

Using a Holistic Rubric

Purpose:

Participants will learn to use a holistic rubric to score samples of student work. They will compare and contrast the analytic rubric with the holistic rubric and discuss the advantages and disadvantages of each.

Overview:

Participants will compare and contrast the analytic rubric used in the activity *Using an Analytic Rubric* with the activity sheet *Holistic Rubric, Problem Solving*. They will identify the similarities and differences between these two rubrics. Then they will use the holistic rubric to individually score student work samples D, E, F, and G with a single score of 4, 3, 2, or 1 based on the given criteria. Small group discussions will follow to reach consensus on scoring. A whole group discussion will focus on analytic vs. holistic scoring.

TEXES Mathematics 4-8 Competencies. The beginning teacher:

- VI.019.A Demonstrates an understanding of the purpose, characteristics, and uses of various assessments in mathematics, including formative and summative assessments.
- VI.019.C Demonstrates an understanding of how to develop a variety of assessments and scoring procedures consisting of worthwhile tasks that assess mathematical understanding, common misconceptions, and error patterns.
- VI.019.E Understands the relationship between assessment and instruction and knows how to evaluate assessment results to design, monitor, and modify instruction to improve mathematical learning for all students including English Language Learners

Materials.

- Highlighters
- Paper for recording

Terms.

Analytic rubric, assessment, holistic rubric, scaled score, single score

Transparencies.

- *Holistic Rubric, Problem Solving*
- *Analytic vs. Holistic Scoring*
- *Which One Should I Use?*
- *Rubric Scoring Process*

Activity Sheet(s).

- *Holistic Rubric, Problem Solving*
- *Analytic Rubric, Problem Solving*
- Student Work Samples D, E, F, and G

References:

TEXTEAMS *Practiced-Based Professional Development: Middle School Assessments* (2003).

Austin, TX: The Charles A. Dana Center.

<http://www.cloudnet.com/~edrbsass/edmath.htm>

Procedure:

Steps	Questions/Math Notes
<p>1. Show Transparency <i>Holistic Rubric, Problem Solving</i> on the overhead.</p> <p>Have participants use Activity Sheets <i>Holistic Rubric</i> and <i>Analytic Rubric</i> to compare and contrast noting the similarities and differences between them. They should note that a single score is used to assess the overall quality of an assessment task.</p> <p>Have participants reflect upon the solution guide and the four stages of the problem-solving model and make connections among them.</p>	<p>Ask questions that require participants to reflect on their understanding of the analytic and holistic rubrics and how these rubrics can be used for assessment.</p> <p><i>How are the analytic and holistic rubrics the same? How are they different?</i></p> <p><i>How does the holistic rubric compare with the solution guide used previously?</i></p> <p><i>How does the holistic rubric address the stages of the problem-solving model?</i></p> <p><i>What can you learn about a student's thinking in mathematics using the holistic rubric?</i></p>
<p>2. Discuss the structure of the holistic rubric and how to use it to assign a single score to an assessment task.</p> <p>Ask them to reflect upon how other disciplines use holistic scoring. Have them brainstorm about situations in mathematics where holistic scoring is used.</p>	<p><i>What must a student's work reflect in order to score a "4"?</i></p> <p><i>How is holistic scoring used in other disciplines?</i></p> <p><i>How is holistic scoring used in mathematics assessment?</i></p>
<p>3. Put the Transparency <i>Rubric Scoring Process</i> on the overhead and discuss each bullet. Explain to participants that they will be following a process similar to the one they used with the analytic rubric.</p>	<p><i>How is this process like the one used with the analytic rubric? How is it different?</i></p>
<p>4. Refer participants to the Activity Sheet <i>High Flyin'</i> and inform them that 8th grade math students from the same class solved this problem. They will independently score four of the papers labeled Student Work Samples D-G using the holistic rubric.</p> <p>Have participants sort the papers into three stack(s) according to the following guidelines:</p> <ul style="list-style-type: none">a. High- needs no re-teachingb. Medium- needs some re-teachingc. Low- needs re-teaching <p>The highs and lows are more easily apparent based on the overall quality. Those papers in the middle can be sorted based on the degree of re-teaching apparent into Medium(high) and Medium(low).</p>	<p><i>How can sorting the papers be helpful in scoring holistically?</i></p> <p><i>In the scores from 1 to 4, where do you think there could be some "gray areas" in determining a holistic score? Explain.</i></p>
<p>5. Have participants use the Activity Sheet <i>Holistic Rubric</i> to individually score each</p>	

<p>student work sample D through G. After assigning a score to each paper, have them write the evidence to support each score.</p>	
<p>6. Have participants discuss their assignment of scores within a small group with a focus on the evidence in the student work as a basis of the score. Ask them to try to reach consensus on the scoring.</p>	<p><i>What would this student need to do to bring his/her score up to a "4"?</i></p> <p><i>How did you distinguish between a score of 1 and a score of 2? Between a score of 2 and a score of 3?</i></p>
<p>7. Following the small group discussions, have a whole group discussion on holistic scoring.</p> <p>Have them compare this experience with the previous experience using the analytic rubric.</p> <p>Show Transparency <i>Analytic vs. Holistic Scoring</i> on the overhead. Ask participants to add other characteristics that distinguish analytic from holistic scoring based on their experience in using the rubrics.</p>	<p><i>How did your experience in reaching consensus using the holistic rubric compare to your experience in reaching consensus using the analytic rubric?</i></p>
<p>8. Ask participants to discuss how they would determine "which one to use" in small groups and be prepared to report to the whole group. Allow a few minutes for brainstorming.</p> <p>Have each group share one idea and write these ideas on chart paper or record on the overhead. Continue this process until each group has had a chance to respond at least twice.</p> <p>Next, show the Transparency <i>Which One Should I Use?</i> on the overhead projector.</p>	<p><i>Compare and contrast scoring student work with a holistic rubric vs. an analytic rubric.</i></p> <p><i>Which one requires more time to use? Explain.</i></p> <p><i>What type of feedback can you give students using the holistic vs. the analytic rubric?</i></p> <p><i>How could you use each type of rubric to inform instruction?</i></p>