

BUILDING COMPETENCY IN COMPETENCY-BASED EDUCATION

A TOOLKIT FOR EDUCATORS

CENTER ON INNOVATIONS IN LEARNING



MODULE 3

WHAT TOOLS CAN I USE TO MEASURE MASTERY?

In this module, you will learn about rubrics, one tool for determining competency and measuring mastery in the CBE environment. This module will discuss what a rubric is and how you can design and use your own. Pay close attention, as your mastery will be assessed at the end of the module!

As the style of teaching and learning change in a CBE environment, so must the way those efforts are measured and assessed. Jonsson and Svingby (2007)[1] discuss the ongoing shift in how educators are approaching assessment

The new assessment culture aims at assessing higher order thinking processes and competencies instead of factual knowledge and lower level cognitive skills, which has led to a strong interest in various types of performance assessments. This is due to the belief that open-ended tasks are needed in order to elicit students' higher order thinking. (p. 131)

The intent of CBE is to focus on mastery and the learning process, rather than simply using a grade or score to indicate when students are ready to move on. Just like teaching for mastery and the development of competencies looks different from traditional instruction, so does assessment of those learning goals. As mentioned in Module 2, assessments in CBE classrooms can range from the traditional tests, quizzes, and papers to portfolios and performance or project-based demonstrations of learning. One way to measure mastery on performance assessments and other authentic assessments of learning is by using a rubric.

[1] Jonsson, A. and Svingby, G. (2007). The use of scoring rubrics: Reliability, validity and educational consequences. *Educational Research Review*, 2, 130-144. Retrieved from https://www.pdx.edu/education/sites/www.pdx.edu.education/files/Scoring_Rubrics_%28Reliability%2CValidity%2CConsequences%29.pdf

RUBRICS WITHIN CBE

Jonsson and Svingby (2007)[2] define an educational rubric as “a scoring tool for qualitative rating of authentic or complex student work,” and Brookhart (2013)[3] writes that, “A rubric is a coherent set of criteria for students' work that includes descriptions of levels of performance quality on the criteria.” Using a rubric for evaluative purposes is, in itself, a learning experience, allowing students to receive feedback on the specific areas of their work where they excel or need improvement[4]. This is essential for CBE classrooms, where students are learning to self-evaluate their work, take feedback as a positive experience, and grow from mistakes and challenges.

Sanborn Regional School District adopted a uniform four-point rubric as one step in improving the assessment literacy of its staff as they transitioned to a competency-based system. They looked specifically at each current letter grade or rating and what it reflected of the students, how it was interpreted by teachers and staff, and whether or not it fit within the district's CBE mindset. Teachers were empowered to create and continually adapt the new rubric, recognizing that such a tool “better defined the type of work, not necessarily the amount of work” that students were doing in the classroom[5]. As a result, the rubric ratings now reflect students' level of mastery, the goals to which they can aspire, and consistent expectations across teachers and schools.



The Design Lab from reDesign is a repository of lesson ideas and resources, competency-related instructional tools, guidance for performance-based assessments, and materials for mastery learning. For rubric examples and other CBE-related assessment resources, click **here**.

DESIGNING COMPETENCY-BASED RUBRICS

Rubrics are much more than a checklist or score sheet and consequently take more time and thought to design. In CBE, rubrics should be designed to address the mastery of a competency and ask students to go beyond a single demonstration of a skill. Well-designed rubrics in CBE should reflect rigorous assessments of students' deeper thinking processes and transfer of knowledge, using frameworks such as Bloom's Taxonomy or Webb's Depth of Knowledge[6].

[2] Ibid.

[3] Brookhart, S. (2013). How to Create and Use Rubrics for Formative Assessment and Grading. ASCD. Retrieved from <http://www.ascd.org/publications/books/112001/chapters/What-Are-Rubrics-and-Why-Are-They-Important%C2%A2.aspx>.

[4] Andrade, H. (2000). Using Rubrics to Promote Thinking and Learning. *Educational Leadership*, 57,5, 13-18. Retrieved from <http://www.ascd.org/publications/educational-leadership/feb00/vol57/num05/Using-Rubrics-to-Promote-Thinking-and-Learning.aspx>

[5] Vander Els, J. (2015). In Search of the Goldilocks Scale. *Competency Works*. Retrieved from <https://www.competencyworks.org/insights-into-implementation/classroom-practice/in-search-of-the-goldilocks-scale/>

[6] For more on developing rigorous assessment tasks see: <https://knowledgeworks.org/resources/rigorous-tasks/>

The Center for Collaborative Education sums up the criteria for making a rubric[7] below:

The Rubric Design Process in Short

1. Decide the standard(s) or competencies/essential skills/habits, learning targets, etc.
2. Consider the level of knowledge and types of skills that are implied by the standard and therefore required by the evidence.
3. Develop criteria directly from the standard(s).
4. Start with the proficient column, consider what evidence of attainment would be necessary and write the descriptors based on this evidence.

A rubric should be a tool for teachers to drive their teaching and learning activities. The Center for Collaborative Education's "Rubric for Rubrics" below can help you determine if your own rubrics can reliably measure what you intend and if your expectations are clear to students.

Rubric for Rubrics

	Criteria	1 (Not Yet)	2 (Approaching)	3 (Meets)
D E S I G N	Selection & Clarity of Criteria (rows)	Criteria being assessed are unclear, have significant overlap, or are not aligned to appropriate standards/competencies for product/task and subject area	Criteria being assessed can be identified, but not all are clearly differentiated* or aligned to identified standards/competencies for product/task and subject area. Criteria may match content or skill of standard/competency, but do not match the level of cognitive rigor indicated. <i>*One row may have criteria from a number of standards/competencies</i>	All criteria are clear, distinct, and tightly aligned to identified standards or competencies. There are no criteria on the rubric that are NOT aligned to an identified competency Criteria are aligned with the standard/competency at the intended level of cognitive rigor.
	Distinction between levels (columns)	Little or no distinction can be made between levels of achievement	Some distinction between levels is clear, but may be too narrow or too big of a jump	Each level is distinct and progresses in a clear and logical order
	Quality of Writing	Writing is not accessible to all users of rubric, including students; it has vague and unclear language which makes it difficult for different users to agree on a score; may have jargon that makes it inaccessible.	Writing is mostly accessible to all users of rubric, including students; some language may cause confusion among different users; may have jargon that makes it inaccessible. Rather than describing the quality of the work, writing may contain "yes/no" descriptors (for example: "Contains an index." This is a fact, but it does not describe the quality of the work).	Writing is accessible to all users of rubric, including students; it has clear, specific language that helps different users reliably agree on a score. As much as possible, it <i>describes</i> the quality of work that demonstrates achievement of the standard/competency
U S E	Involvement of Students in Rubric Development *	Students are not involved in development of rubric	Students discuss the wording and design of the rubric and offer feedback/input	Teachers and students jointly construct rubric, using exemplars of the product or task
	Use of Rubric to Communicate Expectations & Guide Students	Rubric is not shared with students	Rubric is shared with students when the product/task is completed, and used only for evaluation of student work	Rubric serves as a primary reference point from the beginning of work on the product/task, for discussion and guidance as well as evaluation of student work

**Considered optional by some educators and a critical component by others*



HOW DO YOUR RUBRICS STACK UP?

Select one of the rubrics you use regularly with your students and rate your rubric using the “Rubric for Rubrics” tool above.

How did it rate, and how could it be improved? What might you change to make it more appropriate for a CBE environment?

Now it's time to assess your competency on Module 3!



1. Why are rubrics important within CBE systems?

- A. Personalized instruction is more easily assessed with rubrics.
- B. Rubrics are quicker and easier to develop than other assessments.
- C. CBE breaks learning tasks into manageable components that are more easily assessed with rubrics.
- D. CBE focuses on mastery rather than grades, and rubrics give a more accurate picture of learning.

2. Which of the following are true regarding the use of rubrics in CBE?

- A. Rubric design should begin with the standards/competencies to be assessed.
- B. Educators should consider how less proficient levels of learning will be addressed within rubrics.
- C. Rubrics should be used to communicate expectations to students for their learning.
- D. All of the above
- E. A and C above

3. Which of the following meet the criteria for a high quality rubric?

- A. The language is accessible to all users, including students.
- B. Each level progresses in a clear and logical order.
- C. Criteria are aligned to standards or competencies.
- D. All of the above

If you answered D, E, and D, you were correct! If you have mastered this module, continue on to Module 4.