What Teacher Teams Do to Maximize the Impact of Formative Assessment

Presented by Nancy Love and Robin Whitacre
Learning Forward 2019 Annual Conference
St. Louis, Missouri
December 10, 2019

Handout on Learning Forward App

We’re Excited!

My Daughter Lea Love-Moore

Essential Question

• What do teacher teams do to maximize the impact of formative assessment?
What Strikes You about the Teams at the Connery School?

• Roundrobin: Introduce yourself to your table mates and share an experience you’ve had on an effective team. (1 min/person)
• Discuss (5 min):
  – What struck you about the teams in the video?
  – What lessons might we draw about teams that maximize the impact of formative assessment?

Table Talk in Trios or Quads

Formative Assessment: .90 Effect Size (John Hattie, 2016)

"Formal and informal processes teachers and students use to gather evidence for the purposes of informing next steps in learning." – Jan Chappuis, 2015, p. 3

The Formative Assessment for Results (FAR) Cycle Meets Hattie

1.57 Effect Size – Collective Teacher Efficacy
1.44 effect size - Visible Learning

.75 effect size (feedback)
.75 effect size (teacher clarity)
1.04 (RTI)

.90 effect size (formative evaluation)

"Know thy impact!"

If we have something that can quadruple the speed of learning, why would we wait?

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Learning Targets: We Are Learning to...

- Facilitate teams in learning about and applying:
  - A four-step formative assessment cycle
  - Effective use of success criteria with students
  - Data-Driven Dialogue and Criteria Analysis of student work
  - Principles and techniques for effective feedback

Agenda

- The Formative Assessment for Results (FAR) Cycle: Research and Rationale
- Communicating Success Criteria to Student
- Facilitating Criteria Analysis and Data-Driven Dialogue - Simulation
- Providing Effective Feedback

Turn and Talk (See Handout, P. 4)

- What are you most interested in learning today?
- What’s a strength/what’s a stretch in your own practice and/or in the practice of teams with which you work?

A Trip Around the FAR Cycle

- Communicate learning targets and success criteria (.75)
- Give tasks w/success criteria (.90)
- Facilitate Data-Driven and Criteria Analysis “Know thy impact”
- Provide feedback (.75)

Learning Targets: We Are Learning to...

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What If We Could Eliminate the “Never-Ending Line?”

What Are Criteria for Success? Why Bother with Communicating Criteria for Success?

What did you hear from John Hattie that...
- Resonated with you?
- Surprised you?
Why?

Turn and Talk

Success Criteria

What Do You Notice About The Success Criteria? How They Are Communicated?
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Turn and Talk

• How do the criteria for success help students give targeted feedback to their peers?
• How does Ms. Ivey make the criteria for success accessible to her young learners?
• What has Ms. Ivey learned from using criteria for success with her students?

Success Criteria for Success Criteria: Five Ps

- Public
- Precise
- Prior
- Printed
- Presented

Definition: Success Criteria (Same as Criteria for Success)

Success criteria are the qualities that must be present for performances and products to meet the standards and be deemed successful.

- What should teachers and students look for in examining students’ products or performances to know if they were successful?
- What attributes should students and teachers use to judge the effectiveness of the product or performance?
- What counts?

Success Criteria Humor

*NO EXCEPTIONS*

If your font is huge, bold or “cute,” I will set your paper on fire.

Formats for Communicating Success Criteria

- More • Complex • Less
  - Pictures showing examples of criteria
  - Simple “I can” or “I am successful when” statements
  - Checklists
  - Rubrics

Less Complex: Using Pictures and “I can”

More Complex: Checklist for a Performance

Learning Target: We are learning to do a persuasive oral presentation.

Your oral presentation...
• clearly states your position on the topic
• presents the arguments supporting your position
• supports all arguments with reason and evidence
• responds to arguments opposing your position
• is accompanied by visuals (e.g., charts, overheads, chalkboard, handouts)
• is loud enough for everyone in the room to hear easily
• may be spoken with notes but not read
• is fluent in delivery and confident in tone (which means you practiced!)


More Complex: Checklist for a Product

Learning Target: We are learning to write laboratory reports that communicate our findings.

The lab report...
• lists all the steps for the process of ______
• explains your observations
• explains your conclusions about the relationship between ______
• uses technical terms correctly


Most Complex: Rubric

What Do Teacher Teams Do to Improve Their Practice in Communicating Success Criteria?

Learning Together | Taking Action | Reflecting/Assessing Impact
--- | --- | ---
• Read and discuss research | • Create success criteria together | • Kid-test and refine criteria
• Share techniques | • Experiment in classroom | • Share experiments
• Study videos | | • Analyze student work

What Do Teacher Teams Do to Maximize the Impact of Formative Assessment

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Taking Action: Creating a Success Criteria Checklist for a Task (Handout, p. 8)

Taking Action: Personal and Team Action Planning Form (Handout, p. 9)

Reflecting/Assessing Impact: Sharing Experiments Protocol (Handout, p. 10)

Reflecting/Assessing Impact: Analyzing Student Work (to come)

Learning Targets: We Are Learning to...

Wrap Up on Success Criteria

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Criteria Analysis: Purposes

- To analyze student work in relation to pre-established success criteria (checklist or rubric)
- To lead to effective and targeted FIRME action

Criteria Analysis with Data-Driven Dialogue (Handout, p. 11-15)

<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>Phase 1: Predict</td>
<td>Phase 2: Go Visual</td>
<td>Phase 3: Infer/Question</td>
</tr>
<tr>
<td></td>
<td>Phase 4: Infer/Question</td>
<td></td>
</tr>
</tbody>
</table>

Feedback Investigation Reteaching / Re-engaging / Regrouping Moving on Extension

Criteria Analysis Is Suited for...

- Any constructed-response item or task (during or toward the end of a unit) for which the success criteria have been communicated to students

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Lucinda earns $20 each week. She spends $5 each week and saves the rest. The table below shows the total amount that she saved at the end of each week for 4 weeks.

Lucinda's Savings at the End of Each Week

<table>
<thead>
<tr>
<th>Week</th>
<th>Total Amount Saved</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$15</td>
</tr>
<tr>
<td>2</td>
<td>$30</td>
</tr>
<tr>
<td>3</td>
<td>$45</td>
</tr>
<tr>
<td>4</td>
<td>$60</td>
</tr>
</tbody>
</table>

a. What will be Lucinda's total amount saved at the end of 7 weeks? Show or explain how you got your answer.
b. Use numbers, words, or symbols to write an expression that represents Lucinda's total amount saved at the end of n weeks.
c. How many weeks will it take for Lucinda to save $300? Show or explain how you got your answer.

Preparation:
- Work in groups of 3 or 4.
- Assign group roles: facilitator, timekeeper, materials manager, recorder.

Do the task yourselves—individually or in pairs. (Grade 6 Mathematics, Handout p. 16)

Share solutions and approaches in whole team.

Don't look at the student work yet.
Engage in Data-Driven Dialogue

Phase 2: Go Visual

Criteria Analysis Go-Visual Example

<table>
<thead>
<tr>
<th>Students’ Names</th>
<th>Criterion 1 Current Topic Insert criteria for task in top row</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>
</tbody>
</table>

- 6/6 = 100%
- 2/6 = 33%
- 3/6 = 50%
- 2/6 = 33%

- 6/6 = 100%
- 4/6 = 67%
- 2/6 = 33%
- 4/6 = 67%

• Create a table to display your analysis of the student work.
• Evaluate each piece of student work in relation to success criteria (work samples follow the task in the handout).
• Use the table to record whether each criterion has been met (✓) or not yet met (–) for each piece of student work.
• Use the last column to make additional notes.
• Focus on evidence in the work, not what you think that student knows or can do.
• Be aware of personal biases.

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>
</tbody>
</table>

Concept Attainment, Part 2

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 22% of our students answered item 15 “b”. The correct answer was “a”.</td>
<td>• That’s because they don’t understand the vocabulary in the question.</td>
</tr>
<tr>
<td>• This year we increased the percentage of students in the top quartile in reading by 10% over last year.</td>
<td>• Our new reading program must be working.</td>
</tr>
<tr>
<td>• 25% more boys than girls meet the standard in 8th-grade science on our state test.</td>
<td>• Boys are more interested in science than girls.</td>
</tr>
</tbody>
</table>
Phase 3: Observe: Concept Attainment Testers

- Our teachers aren’t emphasizing basic skills enough.
- 45% of our eighth graders are not meeting the standard in computation.
- Teachers aren’t teaching inquiry-based science because they feel too much pressure to cover the curriculum.
- On a recent survey, a majority of elementary teachers reported that they needed more professional development in science content.

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>
<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>
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<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>Notes/Errors</td>
<td>6/6 = 100%</td>
<td>2/6 = 33%</td>
<td>4/6 = 67%</td>
<td>2/6 = 33%</td>
<td></td>
</tr>
</tbody>
</table>

I am struck by…
I observe…
I notice…

Record notes on the Data-Driven Dialogue: Note-Catcher

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 we were not clear enough with students about what makes a good explanation of their reasoning. They need more practice explaining in classroom discourse and in self- and peer-assessing their explanations.
- Some students confuse expressions with equations. Students need a reteach on this.
**Engage in Data-Driven Dialogue**

**Review & Do Task**

<table>
<thead>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Prepare to Take FIRME Action**

- Predictions
- Observations
- Inferences/Questions

**Preparing to Take FIRME Action**

- Moving On

**Feedback**

- Investigation
- Reteaching
- Re-engaging
- Regrouping
- Extension

**How will we assess impact?**

---

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

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

**Record notes on the Data-Driven Dialogue: Note-Catcher**

---

**Criteria Analysis Example**

<table>
<thead>
<tr>
<th>Criteria Analysis Example</th>
<th>Reteaching/Re-engaging</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Melissa</td>
<td>✓</td>
</tr>
<tr>
<td>Jose</td>
<td>✓</td>
</tr>
<tr>
<td>Dante</td>
<td>✓</td>
</tr>
<tr>
<td>Naushina</td>
<td>✓</td>
</tr>
<tr>
<td>Cole</td>
<td>✓</td>
</tr>
<tr>
<td>Irma</td>
<td>✓</td>
</tr>
<tr>
<td>Totals</td>
<td>6/6 met</td>
</tr>
</tbody>
</table>

---

**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 coach or 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.

---

**Sample Team Meeting Agenda**

- Come to meeting having already analyzed your own student work and shared the data with the team.
  - Review Task (2 min)
  - Predict (what were your predictions before you looked at the work) (2 min)
  - Go Visual: record patterns across classrooms (if relevant) (4 min)
  - Observe (4 min)
  - Infer (4 min)
  - Plan for FIRME Action (8 min)
  - Commit to next steps (2 min)

---

**Debrief and Apply**

- What struck you about the protocols?
- How might you adopt/adapt Data-Driven Dialogue and Criteria Analysis in your own work?
- What might be the impact on teachers and/or students?
# What Teacher Teams Do to Maximize the Impact of Formative Assessment

## My Biggest Take-Away

![Enjoy Thank You Image]

## Learning Targets: We Are Learning to..

- Facilitate teams in learning about and applying:
  - A four-step formative assessment cycle
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  - Principles and techniques for effective feedback

## Agenda

- The Formative Assessment for Results (FAR) Cycle: Research and Rationale (DONE!)
- Communicating Success Criteria to Student
- Facilitating Criteria Analysis and Data-Driven Dialogue - Simulation
- Providing Effective Feedback

## A Trip Around the FAR Cycle

- Communicate learning targets and success criteria (.75)
- Give tasks w/ success criteria
- Formative evaluation (.90)
- Facilitate Data-Driven and Criteria Analysis “Know thy impact”

## What kind of feedback positively impacts student achievement? (130 Studies)

- 1/3 of studies: Worsened achievement
- 1/3 of studies: Improved achievement

## Turn and Talk

- What type of feedback do you think improved student performance?
- What type might have worsened performance?

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**Dylan Wiliam: Feedback**

• What does Wiliam say distinguishes effective from ineffective feedback? What do you think of his ideas?

• What is your reaction to Wiliam’s statement that praise is actually worse than no feedback at all?

**Definitions of Effective Feedback**

“Effective feedback can be thought of as feedback that encourages students to think and act like learners and results in deeper learning.”  
– Jan Chappuis, 2015, p. 94

Effective feedback causes thinking and moves learning forward.  
– based on Dylan Wiliam, 2009

**Ingredients of Nutritional (Effective) Feedback**

1. Goal-Oriented (tied to learning target, criteria)
2. Concrete and Specific (success and next steps)
3. Non-judgmental (using evidence)
4. Calibrated (focused on a few priorities)
5. Timely (during instruction)
6. Scaffolded (minimal guidance provided; students do the thinking)

---

**What kind of feedback positively impacts student achievement?**

1/3 of studies: Worsened achievement  
1/3 of studies: No impact  
1/3 of studies: Improved achievement

**Ego-centric**  
Grades  
Judgment  
Criticism  
Praise of the student

**Learning or Task-centric**  
Descriptive information about their performance in relation to learning targets & success criteria

---

**Ingredients of Nutritional (Effective) Feedback**

- Calories  
- Calories from Fat  
- % Daily Value  
- Total Fat  
- Saturated Fat  
- Trans Fat  
- Cholesterol  
- Sodium  
- Total Carbohydrate  
- Dietary Fiber  
- Sugars  
- Protein  
- Vitamin

Adapted from: AOI Moos and Brockerhoff, 2009.
Essential Question

• What do teacher teams do to maximize the impact of formative assessment?
What Teacher Teams Do to Maximize the Impact of Formative Assessment

Shaping Up Our Learning

- Something that squares with my beliefs...
- Three important points...
- A question circling in my head...

Post-Session Evaluation

Take our 3 minute survey!

kickup.co/2019F
SESSION ID: 2328

NOTE: Session ID should be in all CAPITALS and is case-sensitive.