Student Work Analysis That’s All About the Kids

Presented by Nancy Love

Teaching Learning Coaching Conference
Las Vegas, Nevada

October 10-11, 2018
I’m So Excited!
Essential Question

• How can teachers, coaches, and students unleash the power of student work analysis to positively impact student achievement and independence?
It All Starts Here!
Learning Targets: We Are Learning to..

• Describe the four steps of the **Formative Assessment for Results** (FAR) Cycle
• Analyze student work using **Data-Driven Dialogue** and **Criteria Analysis**
• Use student work as a catalyst and guide to next instructional steps for students and teachers
Agenda: And We’ll Get There by...

• Overview of Criteria Analysis and the Formative Assessment for Results (FAR) Cycle
• Criteria Analysis Simulation
• Reflection/Application
What are the learning opportunities for you? What struck you about the video? What are ways in which you unleash the power of student work analysis in your work? (Think/Pair/Share)

**Essential Question:** How can teachers, coaches, and students unleash the power of student work analysis to positively impact student achievement and independence?

**We are learning to...**

- Describe the four steps of the Formative Assessment for Results (FAR) Cycle
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- Use student work as a catalyst and guide to next instructional steps for students, teachers, and coaches
Agenda: And We’ll Get There by...

• Overview of Criteria Analysis and the Formative Assessment for Results (FAR) Cycle
• Criteria Analysis Simulation
• Reflection/Application
Criteria Analysis: Purposes

- To **analyze** student work in relation to pre-established success criteria *(checklist or rubric)*
- To lead to timely and targeted instructional action
- To make it **safe** and productive to analyze student work in a team or with a coach
Criteria Analysis Is Suited for...

- Any constructed-response item or task (given *during* learning) for which the success criteria have been communicated to students
Criteria Analysis Is Not a Solo Act
The Formative Assessment for Results (FAR) Cycle Handout, P. 1

Communicate Learning Targets and Success Criteria
Step One: Learning Target, Success Criteria, and Communication Plan: Elem. ELA

Learning Target: I am learning to write a summary of what I read.


Criteria for Success
My summary:
• States the main idea
• Covers all of the material
• Has no extra information
• Is in my own words

Communication Plan
• Show a model; Have students generate the criteria.
• Compare with criteria above.
• Have students assess three models of strong and weak work using criteria
The Formative Assessment for Results (FAR) Cycle

Communicate Learning Targets and Success Criteria

Give students a formative assessment
A Trip Around the FAR Cycle with a Team

Communicate Learning Targets and Success Criteria

Give students a formative assessment

Analyze student work, e.g. Criteria Analysis and Data-Driven Dialogue
A Trip Around the FAR Cycle with a Team

Communicate Learning Targets and Success Criteria

Assess Impact

Give students a formative assessment

Take FIRME Action

Analyze student work, e.g. Criteria Analysis and Data-Driven Dialogue
Take FIRME Action

- Feedback
- Investigation
- Reteaching / Re-engaging / Regrouping
- Moving on
- Extension
The FAR Cycle Meets Hattie

1.57 Effect Size – Collective Teacher Efficacy
1.44 – Visible Learning (Assessment Capable)

.75 effect size (feedback)
1.04 (RTI)

.75 effect size (teacher clarity)

.90 effect size (formative evaluation)

“Know thy impact”

* Feedback
  Investigation
  Reteaching/Re-engaging/
  Regrouping
  Moving On
  Extension

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Learning Targets: We Are Learning to..

• Describe the four steps of the Formative Assessment for Results (FAR) Cycle

• Analyze student work using Data-Driven Dialogue and Criteria Analysis

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Buzz about the Formative Assessment for Results (FAR) Cycle

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A Trip Around the FAR Cycle with a Team

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Let’s Take the Plunge
It Could Get Messy!
## Criteria Analysis with Data-Driven Dialogue (Handout, pp. 2-3)

<table>
<thead>
<tr>
<th>Review and do task</th>
<th>Engage in Data-Driven Dialogue</th>
<th>Prepare to take FIRME* action</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Phase 1: Predict</td>
<td></td>
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<tr>
<td></td>
<td>Phase 2: Go Visual</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Phase 4: Infer/Question</td>
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*Feedback
Investigation
Reteaching / Re-engaging / Regrouping
Moving on
Extension

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• Work in trios or pairs.
• Assign group roles: facilitator, timekeeper, recorder

Review the learning target, task, and success criteria for grade 6 assessment (page 6 ONLY).

Do the task yourselves (individually or with a partner) and share solutions and approaches in your team.

Don’t look at the student work yet.
How do you think students performed?

What criteria/criterion do you think they will do well on?

What criteria/criterion do you think they will have trouble with?

What errors or confusions do you anticipate students will make/have?

Based on what assumptions?

I predict...

I assume...

I wonder...

I’m expecting to see...

Don’t look at the student work yet.
### Data-Driven Dialogue: Note-Catcher (HO, p. 5)

<table>
<thead>
<tr>
<th>Predictions</th>
<th>Observations</th>
<th>Inferences/Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

**Preparing to Take FIRME Action**
- Moving On

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</tr>
</tbody>
</table>

How will we assess impact?
Engage in Data-Driven Dialogue

4 min

Phase 1: Predict

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How do you think students performed?

What criteria/criterion do you think they will do well on?

What criteria/criterion do you think they will have trouble with?

What errors or confusions do you anticipate students will make/ have?

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I predict...

I assume...

I wonder...

I’m expecting to see...

Record notes on the Data-Driven Dialogue: Note-Catcher (p. 5)
<table>
<thead>
<tr>
<th>Engage in Data-Driven Dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase 2:</strong></td>
</tr>
<tr>
<td><strong>Go Visual</strong></td>
</tr>
</tbody>
</table>

- **Phase 1:** Predict
- **Phase 2:** Go Visual
- **Phase 3:** Observe
- **Phase 4:** Infer
## Criteria Analysis Go-Visual Example (See Blank Version, Handout, p. 4)

Insert student names in first column.

<table>
<thead>
<tr>
<th>Students’ Names</th>
<th>Criterion Current topic</th>
<th>Criterion 2 Opening</th>
<th>Criterion 3 Closing</th>
<th>Criterion 4 Etiquette</th>
<th>Notes/Errors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melissa</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Jose</td>
<td>✓</td>
<td>–</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Dante</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Naushina</td>
<td>✓</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Cole</td>
<td>✓</td>
<td>–</td>
<td>✓</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Irma</td>
<td>✓</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>✓</td>
<td>6 / 100%</td>
<td>1 / 16%</td>
<td>3 / 50%</td>
<td>1 / 16%</td>
<td></td>
</tr>
<tr>
<td>–</td>
<td>0</td>
<td>4 / 67%</td>
<td>2 / 33%</td>
<td>4 / 67%</td>
<td></td>
</tr>
<tr>
<td>✓+</td>
<td>0</td>
<td>1 / 16%</td>
<td>1 / 17%</td>
<td>1 / 16%</td>
<td></td>
</tr>
</tbody>
</table>
Engage in Data-Driven Dialogue

<table>
<thead>
<tr>
<th>Phase 2: Go Visual</th>
</tr>
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<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

- Create a table to display your analysis of the student work (Use Handout, p. 4)
- Insert the success criteria for the task in the first row under the criteria headers.
- Write the students names in the first row.
- Evaluate each piece of student work in relation to success criteria (work samples follow the task in the handout).
- Use the table to record where each criterion has been met (✓) or not yet met (-) for each piece of student work.
- Use the last column to make additional notes.

10 min
<table>
<thead>
<tr>
<th>Phase 3: Observe</th>
</tr>
</thead>
</table>

Engage in Data-Driven Dialogue
Concept Attainment, Part 1

What do the “YESes” have in common? How are they different from the NOs.

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>• It’s 53 degrees out</td>
<td>• It’s cold</td>
</tr>
<tr>
<td>• 75% of our 4th graders scored below proficiency in mathematics problem solving</td>
<td>• Our teachers are not comfortable with the new mathematics curriculum</td>
</tr>
<tr>
<td>• This student diagrammed each trip across the river</td>
<td>• The student must have used the diagram to generate the rule</td>
</tr>
<tr>
<td>Engage in Data-Driven Dialogue</td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase 3: Observe</td>
<td></td>
</tr>
</tbody>
</table>

- Made by the five senses
- Contain no explanations
- “Just the facts”
### Criteria Analysis Observation Example:
Observe by Criteria, by Student, Totals

<table>
<thead>
<tr>
<th>Students’ Names</th>
<th>Criterion 1 (Current topic)</th>
<th>Criterion 2 (Opening)</th>
<th>Criterion 3 (Closing)</th>
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<tbody>
<tr>
<td>Melissa</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Jose</td>
<td>✓</td>
<td>–</td>
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<td>✓</td>
<td>✓</td>
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<tr>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Naushina</td>
<td>✓</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Cole</td>
<td>✓</td>
<td>–</td>
<td>✓</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Irma</td>
<td>✓</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>6 / 100%</td>
<td>2 / 33%</td>
<td>4 / 67%</td>
<td>2 / 33%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>4 / 67%</td>
<td>2 / 33%</td>
<td>4 / 67%</td>
<td></td>
</tr>
</tbody>
</table>
What patterns do you observe across several pieces of work? Examine the table by columns. Examine the summary data for each criterion.

What do you notice about individual students? Examine the table by row.

What specific criteria are our students’ strengths? Which pose difficulties for them?

Identify the criteria for which there are a significant number of not-yet performances or low rubric scores.

---

I am struck by...

I observe...

I notice...

Record notes on the Data-Driven Dialogue: Note-Catcher
## Engage in Data-Driven Dialogue

<table>
<thead>
<tr>
<th>Phase 4: Infer/Question</th>
</tr>
</thead>
</table>

- A possible explanation is…
- I wonder if…
- A question I have now is…
- That may be because…
Criteria Analysis Example Inferences

- A possible explanation is that generalizing is a very tough skill. If we do not teach it explicitly and with enough modeling and success criteria, many students struggle.

- Perhaps were not clear enough with students about what makes a good explanation of their reasoning. They need more practice writing and self-assessing.

- Some students confuse expressions with equations. Students may need a reteach on this.
Engage in Data-Driven Dialogue

<table>
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<tr>
<td>4 min</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

• What possible explanations do we have for the patterns we are seeing?
• How can we find out which of our hypotheses is right?
• What questions do we have?
• What additional data might we explore to verify our explanations?

A possible explanation...
That may be because...
A question I have now...
I wonder if...

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**Data-Driven Dialogue: Note-Catcher**

- **Phase 1:** Predict
- **Phase 2:** Go Visual
- **Phase 3:** Observe
- **Phase 4:** Infer

**Preparing to Take FIRME Action**

- Moving On

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<th>Regrouping</th>
<th>Extension</th>
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How will we assess impact?
## From Criteria Analysis to FIRME Action

<table>
<thead>
<tr>
<th>Feedback</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melissa</td>
<td>✓</td>
<td>+</td>
<td>✓</td>
<td>+</td>
</tr>
<tr>
<td>Jose</td>
<td>✓</td>
<td>-</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Dante</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
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<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
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<td>-</td>
</tr>
<tr>
<td>Irma</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Totals</td>
<td>6/6 met</td>
<td>1/6 met</td>
<td>3/6 met</td>
<td>1/6 met</td>
</tr>
</tbody>
</table>

**Reteaching/Re-engaging**

- Melissa: 1/6 met
- Jose: 3/6 met
- Dante: 1/6 met
- Naushina: 6/6 met
- Cole: 3/6 met
- Irma: 1/6 met

**Extension/Re-engaging**

- Melissa: 2/6 met
- Jose: 1/6 met
- Dante: 3/6 met
- Naushina: 1/6 met
- Cole: 3/6 met
- Irma: 1/6 met
The FIRME Mindset

“It isn’t just ‘Do something.’ It’s ‘Do what?’”

— Chappuis, 2014, p. 4
Team Meeting Options

• Analyze samples of low-, medium-, and high-quality work from one or more teachers.

• Analyze work from students targeted by the team.

• Have a teacher bring the results of his/her own criteria analysis for team input.

• Prioritize work related to learning targets and tasks that are challenging for students and/or teachers.

• Use criteria analysis both to take FIRME action and to refine tasks and success criteria.

• Have individual teachers analyze results before team meeting. Put results together for common assessment and analyze collective results.
Essential Question

• How can teachers, coaches, and students unleash the power of student work analysis to positively impact student achievement and independence?
“I set rigorous goals for my own learning. I know what quality work looks like.”

“I regularly monitor my own progress.”

“Errors are a vital part of learning.”

“It’s persistence, not first and fastest that matters.”

“I analyze my own work based on criteria. I analyze my own errors.”

“I take next steps to improve my learning.”

“I don’t give up on myself.”

“I challenge myself.”

“Feedback
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Debrief and Apply

• What struck you about the protocols (Criteria Analysis and Data-Driven Dialogue)?
• How might you adopt/adapt these in your own work?
• What is your biggest take-away?