

Self-Assessment

Self-Assessment

- Student driven process of
 - Reflecting on the attributes of their own work
 - Analyzing how well their work meets the stipulated criteria
 - Revising their work to better meet the criteria

(Andrade & Boulay, 2003)

Guiding Self-Assessment

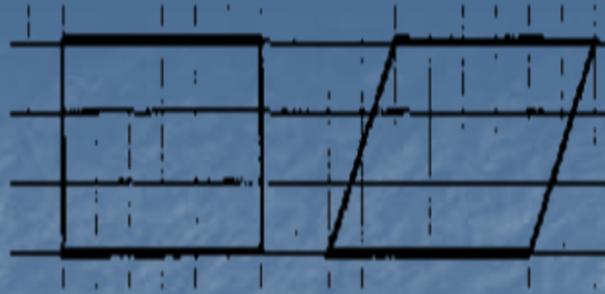
- Model intended outcomes
- Provide students exemplars of learning targets to
 - Clarify what is expected
 - Teach students how to show their understanding
 - Deconstruct the learning target
- Make analysis of student work part of the classroom culture

Self-Assessment Facilitation

- Codesign a rubric (when possible)
- Model what is expected
- Critique samples of student work together
- Have students critique independently
- Discuss student critiques
- Have students apply to their own work
- Ask students to critique their own work and revise

Indicators

- 3-4.2 Classify polygons as either triangles, quadrilaterals, pentagons, hexagons, or octagons according to the number of their sides.
- 3-4.3 Classify lines and line segments as either parallel, perpendicular, or intersecting.
- 3-4.4 Classify angles as either right, acute, or obtuse.



- In what ways are the figures above alike? List as many ways as you can.
- In what ways are the figures above different? List as many ways as you can.
- Use your mathematics vocabulary

Our model

- Similarities
 - Both have four angles - quadrilaterals
 - Both have parallel sides
 - Opposite sides are the same length

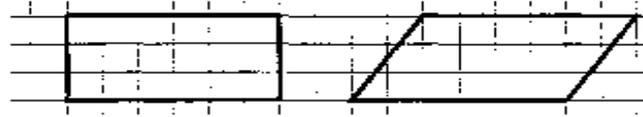
Our model

- Differences
 - One has right angles and one has obtuse and acute angles
 - They have different perimeters

Analytic Rubric

Criteria	Scale				Weight	Score
Similarities	0 No accurate similarities	1 Provides accurate and inaccurate information about similarities	2 Provides only accurate information about similarities		2	4
Differences	0 No accurate differences	1 Provides accurate and inaccurate information about differences	2 Provides only accurate information about differences		2	4
Math Vocabulary	0 Math vocabulary not used	1 Shows conceptual understanding but does not use mathematics vocabulary	2 Uses some grade level mathematics vocabulary	3 Uses grade level mathematics vocabulary	.67	2

Sample 1



In what ways are the figures above alike? List as many ways as you can.

They have 4 sides.
They have parallel sides.

In what ways are the figures above different? List as many ways as you can.

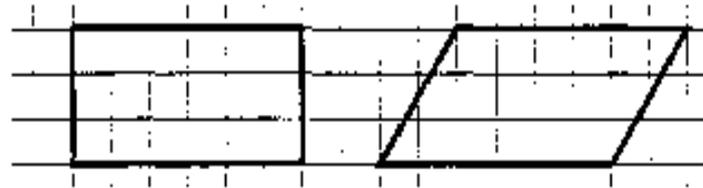
One has square corners.
One is more slant.

right angles

Analytic Rubric

Criteria	Scale				Weight	Score
Similarities	0 No accurate similarities	1 Provides accurate and inaccurate information about similarities	2 Provides only accurate information about similarities		2	4
Differences	0 No accurate differences	1 Provides accurate and inaccurate information about differences	2 Provides only accurate information about differences		2	4
Math Vocabulary	0 Math vocabulary not used	1 Shows conceptual understanding but does not use mathematics vocabulary	2 Uses some grade level mathematics vocabulary	3 Uses grade level mathematics vocabulary	.67	1.34

Sample 2



0. In what ways are the figures above alike? List as many ways as you can.

- ① They can both be square
- ② They can both be slanted
- ③ They can both turn many ways

They are both quadrilaterals because they have four equal sides

In what ways are the figures above different? List as many ways as you can.

- ① In the picture they are different.
- ② One is slanted.
- ③ One is firm and strate.

Analytic Rubric

Criteria	Scale			Weight	Score	
Similarities	0 No accurate similarities	1 Provides accurate and inaccurate information about similarities	2 Provides only accurate information about similarities	2	0	
Differences	0 No accurate differences	1 Provides accurate and inaccurate information about differences	2 Provides only accurate information about differences	2	2	
Math Vocabulary	0 Math vocabulary not used	1 Shows conceptual understanding but does not use mathematics vocabulary	2 Uses some grade level mathematics vocabulary	3 Uses grade level mathematics vocabulary	.67	.67

Sample 3 – Students critique independently

0. In what ways are the figures above alike? List as many ways as you can.

on the top they
both have lines that
are straight and they
both have four corners

In what ways are the figures above different? List as many ways as you can.

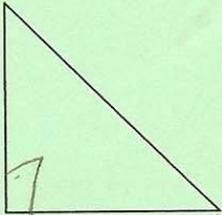
one has slanted
lines and the other
one doesn't and these
not shaped the same
way

Analytic Rubric

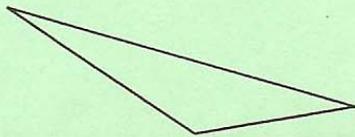
Criteria	Scale			Weight	Score	
Similarities	0 No accurate similarities	1 Provides accurate and inaccurate information about similarities	2 Provides only accurate information about similarities	2		
Differences	0 No accurate differences	1 Provides accurate and inaccurate information about differences	2 Provides only accurate information about differences	2		
Math Vocabulary	0 Math vocabulary not used	1 Shows conceptual understanding but does not use mathematics vocabulary	2 Uses some grade level mathematics vocabulary	3 Uses grade level mathematics vocabulary	.67	

Apply to own work

Describe the shapes below in as many ways as you can. Use your math vocabulary words.



8. a right triangle is a triangle that makes a perfect square.



9. an isosceles triangle.

- What are different ways to have students reflect, review and revise?

Analytic Rubric

Criteria	Scale				Weight	Score
Characteristics	0 No characteristics of triangles correctly described	1 Few characteristics of triangles correctly described	2 Some characteristics of triangles correctly described	3 Most characteristics of triangles correctly described	6	
Math Vocabulary	0 Shows conceptual understanding but does not use mathematics vocabulary	1 Uses some grade level mathematics vocabulary	2 Uses grade level mathematics vocabulary		2	.

To be effective with students

- Students need to have time to apply the rubric to their own work
- Students must be allowed to revise and resubmit
- Needs to also occur in work that is not graded
- This is a process that takes about a semester

A note on low performing students

- These students need extra help understanding the goal of the task
- They need more practice applying the criteria
- They need support in changing their outlook from “I can’t” to “I can”

To be manageable

- Have students turn in the original and resubmission together
- Keep a checklist on the wall showing what work needs revision

Research findings in this area

- Poor writers improved content, development, and voice (Andrade, Du, Wang, 2008; Ross, Rolheiser & Hogoboam-Gray, 1999)
- Students had increased skill in using mathematics vocabulary and in solving word problems (Stallings & Tascione, 1996; Ross, Hogoboam-Gray & Rolheiser, 2002)

How do I find exemplars?

- Keep copies of student work from year to year
- Show a range of performances (with no names) after all work is graded to show expectations for next time
- Investigate the NAEP Questions tool
<http://nces.ed.gov/nationsreportcard/itmrlsx/landing.aspx>