

# Self-evaluations in Geology

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**Context:** In-class; Geologic Catastrophes

**Keywords:** group activity, assignment reflection

**Student Activity Time:** 25 minutes

*After completing a regular course assignment, an educator facilitated an assignment reflection for students to consider their work on the assignment and develop a scale for grading their assignments.*

## Introducing the Reflection Activity

Many times, students need to calibrate their perceptions of their own work in the context of the work of other students in their class. In order to develop consensus within the class members and with the educator, an educator implemented a self-evaluation in their course. The purpose of this assignment was to give students an opportunity to reflect on their own work, and for the class to contribute to the development of a rubric for the assignment.

For an early homework assignment in the course, the educator gave students the assignment and instructions as usual and collected the assignment on the designated date. For half of the class period, the educator facilitated the self-evaluation activity. First, the educator had students spend a short amount of time to determine grading criteria for the assignment. After individual time to identify grading criteria, students were paired up to complete the worksheet and talk with each other about how they would grade themselves, their understanding of the material, and what criteria should be used to grade the assignment. After the educator gave pairs of students' time to complete the worksheet, students were then joined into groups of four to further discuss the assignment and criteria for grading. After each group achieved some consensus, the educator facilitated a class discussion on criteria to grade the homework assignment. The educator then developed a rubric that represented the class developed criteria for grading the assignment, then graded and returned students' work with the rubric.

One outcome of this activity was students' preparation to improve their performance on subsequent assignments. In general, students became more aware of the grading process, developed skills to assess their own work, and developed their expectations for the class in relation to the assignments that they are given.

## Recreating the Reflection Activity

	Description
1	Assign the regular class homework assignment.
2	Separate students into pairs to complete the worksheet and negotiate their thoughts about the assignment together.
3	Group pairs of students into groups of four to revise and edit their worksheets.
4	Facilitate a class conversation about the findings of each group.
5	Collect and grade students' original homework assignment against the parameters determined by the class.

## In the words of the Educator: Tips and Inspiration

*Develop a detailed assignment.* Make sure that the criteria for the original assignment are pretty clear so that students can begin thinking about the criteria. If you had a real nebulous assignment, it would be very difficult for them to figure out what they would be graded for. I do provide some general ideas about grading with the assignment such as clarity, completeness, and level of details, but I do not provide the whole rubric until after the assignment is graded. Ideally, this activity helps them develop the rubric for themselves and learn how to determine the quality necessary to get the grade that they want.

*What was the inspiration for the reflection activity?* A few years ago, I took a summer course on metacognition and it inspired me to change my course. The goal was to get students think more about the assignments they were doing for the class. In that regard, the activity is successful because sometimes their self-evaluation grades are very similar to the grades I give them. For those whose self-evaluation grade is much different than the grade I award for the assignment, students learn to adjust their work habits or their expectations for grades in this class.