Theron Blakeslee, left, and Lauri Bach, an 8th-grade U.S. history teacher in Kingsley, Michigan, review the video of her teaching.

ACCENTUATE THE FORMATIVE

MICHIGAN TEACHERS USE RUBRICS AND VIDEO TO IMPROVE THEIR PRACTICE

BY THERON BLAKESLEE, DENNY CHANDLER, EDWARD ROEBER, AND TARA KINTZ

Formative assessment is one of the most effective tools that teachers use to promote student learning, and watching yourself teach on video is one of the most effective ways to improve your teaching. As part of a project for the Michigan Department of Education, we worked with eight teachers in Michigan who are using videos of their teaching to improve their use of formative assessment practices.

In this article, we describe one of the rubrics we used and highlight some of the improvements that the teachers in our project discovered for themselves through this process. We also discuss how the learning teams we worked with are moving toward facilitating their own enhanced professional learning using classroom observations and the rubrics to provide actionable feedback to each other.

Lauri Bach,
8TH-GRADE U.S. HISTORY

Lauri Bach teaches 8th-grade U.S. history at Kingsley Middle School in Kingsley, Michigan. For the last three years, she has been a member of a school-based learning team studying formative assessment practices with her colleagues.

All teachers in her school are members of a learning team, where teachers read, discuss, and sharpen their ideas about implementing formative assessment.

The Formative Assessment for Michigan Educators (FAME) project of the Michigan Department of Education works with teams like this in about 160 districts throughout Michigan. FAME provides support and resources through regional coordinators, with the express purpose of studying and implementing formative assessment practices.

Bach's learning team has been meeting for three years. While teams

5 DIMENSIONS OF FORMATIVE ASSESSMENT

1. PLANNING
- Instructional planning

2. LEARNING TARGETS
- Use of learning targets
- Learning progressions
- Model of proficient achievement

3. ELICITING STUDENT UNDERSTANDING
- Activating prior knowledge
- Eliciting evidence of student understanding
- Teacher questioning strategies
- Rationale for questioning

4. FORMATIVE FEEDBACK
- Feedback from the teacher
- Feedback from peers
- Student self-assessment

5. INSTRUCTIONAL AND LEARNING DECISIONS
- Adjustments to teaching
- Adjustments to learning

RUBRIC: TEACHER QUESTIONING STRATEGIES				
DIMENSION	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
3.3 Teacher questioning strategies	The teacher is generally looking for the correct answer and often produces it if one or two students don't.	The teacher often scaffolds students' thinking to help them produce the correct answer.	The teacher often asks for elaboration or clarification of a student's answer.	The teacher often asks students to explain how they arrived at an answer or how their answer connects to another student's.

like this are a supportive place to discuss new teaching practices, they may not be set up to provide an essential component of improvement: descriptive, actionable feedback to each other about actual classroom practice.

So when we suggested to Bach and seven other teachers that we would like to observe in their classrooms, video their teaching, and then use rubrics to analyze and reflect on their teaching, they saw this as an opportunity for formative assessment on their own use of formative assessment.

Bach allowed us to sit in the back of her classroom with a video camera and record one of her classes for five days. Then she joined us later each day to watch portions of the video, talk about her teaching, and use a set of rubrics to determine her level of practice of formative assessment on five dimensions (see box on p. 25).

Bach is a strong teacher, and, not coincidentally, a strong learner. Even though she said she was nervous with the video camera in the back of the room, the first thing she wanted to know when we came together after her class was, "What can I do better?"

As researchers, we were not there to tell her what to do better. Our approach was to facilitate, asking, "Given what we've just seen of your teaching, where do you place yourself on each of these rubrics?"

As our discussion progressed and Bach used the rubrics to analyze her teaching, not only did she feel confident that many things she was doing were "right," she also discovered a few things she wanted to change. Would these improvements have occurred to her without actually watching herself teach? How reflective can we be about our own teaching when we're in the middle of it, guiding students through the class period?

OBSERVING TEACHING

The classes we observed were very active and highly engaging for Bach's students. Woven throughout her lessons were formative assessment strategies that helped her make instructional decisions and encouraged students to take ownership of their learning.

In one lesson we observed, students took on the roles of several Founding Fathers to re-enact the events leading up to the Supreme Court decision of *Marbury v. Madison*, establishing the concept of judicial review. Their learning targets were about developing an awareness of landmark cases and, in particular, an understanding of how the judicial branch of the federal government subsequently gained greater power. The final production at the end of class was short but informative, and students were enthusiastic about the work.

The formative assessment strategy at the end of this class was a self-evaluation of learning from this role-playing activity along with several other activities from the past few days, using scales — student-centered generic rubrics based on the learning targets. Bach's students self-assess often, tracking their progress over the course of a unit. Bach will ask, after this kind of self-evaluation, "How well do you think you're prepared for the test on Monday? Do you think there are some areas for you to work on? If so, come in for extra help during seventh hour."

These self-assessments aren't the only piece of formative feedback. Bach provides descriptive, actionable feedback during class and on written assignments, and the students are learning to evaluate each other's work and give peer feedback.

For example, in one class, students were paired to listen to each other's warm-ups and offer suggestions for making each other's work more specific. The task wasn't particularly successful on the day we observed, but Bach's reaction was to give students her own feedback on the process and let them know they would continue to practice this.

When we came back to observe a month later, students were asked again to give feedback to their peers. This time they used a rubric to evaluate their partner's diary entries — a summative activity to show what they had learned about the Industrial Revolution by creating a fictitious diary entry of a young person from that time period about the issues they faced working in the factories.

This time, there were many more instances of students who gave and received actionable feedback, and some could be seen adding to their papers afterwards. This demonstrated the effectiveness of the feedback and practice that Bach gave to the class in the intervening month.

The last activity for the day,

the exit ticket, engages students in metacognition about their learning (i.e. "Tell me some things you did to make your learning go well for you today"). One of the purposes of formative assessment is to give students ways to take more ownership of their learning, and being metacognitive is an important step. We want students to adjust their learning strategies in response to teacher and peer feedback as well as their own self-reflection.

The other purpose of formative assessment is for teachers to adjust instruction based on evidence of student understanding. Bach collects exit tickets and warm-ups to check every student's progress on almost a daily basis.

On one occasion, she gave as a warm-up: "Tell me one specific thing you learned yesterday about the Industrial Revolution." She makes decisions about the pace of the class and the necessity for review based on this evidence collected from students.

TEACHER QUESTIONING STRATEGIES

Bach set the tone for our first afternoon session when she entered the room asking, "What can I do better?" As we went through the class activities on video and coded each instance of her use of formative assessment with an appropriate description from the rubrics, she constantly had self-improvement as her frame of mind.

On the first day, she focused on the rubric about teacher questioning strategies (see table on p. 26).

The idea behind this rubric is that some types of questions might provide more insight into a student's understanding than others, thus giving teachers valuable information for making instructional decisions.

Bach noticed that she often asked questions at level 2 or 3, but rarely at level 4. Given her focus on "doing things better," it wasn't a surprise to see her trying level 4 questions the next day in class. When the opportunity arose, she asked several students, "How did you come up with that answer?" They seemed to enjoy talking more about their ideas.

It's not just discussion, and it's not just reflection on the day's highs and lows. It is an analysis of the day's work with rubrics that describe the practices we aim for.

CONDITIONS FOR SUCCESSFUL LEARNING TEAMS

Learning teams like Bach's need to be structured, planned, and facilitated to meet three conditions necessary for effective adult learning: 1) having a single purpose; 2) using a coach who asks probing questions; and 3) making connections between theory and practice (Kintz, Lane, Gotwals, & Cisterna, 2015).

Michigan's FAME learning teams satisfy the first condition by focusing on formative assessment. They strive to maintain that focus in each meeting, knowing that it can be tempting to go off agenda to discuss other school issues.

All FAME learning teams have coaches, and many are trained in Cognitive Coaching (Costa & Garmston, 2016) so that they know how to listen and ask probing questions, satisfying the second condition.

The third condition may be the most difficult to achieve. By design, learning teams are places to gather, read, and discuss. Connections between theory and practice may be addressed if teachers bring specific classroom instances to the group and jointly try to solve the problem of how formative assessment can be applied. Still, this is just conversation, not exactly practice.

This is where recording one's teaching and analyzing it using formative assessment rubrics becomes very useful, focusing on the connection between practice, as recorded from the day's lesson, and theory, as embodied in the rubrics.

What makes this approach to professional learning potentially powerful is this connection between theory and practice. It's not just discussion, and it's not just reflection on the day's highs and lows. It is an analysis of the day's work with rubrics that describe the practices we aim for.

FORMATIVE ASSESSMENT RUBRICS

The rubrics that teachers in our study have been using were developed over several years by two research teams, one with members from Michigan State University and one sponsored by the Michigan Assessment Consortium, a nonprofit coordinating body promoting effective assessment practices throughout the state.

The rubrics are based on five essential dimensions of formative assessment, each described by one or more subdimensions, as shown in the box on p. 25.

The rubrics do much of the work of guiding discussion with teachers as they reflect on their daily practice. However, we served as knowledgeable colleagues who asked questions that may have moved their reflection forward.

Reviewing one's teaching and analyzing it using rubrics might work fine for many teachers if they do this work alone. But analysis is enhanced when they do this with a colleague who can ask simple questions such as, "How could you have done that differently?" or "What does that rubric statement

mean to you for your practice?"

Importantly, the colleague is not the evaluator. The evaluation tool is the rubric. The basic questions for self-reflection with rubrics are: "Where am I currently on this hierarchy of practice? Where do I want to be? What can I do to get to that point?" The answers lie in the video of the teacher's teaching.

INSIGHTS INTO TEACHING

Bach was one of eight teachers in our study. Each of them could have been highlighted in this article because all are strong teachers with similar commitments to improving their practice. Every teacher we worked with gained insights into their teaching through this process.

Some insights, like Bach's described earlier regarding the types of questions she asks, could be seen as minor adjustments in teaching methods. Her decision to ask a different type of question would not be minor if it results in new insights that can be used to adjust instruction to the benefit of students.

This is what formative assessment is about, making frequent adjustments to teaching or learning strategies to help students move toward deeper understanding of the learning targets for the course.

Frequent adjustments happen only with frequent feedback. Teachers in our research project felt that they were getting their own formative assessment because the process of watching one's teaching and analyzing it using rubrics provides descriptive, actionable feedback.

As one teacher in the group said, "Adjustments to teaching — this is formative assessment in my mind. You're always watching and then decide: Do you keep going with your lesson plan because that was your lesson plan, or can you adjust on the fly and change it because of the feedback you're getting?"

Other examples of teachers' insights included:

This is what formative assessment is about, making frequent adjustments to teaching or learning strategies to help students move toward deeper understanding of the learning targets for the course.

- "I could make copies of the model research projects that are on the board so students can use them more conveniently."
- "I could have asked a question at that point to get them to figure it out, rather than telling them."
- "I see myself giving students the right answer. If I'm not always processing and thinking, sometimes I end up feeding them the correct answer. But then sometimes it's in my head: 'No! Don't give them the answer. OK, well what can I do?' and I know I should use those 'what,' 'why,' and 'how' questions as opposed to giving them the answer."

So why not expand the concept of formative assessment to include feedback that teachers get not only from their students, but from their own reflection on a day's lesson, with or without a colleague to help?

Teachers in our project were experienced professionals who had been working on formative assessment practices with learning teams and implementing the practices for at least a couple of years. We are very interested in how useful this approach will be with novice teachers, especially those who are just starting to implement formative assessment practices in their classrooms and want feedback.

Also, this approach could be used with any teaching improvement goals, not just formative assessment. We might argue that formal evaluation systems would be fair only if they provided this level of detailed feedback to teachers, with the opportunity for viewing actions that contribute to a certain rating. This would be a fundamental blending of teacher evaluation with professional development.

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