How Rubrics Work

What are rubrics, and what can teachers use them to accomplish? Those questions are ably answered in a short, pithy piece (reference below) that describes "the good, the bad and the ugly" aspects of how rubrics function.

"A rubric is an assessment tool that lists the criteria for a piece of work or what counts...and articulates gradations of quality for each criterion, from excellent to poor." (p. 27) The article includes a detailed example completed by the author and her students. Rubrics differ from checklists in one key dimension. Checklists do not identify different quality levels. Author Andrade further differentiates a rubric used exclusively in the evaluation process, a scoring rubric, from what she calls an instructional rubric. "A rubric that is co-created with students, handed out; used to facilitate peer assessment, self-assessment, and teacher feedback; and only then used to assign grades is an instructional rubric." (p. 27) In this case, the rubric is not just about evaluation. It becomes a tool useful in teaching other important lessons related to learning.

What can a teacher use them to accomplish? Andrade lists a number of benefits. First, rubrics constructively confront teachers with their goals—what it is they want a particular assignment or course activity to accomplish. They make instruction more designed and coherent. Andrade works backwards. She starts with her goals for students in a particular unit of instruction. Then she decides on a project that will help them learn what they need to accomplish those goals and demonstrate their learning. Then she develops the rubric. Only with that done does she figure out what she will do each day in class, choosing content and reading that will help students do well on the project.

Clearly rubrics help students understand the rationale behind assignments and activities. They enable students to see what the teacher is trying to accomplish, and their ability to understand what differentiates a high-quality project from one of lesser quality develops even further if they have a hand in creating the rubric that will ultimately be used to assess their work. And rubrics enable teachers to give more informative feedback to students. The level at which they met each criterion on the rubric can be checked with individual comments. Those same rubrics can be used as the bases of formative peer and self assessments.

Last but not least, rubrics help to keep teachers fair and unbiased. The criteria are clearly stated. Ancillary factors, like how hard the student tried, are less likely to influence an instructor when the work is assessed with a rubric in hand.

But rubrics don't accomplish these benefits automatically. Their "bad" aspects include the fact that they are not self-explanatory. Most students have little experience with them and even a rubric created and distributed in class doesn't guarantee that students understand the role it should play as they prepare their work. They may not see how they can use the rubric to deliver constructive feedback to fellow students. And rubrics don't substitute for good instruction. "Even a fabulous rubric doesn't change the fact that students need models, feedback, and opportunities to ask questions, think, revise, and so on." (p. 29)

The "ugly" issues relate to the validity, reliability, and fairness of the rubrics being used. Validity has to do with the "reasonableness" of the standards that end up on the rubric. What is asked of students should be "reasonable" given the curriculum being taught in the course. Standards that are too high or too low are equally problematic. Reliability refers to the consistency of the rubric. It is a reliable measure if, when different people use it to rate the same piece of work, they come up with similar assessments. Rubrics don't prevent an instructor from being biased against certain student groups, genders, or majors. "These concerns do not require us to perform complex statistical analyses but, rather, that we simply worry enough about them to subject our rubrics to critique." (p. 30)

Instructional rubrics reinforce the learning potential inherent in the assessment process. They also significantly reduce the hassles associated with students

who have trouble understanding "what you want," as in what they should learn by doing a project.

Reference: Andrade, H. G. (2005). Teaching with rubrics: The good, the bad, and the ugly. College Teaching, 53 (1), 27-30.

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How Well Does it Work?

The results are exciting and rewarding. Using a 30-point rubric to assess students' performance, I clearly see an improvement not only in students' writing, but also in their thinking. In the pre-test assignment, most students' writing showed difficulty in properly introducing the subject matter, including a thesis statement, statement of the problem, and areas of focus to be discussed in the body of the paper. In a class of approximately 30 students, only two students came close to writing a paper that demonstrated this level of proficiency. After completing the post-test and the second concept map, several students came up to me and said they did not realize how poorly their writing and thinking skills were until they completed this assignment. Several other students reported that now when they read anything, they automatically think in terms of discovering relationships and implications instead of merely gaining knowledge. They recognized that "real" thinking requires organization, and for most students their first concept map showed that their thought processes were not organized at all.

I conclude the assignment by having students use a rubric to rate their work before they turn it in for my assessment. This helps them see the improvements in their writing. But more importantly, the activity enables students, to gain a better understanding of their thinking processes, the importance of details, the meaning of relationships, and the relevance of discovering implications in solving problems in any discipline.

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