Limitations of web-based rubric resources: Addressing the challenges

Michele M. Dornisch & Andrea Sabatini McLoughlin
Long Island University

As a wider variety of meaningful assessment strategies come into more prominent classroom use, teachers are called upon to craft scoring rubrics which validly and reliably assess students' knowledge and abilities. The creation of instructionally sound rubrics can be time consuming, and many teachers feeling the pinch of time pressures are turning to rubric resources from the World Wide Web for assistance. The purposes of this paper are to review the issues surrounding the creation of instructionally sound rubrics, to examine how those issues apply to online rubric banks and rubric generators, and to offer guidelines for how educators can use online resources to best support the creation of meaningful and effective rubrics.

Over the past several decades, a wider range of assessment strategies have gained prominence in classrooms, strategies such as individual or group projects, student journals and other creative writing tasks, graphic/artistic representations of knowledge, clinical interviews, student presentations and performances, peer- and self-evaluations, and portfolios. These types of tasks are said to be able to provide rich information about what "the student *knows* and *can* do, rather than how much the student does *not* know and can*not* do" (Nott, Reeve, & Reeve, 1992). However, they also result in a variety of complex products that await teacher feedback and/or grading.

Two important concerns about such assessment tasks are a) that the products/performances might be over-subjectively and/or inconsistently evaluated, leading to unfairness to students, and b) that providing feedback on or grading these

products/performances would take inordinate amounts of time. The development of rubrics to guide evaluations of these assessment tasks can greatly reduce these concerns. But while the use of rubrics can provide numerous advantages to the teaching, learning, and assessment process, the creation of quality rubrics can be itself both complex and time-consuming.

As educators look for help in creating effective rubrics, and doing so in reasonable amounts of time, many use the information and resources posted on the World Wide Web. In recent years, Internet websites that provide educational resources and tools for teachers have become plentiful. One type of resource offered on some educational websites is a "rubric bank" – a compendium of pre-made rubrics for various grade levels, subject areas, and skills, each ready for printing and use. There are also online "rubric processors" or "rubric

generators" – interactive templates that accept teacher choices or scripting so that more customized rubrics can be created before printing and use. But, as with any other resource, some rubric tools and examples are of better quality than others, and so there are considerations to be raised before, during, and after their use. This paper will explore some of the important factors in the creation of quality rubrics; examine considerations that can limit the quality of web-based rubric resources; and offer guidelines for using web-based rubric resources in ways that support effective teaching and learning.

RUBRICS AS INSTRUCTIONAL AND SCORING GUIDES

Rubrics describe specific characteristics of a product, project, or performance at varying levels of achievement in order to clarify expectations or feedback and to limit misunderstandings in expectations or assessment (Mertler, 2001; Moskal, 2000). They can be useful to teaching, learning, and assessment processes in multiple ways. Rubrics help the teacher to clarify and refine instructional and assessment objectives; they help illustrate to students (or other stakeholders) the desired growth in skills and knowledge; they assist students in developing metacognition and self-assessment ability; and they provide a venue for timely and descriptive feedback in both formative and summative contexts. To be meaningful across these uses, however, rubrics need to clearly convey standards for evaluating student products, projects, or performances (Wiggins & McTighe, 2005). Rubrics do that by outlining specific criteria on which the student activities and products are to be assessed, and offering benchmark descriptions of what the students' efforts might look like at different levels of quality.

In order to clearly discuss issues relative to the development of instructionally sound rubrics and the use of online rubric resources, a few short descriptions of terms are needed prior to their use in this article. *Criteria* are the particular categories of skills on which student product/performance is being evaluated on a given assignment. *Levels of performance* are the ratings that differentiate between varying levels of quality in judgments about student products/performances – they may be expressed with either qualitative titles (excellent, satisfactory,

etc.) or quantitative points systems. *Descriptors* are narrative chunks of text that describe the evidence on which a student's work is judged across criteria and levels of performance.

Rubrics may be designed for either *holistic* or *analytic* assessment. Holistic rubrics are best used when only a quick or overall impression of a student's work is necessary (Arter & McTighe, 2001), but because they provide only limited feedback to students, the use of holistic rubrics is somewhat limited. An analytic rubric separately lists individual criteria to be assessed in a student product or performance and includes descriptions of the criteria at each level of performance (Nitko, 2004). Analytic rubrics are often used both formatively and summatively: they provide students with the kinds of rich feedback on strengths and areas of improvement that more specifically scaffold the continued learning process (Moskal, 2000). However, the crafting of effective analytic rubrics takes time, and their use in grading products/performances is lengthier than when using a holistic rubric (Mertler, 2001).

Rubrics may also be either general or task-specific. State- and district-wide scoring rubrics are typically general in order to focus on a skill, such as written communication, across a large amount of users or across a broad variety of assessment products without needing to be adapted each time they are used. Additionally, if students are expected to grow in a particular skill or set of skills across time and across a variety of products and performances, general scoring rubrics can be used repeatedly to provide the students with continuous feedback and guidelines for further growth (Moskal, 2000). Task-specific rubrics, in contrast, evaluate student performance on a particular assignment or product. If an assignment is used to assess students' knowledge about a specific content topic, or to evaluate a set of special skills that students must demonstrate at that point in time, educators might use a task-specific rubric (Moskal, 2000). Some educators warn, however, that many task-specific rubrics focus more on measuring students' abilities with a given assessment task rather than with a set of knowledge or skills that should be able to serve them across contexts and time (Arter & McTighe, 2001; Popham, 1997).

Aside from deciding upon these frameworks for rubrics, what is important is that the rubric is written well so that it is instructionally sound and useful. Both Popham (1997) and Tierney and Simon (2004) outline major flaws that can be found in even the most well-intentioned rubrics:

- Criteria that are too general, too numerous, or that lack thought pertaining to their relative importance/weight.

- Performance levels that do not have clear and meaningful differentiations between them (e.g., does a rubric really need "very satisfactory," "moderately satisfactory," and "satisfactory" performance levels between "excellent" and "needs improvement?").

- Descriptors that are either too general (and therefore ambiguous) or too specific (i.e., they take too long to write, are too unwieldy to use, or focus on minutiae rather than important learning outcomes).

Jonassen, Peck, & Wilson (1999) outline three main ideals for well-written rubrics.

- Criteria categories should be easily discrete from one another and outline only important elements of a task.

- Performance level indicators should be meaningful and distinct.

- Narrative descriptors should be clear and, well, descriptive. Readers should easily understand them and see meaningful differences across varying levels of performance for each criterion.

Embedded across all of this is the challenge of avoiding potential language conflicts with rubric users: reading level mismatches, jargon-ridden vocabulary, language proficiency frustrations, and incompatible cultural references should all be prevented to the greatest degree possible.

There are big picture issues in rubric writing, as well. Rubric writers (and users) must beware of a tendency to place the focus more on mastering the specific assessment task itself rather than on demonstrating mastery of important new learning (Popham, 1997). Similarly, educators should avoid reducing a potentially rich assessment task to only the most simple and easily observable behaviors –

while this can make rubric writing faster and more straightforward, it can also allow students to earn high grades on technical criteria without engaging in substantive depth with the concepts under study (Custer, 1996). Important learning may be complex and therefore difficult to quickly incorporate into a rubric, but it is part of the educator's job to try to capture as closely as possible the authentic nature of the learning experience (Jonassen, Howland, Moore, & Marra, 2003). All of this adds up to one conclusion: whether an educator is writing his or her own rubrics or vetting/adapting ones found elsewhere, producing rubrics that are effective educational instruments and fit one's students' needs requires at least some concentrated reflection.

WEB-BASED RUBRIC RESOURCES

A number of websites for educators now provide banks of pre-crafted rubrics for classroom use, as well as rubric generators that create tailored rubrics based on teachers' choices or input. While finding pre-made rubrics or rubric templates is a useful help for the busy education professional, both rubric banks and rubric generators are subject to issues that affect their quality and ease of use.

Rubric Banks

Time. The first issue concerning the use of rubric banks is that the search process itself may be time-consuming. Teachers must search through lists of available rubrics (which may be sorted by grade level, subject area, or product type), read over the rubrics that seem applicable to their context, and then decide whether the rubrics may be of use. The scope and type of navigation the teachers must pursue varies by website. Some websites are fairly straightforward and intuitive in their navigation, which makes looking through them relatively easy and/or quick. Other website designs require teachers to spend longer amounts of time (and possibly, larger amounts of frustration) trying to get to what they hope will be useful.

Holistic vs. analytic. There are not many holistic rubrics available on these sites. However, if an educator desires a holistic rubric, he or she can certainly use the ideas found in analytic rubrics and adapt them into a holistic rubric that s/he then creates within word processing software.

Fixed nature. The largest concern with rubrics from rubric banks is that they are generally static – that is, the rubrics are usually available for printing and use "as is." These rubrics are therefore only as good as their original author made them, and they lack the ability to be easily adapted to particular teachers' or students' needs. They may also suffer from any of a number of problematic issues while the rubric bank site offers no way of easily addressing those limitations. This is important because aside from wanting to tailor the rubric for readability and motivation, educators should evaluate the rubric text for the elements noted earlier: Is each criterion important, discrete, and - if weighting is needed - weighted appropriately? Are the levels of performance meaningful and clearly differentiable? Are the descriptors clearly defined and unambiguous, without being overly specific? Does the language used match the users' reading/comprehension abilities? If an educator wants to edit a rubric found in an online rubric bank, he or she may find a way to import or copy a rubric from a rubric bank directly into an offline software program for editing, but it is much more likely that the entire rubric may need to be entirely recreated by the teacher in an offline software program.

Since the other issues this article will discuss are applicable to both rubric banks and rubric generators, we will elaborate on them from within the examination of rubric generators in the next section of the article. N.B.: Some of the more popular, comprehensive, and free rubric banks and generators for educators are listed at the end of this article. All have individual strengths and weaknesses, and each is subject to the issues noted in this article. That said, they are helpful staring points for the busy, assessment-oriented educator.

Rubric Generators

While rubric generators allow educators to edit or create rubrics, therefore moving beyond the main boundary imposed by the set language of the pre-formed rubric banks, they are still subject to the issues outlined in this paper. Unless care is taken with the use of rubric generators, teachers might unknowingly create and use rubrics that are not instructionally sound. If educators are aware of these potential issues, however, they can employ strategies for avoiding or addressing them.

Holistic vs. analytic. Similarly to the situation with rubric banks, rubric resource websites generally do not offer rubric generators for holistic rubrics. If a holistic rubric is needed or desired, a savvy educator would have to adapt the content from a template-generated analytic rubric into a holistic rubric framework of his or her own devising in a word processor, necessitating extra time and thought.

Navigability. While some of the features on currently available sites are fairly transparent to the viewer, it can still take time and effort to learn to travel within a site and use the resources well. Some generators are more intuitive than others and have cueing icons that new visitors might readily understand, but other generators may require a read-through of a secondary set of directions (sometimes offered as pdf files that must be downloaded and opened separately). Similarly, of those rubric generator sites that include sample rubrics, some are easily opened within the Internet browser by clicking on a link, but others must be downloaded and then opened in different programs. Different websites offer a variety of rubric generator templates across content areas, broad skills, or academic grade level, while others offer only a generic generator. Once working within a particular template, some sites offer more suggested language than others, or allow different amounts and types of editing. (An important side note: Some websites have "rubric generators" that are actually links to pre-crafted rubrics - the only editing allowed is the addition of the teacher's or school's name, and possibly a choice of pre-selected graphics to be added onto the rubric layout.)

Amount of teacher input. Some web-based rubric generator sites offer multiple rubric generators for a variety of skills or content topics. As mentioned above, however, these sites are sometimes little more than rubric banks that allow only the addition of heading information or graphics. When that is the case, tech-savvy educators may be able to use the "edit page" feature of their web browser to make other changes, or they may be able to import and manipulate the text in a word processing program - again, though, this takes more time, thought, and computer skill than an educator might have hoped.

Other rubric generators have built-in pull-down menus offering text suggestions for particular rubric

criteria, levels of performance, or descriptors, but some feature only blank menu boxes, or require that an educator access another webpage or file to find suggested or sample text. While all pre-offered language is subject to the language issues discussed in the next section, its availability does give an educator an easier place to start than blank text boxes. Generally, the more flexible the template, the better the odds of an educator being able to tailor a rubric that is both appropriate and most effective for their specific classroom use.

Time. Some rubric generators "time out" unless the work is saved before time is up. If the educator does not save or print within that timeframe, all work is lost when the generator automatically resets. One site, for example, allows a 40 minute window with which to complete a rubric or save it (after which work may continue).

Saving options. Some websites do not allow educators to save their rubrics unless they have registered with the site – and while some have free registration, others require a paid subscription to the site in order to access advanced/additional features like saving one's work. Additionally, different websites offer different methods or venues for saving the work. Some save to their online site (helpful if educators wish to access files from multiple locales without having to carry saved files from location to location, problematic if educators do not always have access to the Internet when they want to work with their rubrics). Other rubric resource sites allow a choice of saving into an online html document or into an Excel file. The latter may offer additional flexibility in working with the rubric later, however, some familiarity with Excel software is then helpful.

Writing. The act of choosing or writing appropriate criteria, levels of performance, and descriptors is a process that requires careful thought. Pull-down menus may feature text that is too broad, too specific, or not matched well to a specific teacher's students and their needs. Even when a rubric generator supplies a choice of generalized grade level (e.g., primary, elementary, middle school, high school), the language used could never be guaranteed to match the entire range of that audience. Whether inputting his/her own text, or using/modifying website-supplied text, the educator using the resource needs to carefully

consider the language being used in criteria and performance level titles, as well as in the descriptors themselves.

Rubric formatting. The layout of the rubric also deserves reflection, as some rubric generators are not very flexible when it comes to editing the number of criteria or number of performance levels in the rating scale. They may force educators to use more or less criteria or performance levels than desired, or stubbornly produce extra cells in a table even when text has been edited out. Some sites always include a numeric rating scale and score, even if an educator would rather have only qualitative indicators and feedback – this might contribute to an over-emphasis on point accumulations rather than a focus on learning and refinement of skill.

Additional features. Some rubric generator sites reserve space on the printed rubric page for open-ended teacher comments to be written for the student, which can help educators add additional clarifying or encouraging remarks. At least one rubric generator automatically creates a criteria checklist for student use, but educators will need to examine the saved checklist for formatting problems before printing. One rubric generator site allows Spanish-speakers to use the generator in that language, although all rubrics created with it are in generated in English. Another site offers an online scoring calculator - again, this can be useful when numeric scores are being tabulated, especially if a complex analytic rubric with weighted sub-components is being used, but a possible inadvertent overemphasis on points rather than learning should be recognized as a potential drawback.

EFFECTIVE USE OF ONLINE RUBRIC RESOURCES

Even though web-based rubric resources need to be used with care and consideration, educators can and should use such tools to work more efficiently - as long as they are aware of a) the limitations to avoid and b) ways to modify the end products so that they can be used productively and well in the teaching/learning/assessment process. Our suggestions for choosing and using online resource sites wisely include the following:

- Take a little time to view some of the other articles cited in this paper – particularly ones that offer examples of well-written rubrics.

- Visit some of the main online rubric resource websites and find one or two that will work best for you for most applications. Look especially for

    – rubric banks that offer many rubrics across subject areas, general skills, and grade/reading levels; and can be imported into other software for editing/adaptation; and for

    – rubric generators that are flexible in number and type of criteria and performance levels; that offer meaningful and well-written suggested text for criteria, performance levels, and descriptors but also allow for easy editing/adaptation of those suggestions; and are flexible in terms of file saving formats.

- Keep your purposes and objectives for a particular assessment task in mind, and find/create/adapt the rubric needed.

After a rubric is found/created, use the following list of questions as a framework for thinking through the points raised in this (and other) articles.

Based on Mertler's criteria for evaluating rubrics (2001) and our own work in finding and adapting rubrics from online resources, the following questions provide a framework for evaluating rubrics before the final version is printed and used with students.

1. *Does this rubric match the knowledge and skills embedded in the purpose of my instructional activities and the goals and objectives of the unit?*

2. *Is this type of rubric (holistic vs analytic, general vs. task-specific) the best one for my current need?*

3. *Is each criterion understandable, irreducible, and important? Can I, and can the students, work easily with the number of criteria in the rubric?*

4. *Are the number and type of performance levels used in the rubric appropriate for these criteria? Are the*

performance levels clearly understood by the students?

5. *Does the language used in the descriptors clearly and descriptively distinguish between different levels of performance on each criterion? Is the text appropriate for the ages, reading levels, and cultural context of my students? Is the rubric written using positive (rather than negative or deficit-oriented) language?*

6. *Is the overall layout efficient, clear, and useful? Is there room for additional teacher comments on student work, should that be desired?*

7. *Have examples been created (or found among student work) that anchor the meaning of the descriptors so that readers clearly understand what work looks like at different levels of performance?*

8. *Have users read through the rubric - or better, tried it out - and given feedback on the rubric's clarity? If multiple educators will use the rubric, has it been tested for consistency across scorers?*

CONCLUSION

The purpose of assessment is to find out what a student can do with the knowledge and skills they have at a given time. To that end, it is necessary to ensure that an assessment task and associated rubric are focused on important learning objectives/criteria, that the rubric is instructionally sound and accurately discriminates between important differences in levels of work quality, that the language used is matched to students' abilities and contexts, that the rubric assists educators in grading complex products/performances fairly and consistently, and that the rubric gives meaningful feedback for students' continued learning. Online rubric resources can help busy educators to find or craft powerful rubrics, but they must be used thoughtfully so that inherent limitations in the examples and frameworks provided by the site are reduced or removed before they prove problematic to the users.

Some Free, Popular, Online Rubric Resources

Rubrician: http://www.rubrician.com/general.htm

Rubrician is a collection of links out to rubric banks, generators, and general rubric

information sites that can vary widely in design and quality. There are some good examples and links here, if one has the time to look through them.

MyTeacherTools:
http://www.rubrics4teachers.com/

This site also offers a variety of example rubrics and rubric-related information, available in downloadable pdf files.

Discovery School (Kathy Schrock):
http://school.discovery.com/schrockguide/assess.html

Discovery School provides a fairly extensive bank of subject-specific and general rubrics, in addition to articles written on a variety of assessment issues, and links out to other online rubric banks and generators.

Teach-nology: Teach-nology http://www.teach-nology.com/web_tools/rubrics/

The Teach-nology website provides a large variety of pre-made rubrics that are referred to on the site as "rubric generators". However, without joining the site for a fee, only the "General Rubric Generator" allows an educator to edit more than the title and addition of simple clip art.

Rubistar:
http://www.rubistar.4teachers.org/index.php

The Rubistar rubric generator allows educators to craft rubrics with up to four performance levels from templates based on a small variety of topic and tasks. Suggested language is offered and is able to be customized. Work must be saved within 40 min timeframes. Some additional functions are available for registered users.

Rubric Builder: http://www.landmark-project.com/classweb/tools/rubric_builder.php3

A service of the Landmark Project, Rubric Builder also offers flexibility in establishing the numbers and titles of criteria or performance indicators on the blank template. Educators must look elsewhere first for suggested criteria and descriptor language, however. Rubrics may be saved online to facilitate viewing/printing

from any location, and there is an online scoring calculator (all rubrics created with this tool generate numeric point values).

My T4L:
http://www.myt4l.com/index.php?v=pl&page_ac=view&type=tools&tool=rubricmaker

Tech4Learning provides a few sample rubrics, but the most helpful tool here is the Rubric Maker rubric generator. Rubric Maker offers a fully customizable rubric template with wide flexibility across rubric elements (criteria, performance levels, and descriptors), suggested editable language, and extra end product options.

References

Arter, J. & McTighe, J. (2001). *Scoring rubrics in the classroom: Using performance ccriteria for assessment and improving student performance.* Thousand Oaks, CA: Corwin Press.

Custer, R. L. (1996). Rubrics: An authentic assessment tool for technology education. *The Technology Teacher, 55*(4), 27-37.

Jonassen, D., Peck, K, & Wilson, B. (1999). *Learning with technology.* Upper Saddle River, NJ: Merrill/Prentice Hall.

Jonassen, D., Howland, J., Moore, J., & Marra, R. (2003). *Learning to solve problems with technology: A constructivist approach.* Upper Saddle River, NJ: Merrill/Prentice Hall.

Mertler, C. A. (2001). Designing scoring rubrics for your classroom. *Practical Assessment, Research & Evaluation, 7*(25). Retrieved October 26, 2005 from http://PAREonline.net/getvn.asp?v=7&n=25.

Moskal, B. M. (2000). Scoring rubrics: what, when and how? *Practical Assessment, Research & Evaluation, 7*(3). Retrieved October 26, 2005 from http://PAREonline.net/getvn.asp?v=7&n=3.

Nitko, Anthony J. (2001). *Educational assessment of students (4th ed.).* Upper Saddle River, NJ: Prentice Hall.

Nott, L., Reeve, C., & Reeve, R. (1992). Scoring rubrics: assessment option. *Science Scope, 15*(6), 44-45.

Popham, W. J. (1997). What's wrong – and what's right – with rubrics. *Educational Leadership, 55*(2), 72-75.

Tierney, R., & Simon, M. (2004). What's still wrong with rubrics: focusing on the consistency of performance criteria across scale levels. *Practical Assessment,*

Research, & Evaluation, 9(2). Retrieved February 12, 2005 from
http://PAREonline.net/getvn.asp?v=9&n=2.

Wiggins, G., & McTighe, J. (2005). *Understanding by design* (Expanded 2nd Edition). Alexandria, VA: Association for Supervision and Curriculum Development.

Citation

Dornisch, Michele M. & Andrea Sabatini McLoughlin (2006). Limitations of web-based rubric resources: Addressing the challenges. *Practical Assessment Research & Evaluation*, 11(3). Available online: http://pareonline.net/getvn.asp?v=11&n=3

Authors

Michele Dornisch is with the Department of Educational Technology and Andrea Sabatini McLoughlin is with the Department of Curriculum and Instruction at Long Island University's C. W. Post Campus.

Contact

Correspondence concerning this manuscript should be addressed to

Michele Dornisch
15 B. Davis Schwartz Library
C.W. Post Campus
Long Island University
Brookville, NY 11548

or via email at mdorn@liu.edu.