

# ELA & Mathematics Educator Professional Development System Summative Evaluation Report

## Math Content Module, Math Content Leader & Mentor Teacher Initiatives





THE PROFESSIONAL LEARNING ASSOCIATION







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## I. OVERVIEW

This summative report highlights key findings from evaluative data collected by The University of Texas at Austin's (UT) EPIC STEM Evaluation Services from November 2017 through March 2020 to assess the following three-year initiatives of the Louisiana Department of Education (LDOE) ELA & Mathematics Educator Professional Development System:

- Elementary and Secondary Mathematics Content Leader (CL) and Mathematics Content Module (CM) Initiatives, which were developed and facilitated by UT's Charles A. Dana Center
- **Mentor Teacher** (MT) Initiative, which was led by the Dana Center with modules and training designed and facilitated by Learning Forward

The purpose of these initiatives is to equip Math CLs and MTs with the training and materials they need to effectively train and support new and current teachers. The CL professional learning sessions consisted of nine days of high-quality, curriculum-specific training that prepared CLs to train fellow educators on six, turn-key Math CMs. The MT sessions consisted of nine days of high-quality training using content-rich, mentor-facing modules that prepared MTs to mentor resident and new teachers. In another initiative led and evaluated by BloomBoard, CLs and MTs were required to demonstrate their knowledge and skills through micro-credential assessments. This integrated system ensures Louisiana educators receive deep and ongoing professional learning connected to the grade level, content area, and curriculum they teach.

Nearly 700 Elementary and Secondary Math CLs and over 1,500 Elementary, Secondary Math, Secondary ELA, and Secondary Universal MTs participated in at least one professional learning session (e.g., trainings) across all three years of the initiatives (see **Table 1**).

	Total # of CLs Trained	Total # of MTs Trained
Year 1 (2017-18)	57	348
Year 2 (2018-19)	278	494
Year 3 (2019-20)	361	704
Total	696	1,546





CLs and MTs were asked to complete surveys at the end of each training, and focus group interviews were conducted with representative samples of CLs and MTs each year. Almost all CL and MT respondents were satisfied with and saw value in the professional learning sessions, applied what they learned in their own practices and shared it with other educators, and met the initiative goals. They also shared their challenges and provided recommendations for strengthening the initiatives.

After being trained on the Math CMs, CLs redelivered CMs to a significant number of educators (referred to as CM participants). Based on CL survey responses in Year 3 alone, CLs trained 1,823 CM participants on at least one module. CM participants were also asked to complete surveys, and almost all CM respondents indicated they had changed their teaching practices as a result of the initiatives. High-level summaries of survey and focus group findings on Math CL, Math CM, and MT participants' experiences, outcomes, and recommendations are provided in the subsequent sections.

"As a CM facilitator, I'll know how I'll need to get the message across. As a CL participant, I can actually experience how those messages will be taken, understood, and then later applied." - Elementary Math CL

## **II. MATH CONTENT LEADER FINDINGS**

## Participant Profile

The CL Initiatives served 414 Elementary Math CLs and 283 Secondary Math CLs, with the number of CLs increasing each year (see **Table 2**). At the end of each professional learning session, a survey was administered to assess the CLs' satisfaction, learning, and application. Two-thirds or more of the CL attendees responded to surveys each year. In addition, two focus group interviews were conducted with CLs in Year 1, and four were conducted in both Years 2 and 3. An average of 10 CLs who were purposefully selected to represent a cross-section of parishes, grades, and subject areas participated in each focus group. The focus group interviews were held in Alexandria, New Orleans, Baton Rouge, and Shreveport.

	Total # of Elementary CLs	Total # of Secondary CLs	Total # of CLs Across Cohorts	Average Survey Response Rate	Total # of Focus Group Participants
Year 1	34	23	57	77%	18
Year 2	171	107	278	70%	41
Year 3	208	153	361	81%	41
Total	414	283	696	77%	100

#### Table 2. Math CL Training Attendees, Survey Respondents, and Focus Group Participants

Across all three years, most survey respondents were classroom teachers (see **Figure 1**), with Elementary Math CLs representing primarily grade-levels pre-K through 5<sup>th</sup> grade and Secondary Math CLs representing primarily 6<sup>th</sup> grade and higher. More training locations were added each year, with sessions in Shreveport, Baton Rouge, Marksville, New Orleans, Lafayette, and Ruston by Year 3 (see **Figure 2**).



## Satisfaction and Utility

Nearly all Elementary and Secondary CLs agreed or strongly agreed they were satisfied with the training experience, facilitation, content, and activities (see **Figure 3**). Math CLs frequently described enjoying the sessions, making comments such as, "I think everything was wonderful," "Very helpful," and "Great job!" "Personally, I have an enthusiasm about this. It is not just another training.... It is something that I look forward to and something that, when I leave, I have a toolbox of things I can use in my classroom the very next day." - Secondary Math CL Elementary and Secondary Math CLs said the most impactful aspects of the professional learning sessions were the collaboration with peers, learning how to achieve vertical alignment and coherence, and the high-quality facilitation. (Themes are listed from most to least mentioned across the report.)

- Collaboration: "Collaboration with other passionate, intelligent, educationloving teachers! Learning from the expertise of the other participants."
- Vertical alignment and coherence: "The PLC community at my school has gained deep knowledge of coherence and how to use tools."
- Facilitators and facilitation practice: "Facilitators did a great job modeling how to present the material and in building relationships."



## **Initiative Outcomes**

Almost all survey respondents reported they achieved the initiative outcomes (see **Figure 4**). By the last session each year, nearly all (95% or more) CLs were prepared and confident to deliver CMs.

#### **Application of Learning**

Math CLs applied what they learned from the CL sessions by delivering CMs to educators, making improvements in their instruction, focusing more on standards, and sharing what they learned with other teachers.

 Delivering CMs: "I plan to integrate the protocols, strategies, and content-based ideas from the previous sessions into professional development opportunities as often as possible."



- Changed teaching practices: "I do a better job with lesson planning and delivery."
- Sharing with teachers: "Sharing with math teachers during teaming time."
- Focus on standards: "I have made more effort to ensure my standards align across grade levels."

#### **Initial Outcomes**

Math CLs indicated seeing improvements in their confidence and teaching practices and in student learning as a result of applying what they learned.

- **Student outcomes**: "I have seen more engagement from my students."
- **Teacher confidence**: "I feel more confident, and it is evident in my lessons."
- Standards, coherence, and vertical alignment: "I have a better understanding of the standards and how they build across grade levels."

## **Challenges and Needs**

"I'm better able to see true mastery of the standard and not just the curriculum." - Elementary Math CL

> "I have applied what I have learned in my classroom. It has produced improvements in test scores." - Secondary Math CL

Each year, fewer Math CLs needed additional support and resources as the sessions progressed, and fewer Math CLs had additional needs in Years 2 and 3 compared to Year 1. Some Math CLs had challenges that stemmed from two main areas of need: (1) they needed administration support to successfully deliver CMs, and (2) they needed information and support on the Math CL micro-credential assessments. Some focus group participants also suggested trainings be provided earlier (e.g., late spring or summer) so they could begin implementing what they learned and delivering modules earlier in the fall.

#### Support from Administration

While some CL respondents received substantial support from their administration (e.g., "[The district is] in full support of us being able to redeliver what we need to redeliver, especially to help us achieve the micro-credentials"), others who cited needing support reported challenges due to lack of administrator awareness of the initiatives and the CL role requirements, insufficient materials necessary for redelivery, inadequate time to prepare and redeliver CMs, and anticipated teacher resistance.

- Awareness: "There's more of a lack of knowledge from the principal about what the initiative is, what it involves, and the fact that we have to re-present."
- **Materials**: "I need to speak to the school administration and district to ask about copies for handouts, manipulatives, markers, applicable technology, and chart paper."
- Time: "[I need] more time to practice."
- Scheduling redelivery: "Support from the school and district to provide a schedule and time to present the modules in a timely manner."
- Teacher resistance: "Motivating teachers to become learners."

#### **Content Leader Assessments**

More information on the BloomBoard micro-credential assessments, which are required to become a state-certified CL, was provided each year based on CL feedback. Information about the assessments was more integrated into training sessions by Year 3. Among CLs who said they needed additional support and/or resources, an increase in awareness of the credentialing requirements was associated with an increase in respondents citing the micro-credential assessments as a major challenge with which they could use more assistance.

"The support I need is really from my district. I need to know our game plan for representing this to our parish. I am a planner and the more time I have to prepare the better my presentation will be." - Secondary Math CL

"We still haven't gotten a lot of direction on BloomBoard. So, it's basically like taking an online course without having any teaching.... I think there should be a little more guidance." - Elementary Math CL

## Math Content Module Delivery

Around one-third of the Math CLs began delivering modules right away, while the remaining CLs waited until the sessions ended. Incrementally, more CLs were delivering CMs as trainings progressed each year.

Elementary and Secondary Math CLs delivered Math CMs to educators in their area (CM participants). Based on CM survey responses, at least 602 elementary secondary teachers and 275 received training on the Math CMs across all three years (see Figure 5). The number of CM survey respondents was highest on CMs 1 and 2. Across all three years, the majority of CM participants agreed or strongly agreed they were satisfied with the training, the facilitator's knowledge, the activities, and their engagement (see Figure 6). The vast majority of respondents agreed or strongly agreed they changed their teaching practices as a result of the CMs.



#### **Application of Learning**

Math CM participants applied what they learned from the CLs' delivery of the CMs in their planning, use of standards, promoting student understanding, and in collaboration with other teachers.

- Standards, coherence, and vertical alignment: "I have used the coherence map to help my instruction and my students' needs."
- **Student experience:** "I have given my students more ways to express themselves visually and more discussion time."
- Lesson planning: "Knowing where the kids are coming from and where they are going helps me when planning my lessons."
- Collaboration: "Better collaboration with my peers" and "I have applied this content to my PLCs."

#### **Initial Outcomes**

Elementary and Secondary Math CM participants reported several improvements in their teaching and student outcomes after applying what they learned.

- Focus on standards: "I am more aware of my standards for my grade level and what is expected of them."
- **Student outcomes**: "Students are gaining a deeper understanding of the math content."
- Better planning: "I will take more time to prepare lessons and anticipate student responses."
- Improved instruction: "The teachers are improving their delivery of the lessons."

"I have really learned the benefits of purposeful planning and how crucial it is to the success of the students." - Elementary CM participant

"My lessons are more focused and more relevant to standards." - Secondary CM Participant

## **III. MENTOR TEACHER FINDINGS**

## Participant Profile

The three-year MT Initiative served at total of 933 Elementary, 227 Secondary ELA, 127 Secondary Math, and 259 Secondary Universal MTs, with the number of MTs increasing each year (see **Table 3**). At the end of each MT professional learning session, a survey was administered to assess participants' satisfaction, learning, and application. About two-thirds or more of the MTs in attendance responded to the surveys each year. In addition, two focus group interviews were conducted in Year 1, and four were conducted in each of the following years. An average of nine MTs participated in each focus group interview. Focus group participants were purposefully selected to represent a cross-section of parishes, grade levels, and subject areas. Focus groups were conducted in New Orleans, Marksville, Baton Rouge, and Lafayette.

	Total # of Elementary MTs	Total # of Secondary ELA MTs	Total # of Secondary Math MTs	Total # of Secondary Universal MTs	Total # of MTs Across Cohorts	Average Survey Response Rate	Total # of Focus Group Participants
Year 1	226	44	33	45	348	77%	18
Year 2	297	72	35	90	494	71%	47
Year 3	410	111	59	124	704	65%	27
Total	933	227	127	259	1,546	69%	92

#### Table 3. MT Training Attendees, Survey Respondents, and Focus Group Participants

Across all three years, most survey respondents were classroom teachers (see **Figure 7**), with MTs representing grade-levels pre-K through 8<sup>th</sup> grade, Algebra I and II, Geometry, Special Education, and other high school courses. MT professional learning sessions were offered in a variety of locations across the state. More training locations were added each year, with sessions being held in Baton Rouge, Ruston, Lafayette, New Orleans, Shreveport, and Marksville across the initiative (see **Figure 8**).



## Satisfaction and Utility

Nearly all MTs agreed or strongly agreed they were satisfied with the training experience, facilitation, content, and activities (see **Figure 9**). MTs described enjoying the professional development sessions, making remarks such as, "This was an excellent day full of information and tools" and "I am happy with the resources given."

"I love the interactive approach. The small group, whole group, and individual reflection opportunities were beneficial." - Elementary MT MTs explained the most impactful aspects of the professional learning sessions were collaborating with other MTs, learning about the mentoring cycle, and building solid relationships with their mentees.

- Collaboration: "The collaboration was key to me because it allows me to gain insight into what other teachers know and have learned."
- Mentor cycle: "The mentoring cycle gives me a framework to follow with my resident teachers as they observe me and then as I observe them."
- Mentee relationship building: "Building relationships is critical in forming a better working relationship with the mentee. This will help tremendously because they trust you."

#### Figure 9. MT Satisfaction Across Sessions Year 2 Year 1 Year 3 95% Satisfied with 93% training overall 97% 95% Satisfied with 91% facilitator's knowledge 92% 94% Activities reinforced 90% my learning 91% 95% I engaged in activities 93% and contributed 93% 93% I can apply learning 91% to mentor teachers 89%

## **Initiative Outcomes**

**Figure 10** shows MTs who agreed or strongly agreed they met the initiative outcomes. As of the last session each year, nearly all (95% or more) MTs were prepared and confident to mentor resident and novice teachers.

#### **Application of Learning**

MTs utilized several strategies from the MT professional learning sessions, both with their mentees and in their own classrooms.

- Figure 10. MT Initiative Outcomes Year 1 Year 2 Year 3 Can build strong relationships 97% 98% with mentees 00% 97% Can diagnose mentee strengths 98% and growth areas 99% 97% Can design and implement 97% mentoring support plan 98% Y1-Y2: Can track mentee progress; 97% Y3: Deepened content knowledge 97% 99% and pedagogy
- **Goals**: "Developing professional SMART goals for myself."
- **Partnership agreements**: "Remembering to always go back to the agreement and the competencies to hold each other accountable."
- **Teaching practices**: "Trying some of the techniques to enhance my teaching."
- **Diagnosing needs**: "We have identified management and instruction needs to address so that student learning can be achieved."

"I have helped my mentee set concrete and attainable goals." - Secondary ELA MT

• **Classroom management**: "Most of my mentoring has been related to classroom management. Without that, no learning happens at our school."

Initial Outcomes

MTs indicated seeing improvements in student performance, their mentoring capacity, and in their own instructional practices as a result of applying and sharing what they learned in the MT sessions.

- **Student outcomes**: "My struggling students are doing better."
- Strong mentor-mentee relationships: "Our relationship has been a • positive one, and we have both learned from each other."
- Mentee growth: "I see that my student teachers are much more aware of their growths and weaknesses."
- Mentor confidence: "My confidence as a mentor has increased. I am more purposeful in my feedback."
- Improved teaching practices: "I have become more intentional in my classroom practices."

## Challenges and Needs

Each year, fewer MTs needed additional support and resources as the sessions progressed. MTs mainly had challenges in two areas: (1) MTs needed resources and/or support from their administration and session facilitators, and (2) they needed more support with BloomBoard's micro-credential assessments.

#### **Support from Administration and Training Providers**

As the initiative progressed, more MTs said their administration was aware of initiative requirements and provided excellent support. Like CLs, some MTs indicated their administrators were not sufficiently aware of the initiative and what was required of MTs. Those who reported needing additional support from the administration wanted more time to fulfill their role as well as opportunities to practice what they learned. They also felt additional materials and ongoing support from the professional learning session facilitators would prove useful. In later years, MTs discussed challenges associated with not having a mentee.

- Time: "Ensuring that I make the time to complete all responsibilities in • a way that I am not short-changing my mentee."
- Extra practice: "I just need more practice." •
- **Resources:** "I would like access to copies of the tools we used in the course, like the observation form, to help me to successfully help my mentee."
- **Continued support:** "I would love the continued support next school year as we begin the process of mentoring" and "Someone to check in with to make sure I am on the right track."
- Access to a mentee: "I end up being less prepared to be a mentor because I don't have a mentee."

#### **Mentor Teacher Assessments**

To address MT uncertainty on the BloomBoard assessments required for MT certification, more assessment information was integrated in MT trainings each year. By the last session in Year 3, almost all (95%) MT respondents were prepared to begin the assessments. Some indicated needing additional assistance with the micro-credentialing process.

- "[The BloomBoard assessments are] so open and so disconnected from what we have been doing. It is almost as if someone in the chain of command has been like, 'Don't show them examples.'"
- "[I anticipate needing] additional resources and training on what artifacts are required [for the microcredential assessments]."

"Mostly, I need time to absorb, discuss with colleagues, and digest the information." - Secondary Universal MT

"I have noticed that instruction is more fluid, and the kids understand the purpose of the content presented." - Secondary Math MT

95% of MTs felt prepared

By the last Year 3 session:

to begin the microcredential assessments

## IV. CONSIDERATIONS MOVING FORWARD

The positive impacts of the initiatives—on both Louisiana educators and students—are salient in the evaluation findings. Respondents consistently said they benefited from:

- **Collaboration** with educators from different content areas, locales, and grade levels
- **Expert facilitators' modeling strategies** participants could successfully implement in the service of their trainees, mentees, and/or students
- **Training resources and materials**, such as planning guides and partnership agreements

As the Math CL, Math CM, and MT Initiatives evolve, the aspects respondents cited as most impactful can be retained and built upon to enhance the initiatives' effectiveness. As with any initiative, participants encountered challenges. Below are considerations for LDOE and session providers to address these areas.

## **Considerations for Louisiana Department of Education**

Over time, as more CLs and MTs participated, administrators attained greater awareness of the initiatives, but some CLs and MTs said they still faced challenges in Year 3 related to lack of administrator awareness. Additionally, participants who cited needing additional support in Year 3 regularly pointed to the BloomBoard micro-credential assessments as a major challenge. As such, it is recommended that LDOE:

- **Provide administrators more information on the initiatives.** This could be informational sheets that describe the initiatives and outline what participants will need to accomplish (e.g., time for CLs to redeliver CMs, mentees for MTs, micro-credential requirements, instructional materials for CLs).
- **Require professional learning session providers to integrate micro-credential assessment support.** To increase participants' comfort level with the assessment platform, providers could facilitate as participants use their own artifacts to work through an assessment during a training session. Because collaboration and facilitator expertise were noted as highly valuable among participants who completed the assessments, providing time, space, and guidance for participants to work through assessments may substantially increase the number of educators who become certified.

## **Considerations for Professional Learning Session Providers**

Each year, MTs said they did not have the necessary tools and resources used in the trainings, and CLs said they did not have all the classroom materials they needed to fulfill their role. Some participants also suggested professional learning providers create opportunities for sustained interaction with other participants and the facilitators. It is recommended professional learning session providers:

- Provide online access to resources, instructional materials, and communities. For example, providers could create a resource-sharing site with features, such as: a chat-enabled community forum, classroom materials (e.g., virtual manipulatives), links to external sites (e.g., Louisiana Believes), searchable document repositories for training resources (e.g., partnership agreement), modified instructional materials (e.g., for different grade levels), and user-provided resources. This type of platform could enable providers to continue delivering high-quality professional learning sessions when in-person training is not viable, as has been the case during the COVID-19 pandemic.
- Integrate micro-credential assessment support by providing guidance, exemplars, and time for participants to work through an assessment during a professional learning session.

	Key Components:	
AAAAA	Peer collaboration Expert facilitators Training resources Admin awareness Assessment support	