

# Using Rubrics to Assess Technology Products

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## A Powerful Tool

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**G**rades. Students dread getting them and frequently misunderstand what they represent. Likewise, teachers dread awarding grades and experience frustration over trying to accurately and objectively assess student work. Parents look forward to receiving a brief report of their children's progress, but they too sometimes misunderstand what the grades represent. Although many have uttered despairingly, "Let's get rid of grades," assessment is an important part of the learning process (Montgomery, 2000, p. 325). As assessment expert Grant Wiggins points out, educators need to have evidence that students have learned something substantial from the work they have done that relates to school objectives (2004).

TEA addresses this need for reliable assessment in Master Teacher Standard II, which states that the teacher will select and administer appropriate technology-related assessments on an ongoing basis and use the results to design and improve instruction. The word *appropriate* becomes important when considering technology products that defy assessment through standard objective test items. While objective tests are an efficient way to check some types of learning, they are insufficient for evaluating the products that the technology standards imply that students will produce.

Kevin Zook points out the need for design-teachers "to match their assessment devices to the specific type of assessment data they are trying to collect (2001, p. 130)." The most valuable assessment data teachers can collect guides instruction and promotes learning as well as measuring achievement. Rubrics seem to provide for all three of these aspects, especially for technology product based assessment. A rubric prepared at the outset of a unit becomes a powerful tool. When we consider first what learning will look like and then design a tool to gather evidence of that learning, we identify prerequisite skills and specific behaviors that demonstrate the learner's success. Students are empowered by such a checklist that guides their understanding of what successful learning looks like. Learning and assessment are no longer mysterious

possessions of the teacher, but become processes in which students take ownership. Classroom teacher and researcher Heidi Andrade found that her students who received rubrics at the outset of an assignment produced better products and understood more fully what a quality product looked like than students who had no rubric. (2000, p. 15).

Sadly, many students move through public school as victims, never being able to understand the connection between grades and learning, with some even believing that grades are a measure of how well the teacher likes them. When assessment becomes a checklist of specific, observable behaviors, students see that they have control of their learning and are able to take steps to improve their work (Montgomery, 2000, p. 327). This altered view allows the teacher to move from behind the big desk into the role of coach and facilitator (Tuttle, 1996).

Not all rubrics will promote learning, however. Teachers must take time to ensure that only measurable criteria are used and that descriptive behaviors are clear and specific (Tuttle, 1996). Using vague descriptors like “good beginning” or “lacks creativity” for a presentation perpetuates the confusion learners have about what quality work looks like. Listing traits of that good beginning teaches students not only how to produce their own good beginning, but also gives them specific criteria for evaluating other presentations they view. Care must be taken, though, that rubrics are not merely recipes for how to perform a task. The task itself is an outward representation of the skills the student has mastered, and so the best rubrics will evaluate the skills that will transfer to other tasks (Popham, 1997, p. 73).

Preparing clear, useful rubrics is a time-consuming process that might prevent some from using them, but web-based rubrics already exist and can be a great resource for busy teachers (Earnst, 2003). For example, RubiStar is a free, government-funded website that allows teachers to quickly customize a rubric from templates or create one from scratch. For technology products, the website offers various templates, including multimedia presentations, video production, and web site design. With timesaving generators like RubiStar, teachers can become proficient at generating their own rubrics and quickly fine-tune them.

It is important to realize that there is no one perfect rubric that works for every technology product. Like other pieces of the learning process, they must be refined as

teachers and students see the need. Both Tuttle (1996) and Andrade (2000) suggest involving students in making rubrics. Examining models of projects together and discussing what makes one better than another clarifies even further the assignment's expectations and how to achieve them. Asking students for input on how to word descriptors clearly also reinforces the teacher's role of a partner who is working with them to facilitate their success. What a change rubrics bring to assessment; when that next project is completed, students will be heard to say, "Oh, I don't need to ask what my grade is. I know it will be an A because I followed the rubric."

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