



Rubrics: Formative Process Tools for Assessment, Instruction & Program Planning

AGEP California - Summer Teaching Institute 2019
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Learning Outcomes for Today:

Participants will be able to...

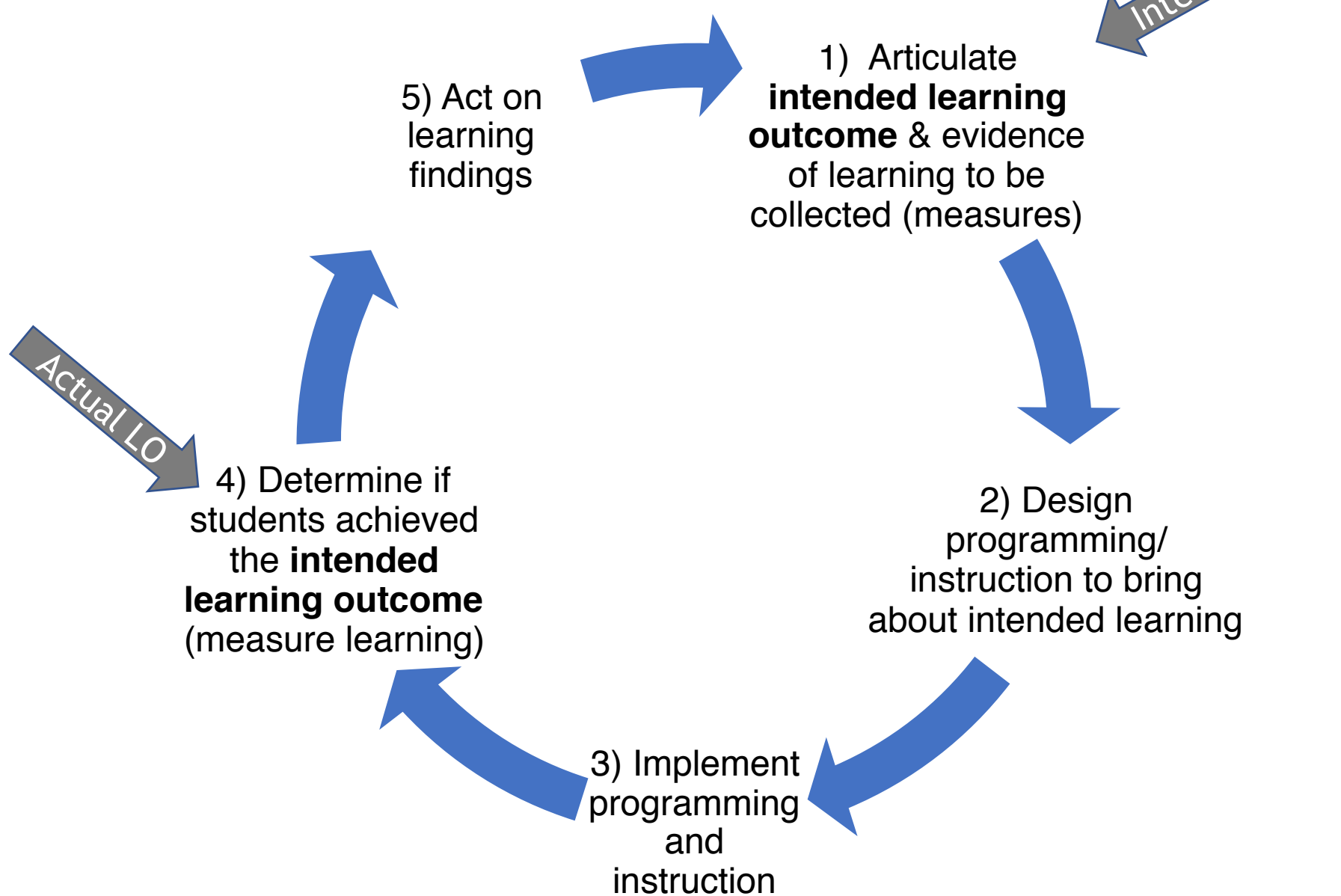
- List benefits of using rubrics for instructors and students
- Recognize different types of rubrics
- Describe the role rubrics play in assessment that provides information for program planning
- Describe the role rubrics play in offering instruction to students
- Use a rubric to assess student work to gain actionable information on student learning

How do rubrics help us to assess student learning for use in program planning and for use in the individual classroom?

A Learning Outcome

- Term refers both to intended and actual, observed outcomes
- In doing so, it clarifies the role of LOs in program planning

Role of LOs in program planning



A rubric defined:

- A scoring guide:
 - a *list* or *chart* that articulates the *criteria* and *standards of achievement* to be used to evaluate work (Suskie, 2009)
 - a set of *criteria* specifying *the characteristics of a (learning) outcome* and the *levels of achievement* for each characteristic (J. Levy, 2012)

Rubrics are used to score...

Assessments that require the observation of a performance or behavior(s), ex.

* Presentations * Lab Work * Group Work

* In-Class Participation * Field Work * Collaboration

Assessments of written or visual artifacts, ex.

* Narrative Exam Questions * Lab reports * Journal Entries

* Essays * Visual Rhetoric * Short Answer
Quizzes

What is the relationship between a learning outcome and a rubric?

- *Learning Outcome* describes what students will do to demonstrate their learning, ex.
 - *Give a presentation*
 - *Perform a task*
 - *Work in team to...*
 - *Write a reflection that...*
- *Rubric* describes
 - The expected properties of that demonstration (criteria)
 - The possible levels of achievement/performance (standards)

Example learning outcome & rubric pairing

Learning Outcome:

After instruction in the characteristics of collaboration and teamwork, students will employ their teamwork skills in the execution of their final group project.

Scoring Rubric:

Teamwork rubric defines four criteria and related standards for effective teamwork that will be examined through the interactions needed to complete the final group project:

- 1) Contributing to team meetings
- 2) Facilitating the contributions of others
- 3) Fostering constructive team climate
- 4) Responding to conflict

Major Types of Rubrics

- Checklist
- Rating Scale
- Descriptive (also called analytic)
- Holistic

The choice of rubric depends in part upon what you want to use the information for.

Example of a Checklist rubric for a website


(suskie, 2009)

Check if present (<i>Standards</i>)	<i>Criteria</i> for a well designed website
	The purpose of the site is obvious.
	The site's structure is clear and intuitive.
	Titles are meaningful.
	Each page loads quickly.
	Graphics and multimedia help convey the site's main points.
	The design is clean, uncluttered, and engaging.
	Spelling, punctuation, and grammar are correct.
	Contact information for the author or sponsor is provided.
	The date each page was updated is provided.

What type of assignment would you utilize a Checklist Rubric For?

- Pause the Slideshow and take a few moments to note the types of assignments that are conducive for implementing a checklist rubric.

Example of a Rating Scale Rubric for Evaluating Fellow Group Members (suskie, 2009)

This group member...(criteria)				
	Almost Always	Often	Sometimes	Rarely
Did his or her fair share of the work				
Participated actively in the group's activities				
Contributed useful ideas, suggestions, and comments				
Listened carefully				
Was considerate of others and appreciated their ideas				
Asked others to clarify their ideas if necessary				
Expressed disagreements respectfully				
Did not dominate the conversation or interrupt others				
Tried to help the group reach consensus				
Helped the group stay on task/topic				
Helped me learn more than if I had worked alone				

What type of assignments would you utilize a Rating Scale Rubric for?

- Pause the Slideshow and take a few moments to note the types of assignments that are conducive for implementing a rating scale rubric.

Example of a Descriptive Rubric

Criteria	Standards			
	1	2	3	4
Contributes to Team Meetings	Helps the team move forward by articulating the merits of alternative ideas or proposals.	Offers alternative solutions or courses of action that build on the ideas of others.	Offers alternative solutions or courses of action that build on the ideas of others.	Offers ideas for constructive action for work of the group.
Facilitates the Contribution of Team Members	Engages team members in ways that facilitate their contributions to meetings by encouraging them to participate and listening when someone is not participating and inviting them to engage.	Engages team members in ways that facilitate their contributions to meetings by encouraging them to participate and listening when someone is not participating and inviting them to engage.	Engages team members in ways that facilitate their contributions to meetings by encouraging them to participate and listening when someone is not participating and inviting them to engage.	Engages team members by taking turns and listening to team without interrupting.
Individual Contributions Outcomes Team Meetings	Completes all assigned tasks by deadline, work accomplished is thorough, constructive, and advances the project. Positively helps other team members complete their assigned tasks by providing support and encouragement.	Completes all assigned tasks by deadline, work accomplished is thorough, constructive, and advances the project.	Completes all assigned tasks by deadline, work accomplished advances the project.	Completes all assigned tasks by deadline.
Fosters Constructive Team Climate	Supports a constructive team climate by doing all of the following: - Treats team members respectfully by being polite and constructive in communication. - Uses positive words or nonverbal, facial expressions, and/or body language to convey a positive attitude about the team and its work. - Motivates team members by expressing confidence about the importance of the task and the team's ability to accomplish it. - Provides assistance and/or encouragement to team members.	Supports a constructive team climate by doing any three of the following: - Treats team members respectfully by being polite and constructive in communication. - Uses positive words or nonverbal, facial expressions, and/or body language to convey a positive attitude about the team and its work. - Motivates team members by expressing confidence about the importance of the task and the team's ability to accomplish it. - Provides assistance and/or encouragement to team members.	Supports a constructive team climate by doing any two of the following: - Treats team members respectfully by being polite and constructive in communication. - Uses positive words or nonverbal, facial expressions, and/or body language to convey a positive attitude about the team and its work. - Motivates team members by expressing confidence about the importance of the task and the team's ability to accomplish it. - Provides assistance and/or encouragement to team members.	Supports a constructive team climate by doing any one of the following: - Treats team members respectfully by being polite and constructive in communication. - Uses positive words or nonverbal, facial expressions, and/or body language to convey a positive attitude about the team and its work. - Motivates team members by expressing confidence about the importance of the task and the team's ability to accomplish it. - Provides assistance and/or encouragement to team members.
Responds to Conflict	Addresses conflicts directly and constructively, helping to manage conflict in a way that strengthens overall team cohesiveness and future effectiveness.	Addresses and acknowledges conflict and stays engaged with it.	Addressing focus toward common ground, avoid taking sides (even if on conflict).	Avoids voicing alternative viewpoints/ideas/opinions.

What type of assignments would you utilize a Descriptive (analytic) rubric For?

- Pause the Slideshow and take a few moments to note the types of assignments that are conducive for implementing a descriptive (analytic) rubric.

Example of a Holistic Rubric For Assessing Student Essay

(Allen, 2004)

Standards

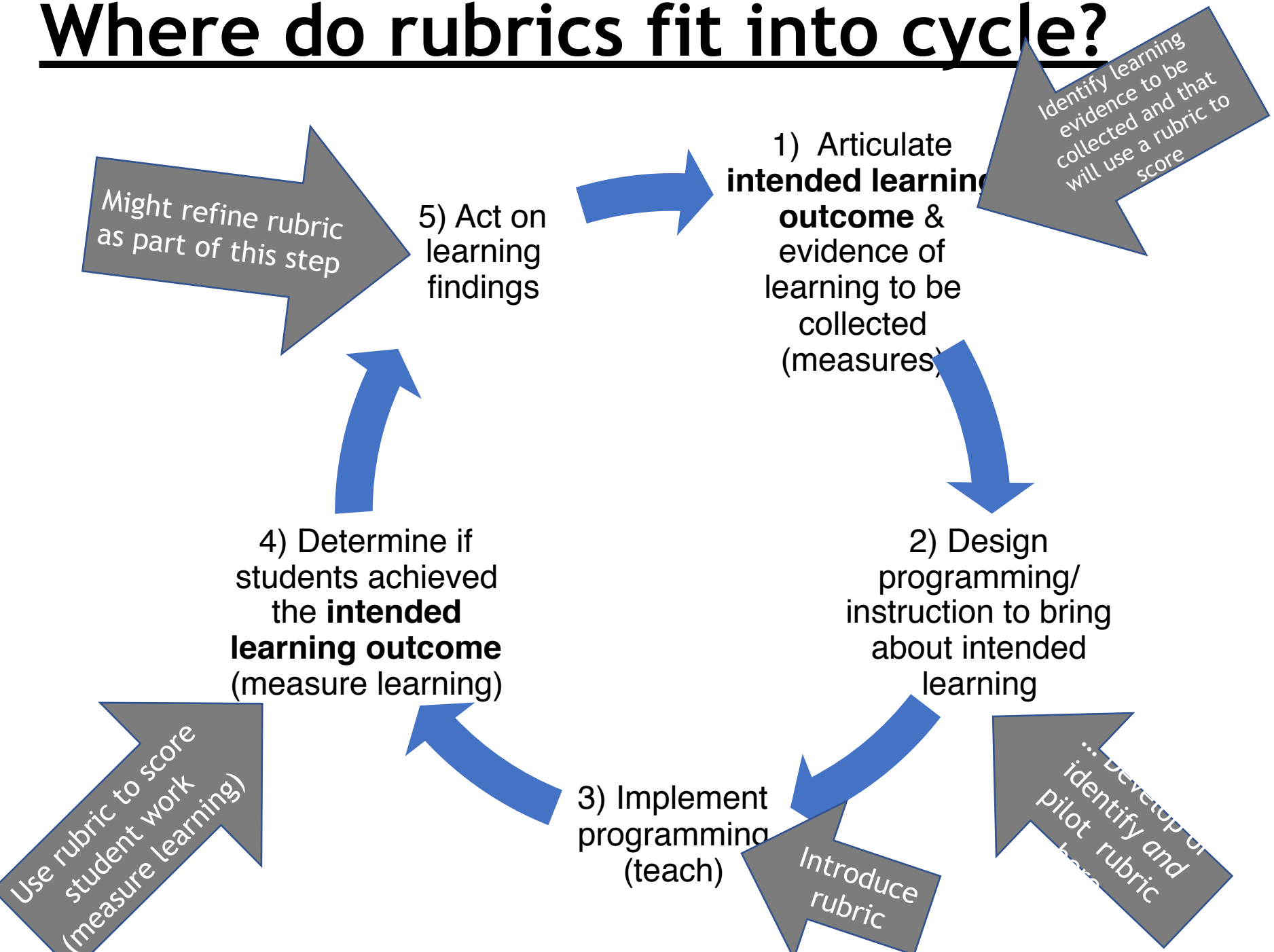


Criteria	Inadequate	Developing Competence	Acceptable	Sophisticated
	The essay has at least one serious weakness. It may be unfocused, underdeveloped or rambling. Problems with the use of language seriously interfere with the reader's ability to discern what is being communicated.	The essay maybe somewhat unfocused, underdeveloped or rambling, but it does have some coherence. Problems with the use of language occasionally interfere with the reader's ability to discern what is being communicated.	The essay is generally focused and contains some development of ideas, but the discussion may be simplistic or repetitive. The language lacks syntactic complexity and may contain occasional grammatical errors, but the reader is able to understand what is being communicated.	The essay is focused and clearly organized; it shows depth of development. The language is precise and shows syntactic variety. Ideas are communicated clearly to the reader.

What type of assignments would you utilize a Holistic rubric For?

- Pause the Slideshow and take a few moments to note the types of assignments that are conducive for implementing a holistic rubric.

Where do rubrics fit into cycle?



Activity: Which Rubric Works Best For PLO Assessment?

Consider the following scenario...

A group of writing faculty plan to meet to review student timed-writing essays. The goal is to quickly and accurately assess student basic composition ability for the purpose of measuring development in basic composition over a semester of writing instruction; timed essays will be given at the start and end of the semester. What kind of rubric would best serve this assessment goal? Why?

Activity: Which Rubric Works Best For PLO Assessment?

Consider the following scenario...

The Chemistry faculty is at the beginning stages of exploring a learning outcome about appreciating the role of chemistry in society. They plan to review assignments, student course activities, student work, and draft narrative descriptions of the ways that a student demonstrates this skill. What type of rubric would best facilitate this effort? Why?

Dealing with rater differences (PLOs)

- 1) Raters discuss differences and come to a shared agreement about score
- 2) Ask a third rater to score to settle the discrepancy
- 3) Average the raters' scores if differences small
- 4) Best practice: Reduce likelihood of discrepancy *before* scoring. “Calibrate” reviewers to apply rubric using example work so that reviewers share understanding of how to apply rubric. Revise rubric to clarify

How to summarize results to promote easy interpretation and action?

Most appropriate and most actionable is to summarize *how frequently* we observed each level of performance

- Ex. Number (or %) of student papers that were determined to be
 - Highly professional
 - Professional
 - Pre-professional
 - Unacceptable

You need to have a single score for each student.

Summarize Results: Averages are problematic

Averages may not capture the actual distribution of student performance.

- Ex. 10 papers scored
 - *Average score: 3 = professional*
 - *Frequency of scores:*

Highly Professional (4)	Professional (3)	Pre-Professional (2)	Unacceptable (1)
5 (50%)	0	5 (50%)	0

Interpreting results and taking action:

What do results suggest to you?

1) Consider student learning results:

- Are you satisfied? How do you know? If not, what might you do?

2) Consider usefulness of rubric:

- Does it work well? Could it be improved? How?

3) Consider process of data collection:

- Did it work well? Could it be improved? How?

What Makes a Useful rubric?

- 1) The assignment asks students to produce work that addresses the rubric criteria
- 2) Criteria and standards are sufficiently distinct and clear that raters consistently apply them in the same way (inter-rater reliability)
- 3) Uses an even number of standards (ex. 4) to avoid tendency to score in the middle.
- 4) The rubric is designed to yield the kind of information about student abilities needed to make planning decisions. Is it the right type of rubric?

The assignment, instruction, and rubric criteria should align.

- Align rubric criteria with learning outcome and the assignment that asks students to produce the outcome.
- Design rubric before giving the assignment, not after.
- As possible, give rubric to students with assignment. Consider having them self-score before turning assignment in.

What are some advantages of using rubrics for students?

(suskie, 2009)

- Helps students understand your expectations. Best practice - provide *with* the assignment
- Students can apply rubrics themselves to guide learning and improvement (ex. self-score before turn in)
- Improves feedback to students by identifying specific areas for improvement and contextualizing their scores
- Gathers information that can be used to improve instruction by highlighting challenges shared by a *significant proportion of students*

What are some advantages of using rubrics for teachers and programs? (suskie, 2009)

- Development of criteria and standards helps to clarify vague or fuzzy goals for a program and among colleagues
- Makes expectations public and shared; all colleagues can understand precisely what students are intended to be able to do
- Makes scoring/grading easier and faster
- Increases consistency in scoring across students, among raters, and through time; allows to measure improvement
- Can gather complementary indirect evidence through student self-ratings
- Makes it easier to identify common strengths and weaknesses in student work, behavior, etc. to inform program planning

Sample RUBRICS

- Review the Sample Rubrics, from past Assessment as Pedagogy Project participants, to identify:

1. The Type of Rubric
2. Strengths of the Rubric
3. Questions about the Rubric

Putting it into practice: Starting With LOs

- What are the PLOs for the program that your mentor teaches in?
- What are the CLOs for the course that your mentor will be teaching?
- Do you see clear alignment between these LOs?
- Is there a clear already existing assignment that could serve as a signature assignment for assessing important aligned LOs?
- What type of rubric may work best with this assignment?