Journaling and Rubrics: The Pleasure and the Pain

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Session Goals

• Reinforce concepts presented by Dr. Marilee Bresciani at the January 4th - 5th sessions.
• Contextualize the assessment of critical thinking.
• Focus: Journaling and Rubrics.
Outcomes Based Assessment Cycle

Adapted from Peggy Maki, Ph.D.
Marilee J. Bresciani, Ph.D.

1. Mission/Purposes
2. Implement Methods to Deliver Outcomes (e.g., planning) and Methods to Gather Data
3. Gather Data
4. Analyze Data and Interpret Evidence
5. Make decisions to improve programs and REPEAT CYCLE.
# Planning for Learning and Assessment

*Banta, T., 2005*

<table>
<thead>
<tr>
<th>What general outcome are you seeking?</th>
<th>How would you know it if you saw it? What will the student know, be able to do, demonstrate?</th>
<th>How will you help students learn it? (in-class or out-of-class)</th>
<th>How do you measure each of the behaviors listed in #2 (criteria)?</th>
<th>What are the assessment findings?</th>
<th>What improvements might be based on assessment findings?</th>
</tr>
</thead>
</table>


Multiple Assessment Methods

Focus: Journaling and Rubrics

- Tests
- Papers
- Writing Assignments
- Lab Reports
- On-line Discussion
- Groups
- Case Study Analysis
- Presentations
- Bulletin Board
- Performances
- Booklets
What is critical thinking?
Core Critical Thinking Skills

Suskie, L. (2005)
Characteristics of Critical Thinking (criteria for assessment of critical thinking)

- Clarity
- Relevance
- Adequacy
- Coherence
- Interpretation
- Evaluation of observations, and communications, and other information sources (Fisher, 2001, p. 14)
Engaging Critical Thinking (Bloom’s Revised Taxonomy)

Creating
Generating new ideas, products, or ways of viewing things
Designing, constructing, planning, producing, inventing.

Evaluating
Justifying a decision or course of action
Checking, hypothesising, critiquing, experimenting, judging

Analyzing
Breaking information into parts to explore understandings and relationships
Comparing, organising, deconstructing, interrogating, finding

Applying
Using information in another familiar situation
Implementing, carrying out, using, executing

Understanding
Explaining ideas or concepts
Interpreting, summarising, paraphrasing, classifying, explaining

Remembering
Recalling information
Recognising, listing, describing, retrieving, naming, finding
Journaling
Reflective writing, Exploratory writing

• Develop thinking skills by helping students extend, clarify, and deepen their thinking about the subject matter.
• Aligned with instructional goals and teaching approach: context-specific.
• Can serve as:
  – instructional method and
  – assessment tool.
• What journaling method(s) are you currently using? (Specific course)
• What works well?
• What is one challenge/question encountered?
Approaches to Journaling

• Guided Journal

Content-specific questions, certain amount of time/week allocated for writing, typically out-of-class.

  e.g., How have you seen journaling function in a particular course from both the students’ and the instructor’s perspectives? How would J. Bean respond to these issues?

Approaches to Journaling (cont.)

• Semi-structured Journal

Provides guidance in helping writers think of things to say: Generic questions or tasks appropriate to discipline.

  e.g., How does your personal experience relate to what we’re studying today?

  e.g., “writing probes” to clarify mathematical thinking:

    -- What is the problem asking you to do?
    -- What makes this problem difficult to solve for you?
    -- Where did you get stuck and why?
    -- What information do you need to get unstuck?
Approaches to Journaling (cont.)

• Open-ended Journal

Students choose how to write about the course and their experiences. Guidance: number of pages/week. Serves as record of students’ intellectual journey through a course.

e.g., summarize lectures, respond to students’ questions, provide personal examples, raise questions, express excitement about new ideas.
Form of Journaling: Classroom Assessment Techniques (CAT)

Approach designed to help instructors find out what students are learning in class and how well they are learning it: information about change in student learning.
Both teaching tool and assessment device.

Potential Impact of CATs

• Learn what and how your students are thinking.
• Clarify your session/course goals.
• Get feedback to make mid-course adjustments.
• Change classroom norms re: student involvement.
• Help students become self-aware of their learning.
• Collect data for post-course improvement.
Examples of Journaling

• Double-entry Journal (dialogue journal)
  reflect on course material/readings and reactions / responses
  focus on process

<table>
<thead>
<tr>
<th>Summarize readings</th>
<th>Interactive commentary</th>
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</thead>
<tbody>
<tr>
<td>Put material in own words</td>
<td>-- ask questions</td>
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<tr>
<td></td>
<td>-- disagree</td>
</tr>
<tr>
<td></td>
<td>-- challenge</td>
</tr>
<tr>
<td></td>
<td>-- personal experience</td>
</tr>
</tbody>
</table>
Examples of Journaling (cont.)

• Contemporary issues Journal
  Relate course material to current issues (e.g., newspaper readings)

• Pro / Con Grid
  Assess advantages / disadvantages
  Compare / contrast
• Classroom Assessment Techniques (CATs) provided by Southern Illinois University, Edwardsville. http://www.siue.edu/~deder/assess/catmain.html

• Classroom Assessment Techniques (CATs) provided by Field-tested Learning Assessment Guide for science, math, engineering, and technology instructors, University of Wisconsin-Madison. http://www.flaguide.org/cat/cat.php

  Faculty across disciplines talk about why they have used a particular CAT in their teaching and examples are provided.
• What methods of assessment have you used with journaling?
Considerations: Assessment of Journaling

• Plus, check, minus – quality thinking (evidence of analysis, reflection, engaged thinking).
  -- translated into letter grades, weight for final grade
• Ongoing feedback – review sample of students.
• Content analysis: major themes.
<table>
<thead>
<tr>
<th>PLEASURE</th>
<th>PAIN</th>
</tr>
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<tbody>
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<td>✧</td>
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What is a Rubric?
http://www.teachervision.fen.com/page/4522.html#what_is_a_rubric

• A rubric is a scoring guide that seeks to evaluate a student's performance based on the sum of a full range of criteria rather than a single numerical score.

• A rubric is an **authentic assessment** tool used to measure students' work.

  – Faculty-generated
  – Student Generated: When used as an evaluative tool enable students to be candid and specific in their evaluations of their own writing, thus supporting what research says about **authentic assessment** and **self-regulated learning** (Grierson, Anson & Baird, 2002; Bandert-Drowns, Kulik, Kulik & Morgan, 1991).
Types of Rubrics

- **Formative**- rubric becomes the map to guide a project. Students progress towards a goal and the process of learning is evaluated.

- **Summative**- Once the final project is submitted, summative assessment is accomplished as the rubric is used for a final grade.

- All rubrics, regardless of their type, include three essential features:
  - evaluative criteria, quality definitions, and a scoring strategy
  - (Popham, 1997).
1-Rubric Design Protocol

When it comes to rubrics, the most frequently asked question is "Do you have rubrics for (insert any subject or skill)?" Our response is "Yes, but it is recommended that you consider designing for the course training. We have learned that using others' rubrics does not productively impact instruction or student learning. We rely upon the following professional protocol (structured steps) to construct criteria statements, indicators, and to build rubrics.

**Rubric Design Protocol**

- Gather student work samples.
- Sort samples into 3 - 4 groups.
- Record your own descriptive statements. Exemplary, Proficient, Basic, Novice or Beyond Expectations, Meets Expectations, Below Expectations.
- Categorize statements into critical performance elements.
- Write an operational definition of each element.
- Select the "best match" of student work per each level of performance--i.e. exemplary, proficient, basic, novice.
- Repeat steps . . . refining your rubric's elements, descriptors, and indicators.
- Store your rubrics and student work examples at each level to use for instructional, communication, and future professional development purposes.

We have found that the use of this "job-embedded professional development protocol" and the close examination of student work transfers into daily classroom instruction and results in increased collaboration between students and teachers on the topics of "quality" and "continuous improvement".

Rubrics Answer…

• By what criteria will the work be judged?

• What is the difference between good work and weaker work?

• How can both students and instructors focus their preparation on excellence?
Why are they used?

- Focus instruction---intentionally.
- Guide feedback---descriptively.
- Characterize desired results---objectively.
- Operationalize performance standards---purposefully.
- Develop self-assessment competence---constantly.
- Involve students---thoughtfully.
Rubric Components

- **Performance Element**: the major, critical attributes which focus upon best practice.

- **Scale**: the possible points to be assigned (high to low).

- **Criteria**: the conditions of a performance that must be met for it to be considered successful.

- **Standard**: a description of how well the criteria must be met for the performance to be considered "good".

- **Descriptors**: statements that describe each level of the performance.

- **Indicators**: specific, concrete examples or telltale signs of what to look for at each level of the performance.

Taken from software company [www.rubrics.com](http://www.rubrics.com)
### Rubric Template

(Describe here the task or performance that this rubric is designed to evaluate.)

<table>
<thead>
<tr>
<th>Score</th>
<th>Stated Objective or Performance</th>
<th>Beginning</th>
<th>Developing</th>
<th>Accomplished</th>
<th>Exemplary</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Description of identifiable performance characteristics reflecting a beginning level of performance.</td>
<td>2</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Description of identifiable performance characteristics reflecting the highest level of performance.</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Description of identifiable performance characteristics reflecting development and movement toward mastery of performance.</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Description of identifiable performance characteristics reflecting mastery of performance.</td>
<td>2</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Layout / Design</td>
<td>The pages are unattractive. Text is difficult to read. The backgrounds are distracting.</td>
<td>The pages appear &quot;busy&quot; or &quot;boring&quot;. Text may be difficult to read. The backgrounds are somewhat distracting.</td>
<td>The pages are eye-catching and attractive. Text is easy to read. The backgrounds are subtle and appropriate.</td>
<td>The pages are well organized with tables. Text spacing and alignment make reading easy. The backgrounds enhance the page.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graphics</td>
<td>There are no photos, icons or clip art or they are inappropriate or of low quality.</td>
<td>Photos are blurry or fuzzy; icons and clip art do not &quot;fit&quot; with the topic. Too many pictures make the download time slow.</td>
<td>Photos, icons, and clip art are appropriate, of high quality, and download fairly quickly.</td>
<td>Photos, icons, and clip art are used creatively and may follow a theme.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>Information is poorly written, inaccurate, or incomplete.</td>
<td>Information could be better written and too much information is given in each section.</td>
<td>Information is well written and interesting to read and is presented in short sections.</td>
<td>Information is creatively written and cleverly presented.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Navigation / Links</td>
<td>The user may become lost or links may be missing or not working.</td>
<td>The user may become confused when navigating between pages. Some links may not work.</td>
<td>Links are consistent and easy to find so that the user can easily navigate back and forth through pages.</td>
<td>Links are created with images and icons to enhance the text links.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working Together</td>
<td>Partners argue or fight much of the time and do not share responsibilities.</td>
<td>Partners have trouble solving disagreements; one partner does most of work.</td>
<td>Partners get along well and share equally in responsibilities.</td>
<td>Partners show respect for one another, get along especially well and work together on all aspects of the project.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Following Classroom Guidelines</td>
<td>Students are often out of area without permission and cause disruptions in the lab and other classrooms.</td>
<td>Students occasionally leave area without permission and are louder than necessary in the lab and in other classrooms.</td>
<td>Students stay in their area, talk quietly to their own partner only, and cause minimum disruptions while visiting other classrooms.</td>
<td>Students are always on task, stay in their own area, and cause no disruptions when visiting other classrooms.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note - Add the scores for each category to get a percentage score.
Rubric Activity
In 5 minutes, start a rubric that addresses a critical thinking skill.
# A Rubric for Rubrics

**A Tool for Assessing the Quality and Use of Rubrics in Education**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>1 Unacceptable</th>
<th>2 Acceptable</th>
<th>3 Good/Solid</th>
<th>4 Exemplary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarity of criteria</td>
<td>Criteria being assessed are unclear, inappropriate and/or have significant overlap</td>
<td>Criteria being assessed can be identified, but are not clearly differentiated or are inappropriate</td>
<td>Criteria being assessed are clear, appropriate and distinct</td>
<td>Each criteria is distinct, clearly delineated and fully appropriate for the assignment(s)/course</td>
</tr>
<tr>
<td>Distinction between Levels</td>
<td>Little/no distinction can be made between levels of achievement</td>
<td>Some distinction between levels is made, but is not totally clear how well</td>
<td>Distinction between levels is apparent</td>
<td>Each level is distinct and progresses in a clear and logical order</td>
</tr>
<tr>
<td>Reliability of Scoring</td>
<td>Cross-scoring among faculty and/or students often results in significant differences</td>
<td>Cross-scoring by faculty and/or students occasionally produces inconsistent results</td>
<td>There is general agreement between different scorers when using the rubric <em>(e.g. differs by less than 5-10% or less than ½ level)</em></td>
<td>Cross-scoring of assignments using rubric results in consistent agreement among scorers</td>
</tr>
<tr>
<td>Clarity of Expectations/ Guidance to Learners</td>
<td>Rubric is not shared with learners</td>
<td>Rubric is shared and provides some idea of the assignment/ expectations</td>
<td>Rubric is referenced - used to introduce an assignment/guide learners</td>
<td>Rubric serves as primary reference point for discussion and guidance for assignments as well as evaluation of assignment(s),</td>
</tr>
<tr>
<td>Support of Metacognition (Awareness of Learning)</td>
<td>Rubric is not shared with learners</td>
<td>Rubric is shared but not discussed/referenced with respect to what is being learned through the assignment(s)/course</td>
<td>Rubric is shared and identified as a tool for helping learners to understand what they are learning through the assignment/ in the course</td>
<td>Rubric is regularly referenced and used to help learners identify the skills and knowledge they are developing throughout the course/ assignment(s)</td>
</tr>
<tr>
<td>Engagement of Learners in Rubric Development/ Use *</td>
<td>Learners are not engaged in either development or use of the rubrics</td>
<td>Learners offered the rubric and may choose to use it for self assessment</td>
<td>Learners discuss the design of the rubric and offer feedback/input and are responsible for use of rubrics in peer and/or self-evaluation</td>
<td>Faculty and learners are jointly responsible for design of rubrics and learners use them in peer and/or self-evaluation</td>
</tr>
</tbody>
</table>

_Scorings:_
- **0 - 10** = needs improvement
- **11 - 15** = workable
- **16 - 20** = solid/good
- **21 - 24** = exemplary

*http://its.monmouth.edu/facultyresourcecenter/Rubrics/A%20Rubric%20for%20Rubrics.htm Dr. Bonnie B. Mullinix © Monmouth University December 2003*
• Using the rubric to assess a rubric as a guide, discuss with a partner your rubric design.
• Consider what would you improve? What obstacles did you face? What worked well?
• What questions remain?
Questions you sent

• Have you had your students generate a rubric for an assignment before they do it?
• Are there some common characteristics that could make a rubric unworkable?
Rubric Problems and Pitfalls

- Failure to adapt to each project
- Ceiling Effect or limiting effects especially in standardized writing assessments (LaBrant, 1936; Mabry & Kaytner, 1997; Mabry, 1999).
- Lack of authenticity - evaluative criteria fail to capture important features of the skill being measured
- Criteria may be vague
- Rubric is too long or complex (Popham, 1997).
- Wolf & Wolf (2002) stress, the goal of rubric based assessment is not to “wrench a piece of writing in line with standardized rubric criteria, but to meet and then push beyond the boundaries of established rubrics to take the writing to the next level” (232).
- Pitfall of the five-point scales being converted to letter grades (Strickland & Strickland, 1998).
Rubric Help

- http://makeworksheets.com/rubrics.html
- http://www.thecanadianteacher.com/tools/
- Project Based Learning Checklists Rubric Maker http://pblchecklist.4teachers.org
- Rubistar http://rubistar.4teachers.org/
- Rubric Builder http://landmark-project.com/classweb/tools/rubric_builder.php3
- Rubrics (Chicago Public classs) http://intranet.cps.k12.il.us/Assessments/Ideas_and_Rubrics/Rubric_Bank/rubric_bank.html
- Rubrics for Web Lessons: Background on Rubrics http://webquest.sdsu.edu/rubrics/weblessons.htm
- Teach-nology Rubrics Generators http://teachers.teach-nology.com/web_tools/rubrics/
- Understanding Rubrics (Adrade) http://www.middleweb.com/rubricsHG.html
- Rubrics at-a-glance (PowerPoint Show - requires Internet Explorer) http://ettc.lrhsd.org/rubrics.htm
Online Resources and Facilitator Contact Information

• Kathleen Pusecker – 831-8537 klp@udel.edu
• Gabriele Bauer – 831-2027 gabriele@aip.udel.edu
• Office of Educational Assessment - http://assessment.udel.edu/index.htm
• Rubrics – Writing Center: http://www.english.udel.edu/wc/staff/
• Center for Teaching Effectiveness http://cte.udel.edu/eval.htm
• PRESENT Technology tools to gather information and feedback.
References