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## Student Learning Outcomes

### Student Learning Outcomes Home

Welcome to the Student Learning Outcomes website! Here you will find resources detailing information on Student Learning Outcomes here at De Anza College:

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### News

**SLO Coordinators Recruitment:** [Job Description](#)

**Find it here:** [Certificate, Degree and Program Outcomes \(CDPO\)](#) documentation form

**June 14, 2010** – The new SLO website is updated and now **LIVE!** Please check the new [SLOAC User Manual](#), Updated [ECMS Manual](#), [SLOAC video Tutorial](#) page, and more!

### Student Learning Outcomes Purpose Statement

The purpose of Student Learning Outcomes is to establish and institutionalize cyclical processes and procedures developed and driven by De Anza faculty and staff to define and assess specific observable characteristics or outcomes that demonstrate evidence of learning that has occurred as a result of a specific course, program, activity, or process.

Follow the following link for more Student Learning Outcomes definitions:

[Student Learning Outcomes Definitions September 24, 2010](#)

[Student Learning Outcomes Definitions \(old\)](#)



## Resource List for Assessment

Contains a **list of Assessment Tools** and what might be appropriate for you.  
<http://faculty.taftcollege.edu/slos/data/asmnt.shtml> scroll to "training resources" and "authentic assessment handout"

A series of articles about Assessment  
<http://faculty.taftcollege.edu/slos/data/asmnt.shtml> scroll to "training resources" and "Fall Team Resources" PDF

This document covers:

**"Formative Assessment"** Do you want to use a tool that provides snapshots of student learning over the period of the class?

**Embedded Assessments:** Do you want to use major exams or projects you already use in your course?

Lastly, An article by Sharyn Eveland and Geoffrey Dyer "Determining Assessment Inquiry" **What information are you seeking to gain from this assessment?** What do you want to know?  
This article gives an example of operationally defining this assessment.

Cabrillo College focuses on **rubrics**  
[www.cabrillo.edu/.../SLO\\_InstructionalPlanningAssessmentProcess.pdf](http://www.cabrillo.edu/.../SLO_InstructionalPlanningAssessmentProcess.pdf)

Page 55 from their workbook can help you with the process of **assessing at the course level.**

Page 10 to 30 provides a step by step example of **"how to create a rubric"** (note: you should keep the De Anza Core Competencie in mind. They are listed on the DA website.

**Multiple-choice Tests**, page 31 of this workbook helps you through a process of assessing the results you gather from a multiple-choice test.

Lets look at pages 32 to 38. **Documentation.** We have a mandate to document our work. This work **will** lead to a report in the future that will give you the opportunity to make a case/justify a resource request.

Do you think these forms would help you communicate your assessment findings for a resource request?

Do these forms help you organize your thoughts so that you can sort out your findings in a meaningful way for improving your teaching methods?

What suggestions do you have to improve these forms so they fit YOUR needs.

HELP As you work with all of these resources we would appreciate your feedback.

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# Assessment Norming

## **In addition to course embedded assessment, Norming is another OPTION**

When you, as an individual instructor assess student learning outcomes (SLOs) of a course or the ICC's De Anza's SLOs for programs or departments, you have an understanding of what you are looking for and the criteria you are using to assess it. However, in most departments, more than one person is assessing the same outcome in different sections of the same course. ***When two or more people are assessing SLOs/ICCs, how do you know you are all looking at the same SLO/ICC in the same way?***

*Norming is a process that can help you and your colleagues determine how closely you are aligned.* Norming is a technique used to convey the ideal of “collaborative authored and collectively accepted expectations for student learning and assessment” (Maki, P.L., 2004, *Assessing for Learning* American Association for Higher Education, Sterling, VA: Stylus).

- Norming does not mean everybody must teach alike with the same exams and projects.
- Norming does not mean identical learning activities, emphases, or pedagogy.
- Norming means collaboration and consultation. *Norming is the practice of having planned, regular discussions with fellow faculty members to share and combine ideas and make decisions that will be carried out by all participants within their areas.*

Let's say that each department has developed their SLO assessment tools and they would like to see how well they are using them. The key in using these assessment tools is to norm them. Participating in dialogue about SLOs or ICCs and how they will be measured at the same time enhances the coherence of courses or programs and creates opportunities for collaboration among faculty. Norming assessments encourage alignment with department philosophies and values and enables faculty to collectively identify the evidence and criteria or performance indicators they expect their students to achieve.

### ***SLO NORMING EXAMPLE 1 – for a course***

- **Student Learning Outcome** -- Let's say that the Star Trek Department has set its SLO to read that "Students will contrast and compare different economic policies in at least three of the different planets studied." To measure this SLO, the team can decide a common tool OR each faculty member can decide an assignment or activity used in their class that addresses the SLO.
- **Means of Assessment** -- The department decides to assess this SLO via an essay. Then the department faculty creates criteria that describes an "acceptable paper", an "unacceptable paper" or a range of possibilities—a standard grading rubric.
- **Criteria for Success** -- They set an arbitrary benchmark (you can choose your own benchmarks) of "at least 75% of the students" writing the essay will meet department expectations on this essay as specified in the faculty-developed grading rubric.

The three department faculty members—Professors Spock, Kirk, and Worf—teaching a particular course met to develop a standard grading rubric that would outline various levels of performance demonstrated in the essays. They agreed upon the following:

An **ABOVE EXPECTATIONS** response:

- "The essay represents a high level of intellectual engagement with its topic.
- It recognizes the topic's complexities;
- it understands and critically evaluates its sources;
- it displays a strong sense of purpose.
- It pursues a clear and consistent line of reasoning.
- It uses source material as evidence frequently and accurately."

A **MEETS EXPECTATIONS** response:

- "The essay addresses the topic.
- It stays on topic.
- It handles multiple facets of the topic, though with uneven success.
- The essay often cites examples from source material clearly and mostly correctly to support claims."

A **DOES NOT MEET EXPECTATIONS** response:

- "The essay does not address the topic.
- It may be written with no clear issue or problem in view.
- It may simply misunderstand the topic, or "write around" it.
- Hypothetical statements replace actual historical citations.
- The essay only rarely employs source material correctly and clearly.
- Citations are rarely accurate, and they are poorly integrated into the argument."

**VERY IMPORTANT!** Remember to define vague terms like "intellectual engagement" in your discussion.

The Star Trek Assessment Rubric is displayed on the next page.

## STAR TREK DEPARTMENT ASSESSMENT RUBRIC

**SLO:** Students will compare and contract different economic policies in at least three (3) of the different planets studied.

**Means of Assessment:** Each student will write an essay. These essays will be read by faculty in the department and scored on the faculty-developed rubric. At least two (2) faculty members will read each essay. If the scores are the same, the paper is given that rating. If the two faculty members score the paper differently, then a third faculty member will read the paper and make a determination of the score and/or the two faculty members will discuss the ratings and come to a consensus.

**Criteria for Success:** At least 75% of the students writing the essay will meet department expectations on this essay as specified in the faculty-developed grading rubric.

ABOVE EXPECTATIONS	MEETS EXPECTATIONS	DOES NOT MEET EXPECTATIONS
· It represents a high level of intellectual engagement with its topic.	· It addresses the topic.	· It does not address the topic.
· It recognizes the topic's complexities.	· It stays on topic.	· It may be written with no clear issue or problem in view.
· It understands and critically evaluates its sources.	· It handles multiple facets of the topic, though with uneven success.	· It may simply misunderstand the topic, or "write around" it.
· It displays a strong sense of purpose.	· It often cites examples from source material clearly and mostly correctly to support claims	· Hypothetical statements replace actual historical citations
· It pursues a clear and consistent line of reasoning.		· It only rarely employs source material correctly and clearly.
· It uses source material as evidence frequently and accurately.		· Citations are rarely accurate, and they are poorly integrated into the argument.

What if the above SLO Norming example does not work for your department? How else can you view SLOs and their assessment?

### ***SLO NORMING EXAMPLE 2 – for a course***

“That’s great, but my department wrote SLOs that are more hands-on. All of the work above does not address my situation. Got any ideas?” a frustrated professor might state. Well, let’s look at another example and see if we can handle this.

- 1 **Student Learning Outcome** -- The X-Men Department wrote an SLO that states that “each student in the course will demonstrate their power in a controlled lab situation.” How might the faculty in this department norm the students’ abilities in this controlled situation? Suggestion—try different assignments. The team can decide a common tool or each faculty member can decide an assignment or activity used in their class that addresses the SLO.
- 2 **Means of Assessment** -- The department will use a lab assignment to measure this SLO. The lab will consist of a threat that the student needs to evaluate and determine a way to alleviate the threat without harming any people or property.
- 3 **Criteria for Success** -- The faculty in the X-Men Department strongly believe that all of their students need to meet this SLO, but being realistic and thinking that there might be a few mistakes made by some students, the department stated their criteria for success as “at least 85% of students completing the lab activity will meet the department’s expectations.”

Professor Cyclops states that a strong response might be that a student quickly identifies the source of the threat and then, with no residual damage to others or to property, the student uses their power to alleviate the threat. The department, after much discussion, also decided that there should be a time limit on this activity.

Professor Xavier thought that a weak response might be that a student uses their power and destroys everything and everyone in the lab.

Professor Storm, one of the few women professors in the department, was working with Professor Wolverine to decide on what a fair response might be to the situation. After much discussion at several department meetings,

the entire faculty in the department decided that there was no fair response to the situation. A student either met expectations or did not meet expectations.

<p><b>SLO:</b> Students will successfully use their power to diffuse a threat.  <b>Means of Assessment:</b> In a controlled lab activity, a student will be confronted with a hostile situation and the student must use their power to diffuse the threat with no residual damage.  <b>Criteria for Success:</b> At least 85% of students completing the lab activity will meet the department’s expectations.</p>	
<b>MEETS EXPECTATIONS</b>	<b>DOES NOT MEET EXPECTATIONS</b>
<p>Student quickly identifies and assesses the situation and then, with no residual damage, diffuses the threat. The student completed the assessment and alleviated the threat within a 15 minute timeframe .</p>	<p>Student does not quickly identify or assess the situation within the 15 minute timeframe. If the student identifies the situation, the student uses his/her power and injures innocent bystanders and/or destroys property. The student does not alleviate the threat in a reasonable amount of time.</p>

**VERY IMPORTANT!** Remember to define vague terms like “quickly or reasonable amount of time” in your discussion.

*Norming Assessment Example relative to an ICC*

But what do you do if you have to do norming on an ICC? For example, all physical education courses can be mapped/linked to Lifelong Learning and Self-Development.

A set of courses from a variety of disciplines or a division can develop a common outcome and use a rubric to assess student performance.

- **ICC — PHYSICAL/MENTAL WELLNESS AND PERSONAL RESPONSIBILITY** Students will recognize lifestyles that promote physical and mental well-being, engage in self-reflection and ethical decision-making, explore career choices and life goals, practice effective individual and collaborative work habits, and demonstrate a commitment to ongoing learning.
- **Means of Assessment** — Participating faculty members will select an activity or assignment that addresses the ICC (any part of the Lifelong Learning and .
- **Criteria for Success** — Students will meet expectations by scoring a "1" or more in at least two of the three categories (Collection, Analysis, and Application).

<p><b>SLO:</b> Students completing an assignment relative to “Physical/Mental Wellness and Personal Responsibility” will demonstrate meaningful self-evaluation.  <b>Means of Assessment:</b> Participating faculty members will select an activity or assignment that addresses the ICC.  <b>Criteria for Success:</b> Students will meet expectations by scoring a "1" or more in at least two of the three categories (Collection, Analysis, and Application).</p>			
<b>CRITERION</b>	<b>PERFORMANCE LEVEL</b>		
	<b>0</b>	<b>1</b>	<b>2</b>
<b>COLLECTION:</b> Quality of information collected	No collection	Somewhat detailed and complete	Detailed and complete
<b>ANALYSIS:</b> Analysis of information	No analysis	Summary of information with some analysis	In-depth/thorough analysis
<b>APPLICATION:</b> Application of concepts to enhance lifelong well-being	No application	Somewhat thoughtful and somewhat specific information	Thoughtful and specific application

This plan and rubric was adopted from Mt. San Antonio College.



## **CONCLUSION**

Norming is one way a group of instructors can plan assessments. Combine any of the above suggestions with sampling (see the white paper, Sampling) and your assessment plan becomes efficient and your results become more valid. The De Anza Nursing Staff and several other groups also that are already working with these concepts without any prompting from the SLO team.

### *FUN suggestion:*

One way any department can get started on norming is to have a “norming party.” Have everyone in the department, including part-time faculty, meet and look over the students’ work. Have more than one faculty member rate each student’s work. If the two faculty members rate the student in the same way, the work is done. But if there is a difference in the rating between faculty members, you could have the faculty members discuss their scoring and see if either needs to reassess their views or you could have a third faculty member rate that assignment and the similar score is the final result. This activity is great for faculty collegiality and collaboration.

# Developing Rubrics

## *What's a rubric and why do I need one anyway?*

Heidi Goodrich, a rubrics expert, defines a rubric as "a scoring tool that lists the criteria for a piece of work or 'what counts.'" So a rubric for a multimedia project will list the things the student must have included in their project to receive a certain score or rating. Rubrics help the student figure out how their project will be evaluated. Goodrich quotes a student who said he didn't much care for rubrics because "if you get something wrong, your instructor can prove you knew what you were supposed to do." Clearly, making grading transparent will allow for more constructive dialogue on the teacher's grading. Rubrics *can help students and faculty define "quality."* Rubrics can also help students judge and revise their own work before handing in their assignments.

A rubric is a matrix with traits along one side, levels of competence along the other, and qualitative observables in each cell. They can be used to classify virtually any product or behavior: essays, research, portfolios, works of art, recitals, oral presentations, performances, group activities, etc.

Generally, rubrics specify the level of performance expected for several levels of quality. These levels of quality may be written as different ratings (e.g., Exceeds Expectations, Meets Expectations, Does Not Meet Expectations) or as numerical scores (e.g., 4, 3, 2, 1), which are then added up to form a total score which then is associated with a grade (e.g., A, B, C, etc.).

The same rubric can be used to evaluate different assignments that measure the same skill. For example, a rubric could be made to evaluate an essay for students' ability to write a coherent thesis statement, but each faculty member does not have to use the same essay for their respective section(s).

Rubric strengths include:

- Complex products or behaviors can be examined more efficiently.
- Developing a rubric helps to precisely define faculty expectations (grading).
- Rubrics are student-to-standard referenced rather than student-to-student referenced.
- When rubrics are shared with students, students understand what is expected of them and learning is improved.

Rubric weaknesses include:

- Development of a useful, effective rubric takes time.
- If working across sections or courses, development of a useful rubric requires faculty cooperation and faculty agreement.

***How do I get started developing a rubric that my I can use to assess the SLOs for a course? Note: instructors can also develop a rubric that can be used by instructors for their department.***

There are websites that are available to help, such as <http://rubistar.4teachers.org/index.php>. There are also many rubrics developed by faculty across the country that you can use for inspiration (*see page 3 for a Mathematics Rubric example*).

Rubrics can be as simple as what Mt. SAC General Education Outcomes (GEO) Coordinator Joe Terreri calls a

“holistic” rubric -- a rating of zero for “Did Not Meet Criterion” and a rating of one for “Meets Criterion.”

**Steps to building a rubric include:**

1. Select an SLO / ICC. In the example below, the ICC is “Students completing an assignment in Humanities will be able to identify the influence of culture on human expression.”
2. Identify the primary traits. The primary traits identified for this example are “students identifying the culture” and “students identifying the influence of culture on human expression.”
3. Identify the levels of competence. For this example, the levels of competence are “Below Expectations” (0 points), “Meets Expectations” (1 point), and “Exceeds Expectations” (2 points).
4. Identify the characteristics of what you are assessing (e.g., organization, originality, etc.). The characteristics that are being assessed here are identification and seeing a relationship.
5. Create your observables.
  - a. Describe the best work you could expect using these characteristics.
  - b. Describe the least acceptable product using these characteristics. (This still meets your minimum criteria.)
  - c. Describe an unacceptable product. (This does not meet your minimum criteria.)
  - d. Describe any additional intermediate levels as necessary.

	0	1	2
	Below Expectations	Meets Expectations	Exceeds Expectations
Identify Culture	Cannot identify a culture; misidentify a culture.	Accurate identification of relevant culture(s).	
Influence on Human Expression	Cannot identify or mis-identify a relationship between the culture and the human expression.	Identify a relationship between the culture and the human expression.	Identify additional facets of the relationship (such as sequence of events, depth or magnitude of the influence, and barriers to the influence).

This example is adopted from the General Education Outcomes workshops ([http://www.mtsac.edu/instruction/generaled/docs/GEO\\_workshop\\_handouts.pdf](http://www.mtsac.edu/instruction/generaled/docs/GEO_workshop_handouts.pdf)).

Mathematics Rubric Example by J. Scholars, Mt SAC

Score Level	Mathematical Understanding	Strategic Knowledge and Planning	Explanation and Justification
(How do you evaluate your	(Do you know it?)	(How did you plan your answer?)	(Can you explain your thinking?)
<b>4</b>	<ul style="list-style-type: none"> <li>· I got the right answer and I identified and labeled the parts correctly.</li> <li>· I used math terms correctly to show I understand how math works.</li> <li>· I computed with no errors.</li> </ul>	<ul style="list-style-type: none"> <li>· I found all the important parts of the problem and I know how they go together.</li> <li>· I showed all the steps and procedures I used to solve the problem.</li> <li>· I explained my mental math or showed my calculations.</li> </ul>	<ul style="list-style-type: none"> <li>· I wrote <b>what</b> I did and <b>why</b> I did it in a clear and concise manner.</li> <li>· If I used a drawing, diagram, or picture, I explained all of it in writing.</li> <li>· I described my logical steps and my critical thinking in a clear and concise manner.</li> </ul>
<b>3</b>	<ul style="list-style-type: none"> <li>· I got the right answer and identified the parts, but I made slight errors.</li> <li>· I made minor errors in computation or steps, but I understand what I did.</li> <li>· I understood my answer and recognized my mistakes.</li> </ul>	<ul style="list-style-type: none"> <li>· I showed detailed pictures, diagrams, models, or computations.</li> <li>· I found most of the important parts of the problem.</li> <li>· I showed a reasonable plan and most of the steps I used to solve the problem.</li> </ul>	<ul style="list-style-type: none"> <li>· I wrote mostly about <b>what</b> I did, not <b>why</b> I did it.</li> <li>· I described my steps, but not clearly.</li> <li>· If I used a drawing, I explained most of it in writing.</li> </ul>
<b>2</b>	<ul style="list-style-type: none"> <li>· I know how to do parts of the problem, but I made noticeable mistakes.</li> <li>· I gave an incorrect answer or only part of the answer.</li> </ul>	<ul style="list-style-type: none"> <li>· I showed some of the steps of parts of the problem, but my plan is not clear.</li> <li>· I found some elements of the problem.</li> </ul>	<ul style="list-style-type: none"> <li>· I wrote some about <b>what</b> I did or <b>why</b> I did it, but not both.</li> <li>· If I used a diagram, drawing, or formula, I explained some of it or it was basic.</li> </ul>

<b>1</b>	· I tried to do the problem, but I did not understand it. · My answer is incorrect, but I did not explain why.	· I showed a plan but it was basic. · I showed a limited number of steps I used to solve the problem. · I included unnecessary information.	· I wrote, drew, or created something, but it was not linked to the answer. · I wrote an answer, but it was not clear.
<b>0</b>	I did not attempt to answer the problem.	I did not show a plan.	· I did not explain my answer in writing.

Based on the aforementioned creation of a rubric, page 4 provides a copy of the final rubric for a set of math classes, which will work for many different levels of math. This rubric was written for student use so that they can assess their own work. This also allows the students to see how instructors will assess their work and use this information to decide if they wish to re-work their project or assignment before it is graded.

*Ultimately, it is your decision as faculty that will guide you in the development of your rubric—using your expertise from your discipline, your understanding of your students, and what you are trying to have them learn.*

Remember, rubrics can provide valuable information about the degree to which a student has achieved a defined learning outcome based on specific criteria that defined the framework for evaluation. Rubrics are a tool to assist faculty.

**NOTE:** This paper provides a process by which to develop rubrics. The *Guidebook to Student Learning Outcomes and Administrative Learning Objectives* is a good resource for information about other assessment tools and is at: [http:// www.mtsac.edu/administration/senates/academic/documents/SLOAUOGUIDEBOOK090808FINAL.pdf](http://www.mtsac.edu/administration/senates/academic/documents/SLOAUOGUIDEBOOK090808FINAL.pdf).

This document was adopted from Mt SAC, Joan Scholars, White Paper “Rubrics” May, 2009

Dr. Dannelle Stevens and Dr. Antonia Levi teach at Portland State University in the Graduate School of Education and the University Studies Program, respectively. Rubrics are used quite extensively for grading at Portland State University, especially in the core University Studies program. One reason for this is that the University Studies Program uses rubrics annually to assess its experimental, interdisciplinary, yearlong Freshman Inquiry core. Because that assessment is carried out by, among others, the faculty who teach Freshman Inquiry, and because most faculty from all departments eventually do teach Freshman Inquiry, this means that the faculty at Portland State are given a chance to see close up what rubrics can do in terms of assessment. Many quickly see the benefits of using rubrics for their own forms of classroom assessment, including grading.

In this book, we will show you what a rubric is, why so many professors at Portland State University are so enthusiastic about rubrics, and how you can construct and use your own rubrics. Based on our own experiences and those of our colleagues, we will also show you how to share the construction or expand the use of rubrics to become an effective part of the teaching process. We will describe the various models of rubric construction and show how different professors have used rubrics in different ways in different classroom contexts and disciplines. All the rubrics used in this book derive from actual use in real classrooms.

### Do You Need a Rubric?

How do you know if you need a rubric? One sure sign is if you check off more than three items from the following list:

- You are getting carpal tunnel syndrome from writing the same comments on almost every student paper.
- It's 3 A.M. The stack of papers on your desk is fast approaching the ceiling. You're already 4 weeks behind in your grading, and it's clear that you won't be finishing it tonight either.
- Students often complain that they cannot read the notes you labored so long to produce.
- You have graded all your papers and worry that the last ones were graded slightly differently from the first ones.

- You want students to complete a complex assignment that integrates all the work over the term and are not sure how to communicate all the varied expectations easily and clearly.
- You want students to develop the ability to reflect on ill-structured problems but you aren't sure how to clearly communicate that to them.
- You give a carefully planned assignment that you never used before and to your surprise, it takes the whole class period to explain it to students.
- You give a long narrative description of the assignment in the syllabus, but the students continually ask two to three questions per class about your expectations.
- You are spending long periods of time on the phone with the Writing Center or other tutorial services because the students you sent there are unable to explain the assignments or expectations clearly.
- You work with your colleagues and collaborate on designing the same assignments for program courses, yet you wonder if your grading scales are different.
- You've sometimes been disappointed by whole assignments because all or most of your class turned out to be unaware of academic expectations so basic that you neglected to mention them (e.g., the need for citations or page numbers).
- You have worked very hard to explain the complex end-of-term paper; yet students are starting to regard you as an enemy out to trick them with incomprehensible assignments.
- You're starting to wonder if they're right.

Rubrics set you on the path to addressing these concerns.

### What Are the Parts of a Rubric?

Rubrics are composed of four basic parts in which the professor sets out the parameters of the assignment. The parties and processes involved in making a rubric can and should vary tremendously, but the basic format remains the same. In its simplest form, the rubric includes a task description (the assignment), a scale of some sort