VIDEO DESCRIPTIONS

Chapter 3: Teaming to Learn

Overview: The videos in this chapter illustrate how instructional leaders and teacher teams refocused their traditional PLC structures to be truly centered on student learning.

Video 3-1: Principal and Division Chair Interview, Lyons Township High School	Dr. Brian Waterman, principal of Lyons Township High School, and Karen Raino, Division Chair, discuss the power of purposeful protocols to ensure that student learning is emphasized during Impact Team meetings.
Video 3-2: Teacher and Principal Testimonials, Reeds Spring School District	Susi Mauldin, Grade 6 communication arts teacher, talks about impact of the ITM.
Video 3-3: Teaching and Learning Coach, Kelsey Norman Elementary, Joplin, MO	Hope Strasser, Teaching and Learning Coach, talks about how collaboration supports classroom clarity.
Video 3-4: Principal Testimonial, Julie Munn, Kelsey Norman Elementary, Joplin, MO	Julie Munn, principal, talks about the ease of the EAA Team Meeting Protocol—Analyzing Student Work.

Strengthening **Student Efficacy**

The Formative Assessment Process in Action

"Assessment for learning happens in the classroom and involves students in every aspect of their own assessment to build their confidence and to maximize their achievement."

Stiggins & Chappuis, 2006

Mastery Moment: Describe the best experience you have had in helping students set goals and achieve them? What conditions were in place that led to your success?

THE WHAT: FORMATIVE ASSESSMENT UNPACKED

Quality formative assessment that involves students in every aspect of their own assessment utilizes pedagogies that are effective in strengthening student efficacy. The benefits of strengthening student efficacy are well documented (Margolis & McCabe, 2006). Students with a strong sense of efficacy are more likely to challenge themselves with difficult tasks and be intrinsically motivated. Students with strong efficacy will put forth a higher degree of effort to meet their goals, and they tend to attribute failure to factors that are in their control rather than blaming external factors. Self-efficacious students also recover quickly from mistakes and ultimately are more likely to achieve their goals. The Impact Team Model (ITM) utilizes quality formative assessment to create learning-focused relationships with students.

Formative assessment is a process not a product! It is not a single event or even a strategy. Stiggins (2007) states that assessment for learning happens in the classroom and involves students in every aspect of their own assessment to build their confidence and maximize their achievement. The role of the student as partner in the assessment process differentiates formative assessment from most other types of assessment. Black and William (1998) described formative assessment as

all those activities undertaken by teachers, and by their students in assessing themselves, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged. Such assessment becomes "formative assessment" when the evidence is actually used to adapt the teaching work to meet the needs. (p. 2)

Nationally, formative assessment has been misunderstood. It has been thought of as an add-on or something extra after teaching has occurred. In actuality, formative assessment is learning and is effective teaching. Typically, students have not been involved in the formative assessment process. It is something teachers have done to them and not with them. Students involved in the formative assessment process are able to

- Compare their work to models of success;
- Self- and peer assess accurately;
- Use feedback to monitor and accelerate their learning;
- Give quality, accurate feedback to peers and the teacher;
- Set realistic, accurate learning goals; and
- Reflect on their learning and learn from their mistakes.

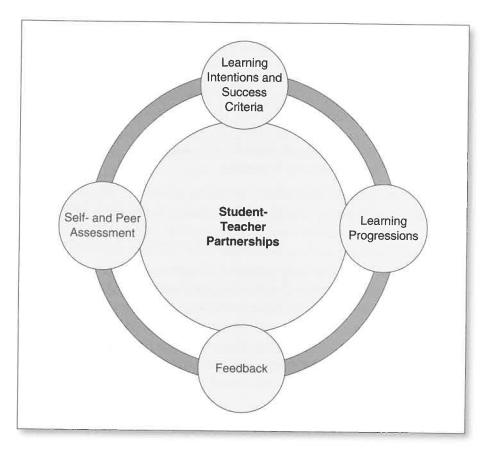
5 Core Practices

National and international researchers have identified five core practices of quality formative assessment (Heritage, 2008):

- 1. A classroom culture in which students and teachers are partners in learning is crucial. A high degree of relational trust must be established for learning to flourish.
- 2. Learning goals and/or intentions and criteria for success are clearly identified and communicated to students.
- 3. Learning progressions clearly articulate the subgoals of the ultimate learning goal.

Chapter 4. Strengthening Student Efficacy • 43

- 4. Students are provided with evidence-based feedback that is linked to the criteria for success.
- 5. Both self- and peer assessment are important for providing students the opportunity to think metacognitively about their learning.



Core Practice 1: Learning-Focused Relationships

The student-teacher partnership is at the core of the formative assessment process. Without this partnership, formative assessment falls flat! It is crucial for teachers and students to develop learning-focused relationships. Formative assessment puts students at the center. It promotes and gives first priority to students understanding their learning.

Core Practice 2: Learning Intentions and Success Criteria

The first step in the formative assessment process is to define the overarching learning goals or *learning intention* for the cycle of learning. The ultimate learning intention is represented by district priority standards

that are determined from the state standards. Learning intentions are written in student-friendly language so students clearly understand the goal for learning.

Teachers develop overarching learning intentions that focus their learning cycles. They then develop their daily learning intentions based on the progression of learning (content) and strategies (process) that teachers teach so students master the standard. Daily learning intentions or teaching points are responsive to student needs and are written in student-friendly language. It important to note that the teaching point or daily learning intention doesn't change daily, because students need time to practice and get feedback. Practice makes perfect!

Success criteria describe successful attainment of the learning intention.

Sometimes success criteria are referred to as *look-fors*. Success criteria help students understand what to look for during the learning and what it looks like once they have learned. Quality success criteria make the learning clear for students and teachers alike. Success criteria can be illustrated best with students when: using exemplars, creating worked examples with students, analyzing samples of strong and weak work, and having students identify success criteria in the latter examples. Ultimately they identify the significant aspects of student performance that are assessed and tested related to curriculum expectations. Success criteria are directly connected to a product or performance (e.g., discussion, a written task, a diagram, etc.). Success criteria can be process based and/or content based.

Example

Overarching learning intention:

We are learning to determine main ideas and supporting details in text.

Daily learning intention:

Today we are learning to create and complete a graphic organizer that illustrates the main idea and supporting details of an article.

Success Criteria:

- Create an organizer that organizes your thinking (main idea and key details).
- Write a main idea statement—place appropriately in your organizer.
- Paraphrase at least three strong key details that support the main idea place appropriately in your organizer.

Chapter 4. Strengthening Student Efficacy • 45

Once teachers have collaboratively determined the success criteria for a given product or performance, the success criteria need to be communicated to students. Collaboratively examining student work, exemplars, and creating worked examples with students are effective strategies for teachers to begin to communicate or co-construct the success criteria for a task or activity aligned to unit or lesson learning intentions. Although this may take substantial time in classrooms to define the success criteria, there are tremendous benefits. Shepard (2006) explains:

[W]hen teachers help students to understand and internalize the standards of excellence in a discipline—that is, what makes a good history paper or a good mathematical explanation—they are helping them develop metacognitive awareness about what they need to attend to as they are writing or problem solving. Indeed, learning the rules and forms of a discipline is part of learning the discipline, not just a means to systematize or justify grading. (p. 631)

Core Practice 3: Learning Progressions

Teachers and students utilize learning progressions to determine the focus or overarching learning intention for their learning cycle. Learning progressions clarify the pathway that students are expected to progress in a domain. The progression identifies the knowledge and skills that students need to meet to reach the overarching learning goal. The progression also defines the prerequisite knowledge and skills as well as a pathway for future learning.

CCSS Learning Progression Example: Reading for Literature Anchor 2

Grade Level 2	Grade Level 3	Grade Level 4	Grade Level 5
Identify the main topic of a multiparagraph text.	Determine the main idea of the text.	Determine the main idea of the text.	Determine two or more main ideas of a text.
	May infer main idea from key details	May infer main idea from key details	May infer main idea(s) from key details
Identify the specific focus of specific paragraphs within the text.	Recount the key details. Explain how they support the main idea.	Explain how the main idea is supported by key details.	Explain how main ideas are supported by key details.
		Summarize the text.	Summarize the text.

Teachers develop their daily learning intentions or teaching points based on the overarching learning intentions using the learning progression to support scaffolding and differentiated instruction. In addition, teachers teach students strategies or approaches to access and master the standard. A deep understanding of the learning progression allows teachers to scaffold the learning for students. The progression gives teachers a defined pathway that ultimately supports them in making decisions that are best for individual students.

The rate of individual students' progress may vary along the learning progressions, but progressions should ultimately connect the knowledge, concepts, and skills students develop as they evolve from novice to more expert performances (Heritage, 2008). This gives teachers and students an explicit pathway for learning. Feedback based on the success criteria provides both teachers and students with descriptive and constructive information on exactly where the student is in relation to the learning goal. Teachers and students should be able to see and understand the scaffolding they will be climbing as they approach (Stiggins, 2005, p. 327) the overarching learning intention or goal. In addition, if learning is derailed at any point, a teacher and student can identify the misconception and then make midcourse corrections.

Overarching and daily learning intentions or goals are the critical first steps in the implementation of the formative assessment process. Research around goal orientation indicates that students are more likely to be "challenge seekers" than "challenge avoiders" (Meyer, Turner, & Spencer, 1997) when motivated by progress. The specific expectations set forth in state and national standards describe what students should know and be able to do at the end of the grade.

Usually the standards need to be expressed in grade-appropriate, student-friendly language and/or broken down into smaller increments, particularly when differentiating to address diverse learning needs and levels of student readiness.

Core Practice 4: Evidence-Based Feedback

The formative assessment process is really *all about* feedback. For deep implementation to occur, feedback must be integrated into all components of the formative assessment process. Feedback is reciprocal: feedback to the student from the teacher, from the student to the teacher, from and to peers, from and to self.

So what does *good feedback* look like? Sound like? Feel like? First, we need to define feedback. Effective feedback provides critical information about where the student is in relation to the learning goal and what they

Chapter 4. Strengthening Student Efficacy • 47

need to learn next. The litmus test of effective feedback is when a student is able to answer the three feedback questions:

- 1. Where am I going? (Feed-up)
- 2. Where am I in the learning? (Feed-back)
- 3. What do I need to learn next? (Feed-forward)

Since Black and Wiliam (1998) published their seminal research, *Inside the Black Box*, identifying feedback as a way to double the rate of student learning, feedback has been recognized as being integral to student success. Effective feedback is directly connected to what criteria or competencies the student needs to know and do in relationship to mastering school and district priority standards. Nicol and Macfarlane-Dick (2005) list seven principles of good feedback practice:

- 1. It clarifies what good performance is (goals, criteria, expected standards).
- 2. It facilitates the development of self-assessment in learning.
- 3. It provides high quality information to students about their learning.
- 4. It encourages teacher and peer dialogue around learning.
- 5. It encourages positive motivational beliefs and self-esteem.
- 6. It provides opportunities to close the gap between current and desired performance.
- 7. It provides information to teachers that can be used to help shape teaching. (p. 1)

To give and/or receive feedback with openness and as an opportunity to progress, a classroom culture of trust must be created. Feeling safe allows for the feedback to be heard. Reciprocal feedback is the *heart and soul* of the formative assessment process. Feedback "lives" in all the Impact Team Model Purposeful Protocols.

Core Practice 5: Self-Assessment, Peer Assessment, and Goal Setting

Students must be taught how to self- and peer assess and to set goals. Therefore, teachers must model using think aloud during these core practices. Rollheiser and Ross (2000) describe a four-stage model for teaching students to self- and peer assess.

Stage 1: Define together with students the success criteria that will be used to assess their learning.

Stage 2: Teach students how to apply the criteria. This can be done successfully through explaining and modeling using a sample of student work.

Stage 3: Give students descriptive feedback on the quality of their self- and peer assessments. This means that teachers have to confer with students and give feedback to lift the level of peer-to-peer feedback.

Stage 4: Partner with students to develop individual learning goals and action plans.

Teachers must conference frequently with students to ensure that selfand peer assessment is accurate and reliable. Teachers must give feedback to students on the feedback students give to each other to ensure reliability; this is called feedback on feedback. Feedback on feedback is crucial to the success of quality self- and peer assessment. Although this takes time, it is time well spent.

After students have received feedback from self- and peer assessment, they set learning goals. Students take the following actions to ensure that feedback is received from their peers, teacher, and self:

- Create individual learning goals and/or action plans.
- Collect student work in an e-portfolio to show progress and mastery for focus standards.
- Revise their work to demonstrate that they have used the evidencebased feedback to progress in their learning.
- Reflect on their learning using evidence-based feedback to determine their strengths and next learning steps.

It is crucial that teachers explicitly model for students how to take action based on the feedback they have received from their peers and their teacher. Teachers model how to set learning goals for students and give evidence-based feedback about the reliability and validity of student learning goals. Teachers hold students accountable for the goals they set and guide students to monitor goals for themselves. In addition, teachers model how to reflect on their goals, monitor their goals, revise their goals, and make midcourse corrections when the need arises.

Short-Term Goals: Students use the success criteria for the assignment or assessment task to create individual, short-term, learning goals. Students highlight any criterion they did not meet and use the criterion to set individual learning goals.

Chapter 4. Strengthening Student Efficacy • 49

Long-Term Goals: Students analyze how they are doing overall in a course or subject in relationship to the short-term goals they create. They may use unit-based learning targets to take stock of how they are doing overall in relationship to what they are supposed to learn in that particular unit. Again, students must be explicitly taught how to do this. Teachers use think aloud regularly and model for students how to do this and then gradually release responsibility to the students. This will result in ongoing coaching and feedback to ensure that students are creating effective individual learning goals.

THE WHY: RESEARCH AND REASONS

Reason 1: This practice increases confidence and self-efficacy. Confidence and efficacy play a role in meaningful self-assessment and goal setting. Ross (2006) points out that when teachers explicitly teach students how to set appropriate goals and assess their work accurately, teachers can promote an upward cycle of learning and self-confidence. When students demonstrate mastery, self-efficacy is strengthened.

Reason 2: This practice increases achievement. Meta-analysis of studies into formative assessment have indicated significant learning gains across all content areas, knowledge and skill types, and levels of education when formative assessment is used. Terrance Crooks (1988) reports that effects sizes for summative assessments are consistently lower than effect sizes for formative assessments.

Hattie's (2009) synthesis on self-reported grading/student expectations reported a 1.44 effect on the learning. This effect translates into over 3 years of learning in 1 year's time. This influence involves the teacher understanding what the student's expectations are. Then the teacher pushes the student to exceed those expectations. Once the student exceeds her own expectations, she gains confidence in her ability.

Reason 3: Formative assessment personalizes teaching. The formative assessment process allows the student-teacher partnership to determine what standards and/or competencies students already know and to what degree. Teachers and students can make decisions together regarding instructional next steps. In addition, teachers can create appropriate lessons and activities for groups of learners or individual students and then reassess.

Reason 4: Collaborative learning increases efficacy. Regularly engaging students in peer assessment gives students the ability to understand their own strengths and learning challenges. When students create learning goals and monitor their goals, it creates ownership of the learning. Owning the learning is key to engagement and motivation. Bandura (1994) also concludes that cooperative learning strategies have the dual outcome of improving both self-efficacy and academic achievement.

Reason 5: Students learn lifelong skills. Engaging students regularly in the formative assessment process supports their development of valuable lifelong skills such as self-evaluation and self-regulation. Specifically, *self-regulation* is defined as the capacity to alter behaviors. It enables people to adjust their actions in a wide range of social, situational, and academic demands (Baumeister & Vohs, 2007). Students learn what it takes to learn—perseverance, effort, and learning from mistakes.

THE HOW: THREE PURPOSEFUL PROTOCOLS

The ITM relies on three of the eight protocols to ensure fidelity of the formative assessment process into classroom culture.

- Evidence Analysis Action (EAA) Classroom
- Lesson Study
- Microteaching

We define *fidelity* as ensuring that students are involved in every aspect of the formative assessment process. The word *fidelity* does not imply that implementation of the process is linear or that every teacher has to implement the process in the exact same way. We have found that implementation is quite messy and since classroom management is key to the successful implementation of the process, implementation evolves differently from class to class. However, it is important that the five key components of formative assessment provide a foundation for implementation.



EVIDENCE • ANALYSIS • ACTION (EAA) IN THE CLASSROOM

The ITM uses a classroom protocol (Evidence • Analysis • Action [EAA] Classroom) to operationalize the five core formative assessment practices. The classroom protocol has three phases:

- 1. Evidence
 - Learning Intentions
 - Success Criteria
- 2. Analysis
 - Self- and Peer Assessment
 - Feedback
- 3. Action
 - Goal Setting
 - Revision

Chapter 4. Strengthening Student Efficacy • 51

The three phases combine to create a cycle of learning in which students and teachers partner together during each phase. Each phase of the protocol supports teachers in deep implementation of the formative assessment process. The length of each learning cycle is determined by curricular goals and student need. Impact Teams ensure that students know what they are expected to know, understand, and do by designing learning cycles in incremental steps to build student knowledge and skills.

Team Activity: With your team, use the EAA Classroom Rubric to assess the implementation of the formative assessment process. Go over each phase and component with your team. What components are you successfully implementing? What components do you need to focus on?

EAA Classroom Success Criteria (NY = Not Yet, S = Sometimes, U = Usually)	NY	S	U
(1) EVIDENCE			
Learning Intentions (LI) and Success Criteria (SC)			
Teacher explains and models using samples of student work or exemplars to illustrate the success criteria of the perspective product or performance.			
Students can articulate the learning intention and success criteria.			
Students engage in co-construction of the success criteria with their classmates and teacher.			
Students can identify success criteria in student work samples and exemplars.			
Students reflect regularly using essential questions connected to big ideas.			
Assessment Tools			
Rubrics and or checklists reflect the learning intention and success criteria aligned to focus learning progression/standard(s).		-	
Exemplars are annotated by the success criteria and are visible to students (notebooks, learning management system [LMS], classroom environment).			
Samples of student work are used so students can practice applying the success criteria (varying degrees of proficiency).			

(Continued)

(Continued)

EAA Classroom Success Criteria (NY = Not Yet, S = Sometimes, U = Usually)	NY	S	U
(2) ANALYSIS			
Peer and Self-Assessment, Feedback			
Teacher models how to self- and peer assess using samples of student work. Teacher thinks aloud while modeling the process.			
Teacher models how to give and receive evidence-based feedback in a respectful manner. Feedback language stems and frames are posted for students to use during this process.			
Students use rubrics and/or checklists when engaged in self-assessment and peer assessment.			
Students get regular practice applying the success criteria.			
Students can identify success criteria in other's work.			
Students can give feedback based on the success criteria in a respectful manner.			
Students engage in reflective dialogue with peers and teacher based on rubrics and/or checklist.			
Students get regular feedback from teacher to lift the accuracy of their self- and peer assessments.			
(3) ACTION			
Goal Setting, Revision, Feedback		_	
Teacher models how to set learning goals, make action plans, revise student work, and reflect using evidence-based feedback.			
Students reflect on their strengths and next steps based on feedback from peer and self-assessment and teacher.			
Students create personal learning goals based on feedback.			
Students revise assessment product based on feedback tied to rubric and/or checklist.			
Students keep track of their progress and mastery of Focus Standards (they have a way to organize their learning).			

Modeling Each Component: It is important to note the importance of explaining and modeling each of the five practices of the formative assessment process with students. Think aloud is an important strategy to

Chapter 4. Strengthening Student Efficacy ● 53

use while modeling so students can get a window into the thinking of the learner. All the components of the formative assessment process must be modeled and taught to students.

Teachers can model each component or attribute using anonymous samples of student work or they use a sample of work they coconstruct with the students in class. Teachers gradually release responsibility and then provide constant feedback and coaching to ensure each phase of the classroom protocol is done with fidelity to ensure reliability and validity of students' peer and self-assessments and students' learning goals and action plans. Students must explicitly be taught each component of the process.

EAA Classroom Protocol: Description

- (1) **EVIDENCE**: Three components of the formative assessment process are introduced during the first phase of the EAA protocol.
 - Learning Intentions and co-construction of success criteria
 - Learning progressions
 - Evidence-based feedback

This phase is the most important phase in the classroom. During this phase expectations are set *with* students. When implementing the formative assessment process, students and teachers must have a crystal clear understanding about what is expected and what quality work or evidence looks like. The evidence can be co-constructed through inquiry, can be modeled from the teacher, can be modeled from other students, or can be determined by analyzing examples of strong and weak work so that students and teachers come up with a shared understanding of what proficiency is.

- **(2) ANALYSIS:** The two components of the formative assessment process that are operationalized during this phase of the EAA protocol are
 - self-assessment and peer assessment and
 - evidence-based feedback.

During this phase, students analyze their work through the lens of the learning intention and success criteria. Success criteria are embedded in either a checklist or a rubric. The assessment criteria on the rubric are directly aligned to the standards and provide evidence of student learning.

The Ladder of Feedback: Typically teachers develop classroom norms to ensure that students are giving constructive and respectful evidence-based feedback. The "Ladder of Feedback" (Perkins, 2003) is a

protocol or structure that establishes a classroom culture of trust. The Ladder of Feedback guides students through four steps:

- 1. Clarification
- 2. Values
- 3. Concerns
- 4. Suggestions

The first step of the ladder gives the reviewer (Student A) a chance to ask the assessed (Student B) clarifying questions about the student work. In Step 2, Student A identifies something they value in Student B's work to help him or her build on strengths. During Step 3 of the ladder, Student B raises concerns. During Step 4, the reviewer makes suggestions for improvement. These suggestions are feedback and should offer Student B some ideas on next steps.

Before this protocol, the teacher models this process for students. It is important to note that sentence stems and phrases should be brain-stormed for each phase of the process to ensure that students develop a language for evidence-based feedback.

Possible Feedback Stems:

- 1. Clarify:
 - What would you like me to focus on during our review?
 - Can you describe what you wanted to learn?
 - Help me understand what you wanted to convey.
- 2. Value:
 - I thought this was very effective . . .
 - I appreciate the way you illustrate . . .
 - This worked very well . . .
- 3. Concern:
 - I wonder if . . .
 - It seems to me that . . .
- 4. Suggest:
 - What if . . .
 - Maybe you could . . .
 - Another idea may be to . . .

Note: Ladder of Feedback in Appendix A-9

Chapter 4. Strengthening Student Efficacy • 55

(3) ACTION: During the action phase of the EAA classroom protocol, students are taught to take action based on the evidence-based feedback given during peer and self-assessment. Goal setting and revision are key components to effective implementation of the formative assessment process into classroom culture. Teachers partner with students to ensure that goal setting is not a separate event that has little connection to what students are learning. Teachers must explain and model effective goal setting and give students ample opportunities to practice goal setting. Students must be given feedback on the goals they set so they learn how to set and monitor their goals.

Gregory, Cameron, and Davies (2011) suggest a 1- to 3-month period to give students a reasonable length of time to make noticeable improvement. They suggest three ways to help students set learning goals:

- 1. Break down general goals into manageable pieces with students
- 2. Model how to fill out goal setting planning frames so students can see how using a frame can help them set goals
- 3. Have students interview one another about their learning goals so students can clarify and revise their goals if necessary

Planning Frame Example:

To make progress at I could
How I plan to do this is
I will do this by
I will know I am successful by using the following evidence:

Peer Interview Example:

- 1. Can you accomplish your goal?
- 2. How did you determine the time frame to accomplish your goal?
- 3. How will you know you are making progress?
- 4. What evidence are you using to show others that you are making progress?
- 5. Explain the models of success you are using to help you achieve your goal.
- 6. Who do you think could help you reach your goal?

Note: Planning Frames in Appendix A-10



James wanted to empower students to own their learning in his freshman level World History Class. He used the EAA Classroom Protocol as a guide for successful implementation of the formative assessment process. The class has to answer the following essential question using the BEAST Writing Rubric (Appendix C-6) that the World History Impact Team coconstructed the previous summer.

Essential Question: Was Ancient Mesopotamia a civilized or uncivilized place to live?

James Milkert, Lyons Township High School, IL

Read the following transcription. Pay close attention to each part of the EAA Classroom Protocol. The transcription is based on a 50-minute class period.

(1) EVIDENCE

Coconstructing Success Criteria

James:

Today is a big day. The goal that we are going to work on today we are going to work on for the rest of the year. We will get there. It is going to be a challenge, but we are going to work hard and become great historians by the end of the year. Today we are going to use ROCKSTAR success criteria for two parts of our BEAST writing rubric: **Evidence and Analysis**.

Today we are going to co-construct the criteria for these two sections of our rubric. We will discuss it together, just like we did with the **Big Idea** category from our rubric. We will talk about what "rockstar" criteria looks like and how to do it. And then we will practice this week to get as close as we can.

Chapter 4. Strengthening Student Efficacy • 57

Brainstorm at your tables what you need to be successful for the EVIDENCE section and ANALYSIS section of our BEAST writing rubric.

Students:

Students discussed the criteria in table groups

James:

So what do you need to be successful on our rubric?

Students:

- We need to know how to get evidence.
- We need to know what evidence is credible or not.
- We need to know what sources to look at first for credible evidence.

James:

Why is that important?

Students:

If we make a claim, we have to have credible, reliable evidence to back it up.

James:

What else do we need to be successful?

Students:

- We need to know what the criteria means.
- We have to assess the credibility of the evidence.
- We have to be able to explain how the evidence supports our claim or big idea.

James:

Yes, we need to be able to analyze the evidence, or explain how the evidence supports our rubric. What are we trying to prove in our writing?

Students:

- We are trying to prove our point.
- We need to know a lot about the topic so we can back up our big idea or claim.

James:

Yes, that is perfect. We have to have credible evidence AND a lot of it to back up our claim.

(2) ANALYSIS

Modeling Peer Assessment

James:

Please take a blank Ladder of Feedback guide out and put it on your desk. You are going to complete one of these for a partner after you read their work. Practice with me first.

(James shows an example of his own writing on the document camera.)

This is my writing. I wrote it. I am feeling really insecure about my work and I am feeling a little defensive about it because I am not sure if it is any good. So take it easy on me. The way we give feedback is we start positive. What do you value about my work? You can use the feedback stems located in the template, if you want.

Students: I like how you put all the effort into your work. I can tell you worked hard on it.

James: Thank you for noticing, I stayed up late, and I worked really hard on this! Now I am listening to you because you noticed something of value related to my work. Okay now go to the next section of the template. Do you have any clarifying questions for me?

Students: Help me understand why you chose the facts you chose as the evidence.

I chose these facts because they were from a primary source. They are credible facts, and they back up my claim. Okay, now give me a suggestion. I get the feeling you don't feel very good about my work. What suggestion can you give me? You can use the sentence stems or come up with a suggestion on your own. What can I do next time to improve?

Students: Be more descriptive with your analyzing.

James: I am not sure what you mean. What does that mean to be more descriptive? If I have to analyze, what do I have to do?

Students: You have to go over it, and you have to explain the evidence.

James: Okay, so I have to explain the evidence better. I can do that.

Scaffolding Peer Assessment

Okay now you have 3 minutes to read over your partner's work and compare it to the model on the screen. Notice how I put the evidence in one color and the analysis in another color. Read your partner's work and highlight each section of the rubric in another color. Then use the Ladder of Feedback Guide to give your partner feedback. You have 3 minutes.

Students: Students read a partner's work and highlighted the evidence in one color and analysis in another color. They then gave feedback to a partner on the template.

Chapter 4. Strengthening Student Efficacy • 59

James: Okay, now talk with your partner. You have 3 minutes each. Give your partner some positive specific feedback and then give them at least one suggestion. (James then listened in to each partnership and gave them feedback on their feedback; James

took notes on the validity and reliability of students' peer-topeer feedback.)

James: (James sits with two girls and listens in on their conversation.) What did you say you liked?

Student 1: I liked how she used evidence to sound like she knew what she's talking about.

James: What part?

Student 1: Right here when she talked about trading, she included everything they traded.

James: Did you hear that, that is a compliment. What did she say?

Student 2: She liked how I used a lot of examples to back up my claim about trading.

James: That is good. That is very good. You used a lot of evidence and gave examples. Does she tell you what civilized looks like in her mind? Can you visualize "civilized."

Student 1: No, actually that is something that she needs to work on. She needs to give more examples about the ancient people being civilized.

(3) ACTION

Modeling and Scaffolding Goal Setting

James: I can set a goal for myself based on the feedback I get from my friends. Let me show you what I mean. Take a look at the screen. Here is a goal for myself. What do you think? Talk with a partner.

Students: It isn't very good. There are no details.

James: That is correct. I have to use the success criteria from the rubric to create specific goals that are measurable. Now take a look at this goal. (James puts an exemplar goal on the screen.) How is this different than my first goal?

Students: It is specific and very detailed. You used the success criteria in

your goals, and you explained what you had to do to be successful

in reaching your goal.

Great. Now you try. You have 3 minutes to write a goal using the James:

template provided. I will walk around and give you feedback on

your goals.

Team Activity: Read the classroom transcription with a teammate. Identify the criteria from each phase of the EAA Classroom Rubric in the transcription. What evidence can you find that illustrates that James is implementing the formative assessment process with his students?

What is similar or different from how you engage students in the formative assessment process?



Read about PS 9's journey implementing the EAA Classroom Protocol into primary classrooms written by Deanna Marco, founding principal of PS 9 in Staten Island,

As a PreK-2 school with only two to three classes on a grade level, consistency and vertical alignment was crucial. As a school, we began to brainstorm a system and common language that would make sense for students of all ages. The staff agreed to try out the stoplight system: Green—I got this; Yellow—I tried, but need some help; and Red—I need help. We began using this system across all structures of the school day including basic things such as line up, clean up, playtime, and so on. What we found was so surprising: Students, as young as 4 years old, were being really honest about their needs. The teachers quickly shifted the language into instruction by asking students to use the visual stoplight we created to self-assess themselves after a mini lesson and during independent work time, and again, students were reflective and truthful. Early on students began to realize that is was not only acceptable to need help, but also encouraged to express yourself when you do not understand something. Developing this trust with students set the tone for peer assessment.

As teachers gained greater understanding of the standards, they began to create rubrics and checklists using standards-based success criteria, which provided both the teachers and the students with clear expectations for their learning. We created a school-wide template for success criteria with the language of the stoplight system built into to the document to provide students with a familiar structure, format,

Chapter 4. Strengthening Student Efficacy • 61

and language across grade levels. We slowly began to model self-assessment with success criteria and exemplar pieces of work and invited students to do the same. Our language was simple: "What did you do well?" and "What are your next steps are?" We were amazed at how quickly students were able to identify their needs and saw a dramatic improvement in their work immediately. Admittedly, we went success criteria crazy!

Currently, our focus is on peer-assessment. Using success criteria and flexible partnerships, students work together to provide one another with a "Glow" and a "Grow." A glow is a statement of positive feedback, and a grow is a next step. Teachers co-constructed language stems to use when providing glows and grows. Peer assessment has made a profound change in student work products. Our biggest discovery is that student work is remarkably improved when they know their peers are giving them feedback.

My journey with self- and peer assessment began just about a year ago. This work has transformed the way my teachers plan for instruction and their approach to feedback. There is a level of trust amongst students and teachers that has inspired us to keep moving on this journey.



Rubric-Bound Assessment Examples in Appendix-C



LESSON STUDY PROTOCOL

Impact Teams use lesson study to improve instructional effectiveness specific to the formative assessment process. It is a collaborative learning process in which teacher teams examine their practice from the planning stage through teaching, observing, and critiquing. The team creates a detailed lesson plan which one teacher teaches and the others observe. The focus of the observation is on the students' responses rather than the teacher's actions. Based on the evidence, the team revises the lesson. The teachers can then go and teach the lesson another time after making the appropriate adjustments.

Time

- 45–60 minutes for developing lessons
- 30–60 minutes for observing lessons
- 40–60 minutes for analyzing and refining lesson

Resources

- curricular materials for lesson development
- release time for team members to observe lesson
- projection (if possible)

Materials

• Copy of lesson plan, template for recording observation—teacher actions and student responses

itep	Procedure	Time Allotment
1	Lesson Planning	45-60 minutes
	 Team plans lesson to observe Team agrees on the teacher actions/strategies Team reaches consensus on the intended student behaviors for each teacher action (observable behaviors) Team identifies possible difficulties students might have Team determines the intervention for each difficulty Team constructs observation template that has agreed-upon teacher actions identified with a space to record student behaviors for each teacher action 	
2	Evidence: Team Observation	30-60 minutes
	 Team uses observation template to record student behaviors Team does not interact with students This can be recorded if classroom coverage is not available 	
3	Analysis: Lesson Analysis	40–60 minutes
	 Teams use the evidence of student behaviors to analyze what parts of the lesson were effective (why?) Teams use the evidence of student behaviors to analyze what parts of the lesson were ineffective (why not?) 	
4	Action: Lesson Refinement	10–20 minutes
	Team refines the lesson based on the analysis	

LESSON STUDY IN ACTION BY CAROL CRONK

Problem of Practice

One of the greatest struggles is to support the building of a mathematics lesson that measures what the teachers are expecting the students to learn. Lessons are frequently not as focused and not as successful as was intended. This is despite the fact that lessons were designed backwards from the learning intention(s) to creating the end of lesson task, to working out the task, and then discussing the outcomes and creating a scoring guide/rubric for the task.

The Solution

After creating a lesson to be taught to a specific group of students, and so much articulation about the learning intention and measuring student progress, the teachers still seemed to have trouble communicating to the students what they were supposed to learn from the lesson. We would plan for that communication to happen, but it simply failed to happen that way.

- 1. This year we decided to build not only learning intentions into the lesson plan but also the success criteria. This seems to be the piece that is missing.
- 2. As the development of the lesson progresses, we refer back to the unpacked learning intentions and success criteria to see if we are staying on track.
- 3. In addition, the table with the learning intentions and success criteria is part of the information provided explicitly to the students along with the mathematical task.

Our Impact

Teachers are remembering to communicate the learning intentions to the students and the *students* have a much better idea of what they are supposed to be learning during the lesson. In addition, the focus on the lesson is more streamlined and student exit cards show better conceptual understanding by the students.

The example below is from a group of high school teachers who are concerned about freshmen with gaps in their understanding. The lesson associated with these learning intentions is one of a set of lessons that

include *number talks* and *close reading* taught to students during the first 2 weeks of school.

Learning Intentions	Success Criteria
 Describe distributive property in your own words Give an example of distributive property Write and solve a numerical expression (distributive property) from a contextual situation Change numeric expression to algebraic expression and solve 	 Accurately describe distributive property "multiplying everything inside the () by number outside" Provide contextual (preferred) or numerical expression (acceptable) 2(\$5+\$3)=\$16 Represent a word problem as a numerical expression and solve 2(x+3)=16 Change a numerical expression to a algebraic expression and solve

Carol Cronk is currently a partner consultant for The Core Collaborative specializing in leading Impact Teams. She is a codirector for the Inland Counties Mathematics Project in California and previously served as the K–12 Mathematics Coordinator at the San Bernardino County Superintendent of Schools.

Activity: How would your team use the Lesson Study protocol to work on a problem of practice regarding implementing the formative assessment process?

Brainstorm a list with your team about what you would focus on using the Lesson Study Protocol.



MICROTEACHING PROTOCOL

Microteaching is organized practice teaching that provides Impact Team members the opportunity to try out small parts of lessons and/or strategies specific to the formative assessment process and receive constructive feedback for improvement. The mini lessons are recorded prior to the Impact Team meetings based on a strategy or approach that the team wants to learn—this need comes up typically while the team is using the EAA Meeting Protocol. The team observes the video and provides feedback to the practice teacher. Then each member of the team has an opportunity to try the technique observed. The team then summarizes what was learned after the session.

Chapter 4. Strengthening Student Efficacy • 65

Time

• 45–50 minutes

Resources

- Mini-lesson preparation by the "practice teacher"
- Video Recording

Materials

• Identified focus for feedback (criteria) / EAA Classroom Protocol

Step	Procedure	Minutes
1	Evidence • Video Observation	
	 Team determines "lens" for observation Criteria from the EAA Classroom Protocol can provide a lens for observation Team observes "practice teacher" engaging students in a specific formative assessment practice Team takes notes in connection with the criteria used for observing 	5–10
2	Analysis	
	Appreciative Feedback	5
	Team names specific strengths associated with criteria for observation	
	Self-Assessment and Clarification	5–10
	 Practice teacher reflects on the lesson after appreciative feedback Reflection may include strengths and possible next steps Team asks clarifying questions prior to team practice 	
3	Action	
	Team Practice	10
	 Team members practice the strategy observed with a partner or triad based on a future unit Each team member gets an opportunity to practice 	
	Feedback Summary	5–10
	Team collaboratively identifies one or two ways to improve teaching technique based on practice and feedback	

)

MICROTEACHING IN ACTION

The English Department chair wanted to build capacity in her building regarding student goal setting with the English 3 Team. The English 3 lead teacher had just volunteered for a coaching connected to the power of think aloud and using examples when modeling the core practices of assessment for learning.

The English 3 lead teacher recorded herself guiding students with peer review in her English class. The team observed the video together and then analyzed the video to determine strengths and possible next steps for how they would use the strategy in their own classrooms. They then had a few moments to practice with a colleague before they actually taught it with their own students.

ACTIVITY

Read the Impact Team Microteaching Notes with your team. How would you use this protocol with your team? What component of the formative assessment process would benefit from microteaching?

Microteaching Note Template

Evidence • Observation Criteria

Teacher: Clarify the evidence. Describe the approach and the criteria for success.

The teacher used think aloud to model using the ladder of feedback with her English class. The teacher adapted the feedback ladder to include:

- Value
- Clarify
- Suggestions

Analysis • Name Strengths

Team: What was effective? Why was it effective?

- The think aloud was very clear
- The students writing down the steps to using the ladder of feedback thought it was effective; they could use the model to support the process
- The template was effective, it had effective sentence stems for the students
- The students were engaged because they were filling in a blank template

Teacher: Would you continue to use this approach? Why? What would you change if you did it again?

Yes, the template worked really well. I would break up the process more and allow the students to talk more in between.

Chapter 4. Strengthening Student Efficacy • 67

Action • Practice and Summary

Team: How would you turnkey this approach in your classroom? How would you adapt this to fit your needs?

Each teacher shared with a partner how he or she would adapt it to fit where they were at in the curriculum. They did this in teams.

Team: What did we learn from this experience?

Think aloud is very important when teaching peer review. We need to model each step and not assume the students know what to do.

NUTSHELL

There are five core formative assessment practices. A learning focused relationship is developed when students are involved in all aspects of the formative assessment process. Implementing the formative assessment process uses pedagogies that also increase efficacy: collaborative learning, goal setting, self- and peer assessment, reflection, action planning.

The ITM utilizes three classroom-based protocols that support teachers in implementing the formative assessment process successfully in classroom instruction. Quality formative assessment is effective teaching.

CHECK-IN

Use the rubric below to assess your system or individual classroom to determine where you are at in implementation of the formative assessment process. There is a section labeled "next steps" after each category on the rubric; use this space to create goals for each section. What evidence would you collect to justify your reasoning?

EAA Classroom Success Criteria (NY=Not Yet, S=Sometimes, U=Usually)	NY	S	U
(1) EVIDENCE			
Learning Intentions (LI) and Success Criteria (SC)			
Teacher explains and models using samples of student work or exemplars to illustrate the success criteria of the perspective product or performance.			
Students can articulate the learning intention and success criteria.			

(Continued)

(Continued)

A Classroom Success Criteria (NY=Not Yet, Sometimes, U=Usually)	NY	S	U
udents engage in coconstruction of the success iteria with their classmates and teacher.			
udents can identify success criteria in student work imples and exemplars.			
cudents reflect regularly using essential questions onnected to big ideas.			
ssessment Tools		1	-
ormative assessments reflect the learning intention nd success criteria aligned to focus learning progression/standard(s) (rubrics/checklists)			
Exemplars are annotated by the success criteria and are risible to students (notebooks, LMS, classroom environment)			
Samples of student work are used so students can practice applying the success criteria (varying degrees of proficiency)			
CON ARIAY N/CHC			
(2) ANALYSIS Down and Salf-Assessment, Feedback			
Peer and Self-Assessment, Feedback Teacher models how to self- and peer assess using samples of student work. Teacher thinks aloud while			
Peer and Self-Assessment, Feedback Teacher models how to self- and peer assess using samples of student work. Teacher thinks aloud while modeling the process. Teacher models how to give and receive evidence-base feedback in a respectful manner. Feedback language stems and frames are posted for students to use durin this process.	g		
Peer and Self-Assessment, Feedback Teacher models how to self- and peer assess using samples of student work. Teacher thinks aloud while modeling the process. Teacher models how to give and receive evidence-base feedback in a respectful manner. Feedback language stems and frames are posted for students to use during	g		

Chapter 4. Strengthening Student Efficacy • 69

EAA Classroom Success Criteria (NY=Not Yet, S=Sometimes, U=Usually)	NY	S	U
Students get regular practice applying the SC.			
Students can identify SC in others' work.			
Students can give feedback based on the SC in a respectful manner.			
Students engage in reflective dialogue with peers and teacher based on rubrics and/or checklists.			
Students get regular feedback from teacher to lift the accuracy of their self- and peer assessments.			
Next Steps:			
(3) ACTION			
Goal Setting, Revision, Feedback			
Teacher models how to set learning goals, make action plans, revise student work. and reflect using evidence-based feedback.			
Students reflect on their strengths and next steps based on feedback from peer and self-assessment and teacher.			
Students create personal learning goals based on feedback.			
Students revise assessment based on feedback tied to rubric and/or checklist.			
Students keep track of their progress and mastery of Focus Standards (they have a way to organize their learning).			
Next Steps:			