

Research on Formative Assessment in Michigan Education 2010-11 Research Activities

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While formative assessment is one of the crucial teaching practices emphasized in reform documents and has been shown to be important for improving student learning (Black & William, 1998), teachers at all levels struggle to implement formative assessment practices effectively (Black, Harrison, Lee, Marshall, & William, 2004; Daws & Singh, 1996). In a large scale effort to help teachers improve their formative-assessment practices, the State of Michigan adopted a balanced assessment system, one comprised of instructional-unit based interim benchmark assessments used *during* the courses, summative, end-of-course exams, and perhaps most importantly, teaching educators how to assess students formatively as they were instructing students. Thus, the Formative Assessment for Michigan Education (FAME) project began.

Research on the FAME model draws on Desimone's (2009) model for examining professional development. Figure 1 outlines the basic features of our model.

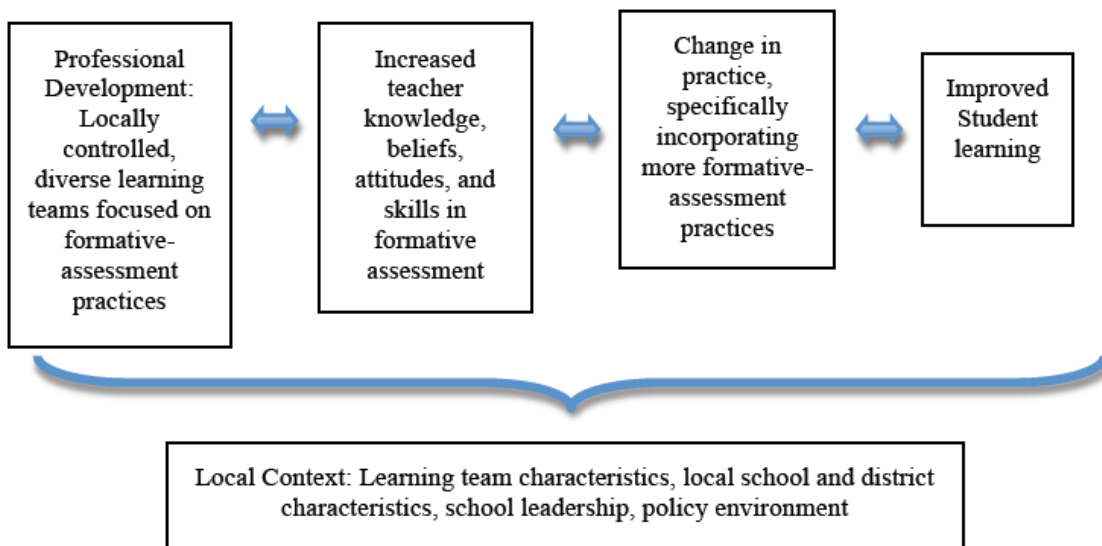


Figure 1. Model for Studying the FAME PD Model.

The research findings, based primarily on video analysis, case study and survey methodology, examines both the content within the boxes in Figure 1, but also attempts to describe factors that explain the links between the boxes.

Theoretical Framework

Professional development that supports teachers' learning has been shown to be a key factor in improving the quality of schools (e.g., Borko & Putnam, 1995; Desimone, 2009) and in improving student learning (Desimone, Smith, Hayes, & Frisvold, 2005). Effective professional development should focus on instruction and student outcomes (Newmann, King, & Youngs; 2004); be sustained over a long period; engage teachers in a community that supports their learning (Darling-Hammond, 1997; Stoll, Bolam, McMahon, Wallace & Thomas, 2006; Wenger, 1998); and engage teachers in authentic problems within their professional practice (Lave & Wenger, 1991; Webster-Wright, 2009; Wilson & Berne, 1999). These characteristics are similar to optimal professional development programs in formative classroom assessment (Schneider & Randel, 2009) which have emphasized models based on different types of

communities of practice (Webb & Jones, 2009; Willie, Lyon, & Goe, 2009; Schneider & Randel, 2009)

Research on professional development to support teachers' formative-assessment knowledge and practice faces the challenge of determining the effectiveness of their implementation (Schneider & Randel, 2009) especially in terms of quality instruction and student learning.

Overview of the Professional Development Provided to Michigan Educators

The Michigan Department of Education (MDE) is completing its third year of implementing systematic professional development opportunities for volunteer Michigan school educators (classroom teachers, school leaders, specialists and others). Measured Progress, the organization assisting MDE, has a planned set of activities for teams of educators in their first, second and third year of implementation. The work of each learning team is facilitated by a coach, who is also a volunteer and in many cases has recruited the learning team and arranged for the teams to meet on a regular basis.

The goals of the coach-facilitated learning teams are several-fold:

- Help educators learn about formative-assessment practices and how they might be applied in their classrooms. This introduction serves both to inform them about what research says about such practices and how they can use them.
- Plan for the use of formative-assessment strategies and tools while they are making plans for the instruction that they will provide.
- Have educators try specific formative-assessment strategies with their class(es) and/or specific students.
- Learn how to use key formative assessment tools in order to improve their instruction and student learning.

MDE and Measured Progress have planned a set of in-person and online activities and accompanying resources to facilitate professional learning around formative assessment. These are more fully described elsewhere.

During the first two years of the Formative Assessment for Michigan Education program, little systematic data was collected on the impact of these activities and resources on teachers' learning or instruction or the learning and achievement of students. A substantial amount of testimonial-type data was obtained at the end of each year, especially in the "May celebration" assembly of learning teams. However, little information about the factors that lead to successful implementation of the formative-assessment professional development was obtained in these years. It is this void that the research activities being conducted by Michigan State University (MSU) are designed to fill.

Research Team – The research team from MSU is comprised of two faculty members and three research assistants. The faculty members are Edward Roeber, the research director, and a faculty member from Teacher Education, Amelia Gotwals, Assistant Professor in Science Education (and with a strong interest in formative assessment practices used within instruction). Gotwals will advise on the nature of the qualitative research to be carried out, while Roeber will direct the quantitative aspects of the research activities.

The research assistants are used to collect the observation and survey data and to analyze the video data that is collected.

Surveys of Coaches and Learning Teams

This section describes results from the analyses of data that were gathered from surveys administered in 2010 and 2011. Coaches and learning team (LT) members completed the surveys at the beginning, the middle and conclusion of team meetings and classroom implementation. This report starts by describing basic characteristics of the surveys, their respondents, and procedures of analyses. Then, the results are presented according to the

research questions and topics of this study. In some cases, additional comments and suggestions for improvement are included.

Research Questions

The research questions for the 2010-11 school year FAME project participants were:

1. Which types of learning teams are more effective in their ability to help LT members gain knowledge of and practices around the formative assessment process?
2. How do coaches facilitate learning teams?

Related to the research questions, we established a set of topics that helped to create and analyze the survey questions as well as organize the results of this report.

1. Characteristics of Learning Team Members
2. Coaches' Characteristics
3. Learning Team make-up
4. Meeting Implementation
5. Coaches Skills and Learning
6. Effects of meetings in LT members' formative assessment practices

Over the 2010-2011 school year, three surveys were designed and administered to coaches and LT members. The *Fall Survey* was administered in August/September 2010, after the initial team meetings. The *Winter Survey* was administered in February/March 2011, as a procedure to collect data during the implementation process. The *End of the year Survey* (Spring) was administered in May/June 2011 after completing the yearly meetings. Details of the surveys are presented in Table 1.

	Fall Survey	Winter Survey	End of the year survey
Purpose(s)	Diagnosis, setting baseline for pre-post analysis, guiding project design.	Evaluating process of implementation	Evaluation of the annual period and making suggestions for next process
Respondents	348 LTMs 68 coaches	150 LTMs 37 coaches	122 LTMs 34 coaches
Number of questions	13 (LTMs) 18 (Coaches)	18 (LTMs) 21 (Coaches)	23 (LTMs) 17 (Coaches)

Table 1. Surveys characteristics

Surveys included multiple-choice, Likert- scale, and open-response items. Codes were developed for open-responses items based on professional development materials and were supplemented by themes from responses. Inter-rater reliability between at least two raters was established for all items to assure agreements and quality coding. Descriptive statistics were used to analyze the data; specific we examined analyses of frequencies of responses.

The initial survey was conducted through a paper-based survey handed out and collected at the orientation/initial training meeting. Subsequent surveys were conducted electronically, using online survey instruments. This permitted surveys to be created and administered quickly, as well as analyzed efficiently. Past survey questions were re-used in order to gauge change over time. Overall results were produced along with a summary that includes written comments of the coaches.

Survey Results

Coach Fall Survey Results – This section provides information on the coaches collected at the time of the orientation/initial training in the August-September. Coaches met with their teams and received information on the project as well as formative assessment practices from MDE and Measured Progress. The coaches who attended the initial orientation meeting were asked to complete a written survey just before and right after the one-day session. The following tables present the results of this survey.

Table C-1 shows the experience of the coach in the “coach role.” Coaches were asked whether they had served as a coach or facilitator of adult groups before.

**Table C-1
Prior Experience of Coaches as
Coach/Facilitator of Adult Groups**

Yes	39%
No	59%
No Response	2%

As can be seen, a majority of coaches reported no prior experience serving as a coach or facilitator of an adult team.

The next question asked coaches about their perception of their knowledge about formative assessment. This, of course, is self-report data, not the result of an independent determination. Coaches were asked this question both before and immediately following the orientation/initial training meeting. These data are shown in Table C-2.

**Table C-2
Coach Knowledge About Formative Assessment**

	Pre-Meeting	Post-Meeting
Quite a Bit	44%	52%
Some	38%	21%
A Little	10%	15%
Not Much at All	6%	8%
No Response	2%	4%

Most coaches (82%) did report knowing some or quite a bit about formative assessment at the start of the orientation/initial training meeting. By the end of the orientation/initial training meeting (several hours later), more coaches responded knowing “quite a bit” (52% versus 44%), far fewer (21% versus 38%) marked knowing “some,” and more coaches (15% versus 10%) responded knowing “a little.” Perhaps these results are the result of coaches learning what formative assessment practices are and the complexity in learning to use them.

The third item on the survey required an open-ended response. Coaches were asked to briefly describe formative assessment. Coach response fit into one of two categories. Either coaches responded that formative assessment is finding out what students know or gathering information to inform instruction. The results are captured in table C-3 below.

**Table C-3
Coach Description of Formative Assessment**

Finding out what students know	50%
Gathering information to inform instruction	41%
No Response	9%

As reported above, exactly half of the respondents (n=70) reported that formative assessment is finding out students know, 41% posited that formative assessment is gathering information to inform instruction, and 9% provided no response.

The coaches were then asked about whether they were new to the formative assessment project or had participated in the past. Table C-4 shows these results.

**Table C-4
Past Participation in the Michigan
Formative Assessment Project**

First Year	58%
Second Year	30%
Third Year	9%
No Response	2%

A majority of coaches (58%) indicated that this school year is their first for participating in this project. Given that the training was for first year teams, this is not surprising. Coaches that reported past participation were ones who had formed new, first year teams and continued to participate in the project.

Table C-5 shows the current position occupied by the coaches. While this data was collected in detail, it is summarized here by key positions.

**Table C-5
Job Responsibilities of Coaches**

Position	Number
Classroom Teacher	19
Building Administrator	14
Department Chair	2
District Administrator	16
ISD Administrator	13
Retiree	2

Note: Respondents could check multiple categories.
Total number of coaches responding = 62

Coaches were then asked for their total number of years of professional experience. These results are shown in Table C-6.

**Table C-6
Total Years of Professional Experience**

0-1 Years	0%
2-5 Years	5%
6-15 Years	44%
16 or More Years	45%

As can be seen from Table 6, the coaches are a very experienced group, with almost half having served in a professional position for 16 or more years.

The motivation to become a coach was something that was important to examine as well. Table C-7 presents the results. Given that a coach could choose more than one reason, the results are presented in Yes-No format for each option.

**Table C-7
Reasons for Choosing to Coach a Team**

Reasons for Coaching	Yes	No
Part of current job	5%	57%
Related to current job, but not required	29%	37%
To find out more about formative assessment	41%	25%
Other	7%	61%

The coaches most reported that interest in learning more about formative assessment was their primary motivation in becoming a coach.

Coaches were asked to provide the composition of their learning teams. The results of what they reported are shown in Table C-8.

**Table C-8
Composition of the Learning Teams**

Geographical Distribution	
All teachers from 1 school	37%
Teachers from multiple schools, same district	31%
Teachers from multiple schools, different districts, same ISD	13%
Job Responsibilities	
All elementary teachers	21%
All middle school teachers	14%
All high school teachers	16%
Teachers at multiple grade levels	33%
Blank	17%
Administrator Participating?	
Yes	40%
No	40%
Blank	21%

At the conclusion of the Launch meeting, coaches were asked to describe how their understanding of formative assessment was affected by the initial professional development training. Their open-ended responses are shown in Table C-9.

**Table C-9
Impact on Professional Development on Coach Understanding**

Improved Understanding	56%
Unchanged Understanding	6%
Training Provided Irrelevant Information	4%
No Response	34%

As reported above, most coaches (56%) responded that the session had improved their understanding of formative assessment. A much smaller percentage (6%) indicated that their understanding was unchanged and a similarly small percentage (4%) felt that the training provided irrelevant information. A large percentage (34%) offered no response.

Coaches were then asked how prepared they felt they are to lead their learning team. Their responses are shown in Table C-10.

**Table C-10
Preparedness to Lead a Learning Team**

Preparedness Level	Percent
Very prepared	19%
Prepared	58%
Unprepared	5%

Very unprepared	12%
Blank	5%

This table shows that the vast majority of the coaches felt they were prepared to lead their learning teams.

The next question asked coaches about the types of information or training that would improve their comfort level in coaching a learning team. This item was open-ended. The results are captured in Table C-11.

Table C-11
Types of Future Training/Information that would Improve Coach Comfort

Information specific to learning targets and protocols	64%
No further information needed	6%
Unsure/Experience will dictate	4%
Other information needed	4%
No Response	21%

Most coaches (64%) responded that they would like further information about learning targets and protocols. A small percentage (6%) indicated that they did not need any further information, while an equal number (4%) reported that they were unsure of further needs at the present time or suggested that other information was needed (these responses tended to be idiosyncratic). Finally, 21% offered no response.

Table C-12 shows the level of confidence that the coaches have in their coaching skills.

Table C-12
Confidence in Coaching Skills

Confidence Level	Percent
Very confident	20%
Confident	58%
Unconfident	3%
Very unconfident	9%
Blank	10%

Table C-13 shows the level of familiarity of the coach with the learning team that they are leading.

Table C-13
Coach Familiarity with Learning Team

Level of Familiarity with Learning Team	Percent
Very well – I work with them	49%
Well – I have worked with them in the past	18%
Not very well – there are a few team members who I just met	16%
Not very well – I just met them today	11%
Blank	6%

Many coaches were familiar with the learning team that they agreed to facilitate, not surprising since coaches were asked to organize the team that they were to facilitate. However, about a quarter of the coaches indicated that they were facilitating a learning team with whom they were not familiar.

Coach Winter Survey Results – At the time of the preparation of this paper, the winter survey of coaches was just wrapping up. A total of 37 coaches (out of approximately 66) had

responded to the survey that was posted online. This yields a response rate of 56%. The survey did not close for another week, so these figures may change somewhat. The survey asked several questions regarding the experience of the coach, job responsibilities, the composition of the learning team (levels and content areas), and other questions similar to those asked in the fall survey. The responses to those questions are not shown here. Listed below are the responses to questions that are unique to the winter survey.

Table C-14 shows the responses of the coaches to the question of how many times the learning team led by the coach has met so far this school year.

Table C-14
How Many Times has the Learning Team Met?

Frequency	Percent
Not yet	0%
1 Time	0%
2 Times	8%
3 Times	19%
4 or More Times	73%

Given that this survey was conducted during the sixth through the seventh month of the school year, these figures are quite good. They indicate that learning teams are meeting once a month or more often, which permits times for teachers to try new ideas, but not so much time that they lose interest in this project.

We then asked how long a typical meeting lasted when the learning team did meet. Table C-15 shows these results.

Table C-15
Length of Typical Learning Team Meeting

Meeting Length	Percent
15 to 45 Minutes	8%
One to Two Hours	24%
Two to Three Hours	43%
More than 3 Hours	24%

As can be seen, the learning team meetings generally last more than two hours. This is a good result, indicating ample time for discussion of the formative assessment practices being studied.

Next, the survey asked coaches what learning targets for the coaches of learning teams they had selected to work on. The coaches could select more than one response, so the results are not cumulative across categories.

Table C-16
Coach Learning Targets

Coach Learning Target	Percent
Team building skills	54%
Organizational skills	51%
Appropriate use of protocols	57%
Effective use of questioning strategies	59%
Effective use of feedback	62%
Appropriate use of resources	57%
Other	19%

The responses to this question indicate that about half of the coaches had identified learning targets for themselves as they worked in this project. Since this question was not asked in such a manner as to permit cumulative responses, it is not possible to answer the question of what percent of coaches had selected one or more learning targets and what percent had not selected any of the learning targets.

**Table C-17
Goals for Learning Team Meetings**

Yes	89%
No	11%

Almost all coaches indicated that they had established goals for the meetings of the learning teams, which is not surprising. The follow up question, shown in Table 18, asked who establishes the goals of the learning teams.

**Table C-18
Who Establishes the Learning Teams Goals?**

The Coach	27%
The Learning Team	8%
Both Coach & Learning Team	57%

This data shows that most often, the learning team goals are established either jointly by the coach and learning team together or the coach, not the learning team. Given that the learning teams typically know less about formative assessment practices than the coach, this manner of picking team topics makes sense.

Next, the coaches were asked what components of formative assessment practice their learning teams have discussed. As above, the learning teams may have discussed several of the components, so they were instructed to respond to all components that their teams had discussed.

**Table C-19
Formative Assessment Components Discussed**

Components Discussed by Learning Team	Percent
Planning	65%
Learning target use	89%
Student evidence	65%
Using self-assessment	68%
Using peer assessment	51%
Goal setting	46%
Providing descriptive feedback	65%
Activating prior knowledge	59%
Formative assessment tools	84%
Student and teacher analysis	16%
Using formative feedback to guide instruction	70%
Instructional decisions	46%
Other	8%

This table shows that learning teams are engaged in discussions of a number of the components of formative assessment, which is excellent. The balance among the topics shows that teams are not focusing on just one or two components, either. That said, there is still not near universal coverage of many of the topics, so that teams will have other topics they can explore in future meetings.

One item that was discussed at the initial meeting of the coaches and learning teams was for the teams to set group norms for the learning teams. As shown in Table C-20, two-thirds of the learning teams have sets norms for their teams.

Table C-20
Has Learning Teams Set Group Norms?

Set Norms?	Percent
Yes	65%
No	35%

Finally, coaches were asked if they had used protocols during their learning team meetings. These protocols were not provided to the coaches nor explained in depth, but coaches were given the URL's so that they could download and use protocols available on the Internet.

Table C-21
Used Protocols in Learning Team Meetings

Use Protocols?	Percent
Yes	54%
No	30%
Not Sure	16%

It is not surprising that not all coaches had used protocols by the time of this winter survey. Several may not have felt the need to use them, while others might not have found them. At least one coach was not sure what "protocols" are, given his request of the research team to explain what they are.

Coach Spring Survey Results – In the spring (May-June, 2011), the coaches participating in the FAME project were surveyed for the third time. At the outset, it should be noted that the Spring survey was confusing to some coaches, since it took place within weeks of the completion of the Winter survey. Some coaches reported thinking that the Spring survey was merely a repeat of the Winter survey sent to those who did not respond to it. Thus, some of the coaches may not have responded to the survey, thinking that they had already done so.

Key results from this survey are provided below.

Coaches were asked to rank order the reasons for their effectiveness in leading their learning team. These results are shown in Table C-22. Note that the *lower* the number, the *higher* the rank (higher the importance given by the coaches).

Table C-22
Factors Perceived to be Related to Coach Effectiveness

Success Factor	Average Rank Order
Role in the District	7.00
Frequency of the LT Meetings	6.03
Length of LT Meetings	7.36
Structure of the LT Meetings	5.33
Relationship with LT Members	3.17
Knowledge of Formative Assessment	4.20
Experience in Education	4.80
Cognitive Coaching Training	6.00
Use of Cognitive Coaching Tools/Strategies	5.35
Resource Materials: ning, Books, Examples of Student Work	4.93
Other	7.00

It appears that coaches credit their relationship to LT members, their knowledge of formative assessment, their experience in education, and the use of resource materials as the most important factors in their perceived effectiveness as coaches.

The perceptions about Cognitive Coaching was probed in greater depth in a couple of additional questions. Coaches were asked whether they had participated in Days 1-4 of the Cognitive Coaching Seminar. This was offered to all year 1 coaches but attendance was not required. Just over half of the survey respondents (53%) indicated that they had participated in the Cognitive Coaching Seminar.

Of those who did participate in the Cognitive Coaching Seminar, 80% of them indicated that they had used the tools such as pausing, paraphrasing and asking meditative questions in the LT meetings or conversations with LT members.

Next, coaches were asked how the Cognitive Coaching affected their work with their LT. These responses are shown in Table C-23. Coaches could mark more than one answer.

Table C-23
Manner in Which Cognitive Coaching Program Affected Learning Teams

How C.C. Affected LT	Percent Responses
Generally Positive	41%
More Focused	15%
More Reflective/Better Problem Solvers	29%
Better Listener	15%

The survey then asked coaches about which learning targets they had worked on for themselves. These responses are summarized in Table C-24. Note that this same question was asked in the Winter survey (see Table C-16).

Table C-24
Coach Learning Targets

Coach Learning Target	Percent
Team building skills	47%
Organizational skills	44%
Appropriate use of protocols	62%
Effective use of questioning strategies	56%
Effective use of feedback	79%
Appropriate use of resources	53%
Other	12%

The most substantial change shown from the Winter to the Spring survey is the percent of respondents who marked "Effective Use of Feedback" as a coach learning target.

Next, the coaches were asked about which formative assessment components that their learning team had discussed. These results are shown in Table C-25.

Table C-25
Formative Assessment Components Discussed

Components Discussed by Learning Team	Percent
Planning	59%
Learning target use	76%
Student evidence	71%
Using self-assessment	74%
Using peer assessment	62%
Goal setting	59%

Providing descriptive feedback	76%
Activating prior knowledge	62%
Formative assessment tools	88%
Student and teacher analysis	38%
Using formative feedback to guide instruction	65%
Instructional decisions	59%
Other	8%

Coaches reported that their learning teams discussed a number of topics. These findings are comparable to those reported in the Winter survey.

Coaches were asked to describe one or more instances when they felt that they were successful as coaches in coaching their learning team. These responses are shown in Table C-26.

**Table C-26
Self-Reported Instances of Coaching Success
with Learning Teams**

Type of Success with LT	Percent
Provided Feedback/Reflection	22%
Helped Teacher Improve Practice	25%
Changed Teacher Beliefs/Dispositions	7%
Facilitated Quality Dialogue/Discussion	35%
Elicited Group Commitment/Participation	7%
Other	4%

Coaches next were asked to identify one or more areas where they struggled in coaching their learning team. These responses are shown in Table C-27.

**Table C-27
Areas in Which Coaches Struggled
Coaching Their Learning Team**

Areas of Coach Struggles	Percent
Off-Topic Conversations	6%
Unequal Member Participation	8%
Lack of Commitment/Motivation	14%
Uncertain of Process/Materials	33%
Time Constraints/Schedule Conflicts	14%
Conflicting Expectations	19%
Other	6%

Finally, coaches were asked what types of support they felt they needed to be more effective in supporting teachers' implementation of formative-assessment practices in their classrooms. These responses are summarized in Table C-28

**Table C-28
Support Needed by Coaches to Improve Teacher
Effectiveness in Using Formative Assessment**

Areas of Support Needed	Percent
More knowledge about formative assessment	23%
More Cognitive Coaching training	20%
Classroom observation time	13%
One-on-one time with teachers	7%
More experience coaching	7%

More learning team meetings	7%
Building/district commitment to initiative	13%
Other	13%
None	0%

It is clear that no one need was identified by the coaches to help them become more effective in working with teachers to use formative assessment in their classes. The two most identified areas, albeit with small percentages of coaches, is to learn more about formative assessment and to be given more Cognitive Coaching training.

Finally, coaches were asked whether they intended to participate as a coach in 2011-12. Of those who responded, 62% that they would continue to coach their existing team, 17% said that they would coach a new team, 14% said that they would not continue, and 7% were not sure.

Learning Team Fall Survey Results – Just like the coaches, the members of the learning teams (LTs) present for the initial orientation session were also asked several questions before the one-day meeting began, as well as at the conclusion.

The first two questions on the survey were open-ended and therefore required written response. Learning team members were asked how they currently assess student learning and how they use the information from these assessments. Learning team members included a great variety of combinations to this two-part question, the most common responses being coded in the categories below.

**Table LT-1
In what ways do you assess student learning and how do you use this information?**

Assessment Methods Used	Percent
Summative assessment only	43%
Formative assessment only	20%
Summative and formative assessment	7%
Summative Assessment and Informal Observation	5%
Summative Assessment and Guide Instruction	3%
Informal Observation	3%
Formative assessment and informal observation	3%
Other combination (20 different combinations given)	17%

The next open-ended question asked learning team members to describe formative assessment in two or three sentences. The responses were coded into four categories, each of which is recorded below in Table LT-2.

**Table LT-2
In two to three sentences, describe what you feel formative assessment is and give an illustration.**

Definition of Formative Assessment	Percent
Finding out what students know	65%
Using knowledge of student learning to inform/guide/modify instruction	27%
Uncertain	4%
Including students in the assessment process	2%
Other	2%

The first closed-response question asked learning team members about their knowledge about formative assessment, both before the orientation/initial training meeting as well as immediately following the one-day meeting several hours later.

**Table LT-3
Learning Team Member Knowledge
Of Formative Assessment**

	Pre-Meeting	Post-Meeting
Quite a Bit	7%	44%
Some	26%	54%
A Little	54%	2%
Not Much at All	13%	0%

While coaches professed greater knowledge about formative assessment before the orientation/initial training session than the members of their learning teams, the learning teams reported substantial increase in their understanding of formative assessment as a result of the initial training meeting. The increase in learning team self-reported understanding of formative assessment was far greater than that of the coaches.

The survey also asked learning team members about their current job assignment. These numbers are shown in Table LT-4.

**Table LT-4
Job Responsibilities of Learning Team Members**

Job Responsibility	Number of Responses
Classroom Teacher	304
Building Administrator	66
Department Chair	20
District Administrator	22
Other	7

Note: Respondents could check multiple categories.
Total number of learning team members = 368

Because a person could code themselves into multiple categories (e.g., classroom teacher and department chair), the responses shown in Table LT-4 cannot be added up. However, it is clear that the vast majority of learning team members is classroom teachers.

The members of the learning teams were asked for their total years of professional experience. Table LT-5 shows the data for the respondents.

**Table LT-5
Total Years of Professional Experience**

Job Responsibility	Percent
0-1 Years	4%
2-5 Years	13%
6-15 Years	47%
16 or More Years	37%

This table shows that the participants in the formative assessment professional development project are very experienced educators. This data is reflective of the Michigan teacher force, which because of budget cuts and attendant layoffs, also tends to be quite experienced.

Learning team members were asked about their past participation in the formative assessment professional development project. These data are shown in Table LT-6.

**Table LT-6
Past Participation in the Formative Assessment Project**

First Year	95%
Second Year	3%
Third Year	0%

Table LT-6 shows that the vast majority of learning team members are in their first year of participation.

Next, learning team members were asked how they were recruited to participate in the formative assessment project. The data is shown in Table LT-7.

**Table LT-7
How Were Learning Team Members Recruited?**

Manner in Which Recruited for Learning Team?	Percent
I was recruited	15%
I volunteered	53%
I wanted to improve my professional practice	34%
I was interested in learning more about formative assessment	41%
I was interested in joining a professional learning team	19%
Other	1%

These data are very interesting. Note that teachers could select more than one response so these percentages cannot be added up. There was not one overwhelming reason why teachers agreed to participate in the project and work with a learning team. This may mean that there are a variety of ways to recruit teachers for future participation in formative assessment professional development

The second part of the survey was completed after learning team members had completed the initial training. The first question in this section was open-ended, asking learning team members how much their training had improved their understanding of formative assessment. Most respondents indicated that the training improved their existing understanding, as is indicated in the table below.

**Table LT-8
How has your understanding of the formative assessment process changed as a result of today's session?**

Improved existing understanding	86%
Answer unrelated to the question	6%
Understanding not improved (still lacking understanding)	4%
Training provided more clarity	3%
Understanding unchanged	2%

Table LT-9 asked LT members how well they knew the other members of their learning team.

**Table LT-9
How Well the Members Knew Their Team?**

Prior Knowledge of Learning Team	Percent
Very well – I work with them all the time	40%
Well – I have worked with them in the past	57%
Not very well – there are a few team members who I	2%

Just met	
Not very well - I just met them today	1%

This table shows that virtually all teachers (97%) knew the members of their learning team before the formation of the learning team.

The individuals attending the orientation/initial training session were then asked how frequently they carried out various formative assessment practices as teachers or how often students carried out activities designed for them. The list of practices that learning team members could check off includes the following practices. (Note: the number preceding each practice can be used to look up the practices in Table LT-10.)

<p>How often do you, as a teacher, do the following:</p> <ol style="list-style-type: none"> 1. Incorporate the formative assessment process when planning? 2. Share learning targets with your students 3. Use learning targets to plan instruction and assessment? 4. Communicate established criteria for success? 5. Share exemplars of good student work? 6. Gather a variety of evidence of student knowledge (products, observations, conversations) 7. Use a variety of formative assessment tools in your classroom? 8. Provide descriptive feedback to help students know what they should do next? 9. Show students how to use the descriptive feedback to improve their mastery of the learning target(s) 10. Use assessment data to adjust your instruction? 11. Consider your own understanding and implementation of formative assessment? <p>How often do your students:</p> <ol style="list-style-type: none"> 12. Self assess against established criteria? 13. Assess the work of others?
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Table LT-10
Frequency of Use of Formative Assessment Practices

Question	Frequency of Use of Formative Assessment Practices						
	A	B	C	D	E	F	G
1	9.5	14.6	11.0	11.6	22.6	16.8	11.9
2	10.3	6.5	11.8	10.0	15.3	22.9	23.2
3	11.5	2.9	5.9	9.1	15.9	27.4	27.1
4	12.1	3.8	7.7	15.6	26.3	23.0	11.5
5	10.9	8.8	24.7	20.6	20.6	11.5	2.9
6	10.7	2.7	16.1	14.3	16.4	25.9	14.0
7	11.0	3.6	11.6	15.8	26.8	19.9	11.3
8	11.6	6.5	13.9	17.5	27.3	15.7	7.4
9	11.9	26.0	24.5	15.2	13.7	6.9	1.8
10	10.4	3.0	10.1	16.4	19.9	22.0	18.2
11	12.2	17.3	20.5	16.4	15.8	11.9	6.0
12	12.2	18.5	31.5	13.1	14.3	7.1	3.3
13	11.4	18.0	35.1	15.0	12.9	5.1	2.4

Legend

A = [Blank]

B = Not at all

C = A few times per year

- D = Monthly
- E = A few times per month
- F = Two to three times per week
- G = Daily

This chart shows that the use of each of the formative assessment practices was used with different levels of frequency by teachers participating in the learning teams. In general, about 20% of the teachers reported using each formative assessment practice at each level of frequency. This is not a surprising finding, given that most of participating teachers were in their first year of participation in the project.

The final two questions on the fall survey were open-response. The first of these two questions asked learning team members for additional feedback on the training session. While most respondents expressed positive sentiments, a large percentage indicated that there were problems with structure and/or pace of the training. A full description of the responses is recorded in the following table.

Table LT-11
What other feedback or comments do you wish to make about the session that you attended today?

Positive feedback	67%
Problems with structure/pace	24%
No feedback provided	2%
Logistical issues	1.5%
Other	5.5%

The final question on the survey asked learning team members about the types of information or training they need to increase their comfort with formative assessment. Most learning team members indicated that they would like further models and examples of formative assessment in practical situations or more on-going training. The full responses are captured below in Table LT-12.

Table LT-12
What types of information or training would increase your comfort in learning about formative assessment within your learning team?

Providing models and examples	57%
On-going training	18%
Adjusting training content	13%
Adjusting training pace	5%
Nothing	4%
Other	3%

Learning Team Winter Survey Results – As with the coaches, the members of learning teams were surveyed during mid-year (February-March) to determine their work on implementing formative assessment practices and other aspects of the professional development program. As with the coach survey, the survey was still open at the time that this summary was prepared, so that some of the percentages may change somewhat when the final summary is prepared. At the time of preparation of this paper, 150 responses had been received from the learning team members. This represents a response rate of approximately (42%). As with the coach survey, questions of a demographic nature that were repeated from the fall survey are not reported here.

Table LT-13 shows the whether or not those surveyed during the winter attended the fall orientation/initial training session.

Table LT-13

Attendance at Fall Training Session

Yes	89%
No	11%

This table shows that not all learning team members were able to attend the fall orientation/initial training meetings. This may have been due to late formation of the learning team, as well as travel restrictions or restrictions on the use of substitute teachers.

Then learning team members were asked how frequently their learning team had met thus far in the school year. These data are shown in Table LT-14.

Table LT-14
Frequency of Learning Team Meetings

Not Yet	4%
1 Time	3%
2 Times	8%
3 Times	23%
4 Times or More	62%

The table shows that most of the learning teams have been meeting frequently. More of concern is the indication from 4% of the teachers that their learning team has not yet met, and the 3% who indicated that the learning team has met only once. Given that the survey was conducted more than half way through the school year, it is likely that these learning teams will not effectively assist the participating teachers.

Table LT-15 shows the areas of focus for the learning team meetings.

Table LT-15
Focus on Learning Team Meetings

Focus Area for Learning Team Meetings	Percent
Planning	57%
Reflecting	67%
Problem Solving	28%
Sharing	79%
Formative Assessment Tools and Strategies	87%
Resources	45%
Other	5%

As can be seen, formative assessment tools and strategies were selected by almost all (87%) of the learning team members. Other areas such as "sharing," "reflecting," and "planning" were also selected frequently by more than half of the teachers.

Learning team members were asked whether they had specific goals regarding formative assessment practices for their teaching for this school year. These results are shown in Table LT-16. Table LT-17 shows the areas identified by the teachers who answered "yes" to the previous question (reported in Table LT-16).

Table LT-16
Specific Formative Assessment Goals for Instruction

Yes	81%
No	19%

Table LT-17
Areas of Formative Assessment
Work Identified by Teacher

Formative Assessment Work of Teachers	Percent
Planning for the use of formative assessment	59%
Using learning targets with students	64%
Gathering student evidence	41%
Using self-assessment	43%
Using peer assessment	25%
Using feedback to guide instruction	55%
Goal setting	31%
Activating prior knowledge	30%
Using formative assessment tools (e.g. question out the door, red light/green light)	55%
Using student evidence for student and teacher analysis	29%
Providing descriptive feedback to students	27%
Making instructional decisions based on formative assessment evidence	49%
Other	2%

This question revealed that a number of teachers were already using formative assessment practices in their classroom, although because most of the percentages were moderate, there is still room for improvement in this area.

The learning team members were asked if they had used formative assessment practices thus far in their classrooms. These results are shown in Table 30.

Table LT-18
Use of Formative Assessment
Strategies This Year?

Response	Percent
Yes	82%
No	18%

Individuals who answered “yes” to this question (that they had used formative assessment strategies this year) were then asked to indicate which strategies and tools they had used. A total of 106 responses were provided to this question. These responses are shown in Appendix B. Teachers reported an extensive use of the formative assessment strategies and tools in their classrooms.

The respondents were also asked about how *students* have responded to these formative assessment strategies or tools. 102 responses were provided to this question. The actual responses are provided in Appendix B. Teachers reported a number of constructive ways in which students have responded to the formative assessment strategies and tools that they had used in their classrooms.

One of the key questions that the research team wanted to investigate is whether the idea of a learning team to support learning and use of formative assessment practices was viewed as constructive by the participants in the learning teams. These results are shown in Table LT-19.

Table LT-19
Learning Team Meetings Impacted
Use of Formative Assessment

Response	Percent
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Yes	85%
No	15%

As can be seen, almost all of the participants in the project viewed the use of learning teams as constructive. The individuals who responded in the affirmative were then asked for examples of how the learning team meetings had impacted their practice. There were 99 responses at the time of the writing of this summary. These examples are shown in Appendix C. As can be seen, there are a number of constructive ways in which the learning team meetings have positively impacted the use of formative assessment strategies and tools by the teachers participating in the FAME project.

The final survey results reported were on learning team members' perceptions of the effectiveness of the learning teams to support formative assessment learning by the teachers. These results are shown in Table LT-20.

**Table LT-20
Effectiveness of Coach-Facilitated Learning Team
To Support Use of Formative Assessment**

Response	Percent
Very Effective	21%
Effective	58%
Neutral	16%
Ineffective	3%
Very Ineffective	2%

As this table shows, the vast majority of teachers (79%) indicated that the coach-facilitated learning teams are effective or very effective in supporting the use of formative assessment practices in their classrooms.

Learning Team Spring Survey Results – In the spring (May-June, 2011), the learning team members participating in the FAME project were surveyed for the third time. At the outset, it should be noted that the Spring survey was confusing to some learning team members, since it took place within weeks of the completion of the Winter survey. Some learning team members reported thinking that the Spring survey was merely a repeat of the Winter survey sent to those who did not respond to it. Thus, some of the learning team members may not have responded to the survey, thinking that they had already done so.

Key results from this survey are provided below.

The first question asked learning team members to characterize their current classroom assessment practices. The responses from the Fall and the Spring surveys are shown in Table LT-21.

**Table LT-21
Learning Team Member Assessment Practices
in the Fall and Spring**

Classroom Assessment Practices	Fall Survey	Spring Survey
Summative assessment only	43%	11%
Formative assessment only	20%	25%
Summative and formative assessment	7%	61%
Others that are different from the indicated below (e.g. generic assessments)	31%	3%

As can be seen, the learning team members reported a reduction in summative-only assessment practices, and a substantial increase in a more balanced approach to assessment (using both summative and formative assessment classroom assessments).

When asked whether their use of formative-assessment practices had changed over the year, 88% learning team members answered affirmatively. Learning team members were then asked to indicate *how* their formative-assessment practices had changed. Their responses are shown in Table LT-22.

Table LT-22
How Learning Team Members Formative Assessment Practices Changed

Changes in Formative Assessment Practices	Percent
Assess more often	40%
Use more types of assessment	23%
Involving students more in assessment	11%
More planning/intentionality in assessment	23%
Other	3%

Learning team members were asked if they had specific goals in their learning about and using formative assessment during the school year. At the end of the year, 68% of the learning team members responded affirmatively, while 32% indicated that they did not. In the Spring survey, learning team members were asked again about their goal areas for their learning about formative assessment. Their responses are shown in Table LT-23; comparable results from the Winter survey are shown in Table LT-17.

Table LT-23
Areas of Formative Assessment Work Identified by Teacher

Formative Assessment Work of Teachers	Percent
Planning for the use of formative assessment	44%
Using learning targets with students	52%
Gathering student evidence	30%
Using self-assessment	41%
Using peer assessment	20%
Using feedback to guide instruction	27%
Goal setting	23%
Activating prior knowledge	33%
Using formative assessment tools (e.g. question out the door, red light/green light)	49%
Using student evidence for student and teacher analysis	28%
Providing descriptive feedback to students	28%
Making instructional decisions based on formative assessment evidence	36%
Other	2%

Note that the percentages shown in Table LT-23 are somewhat lower than the comparable percentages indicated in the Winter survey as shown in Table LT-17.

About 90% of the learning team members indicated that they had made progress towards their goals. Others indicated that they did not believe that they had made progress towards their goals or another response. Then, learning team members were asked about what contributed most to progress on their goals. Their responses are shown in Table LT-24.

Table LT-24
Factors that Contributed Towards Learning Team Members Making Progress Towards Their Goals

Factors Contributing to Progress	Percent
Collaboration with other LT members	43%
Coach facilitation	7%
PD training	4%
Observing other teachers	4%
Use FA strategies and tools in class	32%
Resources such as ning, books, other	4%
Other	9%

Next, learning team members were asked about what ways that they used formative-assessment during the school year. Their responses are shown in Table LT-25.

**Table LT-25
Learning Team Member Use of Formative Assessment**

Uses of Formative Assessment	Percent
Improve teaching and learning	80%
Set learning targets	70%
Gather sources of student understanding	53%
Activate prior knowledge	59%
Improve student engagement	71%
Strengthen relationships with students	42%
Understand my own growth and development as a teacher	45%
Improve the efficiency of classroom procedures	43%
Modify instruction	70%
Improve classroom management and discipline	27%
Other	4%

Learning team members were asked about their perceived success in implementing formative-assessment practices. A summary of their responses is shown in Table LT-26.

**Table LT-26
Learning Team Success in Implementing
Formative Assessment Practices**

Level of Perceived Success	Percent
Small	21%
Moderate	62%
Significant	17%

Learning team members report mainly a moderate level of success in implementing formative-assessment practices, a realistic assessment given that they have been using these strategies for only a few months at the time of the Spring survey.

Table LT-27 shows learning team members' perceptions of the degree to which the learning team contributed to their modification of their classroom practices. These figures are slightly lower than shown in Table LT-26

**Table LT-27
Degree of Improvement of Formative Assessment Practices,
Based on Collaboration with the Learning Team**

Level of Perceived Success	Percent
Small	28%
Moderate	57%
Significant	16%

Next, the learning team members were asked degree of success in using two particular formative-assessment practices – sharing learning targets in student-friendly language and providing descriptive feedback. These survey results are shown in Tables LT-28 and LT-29, respectively.

**Table LT-28
Success in Sharing Learning Targets in Student-Friendly Language**

Level of Perceived Success	Percent
Small	33%
Moderate	40%
Significant	26%

**Table LT-29
Success in Providing Descriptive Feedback to Students**

Level of Perceived Success	Percent
Small	37%
Moderate	47%
Significant	17%

Learning team members indicated moderate levels of success in learning to use these particular formative-assessment strategies.

Learning team members were asked what types of support they felt they needed to more effectively implement formative assessment in their classrooms. A summary of their responses is shown in Table LT-30.

**Table LT-30
Support Needed by Learning Team Members
to More Effectively Implement Formative
Assessment in Their Classrooms**

Types of Support Desired	Percent
More learning team training	32%
More learning team meetings	38%
More formative assessment content training	38%
Individual coaching and modeling techniques	24%
Classroom practice	61%
Building/district commitment to the initiative	37%
Other	13%

The responses provided in the "Other" category are summarized below:

<p>Other responses:</p> <ul style="list-style-type: none"> - Don't believe this is best for our students. - Ways to improve student motivation - Additional help with peer assessment at the lower grades - I need Muskegon Heights District to follow through on something. - More release time to work on learning targets and write them in student friendly language. - More time, more time co-planning with co-teachers, etc... - Planning time - Grading training - Time to put plans into place - MDE financially supported grants for the Cognitive Coaching process. - Group and individual time to develop learning targets, thinking maps, etc - For the state to reduce the number of concepts that must be taught in one year. - Time to "reformat" units to better organize formative assessments

- Time to work on creating lessons that are planned formatively
- Continued team meetings
- Time to collaborate and create goals and materials

Learning team members were then asked what aspects of the learning team meetings that had been most beneficial. A summary of these responses is shown in Table LT-31.

**Table LT-31
Aspects of the Learning Team Meetings
Viewed As Most Beneficial**

Aspects of Learning Team Meetings	Percent
Planning	36%
Reflecting	63%
Problem Solving	32%
Sharing	79%
Formative Assessment Tools and Strategies	60%
Resources	35%
Other	7%
Not seen a benefit from learning team meetings	5%

Learning team members were invited to comment on their learning team experience. Their positive and negative comments entered into the online survey are summarized and shown below.

- Positive (41)

 - Diverse makeup was positive
 - Engagement during the process.
 - Collaboration across different levels
 - Sharing experiences/ideas was positive
 - Space supportive
 - Opportunity to learn/learning from others
 - Great coach/leadership
 - Learning is applicable in classrooms/effects in kids
 - Good materials
 - Projections for future process (e.g., workings as a coach)
 - Adequate sessions' timing
 - Teamwork adequate
 - Flexible format/model was positive

Negative (18)

 - Diverse makeup was positive, but also it affected practical application of FA
 - Lack of effect and accountability as LT
 - Unequal participation in meetings
 - More resources needed for different teachers
 - Team did not work
 - Not all members engaged
 - Better communication of expectations needed
 - Excessive time needed to implementation/ time required that affects school work.
 - Insufficient meetings
 - Administrator presence needed
 - Inadequate leadership
 - Problems with working across buildings in LTs

Finally, learning team members were asked if they wished to continue with the FAME program during the upcoming school year (2011-12). Almost all (88%) responded in the affirmative and 12% said they did not wish to do so.

Then, learning team members were asked if there was anything else they wished to share. The comments entered in the online survey are reproduced below.

- Generally positive experience

- Standardized tests are counterproductive to FA/conflict with State's demands
- No benefits to schools and kids, just more work
- Important process to be implemented
- Too much resources provided that can be systematized
- Evaluate particular LT's success (Muskegon Heights)
- Concerns about future funding
- Usefulness of Measured Progress website
- Good expectations to future process. Interest in continuing next year
- Good content, update, opportunity to refresh ideas
- FA can be combined/integrated with other programs
- Good coaching/leadership
- Need of balancing an adequate number of meetings and time to prepare/implement

Summary – The goal of this comprehensive research project is to engage faculty and graduate students in helping MDE and Measured Progress to develop and carry out the statewide professional development program on formative assessment. By examining its implementation and periodically reporting to the project's management team, the goal is to use the data collected both formatively to improve the project as well as summatively to demonstrate its effectiveness so that it will be continued and expanded in the future. While a number of ideas are laid out in this proposal, the goal of it is only to suggest activities that might be carried out. The MSU research team will be pleased to discuss this plan with the project management team and adjust it as needed.

Appendix A
Formative Assessment Tools and Strategies Used by Teachers

Accessing prior knowledge, exit ticket, learning target
Exit tickets/ quick quiz/ graphic organizer/ think, pair, share
Lots of the ideas from the launch and our team meetings. Just used exit tickets with students and teachers. -Snowball-sharing answers and throwing ball of paper to center of room to share and rework (if needed) Math problems.
-Exit ticket -Student self-assessment -We are meeting to do the 4th strategy this Monday!
Use learning targets with students and descriptive feedback
Ticket out the door
Four Corners
Learning Targets, Peer assessment and goal setting 3, 2, 1
Big Ideas and I Can Statements Exit slips Self-Assessment
Activating Prior Knowledge Feedback use
Ticket out the door.
The team will need to specifically answer this question.
Learning targets, rubrics, exit slips, descriptive feedback and conferencing
We have used a number of the different strategies and learning tools.
Discussions; ticket out the door; KWL; listening to group discussions; students assess their learning; performance assessments;
Descriptive feedback
All of the above (shown in Table 29)
Question out the door
Learning Targets, planning formative assessments in advance to use in lessons, more student self-assessment
Openers &/or questions out the door; Giving descriptive feedback on assignments for students to rethink their responses/content vs. just giving them a grade; students were provided the learning targets to reflect on their understanding of each as I specify the learning target goal for the lessons; thumbs up/down/sideways if you understand and can explain the concept to others
Variations on ticket out the door.
Establishing learning targets, using "I can" statements, using exemplary papers
On Target? Ticket Out the Door/Self-Assessment, I Can Statements (Learning Targets)
Exit card, personal interviews, written & oral feed back
I have used many and I use them daily. Too many to list.
Exit Slips, Sample Match
Red, yellow, green cups for students to put their sticks/names in to indicate how they feel about a lesson; self assessment on center work; wait time for answers to questions; providing descriptive feedback
Learning Targets
Our team has created new/expanded on old strategies. 25 word summaries, peer editing tools, self assessment worksheets, questioning strategies, etc.
Ticket out the door thumbs up and down student to student checks think pair share
Wait time variations, response cards, fact first questioning, pass the question, commit and toss, four corners, juicy questions, whip around
Question out the door

clickers
descriptive feedback
I have tried the Facebook template and a variety of student self-reflection tools.
I have used tickets out the door, learning logs, and some activating prior knowledge strategies.
Working on learning targets for math. Toss and share.
Learning target
formative assessments
Conferencing, ticket out the door, peer assessment, self-assessment
Ticket out the door, self and peer assessment, Activating prior knowledge, goal setting
Mostly the Player/Coach scenarios in which the students assess one another's skills/abilities. They seem to love this.
I have used ticket out the door, feedback sheets, and also just incorporated the use of formative assessment into the daily class lesson.
25 word summaries in French
exit tickets
Learning targets and descriptive feedback
Learning Targets, Weekly Learning Logs
Exit cards
using assignments as assessment tools prior to test
I have used the 3,2,1 strategy, Student self-assessment "how I learn", Students who have it, and Please notice.
Question out the door/exit slips
Ticket out the doors
I can statements
Test Reflections
Our team has tried new ideas and videotaped them; then brought the videotape back to the group and discussed how it worked.
I have used more self-assessments than in the past. I have also been using learning targets.
Exit Slips
Self correctives
3 group correctives
Assessment Quizzes
Having students self assess using "I can" statements in response to learning targets.
Learning targets w/self-assessment
ticket out the door
Daily, students write down what they have learned & what they have questions about. Their grades are only based on summative assessments, and I pick specific assignments to write detailed feedback for the students.
Self and Peer assessment techniques such as writing samples for kids to compare theirs to.
I can statements for learning targets, Awesome & On My Way reflection
Overall, strategies would include low-risk, not-graded assignments that students could spend more time thinking and practicing as opposed to worrying about their grades.
Graphic Organizers
Gallery Walk
Competitive Games for Challenge Problems
Family Tree for Vocabulary in Geometry
Human Histogram
Exit slips
"I can" statements
Cell phone review
There have been many strategies, combined with RA that I have used this year.
Quick Quiz with immediate feedback, self-analysis of tests.
Exit quizzes
answers on sticky notes and throw onto floor
Thumbs up/down, ticket out the door...stressing activation of prior knowledge
I tried to use most of them. Not all in one lesson, but over the year.

Ticket out the door thumbs up, thumbs down conferencing learning targets
Stop light strategies, toss and share, exit strategies like post it notes
Ticket out the door, self assessment cards or statements, learning targets, feedback
Gallery walk, 25 word summary
Tickets out the door
A majority of the above listed strategies. I've also broken down assignments into smaller steps and focused my instruction on practicing first, then performing.
3 – 2 - 1 tool
I have taken homework results and partnered students with a learning partner - a high and low student together.
I have modified instruction based on homework results.
I have turned a summative into a formative assessment when the need arose. I went back and re-taught a chapter.
Exit slips, silent signals to self evaluate understanding for immediate feedback, self-assessment rubrics, teacher rubrics, graphs to show progress, reflections on progress
Tickets in and out the door Practice testing to formatively assess readiness for final assessments Verbal class discussions for checks Reflection pieces on what students have learned at end of projects or units.
CPS (clicker system)
Some examples are creating/using learning targets, self assessment lessons, finding creative ways to quickly assess student progress w/ hw
Using learning targets with students.
Incorporating Learning Targets Daily Vocabulary Strategies
Talking to the text, 25 word abstract, think aloud, chalk talk, exit slips,
Ticket out the door, Clicker systems, and others, but they weren't new for me.
Self-assessment tools
Self-evaluations ticket out the door activating prior knowledge
Activating Prior Knowledge Goal Setting
Bookmarks with "I can" statements
Peer assessment is new to me and this is the first time I've taught students to self assess and really encouraged them to do so. I am also much more conscious about what is truly descriptive feedback and I require students to read and use that feedback.
I have used the tools related to writing learning targets
All the ones checked above (See Table 29)
Ticket out the door - 3 things you remember from yesterday, 2 things to know more about, 1 question you still have. Self assessment
White Board activities Smart Board activities
Activating prior knowledge, goal setting, using formative assessment tools.
Ticket out the door, activating prior knowledge, test reflections.
Ticket out the door Test reflections Muddiest point

Learning targets
Vocabulary math exit slip
Exit tickets, more feedback on ELA papers that direct students to advance their ideas, etc.
Peer assessment
Goal setting
Descriptive Feedback
Ticket out the door
Self Assessment
CPS systems
Pre-test
Traveling groups
Assessment tools, learning targets
Ticket out the door
Chalk Talk activity
Stars and Steps (feedback form)
Planning using tickets out the door and quizzes.
I am an admin member.

Appendix B
Impact of Formative Assessment
Strategies and Tools on Students

Re-visiting/re-teaching concepts. Hope it improves quiz/test scores
Enthusiastically
Students responded thoughtfully and clearly identified learning and problem areas.
They have liked doing these new activities and sharing what they know!
Responded favorably and students performed better on district assessments
They did what was asked.
Students have cooperated. They haven't been as successful when using it to self-assess and correct, though.
They have liked the assignments.
They like not being graded on things concepts and ideas they are practicing
They have responded positively. They feel validated.
Generally have accepted them without complaint.
For second grade - some went back and corrected their work, others were not developmentally ready to do that.
The students have responded well to the learning tools and strategies. It has helped them take more ownership of their learning.
Well received
They have used the info to develop their understanding.
Kids love clarity...better grades.
Positive
It is a learning process for the students as well as the teachers. They are learning to self-assess and are beginning to use this process.
Students seem to be placing more importance on their during class learning and like knowing exactly what they expected to learn. I have more and more students wanting to redo assignments to show their knowledge and explain their understanding the best way possible. There have been more one on one interactions and conversations about content between teacher/student and student/student when the descriptive feedback is given on assignments.
It has been instructive.
More self assessment, raising the level of their writing, formative assessment has become a way of learning- before, during and after assignments for my students
Students regularly complete Warm-Ups/Ticket Out/In the Door(s)so the implementation went smoothly. The self-assessment piece is challenging for some.
Formative assessment takes the pressure off the students they don't realize they are being assessed
The love the formative assessment activities. They stay interested in them and enjoy them as long as I vary them. They will get bored of them if I use the same ones only.
They seem to like to have a say in their learning.
They are still getting used to them (as am I).
I think they prefer formative to summative assessments. They give them more feedback throughout the learning process
Students have responded well to what we have done, although I am still working on including further strategies and opportunities for formative assessment in lessons.
The students work well together with their peers. The advanced students are actually "teaching" the more strategic learners.
They appreciate the immediate feedback
Positively
The students have responded very positively. They see these things as quick ways to describe their learning to me.
They loved them.
The clearly defined learning targets help them understand and focus on what they are learning. It also helps them self-assess whether they are on target or not.
They actually take them seriously and reflect well.
Some have worked out well; others have been a train wreck due to my lack of experience

using them. Both positive and negative have been altered to fit into my teaching style and classroom.
I'm using a lot of assessment strategies that I've used in the past
They really like it and it seems to really help with "reviewing" material.
I have found that it has made positive change on student learning
Very well, since many teachers are using the tools, many students know exactly what they are.
Positively
Positively
They seem to like the "review."
They struggle with questions that require them to reflect upon how they learn.
Favorably--assignment was completed by most
Positive response
Students have responded positively. It seems easier for them to ask questions about specific information/skills that they need more help to understand.
Very well, we've seen a significant bump in summative scores
They have been positive.
They love it! I gauge my teaching on their learning, and I don't waste time.
They are expecting a target prior to a lesson and some are using self-assessment to evaluate their learning and class performance.
Students do well with the daily learning & questions. They are using them to study & work to answer the questions within a week of writing them. I think they still struggle (as do I) about how to work with the feedback they get, in an effective way.
Kids seem to be empowered by the self-assessment tools.
They did very well with the "I can" statements - used for math to break down steps for process and they definitely helped some of my struggling students. Need to discuss further the On My Way reflection as I don't think they fully understood the tool when I used it- but will definitely try it again.
A small fraction of students refuse to do the practice activities if they are assigned individually. However, if it is a whole class activity such as an anticipation guide, everyone seems to participate and is engaged.
Overall favorable responses.
The "I can" statements really worked well with the students. It changed the mindset from my teaching to what they could do.
My grades, and student learning in particular, have been better than ever.
Mixed but mostly positive.
They seem to like the variety and novelty as opposed to traditional instruction.
They like it, most just see it as another class process/lesson, which I think is good.
Mixed reviews, some lessons it's awesome, others need revision.
They are positive about the process. I try not to make a huge deal about using a certain strategy or tool. They don't really realize it's any different than what I might normally do.
All students have really opened up to learning and are finding new ways to ask questions and share knowledge.
Love the gallery walk but not as crazy about the summaries as I am
They have responded well.
Some groan if they hear you say we are going to go back over it. They like the learning partners.
Students find it helpful, enlightening and useful, they are usually honest, if they resist doing the task, then you know it is too difficult for them to accept the responsibility for their learning and that this is a new experience for them.
Kids students are getting better at formulating questions and asking for help. They had no problem transitioning into new procedures such as tickets in and out the door when the assignment is meaningful.
They enjoyed it.
Mostly for the good.
Student work was improved as a result of knowing learning target.
Students have responded well for the most part, most of my students are not doing better

academically though.
Engaged and empowered.
Students always like a variety, so they have enjoyed something different for the most part.
Fairly well after some practice.
6 on a scale of 1-10.
Fairly well after some practice.
Positively. It has given them a more active (more involved) role in their learning.
We developed our bookmarks for each chapter during our last session, so we have just started implementing this week.
They still struggle some and often say that they wish I would just tell them if it was right or wrong but I know they get satisfaction out of being guided toward that themselves as well as finding for themselves where they went wrong.
Students have done well with the learning targets.
Positively
Honestly and without complaining.
Love the interaction and immediate feedback.
The students have liked them. It can be a different way of learning.
Its hard for special education students to start something new, as they get used to the idea of writing in math it is becoming easier.
Some students have become more engaged with the use of learning targets. They feel my expectations are much more clear.
They seem to enjoy it. It is a good way for both of us to know whether they understand the concept or not.
They seem to read over their work more carefully and I have seen changes in future work
Good.
Positive.
It's given me more information to tweak instruction.

Appendix C
Impact of Learning Teams on Participating Learning Team Members

Making me more aware of my teaching strategies.
I think about trying to have the kids self assess more.
Sharing of ideas - got a great idea at one of the meetings and used it the next day.
I utilize the discussions and ideas from team meetings as soon as feasible.
Makes me more aware of specific things they need help on, on a more timely basis.
Make my teaching more focused.
We give feedback to new formative assessment strategies.
More deliberate
Making me more aware of my teaching. Providing ideas and techniques.
Helped me see how others are using them and gives me ideas for future use.
Questions or problems I'm having get answered or solved together. It's good to be part of a team.
Sharing with team members is valuable for getting new ideas and feedback.
Keeps reminding me to use it in the classroom and try new strategies.
Students are applying their self-assessment knowledge in other courses.
The sharing has resulted in new materials for formative assessment classroom use. The knowledge gained has impacted my use of formative assessments as well.
We have chosen one particular one to use each month so it has encouraged me to try a variety of strategies.
We discuss the tool and strategies and then discuss how they have impacted our students and classrooms.
I have implemented more formative assessment strategies into my teaching.
My team sets goals so that when we meet again we have tried to accomplish those goals.
It's really great to have a think-tank of positive and motivated individuals to share positive examples with and to think through plans that didn't work as expected. It makes it easier to think about formative assessment specifically when we meet each month for that purpose.
Adjust instruction
Just as students are learning to self-assess, I am assessing my lessons as well.
As an administrator, we are looking at the impact of the purposeful implementation of Formative assessment practices on student learning.
Many of us shared a desire and different ways of incorporating learning targets with students. We were able to share documents that were already typed out vs. all having to recreate from scratch.
It has been a nice way to share ideas, and learn new strategies.
It is encouraging to meet with other teachers who are implementing formative assessments: we challenge each other to continue on the path we have chosen, there is an accountability to the group piece, as we share what we are doing the focus becomes clearer to the individual and the group, and we support each other in our research and practice. We have chosen to meet in each other's classrooms for the last part of the year.
It's helpful to collaborate with other teachers and to have the time to develop resources to implement this year.
Keeps FA in mind when planning weekly. Self assess daily
Discussing what works and what doesn't work in the classroom with other teachers is most helpful.
I feel encouraged. I like to hear other ideas being used by others as well.
I wouldn't be implementing the strategies if I didn't attend the meetings.
Staff are having collegial conversation about formative assessment, practicing formative assessment, using student feedback more effectively and reflecting on the impact effective formative assessment has on student learning.
Being on the team helps me remember to put some formative assessments into my teaching.
I am only a second year teacher, so the information has helped me create better lesson plans. I use formative assessments all the time in my room.
Our team leader shared a list of strategies we could try in our classrooms with the understanding that we'd report back on the success of these strategies.

I think more about the how and why students think the ways they do....
It helps keep me accountable and gives me guidance as I try things in my classroom.
The meetings have helped me to continue to focus on the formative assessment process and allow me to reflect on my use of formative assessments.
I have more ideas and a deeper understanding of formative assessment.
I like to hear how others are using the process, their thoughts, what worked and what didn't. I also like to get ideas on my own experiences with the process.
Yes, it reminds I'm using formative assessment a lot more than I think I am.
Not as much as I would have liked though, I really would have preferred a well-developed plan prior to this year.
We discuss what we liked using in our classrooms and other ideas or things that worked to consider using...We also just further have reflection and discussion about various tools or strategies.
Seeing what others are doing and sharing out the results impacts further usage in the classroom.
Our weekly discussions with focus on student learning
Team meetings have helped to answer questions that have arisen, as well as providing great brainstorming.
Keeps it fresh in my mind.
It has been very helpful to listen to my teammates share how they used various strategies and the students response.
Assessments can be brief checks of students understanding and it doesn't take long to do or review.
The team meetings help keep me focused, and encourage me to try new strategies and tools.
Meetings help since we share ideas and reflect at next meeting.
The learning team was supportive of each initiative and the sharing of ideas opened up new ideas for each teacher to try in their classroom.
It keeps me focused on continuing to use to strategies and reflecting on what has been effective.
I've been able to share what we've been doing and gain some suggestions for other things to try.
I get great ideas from our meetings.
I learn from strategies that my colleagues have tried and alter it to "fit" my classroom.
Team members have shared ideas I could use in my classes and helped revise strategies to work for me; Team members helped me write more effective learning targets.
Hearing others' strategies & methods, as well as discussing them all together, has truly helped me understand and utilize formative assessment in a better way. We work hard to give feedback to each other in these meetings and work to solve each other's problems/questions.
The group keeps me on task remembering to use these strategies so that I can have things to share. They are also great tools for problem solving.
The opportunity to hear what others are doing and time to reflect on my own teaching has been very beneficial. Our facilitator has shared many resources with us also.
My Learning Team has decided to focus on Cognitive Coaching methods to help on a one-on-one basis. Personally, I have used this type of questioning with my Senior students as they are guided through their Senior Projects and Portfolios.
Sharing strategies and ideas that they have tried that work.
The group makes it easy to discuss both successes and failures.
Reflecting on past practice and future goals.
We've been able to share ideas and, more importantly, share the success or failure of strategies.
Made me more aware of using it on a more consistent basis.
Nice to hear the support and struggles from others. IT really helps.
Meetings are very helpful in keeping on track with formative assessment. The ideas that are generated by sharing with my "teammates" are motivating me to do things better and improve my teaching. All of which leads to an increase in student learning :)
Encouraged me to keep trying.

We are rally starting to use student friendly learning targets especially in math.
We come up with strategies and ideas to use in our classrooms. We also dialogue about our successes and plan what we want to do next.
It provides motivation to try new things and a place to air questions, concerns, or ask for help.
It is helpful to have a group to come back to and see what others are doing. Also, to get new ideas.
I am energized to try new ideas and it keeps it "active" when my to-do list gets too large and it could easily be overlooked or pushed to the side for an easier approach.
I am using it more.
I assume you mean if yes to question 10, then how? Well, at our meetings it just gives us time to reflect and share our ideas and thoughts about things. Teachers are always so short on this type of time. It is very valuable to share and talk with colleagues.
Yes, although we haven't met that much I hold myself more accountable because we plan to share with other professionals.
The biggest benefit is listening to other teachers' examples, bouncing my ideas off them, and talking directly w/ teachers in my subject area.
I have tried new strategies to improve my teaching.
Yes- collaborating allows me to get many ideas from my fellow colleagues.
Provided ongoing support and accountability necessary for me to make changes to my teaching practice.
We set goals on what to use between meetings, so I know I HAVE to try a new tool or strategy. It's the accountability thing; I'm going to have to share what's new at the next meeting.
By providing examples of Formative Assessment, and showing me the difference between formative & Summative Assessment.
Meetings have enabled me to check my use of resources, discuss what is working in our school, and make decision on what to try next.
I have become more aware of making sure I include formative assessment in classroom on a regular basis.
It's been a minor impact. I was transferred from high school to middle school this year, so my preps are completely new and my teaching style has needed adjustment. I don't feel as though I've done much with formative assessment. The most influential activity has been the ability to talk and reflect with my team. Even though my teaching is not strictly in line with formative assessment, it has changed how I set up my class and how I approach the lessons.
I feel I have a better grasp of what and how the students are learning (understanding....or not understanding!)
I use formative assessments more frequently, such as thumbs up, exit slips, and pair shares.
I think of how to use formative assessment all the time. Indeed, thinking about using formative assessment has actually altered the style of assignments that I give. Also, I always start with the end in mind now and I don't think I always had a clear picture of that before.
Encouraging, sharing ideas, positive, feedback.
We have spent time researching some strategies and planning how to use them. We have agreed that we would bring completed forms to our next meeting.
Sharing of strategies and ideas that I might not have thought of to incorporate into my lessons.
The students have asked when we were going to do certain learning tools that we have done so far this year.
We have some time to create artifacts and visit other learning teams.
Just being able to discuss strategies and how to improve them has been of great help.
Implementing strategies
Sharing strategies helps to get more ideas.
I try and do more formative assessments on certain assignments.
I am definitely more aware of how important it is to PLAN for formative assessment.