USING RUBRICS TO ASSESS STUDENT LEARNING: A TOOL FOR STUDENT AFFAIRS PROFESSIONALS, TOO!

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Learning Outcomes for Today:

Participant will be...

- Able to describe what a rubric is and list benefits of using rubrics
- Familiar with different kinds of rubrics
- Able to describe the role rubrics play in assessment that provides information for program planning
- Able to use a rubric to assess student work to gain actionable information on student learning
WHAT IS A LEARNING OUTCOME?

• A change in attitude, aptitude or behavior that a student can describe or demonstrate after participating in a program(s) or using a service(s) (CSU Sacramento)

  • Ex. As a result of the health awareness workshop, students can explain how exercise affects stress.

  • Ex. As a result of the time management workshop, students have identified two tools to better manage their schedule.
WHAT IS 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

1) Articulate intended learning outcome & evidence of learning to be collected (measures)

2) Design programming/services to bring about intended learning

3) Implement programming (teach)

4) Determine if students achieved the intended learning outcome (measure learning)

5) Action learning findings
WHAT IS A RUBRIC? WHAT ROLES DO THEY PLAY IN THE ASSESSMENT OF STUDENT LEARNING AND PROGRAM PLANNING IN STUDENT AFFAIRS?
WHAT IS A RUBRIC?

• 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 an outcome and the levels of achievement for each characteristic (J. Levy, 2012)
What are rubrics used to score?

• Assessments that require the observation of a performance or behavior(s), ex.
  • Presentation
  • Teamwork
  • Role plays
  • Performances

• Assessments of written or visual artifacts, ex.
  • Reflection papers
  • Portfolios
  • Journals
  • Art pieces
  • Resumes
What is the relationship between learning outcomes and a rubric?

- **Learning Outcomes** describe what students will do to demonstrate their learning, ex.
  - Give a presentation
  - Work in team to...
  - Role play a....
  - Write a reflection that...

- **Rubric describes**
  - The expected properties of that demonstration (criteria)
  - The possible levels of achievement/performance (standards)
EXAMPLE LEARNING OUTCOME AND RUBRIC PAIRING

Learning Outcome:

Reflecting teamwork instruction in the leadership workshop, 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:

- Contributing to team meetings
- Facilitating the contributions of others
- Fostering constructive team climate
- Responding to conflict
PAIR AND SHARE

Turn to a partner and share a learning outcomes from your campus (department or divisional level) and a source of direct evidence

- student performance
- written work
- observable behaviors

Anyone willing to share with the group?
TYPES OF RUBRICS

• Rubrics differ in structure - in the way criteria and performance standards are described. And thus,
  • In the kind of information they can provide about the quality of a piece of work
  • Choice of rubric depends upon what you want to use the information for.
  • All rubrics enable collection of qualitative and quantitative data
MAJOR TYPES OF RUBRICS

- Checklist
- Rating Scale
- Descriptive (also called analytic)
- Holistic
## Example of a Checklist Rubric for a Website (Suskie, 2009)

<table>
<thead>
<tr>
<th>Check if present (Standards)</th>
<th>Criteria for a well designed website</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The purpose of the site is obvious.</td>
</tr>
<tr>
<td></td>
<td>The site’s structure is clear and intuitive.</td>
</tr>
<tr>
<td></td>
<td>Titles are meaningful.</td>
</tr>
<tr>
<td></td>
<td>Each page loads quickly.</td>
</tr>
<tr>
<td></td>
<td>Graphics and multimedia help convey the site’s main points.</td>
</tr>
<tr>
<td></td>
<td>The design is clean, uncluttered, and engaging.</td>
</tr>
<tr>
<td></td>
<td>Spelling, punctuation, and grammar are correct.</td>
</tr>
<tr>
<td></td>
<td>Contact information for the author or sponsor is provided.</td>
</tr>
<tr>
<td></td>
<td>The date each page was updated is provided.</td>
</tr>
</tbody>
</table>
**EXAMPLE OF A RATING SCALE RUBRIC FOR EVALUATING FELLOW GROUP MEMBERS** (Suskie, 2009)

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

## Teamwork VALUE Rubric

Teamwork is behaviors under the control of individual team members (effort they put into team tasks, collaborative support, and the quantity and quality of contributions they make to team discussions.)

**Criteria**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Capstone 4</th>
<th>Milestone 3</th>
<th>Milestone 2</th>
<th>Benchmark 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contributes to Team Meetings</strong></td>
<td>Helps the team move forward by articulating the merits of alternative ideas or proposals.</td>
<td>Offers alternative solutions or courses of action that build on the ideas of others.</td>
<td>Offers new suggestions to advance the work of the group.</td>
<td>Shares ideas but does not advance the work of the group.</td>
</tr>
<tr>
<td><strong>Facilitates the Contributions of Team Members</strong></td>
<td>Engages team members in ways that facilitate their contributions to meetings by both constructively building upon or synthesizing the contributions of others as well as noticing when someone is not participating and inviting them to engage.</td>
<td>Engages team members in ways that facilitate their contributions to meetings by constructively building upon or synthesizing the contributions of others.</td>
<td>Engages team members in ways that facilitate their contributions to meetings by restating the views of other team members and/or asking questions for clarification.</td>
<td>Engages team members by taking turns and listening to others without interrupting.</td>
</tr>
<tr>
<td><strong>Individual Contributions Outside of Team Meetings</strong></td>
<td>Completes all assigned tasks by deadline; work accomplished is thorough, comprehensive, and advances the project. Proactively helps other team members complete their assigned tasks to a similar level of excellence.</td>
<td>Completes all assigned tasks by deadline; work accomplished is thorough, comprehensive, and advances the project.</td>
<td>Completes all assigned tasks by deadline; work accomplished advances the project.</td>
<td>Completes all assigned tasks by deadline.</td>
</tr>
</tbody>
</table>
| **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 vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work.  
- Motivates teammates 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 vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work.  
- Motivates teammates 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 vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work.  
- Motivates teammates 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 vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work.  
- Motivates teammates 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 destructive conflict directly and constructively, helping to manage/resolve it in a way that strengthens overall team cohesiveness and future effectiveness. | Identifies and acknowledges conflict and stays engaged with it. | Redirecting focus toward common ground, toward task at hand (away from conflict). | Passively accepts alternate viewpoints/ideas/opinions. |
**Example of a Holistic Rubric for Assessing Student Essay** (Allen, 2004)

<table>
<thead>
<tr>
<th>Standards</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate</td>
<td>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.</td>
</tr>
<tr>
<td>Developing Competence</td>
<td>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.</td>
</tr>
<tr>
<td>Acceptable</td>
<td>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.</td>
</tr>
<tr>
<td>Sophisticated</td>
<td>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.</td>
</tr>
</tbody>
</table>
WHERE DO RUBRICS FIT INTO CYCLE?

1) Articulate intended learning outcome & evidence of learning to be collected (measures)

2) Design programming/services to bring about intended learning

3) Implement programming (teach)

4) Determine if students achieved the intended learning outcome (measure learning)

5) Action learning findings

Might refine rubric as part of this step

... Develop or identify and pilot rubric here

Use rubric to score student work (measure learning)
ACTIVITY: SCORING STUDENT WORK WITH A RUBRIC.

Steps to Activity

1) Score student work using rubric.

2) Review data for inter-rater reliability. What if differences in scoring?
   - Who had identical scores? Table talk: what did you learn about using rubrics?
   - What do we do to mitigate variation in scores? Norming, Calibration

3) Summarize results – how best to do that?

4) Identify possible actions suggested by results.
**Activity:** Scoring Student Work with a Rubric.

Guide to discussion of activity

1) Score student work using rubric.

2) Review data for inter-rater reliability. What if differences in scoring?
   1) Who had identical scores? Table talk: what did you learn about using rubrics?
   2) What do we do to mitigate variation in scores? Norming, Calibration

3) Summarize results – how best to do that?

4) Identify possible actions suggested by results.
Review Scores: Check for Inter-rater Reliability.

• Examine degree to which scores for same paper agree.

• If diverge, why?

• What do?
  • Ask another rater to score
  • Revise rubric to clarify

• Best practice: “Calibrate” reviewers to apply rubric before scoring using example work so that reviewers share understanding of how to apply rubric.
SUMMARIZE RESULTS

• Goal is information on which we can act, so frequencies with which particular levels of performance are observed are preferred relative to average performance for the group.

• Do our example – calculate a mean and represent the results as a frequency, which is more intuitive to folks?
SUMMARIZE RESULTS: OTHER PROBLEMS WITH AVERAGES

- Averages may not appropriately describe distribution of student performance. Ex.

- ADD an example here using our rubric....showing that a mean may show that student performance is just fine but really it is dichotomous, students either did poorly or very well.

- Averages are not appropriate because they assume that the difference between each standard is equal.
INTERPRETING RESULTS AND TAKING ACTION: WHAT DO OUR RESULTS SUGGEST TO YOU?

1) Consider student learning results:
   - Are you satisfied? If not, what might you do?
INTERPRETING RESULTS AND TAKING ACTION: WHAT DO OUR RESULTS SUGGEST TO YOU?

2) Consider usefulness of rubric:

• Does it work well? Could it be improved? How?
Reflection:

Think about your learning outcome with your direct evidence, how might you use a rubric in your data collection? What have you learned about rubrics that might help you in your assessment of that outcome?
Activity: What might you use a rubric for in your own work?

Reflect on your own program work,

- Identify an opportunity to apply a rubric.
- What would you use the rubric to evaluate? Why?
- What kinds of rubric (analytic, holistic, etc.) would you choose and why?
WHAT ARE SOME ADVANTAGES OF USING RUBRICS TO STUDENTS? (Suskie, 2009)

• Provide to students to help them 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

• Gather 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 help to clarify vague or fuzzy goals for a program and among colleagues

- Makes expectations public and shared; all colleagues can understand precisely what intend students to be able to do

- Make scoring easier and faster

- Increase consistency in scoring across students, among raters, and through time; allow 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.
REACTIONS

COMMENTS

QUESTIONS

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RESOURCES FOR RUBRICS

1) Google – tons out there
2) Professional societies, colleagues, networks, listservs
3) VALUE Rubrics
4) Rubistar - http://rubistar.4teachers.org/
5) Develop it yourself
HOW CAN REFINE OUR RUBRIC BEFORE WE USE IT TO CONDUCT ASSESSMENT?

1) Develop or identify rubric shaping it to needs

2) Pilot rubric by applying it to example work

3) Share rubric with students to understand how they interpret it

4) Revise/refine rubric to increase inter-rater reliability and usefulness to students
TIPS: WHAT MAKES A USEFUL RUBRIC?

1) The assignment asks students to produce work that addresses the rubric criteria (assignment, instruction, and rubric criteria are aligned).

   • *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.*

   • *Align rubric criteria with learning outcome and the assignment that asks students to produce the outcome.*
WHAT MAKES A USEFUL RUBRIC?

2) Criteria and standards are sufficiently distinct and clear that raters consistently apply them in the same way (inter-rater reliability)

3) Use an even number of standards (ex. 4) to avoid tendency to score in middle.

4) The rubric is designed to yield the kind of information about student abilities needed to make planning decisions.