OVERVIEW OF THE RESULTS FROM RESEARCH ON THE 2013-14 FAME PROJECT

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Michigan State University (MSU) College of Education researched the implementation of the Formative Assessment for Michigan Educators (FAME) project during the 2013-14 school year, including studying:

- 1. Policy influences (both at the learning team and the individual teacher levels) of FAME and other initiatives;
- 2. Leadership and scale-up activities to expand the scope of the FAME program;
- 3. Impact of the FAME program on teacher practice;
- 4. Impact of the FAME program on students' learning and aspirations; and
- 5. Impact of the FAME program on students' achievement

Research on coaches, learning teams, individual teachers, and students was implemented. The full report summarizes the research data and findings from the multi-faceted approach to the study of the FAME program. This abstract summarizes some of the key findings.

OVERVIEW OF THE FAME PROFESSIONAL DEVELOPMENT PROGRAM

This is the sixth year for the MDE formative-assessment professional development project. Activities planned for 2013-14 build on those from previous years, particularly past evaluations conducted at the end of years two through five of the project, as well as the research conducted by the MSU research team in years three through five of the project (Gotwals, et al, 2011; Gotwals & Roeber, 2013; Roeber, et al, 2013).

<u>Purpose of the Study</u> – The purpose of this study was to determine how effectively members of voluntary learning teams are able to learn about formative-assessment strategies and use them in their classrooms. The ultimate goal of this professional learning model is to impact teachers' formative-assessment practices and to improve student learning. This research should help the Michigan Department of Education, as well as current and future project participants, better understand how to improve instruction and learning through formative-assessment practices.

RESEARCH MODEL – The model used for the 2013-14 FAME research is shown in the graphic on the next page. Note that while conceptually, the influence of the FAME program moves from left to right, there are interactions among each of the pieces, thus making the research effort a far more complex and difficult picture to untangle.

RESEARCH DESIGN – All coaches and learning team members were asked to participate in the research effort through being asked to complete a survey at the end of the school year. Members of the MSU research team attended some of the Launch Into Learning sessions for the Year 1 Learning Teams, as well as the Cognitive Coaching sessions for Year 1 and Year 2 & 3 Coaches. Other activities – such as observation and videotaping of learning teams, observation and videotaping of individual teachers using formative-assessment strategies, interviews with teachers who were observed, and interviews and surveys of students in the classrooms where students were observed, took place in a sample of the participating schools.

<u>SAMPLE</u> – To the greatest extent possible, the MSU Research Team continued the research using the implementation of the quasi-experimental procedures begun in past years for investigating the impacts of the formative-assessment professional development program on educators and students. While the set of coaches and learning team members are all volunteers, we continued to monitor the randomly selected sample of coaches and learning teams to observe and videotape.

We selected the sample and then recruited these coaches and learning teams to participate in 2012-13 based on whether the school as a whole scored above or below statewide levels of performance on MEAP, the state assessment program. If a coach or learning team did not wish to participate in the observation and videotaping portion of the research, the coach and learning team was replaced by a comparable coach and learning team, which will then was asked to agree to participate. Due to school closings, team changes and attrition, the original panel of six schools was reduced to three schools, each of which had participated in the FAME program in past years.

2013-14 FAME Research Model

Each of the boxes influences each other and feeds forward and back into each other (e.g., information about implementation at the learning team level or teacher practice level feedback back into the structure of the Michigan Department of Education FAME model).

Michigan Department of Education FAME PD Model

- Launch into Learning
- Resources
- Measured Progress
- Regional Lead Program
- Cognitive Coaching/Adaptive Schools...

Learning Teams

- Coach led
- Locally controlled and supported
- Diverse make-up
- Diverse activities
- Diverse implementation
- High depth of discussion about formative assessment content (combining theory and practice)

Teacher Knowledge

- Increased teacher knowledge of formative assessment practices
- Increased teacher beliefs/attitudes about formative assessment
- Improved teacher
- Beliefs about student learning potential
- (Do we want to address relationship between content knowledge and assessment practices?)
- Note: Can "beliefs and attitudes" be under the category of teacher knowledge?

Teacher Practice

- Increased use of formative assessment strategies
- More sophisticated use of formative assessment strategies (not sure what it is... is this moving FA from using tools to a process?)
- Shift in teacher noticing, emphasis on student understanding

Student Learning

- Change in student learning tactics
- Increased metacognition
- Improved selfperceptions as learners
- Increased student engagement

Student Achievement

- Increased achievement on instructionallysensitive assessments (local)
- Increased achievement on less instructionally sensitive assessments (MEAP, etc)

External Influences on Implementation of FAME Model

Influence of National, State, and Local Policies

• NCLB accountability, statewide assessment programs, educator evaluation; MCEE Influence of National, State, and Local Contexts

<u>INSTRUMENTATION AND RESULTS</u> – There are several ways in which data were collected, as described below. Key results are also reported.

<u>Leads</u> – The MSU research team studied the regional Leads in several ways. The Leads were observed, interviewed and surveyed by two of the researchers, who used the occasions when they were together with the Leads to informally interview them about their work, their learning, and their work with coaches and learning teams. Four research goals were identified for this aspect of the research program. These are:

<u>Question 1</u>—What are the expectations and activities of the Leads in the FAME program? Describe the Lead program. The work here also needs to look at the Lead program from the perspective of MDE and its contractor MP – what have they designed and implemented for the Leads?

<u>Question 2</u>—How do the Leads interact with the Coaches in their region of the state? How often? How much? In what ways?

<u>Question 3</u>—Do Coaches use Leads to guide their interactions with the Learning Teams? If so, how? <u>Question 4</u>—To what extent do Leads use resources provided by the FAME project (e.g., regional leads, Cognitive Coaching, Adaptive Schools, TFAP, and other resources)?

Based on their responses, Coaches are generally pleased with the support they receive from Leads. Over half of the Coaches received extensive support from the Leads, and all of the Coaches stated the Leads were available for assistance when needed. Coaches use the input of their Leads and/or Learning Team members when deciding on the agenda and topics to be discussed. The Coach determines whether or not there will be further communication with the Lead. Most of the Coaches realized it is a 'two-way street,' and know the Leads have resources available. The relationship between the Coach and the Lead and the extent of the support provided is often influenced by the relationship and proximity between the Coach and the Lead. If the Coach 'sees' the Lead often, then the Coach is more inclined to take advantage of the Lead's input. Coaches also understand the value of making decisions based on the interests/concerns of their team, and frequently involve them in the process.

By all indications, the FAME model of using Leads and Coaches is viewed as a valuable approach to support teachers' learning about formative assessment. The relationship between the Lead and the Coach is an important piece. Leads support Coaches in their own growth and understanding of their role as a Coach and the formative assessment process. Leads are to be there to provide answers, resources, and moral support so Coaches do not feel like they are working in isolation from other educators. According to Coaches, the most important supports provided include:

- Modeling of coaching skills
- Sharing resources
- o Pushing Coaches beyond their comfort level
- o Being available
- Offering encouragement

One challenge Leads and Coaches face is the ability to establish and maintain lines of communication. This was seen as critical a critical factor in promoting a supportive relationship.

<u>Coaches</u> – Surveys and observation of coaches in action with their learning teams were carried out. Each is described below.

Surveys - The MSU research team conducted a survey of coaches during the 2013-14 school year. The survey used many of the same questions used in past surveys so that trends in team composition and understanding of formative-assessment practices could be documented.

Coach surveys show that Coaches are familiar with the members of their Learning Teams and many (but not all) participated in Cognitive Coaching seminars. Coaches reported considerable confidence in their coaching skills and attribute this in part to the Cognitive Coaching program. Coaches reported they were somewhat or very familiar with FA strategies and used them from periodically to daily Coaches rated the FAMR resources differently:

o 48% rated TFAP Guide as "Very Helpful"

- o 39% rated the website as "Very Helpful"
- 44% rated the one-day Launch Into Learning as "Very Helpful"
- 82% rated Cognitive Coaching training as "Very Helpful"
- \circ 5% to 20% indicated that they did not use these resources.

Coaches identified several factors that contributed to their success as a coach:

- o Role in district (45%)
- Common meeting time (70%)
- Relationship with LT members (76%)
- o Knowledge of FA Process (74%)
- Experience in education (76%)
- o Administrator support (59%)
- Use of Cognitive Coaching tools and strategies (65%)

The formative assessment features most discussed in learning teams included:

- Use of FA tools (54%)
- Using learning targets (46%)
- o Planning for the use of FA (33%)
- o Providing descriptive feedback to students (33%)
- Helping students to use self-assessment (32%)

Coaches were asked with whom they spoke with about the FAME program and the topics they discussed. These findings are shown in Table A-14 (from the main report) below:

Table A-14
Audiences Coaches Spoke With About Various
Formative Assessment Topics

	Topics Discussed						
Audience	General FA Ideas	Use of FA Tools/Strategies in Classrooms	Facilitating FA Meetings	Benefits/Positive Impacts of FA	Challenges/ Constraints of FA	N.A.	
LT members	90.7	96.3	42.6	83.3	64.8	0.0	
Other teachers not on LT	60.8	62.8	7.8	64.7	25.5	15.7	
Other LT coaches	45.8	47.9	52.1	47.9	35.4	31.3	
Regional Lead	40.9	27.3	34.1	22.7	11.4	47.7	
Building principal or administrator	52.9	47.1	49.0	72.6	35.3	13.7	
Curriculum or instructional coaches	43.1	39.2	17.7	43.1	21.6	43.1	
Individuals from other schools or districts	49.0	41.2	19.6	52.9	19.6	37.3	

Interviews – Coaches that participated in the Cognitive Coaching and Adaptive Schools trainings were also informally interviewed about their work with their learning teams and their interactions with the Leads during each of the trainings.

Observation – In addition to surveys of all coaches, the MSU research team continued to conduct observations of coaches working with their learning teams throughout the school year. The focus of this effort was on the three continuing learning teams that had been observed and videotaped in the past.

<u>Learning Team Members</u> – Surveys and observation of learning team members were also carried out:

Surveys - MDE conducted a survey of the learning team members during the 2013-14 school year. As before, the surveys were developed with questions for learning team members on first, second, and third year teams. The survey took place at the end of the school year.

Learning team (LT) surveys showed that

- LT members know each others
- LT members reported no knowledge (16%), a little knowledge 42%), some knowledge (32%) or a lot of knowledge (11%) about FA
- o LT members reported they were somewhat familiar with FA strategies (less than Coaches) and used them from periodically to daily (again, less than Coaches)

Learning team members were also asked with whom they spoke with about the FAME program and what topics they discussed. These findings are shown in Table B-11 (from the main report) below:

Table B-11
Audiences Learning Team Members Spoke With
About Various Formative Assessment Topics

	Topics Discussed						
Audience	General FA Ideas	Use of FA Tools/Strategies in Classrooms	Benefits/Positive Impacts of FA	Challenges/ Constraints of FA	N.A.		
LT Coach	70.9	68.3	57.0	64.8	17.4		
LT members	77.0	77.8	70.8	66.7	5.8		
Other educators not on LT	57.7	52.3	49.6	27.5	15.3		
Building principal or administrator	52.9	47.6	49.5	37.3	19.3		
Curriculum or instructional coaches	32.7	27.0	27.0	21.9	51.0		
Individuals from other schools or districts	34.9	26.7	30.2	17.3	50.0		

Learning team members were asked about what are the most beneficial aspects of work on their Learning Teams. This is shown in Table B-12 (from the main report) below:

Table B-12
Most Beneficial Aspects of the Learning Team

Aspect of Learning Team	Percentages
Planning to use formative assessment in the classroom	62.9
Reflecting on using formative assessment in the classroom	63.7
Problem solving about formative assessment in the classroom	52.2
Sharing your ideas about formative assessment	73.9
Learning about formative assessment tools and strategies	62.5
Developing or finding new formative assessment resources	53.5
I have not seen a benefit from the learning team meetings	4.9

Table B-13 (from the main report) shows the types of training and support that LT members feel that they need to more effectively use formative assessment in their classrooms.

Table B-13
Types of Training and Support Needed to More Effectively Use Formative
Assessment in the Classroom

Types of Training/Support Needed	Percentage	
More knowledge about formative assessment	34.7	
More Learning Team training	28.2	
Additional Learning Team meetings	32.7	
Individual coaching and modeling of techniques	25.8	
Classroom observation protocols for formative assessment	30.2	
Classroom practice	56.1	
Resources and materials on formative assessment	45.2	
Building/district commitment to the initiative	27.4	
None	5.2	

Observation – The teams observed differed on whether or not they were able to maintain their focus on FA topics. Teams varied on how many topics they focused on during the school year, ranging from only general FA discussion to another team that discussed formative feedback, student evidence and formative assessment tools, and formative assessment strategies and instructional decisions. Coaches varied in their centrality to the LT (i.e., how much they "led" their LT). Coach questioning varied in the extent to which they asked probing questions. Coaches also varied considerably on the depth of feedback provided. The depth of content discussed at LT meetings varied from those that discussed theory and practice to a team that focused only on FA practice. Depth of discussion also varied between the teams observed; one team was able to get beyond one-way or parallel sharing and get to the point where discussion built on one another's ideas.

Learning Team Policy Survey Results – The MSU Research Team conducted a second survey of the FAME Learning Team participants. All participants in the 2013-14 FAME program (Learning Team members, whether first-, second-, or third-year) were included in the sample selected for the survey. The intent of this investigation was to answer two key questions:

- What is the association between experience in the FAME program and the enactment of formative assessment teaching practices?
- What is the association between contextual factors (e.g. state, district, administrative, collegial, and classroom contexts) and the enactment of formative assessment teaching practices?

The survey asked teachers to report the frequency of which they employed 17 different instructional practices. Indices were created to capture the average response for an individual, relative to the group mean, to each of these categories:

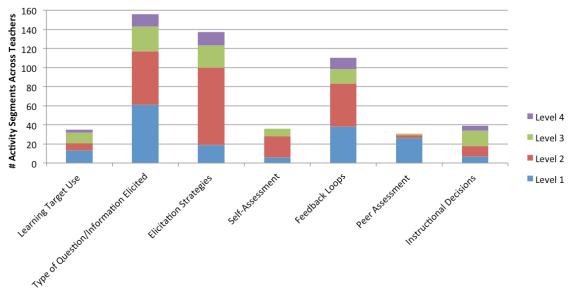
- State policy context;
- District context;
- Instructional program coherence;
- o Principal leadership;
- o Collegial relations;
- Student characteristics;
- o Teacher educational background, values, and beliefs;
- School organization; and
- o Formative assessment instructional practices.

The core finding from our analyses is that as FAME experience increases so, too, does the usage of FAME-related teaching practices. Due to the scale of the underlying variables, the exact frequency change is unclear. However, the results suggest that teachers see a significant boost in their second year and in their fourth year. This is relatively consistent with what would be expected, since the FAME program is designed as a multi-year professional development program. A second finding is that a teacher's view of students and the perceived amount of school support are both positively associated with use of formative assessment practices. How a teacher views their students is consistently positively associated with FAME practices across the entire sample as well as within subjects. In addition, the more teachers perceive support from their school, the more likely

they were to report using FAME related practices. Interestingly, this result does not appear to hold when we look within any given subject.

Teachers – A small group of teachers from the selected learning teams were recruited in order to videotape their classroom instruction. In addition to the surveys of volunteer learning teams and videotaping of each team meeting, the research team conducted observations of individual teachers in their classrooms. The focus of this effort was on volunteer educators from the first-, second-, and third-year learning teams that agreed to be observed. Each teacher was observed two or three times, typically for three consecutive days – in the fall (between October and December), the winter (December through February) and in the spring (between March-May). The goal of this aspect of the project was to determine how teachers implement the formative-assessment strategies and tools that they have selected for use. Videos were stored securely on a secure hard drive and a secure server or later analysis.

The figure below illustrates that the most frequently observed practices within activity segments were Questioning; Elicitation Strategies, and Feedback Loops, with substantially fewer instances of Use of Learning Targets, Self Assessment, Peer Assessment and Instructional Decisions. There were no upper level instances of teachers using Self Assessment and Peer Assessment and there are relatively few Level 4 codes for Use of Learning Targets and Instructional Decisions.



Students – Students in the classrooms where teachers were observed were surveyed and interviewed about their perceptions of the use of formative assessment practices in their classrooms, as well as their roles in the learning process in the classroom. These results are shown in Figures G-1 and G-2, respectively, from the main research report.

Figure G-1 Student Perceptions of FA Use in Their Classroom

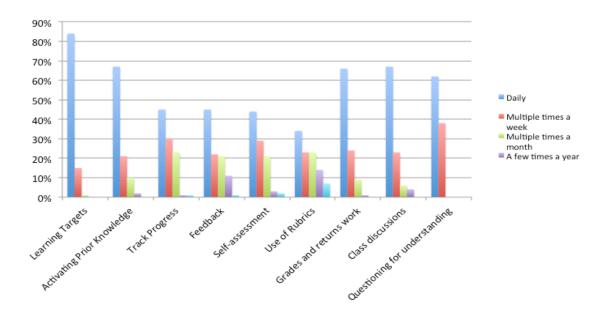
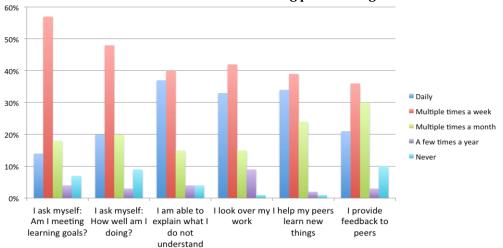


Figure G-2 Student role in the learning process: Cognitive and behavioral



Student Achievement – One of the most challenging aspects of change research, as well as professional development activities in general, is to document changes in the actual learning and achievement of students. This project is no exception. While it is relatively easy to document changes in perceptions of educators (via surveys) and even feasible to study changes in teacher-provided instruction (through observation of professional practice), the most challenging and yet important aspect of evaluating the success of professional development activities provided in programs such as the FAME project is how such work by teachers impacts the aspirations, attitudes and achievement of students.

Because of the number of issues inherent in this type of data collection, the MSU research team began this work with a focus on the learning teams (especially those continuing as year 2 and year 3 teams) that were selected to observe and that volunteered in 2012-13 to permit their learning team meetings to be videotaped. The goal was to collect data (test scores, grades, demographic data, and other information) for the students of the learning team members. Comparable data on other students at the same grades taught by teachers not participating on the learning teams is to be collected if possible. Ideally, this comparison group will be drawn from the same school(s), grade(s) and content area(s) of students in participating classrooms. The conclusions from this part of the study are as follows.

- No discernable impact of FAME on student achievement after participating in FAME for 6 months Many methodological and sampling issues in the study Almost impossible to clearly study this in a statistically rigorous manner