

## Increasing Student Engagement with Self-Assessment Using Student-Created Rubrics

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*Abstract: Self-assessment is a formative process where students evaluate the quality of their own work. This paper describes a strategy for using student created rubrics as self-assessment tools to increase student engagement. Initially, the instructor models how to identify criteria for mastery in an assignment. This is followed by students in small groups identifying criteria for mastery in their assignment. These criteria can be used to create either an analytic or holistic rubric. Students use this rubric first to practice the assessment process through peer-review, followed by self-assessing their own work. Students can also choose to conference with their instructor to discuss their feedback as well as reflect on the quality of their work. The student will then apply this feedback to their work prior to final submission.*

*Keywords: self-assessment; criteria-based rubric; instructor feedback: student engagement*

### Self-Assessment

Self-assessment is a process in which students evaluate their work to see how well it meets the criteria required for the assignment (Andrade & Du, 2007) and is a critical skill for all learners to continually improve their work (Carless et al., 2011). According to Andrade and Du (2007), the process of self-assessment begins with establishing expectations for an assignment, followed by students comparing their work to these expectations, often presented in the form of a model or rubric, generating feedback for themselves, and then applying their own feedback to improve their work. Additionally, self-assessment should be an ongoing formative assessment process (Andrade & Valtcheva, 2009). However, it can be problematic if students lack experience in self-assessment (Lew et al., 2010). Therefore, instructors need to support students understanding the connections between feedback, their work, and how those connections can help them improve their work (Quintion & Smallbone, 2010). One way to do this is to involve students in creating the assessment process and using self-assessment. This way, students independently focus on the quality of their work, rather than relying on their instructor (Andrade & Valtcheva, 2009).

### Increasing Engagement with Self-Assessment

Munns and Woodward (2006) identified three behaviors of student engagement that should occur simultaneously, which are: 1) students understanding what they are learning; 2) students valuing what they are learning; and 3) students actively participating in what they are learning. Successful self-assessment increases student achievement, as well as actively involving students in their learning process (Andrade & Valtcheva, 2009), thus aligning with the behaviors of student engagement. When students engage in the process of self-assessment to create their best work, they can increase their

chances of success, leading to higher levels of self-efficacy, and thus increasing their overall engagement in the learning process (McMillian & Hearn, 2008). By involving students in the process of creating a rubric (Andrade & Valcheva, 2009), followed by students having opportunities in class to self-assess their work (Carless et al., 2011), as well as reflecting on instructor feedback (Quintion & Smallbone, 2010), the instructor can further increase the chances of eliciting the behaviors of student engagement.

### **Modeling Mastery Criteria**

The first step in preparing students to self-assess their work is for the instructor to model the process of identifying the criteria to be assessed. The instructor will use an example assignment, (preferably one like the assignment students will self-assess), and model how to identify the criteria of that assignment required to demonstrate mastery. This can include the instructor explaining what criteria are required, and how they contribute to demonstration of mastery of the assignment. This should be followed by engaging students in discussion about the importance of establishing a core set of criteria for an assignment (Inoue, 2005), while also pointing out how the means to demonstrate these criteria can vary. For example, if one of the criteria is for students to express a clear understanding of a concept or skill, this can be demonstrated in various forms; written as an essay, as a presentation, or a multi-media project.

It is important for students to understand how to monitor their progress of the assignment by focusing on their performance, then comparing it to the established criteria (Andrade & Valcheva, 2009) to achieve mastery. The instructor should explicitly inform students this exercise is to prepare them to identify the criteria for an upcoming assignment that they will assess themselves.

### **Collaboration to Identify Criteria**

At this stage, the instructor will review the assignment for self-assessment with the class and refer to the process of identifying criteria required for mastery that was previously modeled. This should include discussion on how this assignment aligns with the goals of the unit or lessons that have been taught so that students can get a clear understanding of the purpose of the assignment. The instructor will assign students to small groups, with no more than five students in a group to achieve optimal cohesion and sociability (Akcaoglu & Lee, 2016). Each group will be given time to discuss and identify the criteria for mastery. Each group will then present their criteria, with the instructor recording their responses in a medium visible to all students. The instructor can then ask students to identify the common criteria as a starting point to eventually finalize a list of the criteria for mastery. As the discussion continues, the instructor should remind students that while there may be disagreements, the class will have to eventually come to a consensus (Inoue, 2005). This process of students being involved in the creation of the rubric and identifying the criteria for mastery helps students become more familiar with the assignment (Andrade & Valcheva, 2009).

### **Rubric Creation**

Once the instructor has established a consensus among the students, they can present options in which the criteria will be presented. One option is a criteria-based analytic rubric, which focus on each criterion separately (Brookhart, 2013). The instructor can model how to create an analytic rubric for the assignment that contains individual criteria aligning to the objective of the assignment, as well as a description of performance quality of each of these criteria. This includes how to create a performance-level description for each criterion. The performance descriptions should be clear,

provide a description of the performance across a continuum of quality, be distinguishable between levels of quality, and contain a description of the assignment objective at the appropriate performance level that is easily identifiable (Brookhart, 2013). As outlined in Table 1, instructors can demonstrate point-based scores for each level of performance to easily establish an overall score and assign terms that indicate levels of proficiency. The addition of terms that indicate proficiency clarifies the quality of student work, as opposed to simply using numerical scores.

**Table 1. Sample Criteria-Based Analytic Rubric.**

	Advanced (5 points)	Proficient (4 points)	Approaching proficient (3 points)	Below Proficient (2 points)	Novice (1 point)
Criteria 1	Performance Description	Performance Description	Performance Description	Performance Description	Performance Description
Criteria 2	Performance Description	Performance Description	Performance Description	Performance Description	Performance Description

\* This Table illustrates an example of a criteria-based Analytic rubric.

However, some may find creating an analytic rubric quite time consuming. Another option is a holistic rubric, see Table 2. As opposed to a criterion-based analytic rubric that contains objectives with performance levels, a holistic rubric includes all criteria to be assessed along with a performance description of each criterion (Brookhart, 2013). While this rubric does not identify specific levels of performance, it allows for evaluation of criteria, and it is less time intensive to create as opposed to an analytical criterion-based rubric. The instructor can survey students as to which rubric they would prefer, then decide if they want students to create the rubric as part of the assignment, or to create the rubric themselves using the agreed upon criteria for mastery, and then distribute it to the students.

**Table 2. Sample Holistic Rubric.**

Criteria 1	Criteria 2
<ul style="list-style-type: none"> <li>• Performance Description</li> <li>• Performance Description</li> </ul>	<ul style="list-style-type: none"> <li>• Performance Description</li> <li>• Performance Description</li> </ul>

\* This Table illustrates an example of a holistic rubric.

### Peer-Review Practice and Self-Assessment

Initially, students will use the student-created rubric to monitor the quality of their work as they progress on completing the assignment by comparing their work to the agreed upon criteria. Once they have completed a first draft of the assignment, the instructor will pair students up to peer-review each other's work, using the student created rubric. This will create an opportunity for students to practice assessing the assignment using the rubric, to discuss their reasoning and provide feedback to each other. Once students have practiced assessing the assignment in peer review, they will use the rubric to self-assess their work. Students will then submit their self-assessed assignment for instructor review. The instructor will provide feedback, aligning comments specifically to the rubric. The student should have the option to conference with the instructor to discuss and reflect on the feedback provided, as well as to provide a rationale to the instructor, supporting their assessment decisions.

This way, both the student and instructor can come to a consensus before the final version of the assignment is submitted and graded.

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