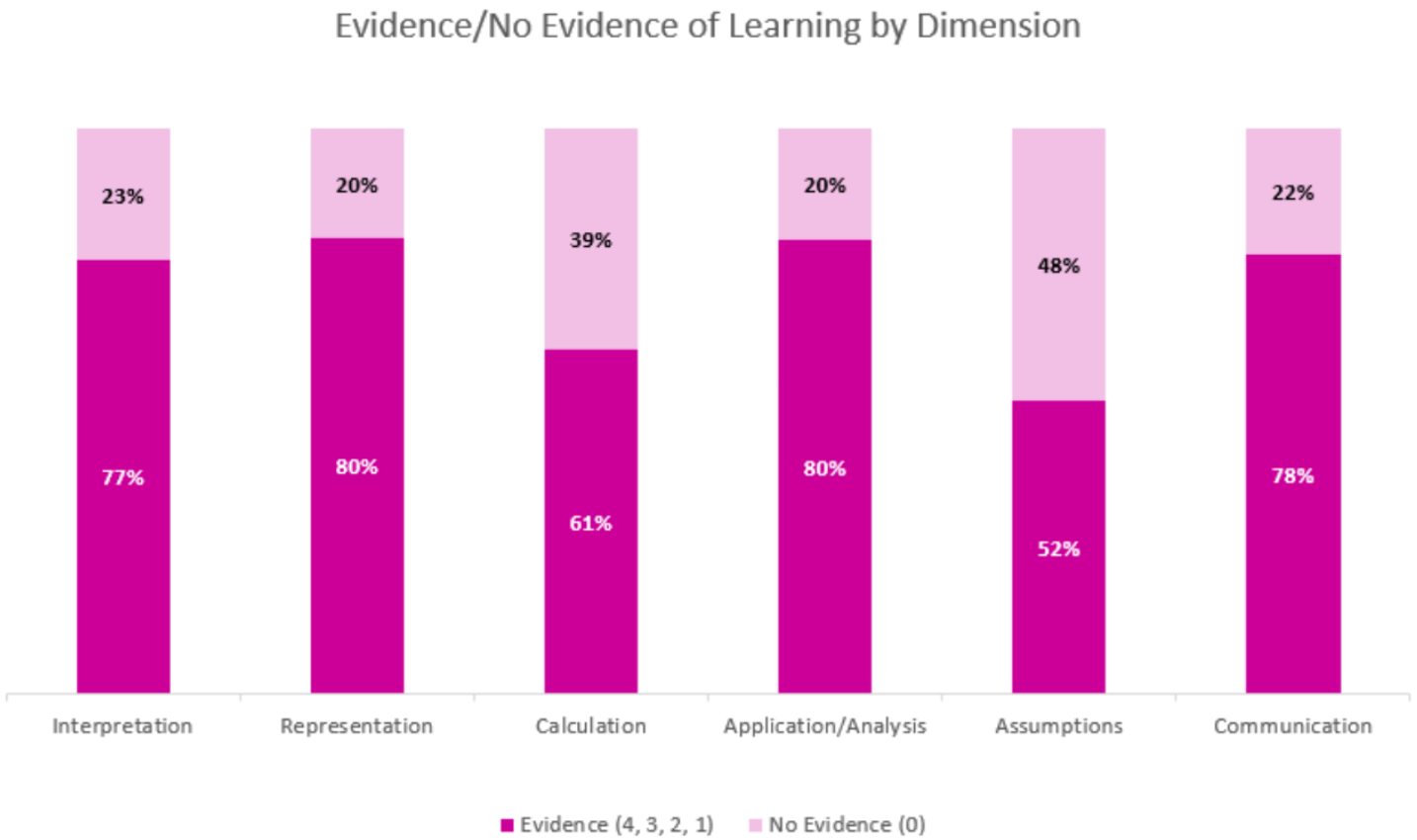
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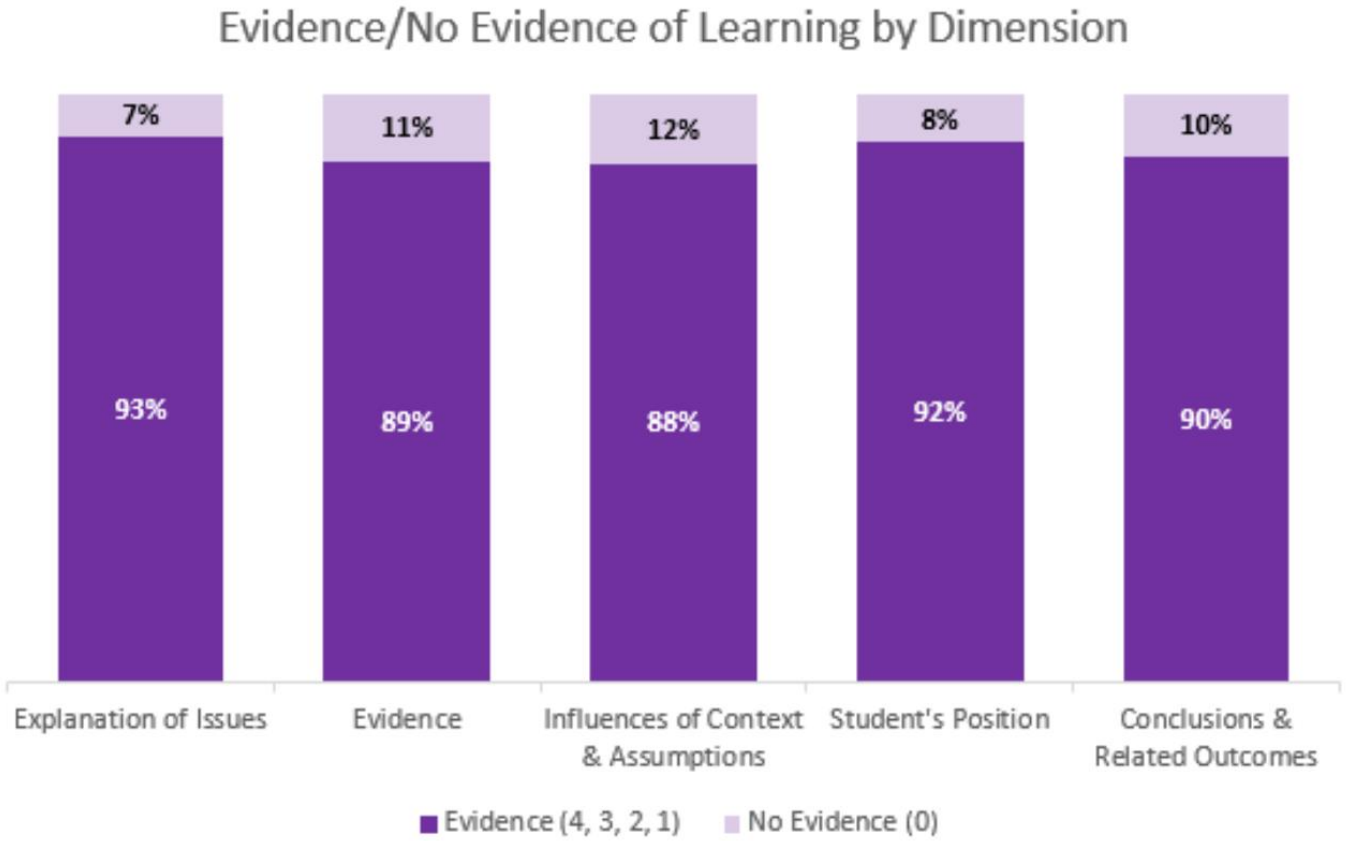
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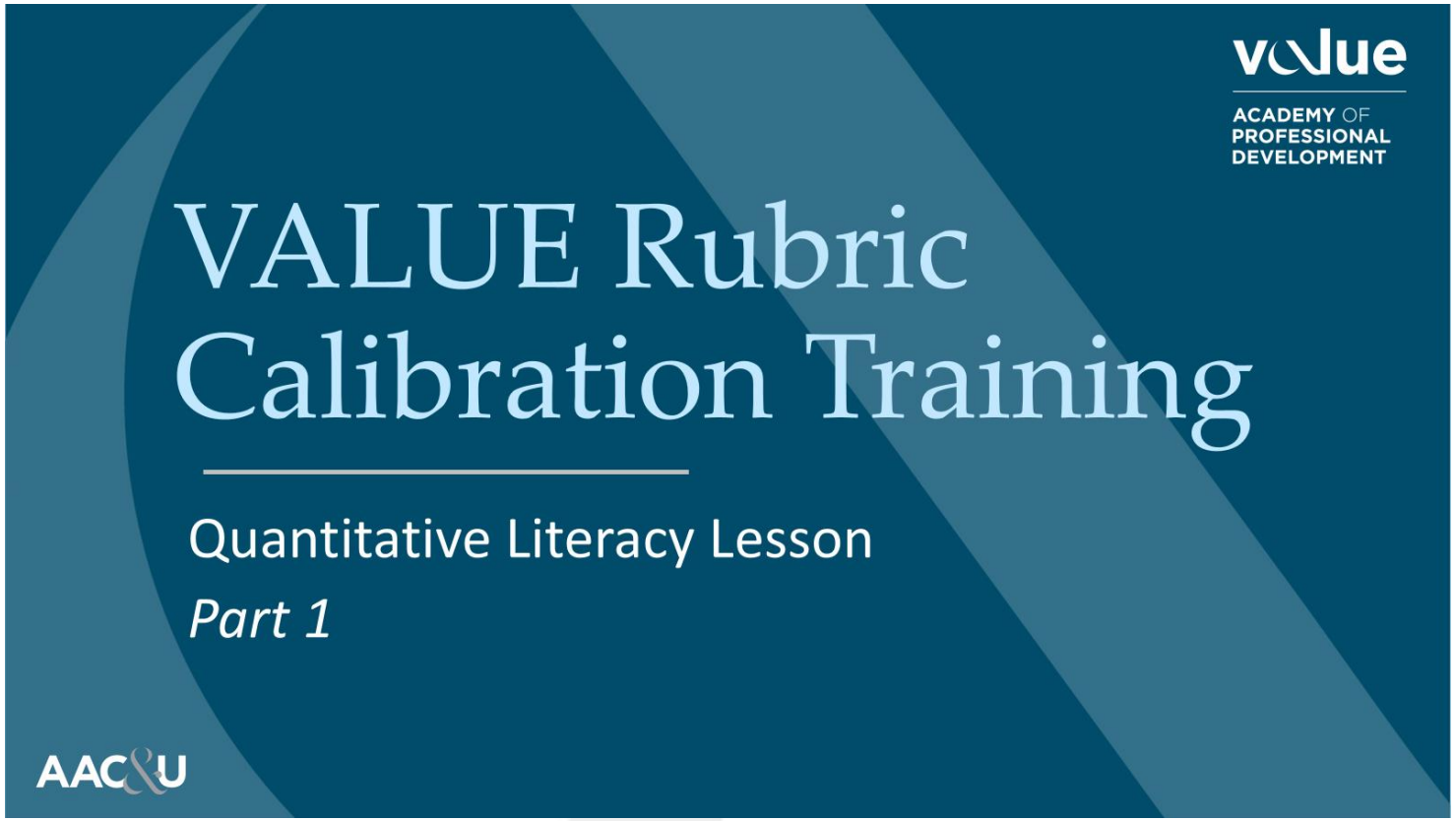
To review:

-- Quantitative Literacy VALUE Rubric 2.0

-- CO2 Concentration Assignment (for IAA)

Question: How well does this assignment elicit the behaviors called for in the rubric?

Tip #3: Ensure scorers are well-calibrated.



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To review:

-- Quantitative Literacy VALUE Rubric 2.0

-- “NBA Dynasties” (please do not share outside Institute)

Task: Score this assignment on the dimension of Analysis Using Tools and/or Technologies.

Tip #4: Summarize data appropriately.

value RUBRICS

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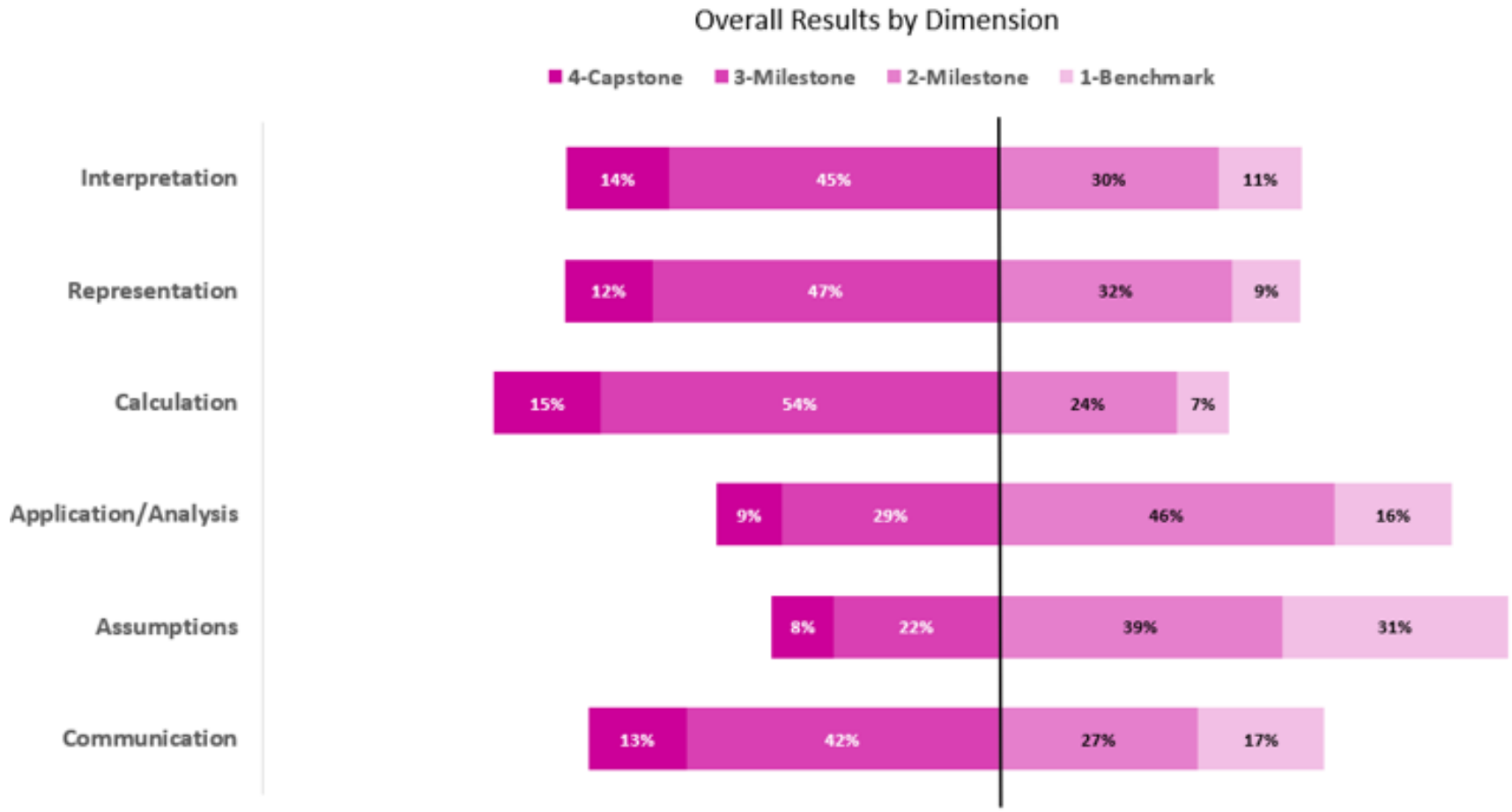
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- Ordinal data.
- Calculating frequencies / percentages makes sense.
- Reporting means does not.

Tip #4: Summarize data appropriately.



Tip #5: Get the right people in the room to discuss the results.

Question: On your campus (and for your project), who are the “right” people?

Tip #1: Start by identifying desired outcome(s).

Tip #2: Ensure assignments are well-aligned with rubric.

Tip #3: Ensure scorers are well-calibrated.

Tip #4: Summarize data appropriately.

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Your Ideas?

What Should I Have Added?

Thank You & Good Luck!



\Steve Jones, AAC&U Senior Fellow

\sjones@aacu.org

\Cell: 719-502-1835