Analysis of Student Work
Andrea Whittaker, Ph.D.
San José State University
October 6, 2007

“What most of today’s educators know about education assessment would fit comfortably inside a kindergartener’s half-filled milk carton.” (Popham, 2006)

Purpose
• Present ideas for scaffolding the process of analyzing student work
• Discuss candidates’ ongoing difficulties with the task
• Generate additional ways to scaffold candidates to use evidence from student work to guide their teaching
Context

- Middle level emphasis program
- Year long student teaching placement
- Student teaching seminar met weekly in Fall semester and 8 times during Spring
- “Coaching cycle” in Fall
- PACT Teaching Event in Spring
  - staggered due dates for tasks

Planning Big Ideas

- Introduced in second seminar meeting
  - Referred to throughout program as students were designing and implementing lessons
- Aligned with PACT teaching event tasks
- Backwards design elements
- Emphasized:
  - Hierarchy of outcomes (big ideas/essential questions, standards, objectives)
  - Planning based on students’ characteristics/needs

Protocol for Analyzing Student Work 2005

- Adapted from “Collaborative Assessment Conference”
- Used informally 5-6 times during Fall semester
  - Candidates took turns bringing in samples of student work from their classrooms
  - Discussed strengths and challenges, ways they would judge quality of students’ understanding, next steps for teaching
Analysis of Student Work
Seminar Activity (Dec. 2005)

• In subject-alike pairs, explain the objective(s) for this lesson.
• Brainstorm evaluative criteria related to these outcomes
  – What will you use to judge the quality of a students’ performance related to these outcomes?
  – What makes this sample high quality, ok, or weak?

Analysis of Student Work
Seminar Activity (continued)

– use highlighter (one color) to identify strengths related to objectives, use second color to identify areas of challenge or need
– describe in words what these strengths and needs represent in relation to your desired outcomes
– determine and justify your next steps for teaching that student

Analysis of Student Work
2006

• Why do we look at student work?
  – Assessment
  – Check for comprehension
• When and how do we look at student work?
  – During the lesson
  – HW – the next day
  – Assess ASAP
  – Reading it, Asking questions about it, asking for summaries
  – Not jump to conclusions – “listen”
  – How is “transfer” occurring or not?
  – Strategic about how you design what they give you
• What do we use to evaluate student work?
  – Tests [the “key” to the text]
  – Essays
  – Explaining knowledge “lab practical exam”
  – Projects
  – Pre-determined rubrics w/expectations
  – Examining “process” rather than final answer
  – Rubrics – encourages students to take ownership/responsibility
What do you remember about the Scientific Method from your own middle school science class?

What’s the connection?

• Scientific Method is essentially the same framework that we use in Assessment!

• CYCLE OF INQUIRY!!!

• Student Assessment provides the evidence for all your decision-making

Protocol for Analyzing Student Work 2006-07

1. Pose a question about the work that you want to answer... (e.g. To what extent did my students develop the knowledge, skills, and ability defined by my essential question, objectives or content standard?).

2. Identify strengths revealed in the student work

3. Identify challenges, misunderstandings, or confusion in student work.

4. Use student work evidence to Answer the questions from above and draw conclusions

5. Plan next steps for teaching based on your conclusions about your students' learning of your objectives, content standards and/or essential question.
Evaluative Criteria

• Purpose is to evaluate the extent to which the student produces work that reflects the desired outcomes.
• Informs the selection/design of assessment tools.
• Used to guide the feedback that a teacher can give a student (where they stand in relation to the outcome; what they need to do to get better).
• Conclusions about students’ performance in relation to evaluative criteria guides what teachers teach next.

Then... how do we derive evaluative criteria?

• Should come from whatever is defined as the learning outcomes (essential question, content standard, and/or objective).
  – Essential Questions – How do authors develop characters in a novel?
  – Content Standard – Grade 7 (3.3) Analyze characterization as delineated through a character’s thoughts, words, speech patterns, and actions; the narrator’s description; and the thoughts, words and actions of other characters
  – Objective – TSWBAT compare/contrast how ______ develops as a character from the beginning to the end of the novel.

Then... how do we derive evaluative criteria? (cont.)

• How would you measure these outcomes?
• What would be evidence that a student could do this well? (Assessment tool)
• How would you judge the quality of the students’ performance on that assessment?
  – Not merely completeness/correctness
  – Description of quality depends on defined outcomes and the nature of the task the students have engaged in.
Example of Evaluative Criteria

• Accurate selection of examples of thoughts/feelings/actions from beginning to end of novel.
• Depth of explanation for differences beginning/end (justify conclusions using evidence from the novel about the character's change)

Generate another example

• What content standard and/or objective defines the outcome for the sample of work brought in?
• What evaluative criteria emerged in our discussion of the sample?
• Did these represent completeness, accuracy, and/or quality? What else?

Your own sample!

• What essential question, content standard, and/or objective does your sample assess?
• What evaluative criteria will you use to judge student success related to these outcomes?
• Identify strengths and challenges using the evaluative criteria.
• Given this evidence, what are your next steps for teaching this student?
Ongoing Difficulties

• Assessment tool design
  – Alignment of task/tool with rich outcomes
  – Designing tool when PLANNING
• Developing evaluative criteria
  – Emphasis on “correctness” or “completeness”
  – Need for criteria for judging “quality” of student understandings, development of mastery, or approximations toward outcome
  – Need to identify misconceptions and partial understandings

Ongoing Difficulties

• Citing evidence to support conclusions about student understandings
• Elaborating specific next steps for teaching given judgments about quality of student understandings

Ideas for additional scaffolding

• More attention to wording of big ideas and objectives to emphasize higher level student understandings
• Provide exemplars of assessment tools that allow students to show understandings beyond completeness and correctness
• Emphasize rubric design, purpose, and use as means for developing deeper understandings of evaluative criteria
• Use PACT benchmarks (3) to reveal what high quality analysis looks like
Your ideas?