Mathematics Achievement Fund

Technical Assistance Session

September 15, 2021

Kentucky Department of EDUCATION

Welcome…

Introductions…

- Erin Chavez, Kentucky Department of Education-MAF Grant Coordinator
- Johna Rodgers, GPC, Johna Rodgers Consulting
- Jennifer Bryant, Kentucky Department of Education-Procurement Branch
- Thomas Clouse, Kentucky Department of Education-Division of Program Standards Manager
- Maggie Doyle, Kentucky Department of Education-Academic Program Consultant

A brief MAF overview…

As specified in KRS 158.844, the MAF was created to provide developmentally appropriate diagnostic assessment and intervention services to students, primary through grade 12, to help them reach proficiency in mathematics. The grant provides funding for professional learning and release time for teachers to serve as coaches.

The mathematics coach will improve mathematics teaching practices aligned to the *Kentucky Academic Standards (KAS) for Mathematics* by working with teachers in their classrooms to:

- Observe and provide feedback;
- Model appropriate evidence-based instructional practices;
- Conduct workshops or institutes;
- Establish professional learning communities; and
- Ensure high-quality instructional resources that are aligned to the *KAS for Mathematics* in order to meet the needs of primary students and other students who are struggling to meet grade level standards in mathematics.

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A brief agenda…

We will follow the **Request for Applications** (RFA) document

- Initially, we will focus on…
  - The background and funding
  - The role, responsibilities, and professional learning of the Mathematics Coach
  - Brief presentations of the four pre-approved professional learning providers
  - Break for questions

A brief agenda…

- In the second half of our session, we will focus more developing the proposal narrative and budget, including…
  - Application components and submission instructions
  - Blinding/Redacting, fonts, and space limitations
  - The grant review process
  - Responding to the narrative questions
  - Creating the budget and budget summary
  - More
  - Break for questions and wrap up

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Questions?

Please submit questions to the following Google form:

https://forms.gle/u7A3AChGDC9josvo7

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Eligibility

- Page 1
- Public school districts, KSB, and KSD
- Districts must have students in the primary program who are struggling with meeting grade level standards
- The district must submit a separate application for each school
- The MAF RFA is designed to support students in grades K-5; therefore, the grant will serve only grades K-5

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Eligibility

- Submitted applications will **not** be considered if:
  - A submitted copy is not redacted to eliminate identifying information as noted on pages 7-8
  - The application is not received by the deadline of Friday, Oct. 8, 2021 at 4 p.m. ET
- Existing and new applicants are eligible
- A timeline of activities is noted on page 2

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Background, funding

- Page 2
- State funding available through KRS 158.844
- The 2022 MAF grant specifically provides funding for release time for teachers who serve as coaches in grades K-5
- Mathematics Coaches will work with **teachers** in teachers' classrooms to help improve mathematics teaching practices

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Background, funding

- Approximately 75 schools will receive grant awards
- Schools will receive $62,000/year
- Funds will be used for professional learning of the coach
- Up to 25% of funds may be used for salary costs of the coach (certified services, fringe)
- Grants are renewable after two years for up to 4 years
- More on funding as we proceed

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Background, funding

- The district will serve as the fiscal agent for its awarded school(s)
- The school must budget in its application for **matching funds** of $62,000 (1:1 match)
- More on funding as we proceed

A word from Johna….

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The truth about grants…

- A grant is not fr

at a deep discount

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Mathematics Coach…

- Pages 3-4
- The Coach is a school-based mathematics leader
- The Coach will provide ongoing support for teachers to improve mathematics teaching practices by working in their classrooms
  - Observing and providing feedback;
  - Modeling appropriate evidence-based practices;
  - Conducting workshops or institutes;
  - Establishing PLCs; **and**
  - Ensuring high quality instructional resources are aligned to *Kentucky Academic Standards for Mathematics*

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Mathematics Coach…

Qualifications include…

- Five years of certified primary/intermediate mathematics teaching experience
- Demonstrated leadership skills regarding coaching adult learners
- Capacity to design professional learning aligned to the characteristics of High Quality Professional Learning
- Able to determine whether instructional resources are aligned to the *KAS for Mathematics* (please see High Quality Instructional Resources) and, based on that determination, support teachers with next instructional steps.

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Mathematics Coach…

The Coach will serve on the schools MTSS Team (Multi-Tiered System of Supports Team) to support

- Align the school's systems, data and practices to the essential six elements of KYMTSS in order to provide reliable and valid data to the KDE at least twice per year (see Annual Evaluation).
- Provide more detailed information about individual students to inform next steps for instruction or intervention; and
- Provide guidance on diagnostic assessment, intervention selection, implementation fidelity and progress monitoring for tier two and tier three services.
- The intervention services for identified students **must supplement**, not replace, their classroom comprehensive mathematics program.

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Mathematics Coach…

- The Coach will meet at least monthly with the principal around the mathematics vision and ongoing work
- The Coach will submit a detailed schedule to KDE for approval each fall
- The Coach will report to and be evaluated by a district administrator
- The Coach will **not** evaluate classroom teachers nor may the Coach serve as a substitute or classroom teacher

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Mathematics Coach…

- On page 4, the daily work of the Coach is outlined for both Year 1 and Year 2+
- Key elements include…
  - Developing the mathematics vision with the school
  - Engaging and coaching teachers around the *KAS for Mathematics*
  - Facilitating collaborative teacher interaction around models of instruction
  - Coaching teachers in cycles of planning (at least 8 cycles per 50% of mathematics teachers)

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Mathematics Coach…

- The Coach will co-facilitate (Year 1) and provide (Year 2+) professional learning aligned to the school mathematics vision
  - Approved providers will deliver professional learning for **100% of mathematics teachers within the school,** co-facilitated by the Coach in Year 1
  - The Coach will lead professional learning in Year 2+
- The Coach will spend at least 50% of the instructional day in classrooms
- The remaining 50% of their time is for collaborative planning, lesson study, and more (p. 4)

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Professional learning (coaches)

- Page 5
- Grant funds may be use to provide the required professional learning for the Mathematics Coach
- The Coach will engage in four areas of intensive, ongoing professional learning from four pre-approved providers
  - *KAS for Mathematics*: Educational Cooperatives
  - Mathematics coaching: (McGatha, Bay-Williams)
    - KY Center for Mathematics (KCM) will support mathematics coaches in between coaching sessions and provide feedback on the coaching model utilizing the Kentucky Mathematics Innovation Tool
  - Cognitive coaching: M^2 Consulting (McGatha)
  - Elementary Mathematics Endorsement: University of Louisville

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Educational Cooperatives

Learning Goal

- To learn how the Breaking Down a Standard resource and the Assignment Review Protocol can work together to support instruction around specific standards and to ensure tasks and assignments are aligned to grade level standards.

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Educational Cooperatives

Success Criteria

- Complete the Breaking Down a Standard resource to build a shared understanding of a standard.
  - Explain and give grade-appropriate examples of how the architecture/components of the standards (such as the Clarifications, Coherence/Vertical Alignment, Attending to SMPs) support the development of cluster level understanding.
  - Identify and develop a shared understanding of the “target of the standard” (conceptual understanding, procedural skill/fluency, application)
  - Identify misconceptions that may occur in relation to the standard being explored.

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Educational Cooperatives

Success Criteria

- Complete the Assignment Review Protocol to review and evaluate mathematics tasks.
  - Determine the cognitive complexity of any given task.
  - Determine the level of relevance within a task.
  - Consider potential “next steps” with mathematics tasks based upon evaluation and shared understanding of the *KAS for Mathematics*.

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Educational Cooperatives

Learning Goal:

- To build a shared understanding of the Coherence/Vertical Alignment within the *KAS for Mathematics* and how that component provides guidance for teachers on sequencing content to align with the developmental progressions and the target of the standard.

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Educational Cooperatives

Success Criteria

- Explain why it is important for educators to know the standards for their grade as well as for the grades before and after theirs.
- Identify the target of a standard (conceptual understanding, procedural skill/fluency or application) and explain how that supports where the standard is placed within the learning progression.
- Identify (and develop the capacity to lead discussions around) the connections that relate standards within and across grade levels.

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Educational Cooperatives

Learning Goal:

- To build a shared understanding of the Standards for Mathematical Practice (SMPs) within the *KAS for Mathematics* and how the components of the architecture provide support to educators working to make connections between the content standards and the practice standards within instruction.

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Educational Cooperatives

Success Criteria

- Identify the importance of the balance between the content standards and the practice standards within mathematics.
- Clarify the purpose of each component of the architecture related to the SMPs within the *KAS for Mathematics*.
- Identify (and develop the capacity to lead discussions around) what integrating the SMPs might look like when implementing grade level tasks.

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KCM
KENTUCKY CENTER FOR MATHEMATICS

Kentucky Center for Mathematics (KCM)

- KCM will provide one-on-one coaching the math coach in the schools.
- Engage in feedback that identifies the current level of implementation as outlined in the Kentucky Mathematics Innovative Practice Profile.
- Capture and analyze video from classrooms and coaching feedback sessions
- Facilitate the job alike cadre of KY math coaches to provide support and build a network. Monthly meetings.
- Ensure successful implementation of math coaching at the school level.

SCAN ME

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KCM
KENTUCKY CENTER FOR MATHEMATICS

Kentucky Center for Mathematics (KCM)

Kentucky Mathematics Innovation Practice Profile

Purpose: Based on the eight mathematics teaching practices from the National Council of Teachers of Mathematics (NCTM), this document operationalizes quality math instruction in the classroom. It can be used to support the implementation of any mathematics innovation.

Mathematics Teaching Practice 1: Establish mathematics goals to focus learning
Effective teaching of mathematics establishes clear goals for the mathematics that students are learning, situates goals within learning progressions, and uses the goals to guide instructional decisions.
Accomplished Use
1. Teacher *consistently* …
a. establishes clear and detailed goals that indicate the mathematics students are learning.
b. explains how the mathematical goals contribute to enduring understandings.
c. uses these goals to adjust instruction.
d. connects concrete and semi-concrete (representational) activities to the conceptual understanding of the mathematical goals.
e. uses a concrete--semi-concrete (representational)--abstract learning progression to meet these goals.

Mathematics Teaching Practice 2: Implement tasks that promote reasoning and problem solving
Effective teaching of mathematics engages students in solving and discussing tasks that promote mathematical reasoning and problem solving and allow multiple entry points and varied solution strategies.
Accomplished Use
2. Teacher *consistently*…
a. provides opportunities for students to explore and solve problems that build on and extend their current mathematical understanding.
b. selects tasks that provide multiple entry points.
c. poses tasks that require a high level of cognitive demand.
d. provides opportunities for students to discuss tasks without taking over student thinking.
e. selects tasks that allow students to make sense of and solve using varied approaches and strategies.

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Kentucky Mathematics Innovation Practice Profile will be a tool that guides our feedback.

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KCM
KENTUCKY CENTER FOR MATHEMATICS

Kentucky Center for Mathematics (KCM)

- Monthly coaching
  - in-person 4x year
  - virtual 6x year
- Professional learning support for math coaches
  - Co-present professional learning
  - Co-develop professional learning
- Provide needed resources for the math coach
  - Books
  - Resources (math manipulatives, children's books, etc.)
  - Online resources for instruction
- COST- $3000

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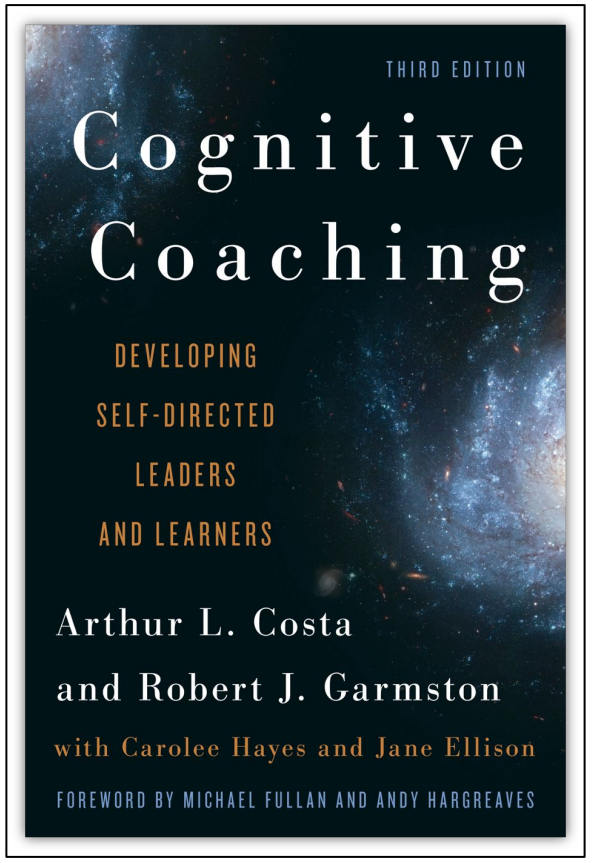
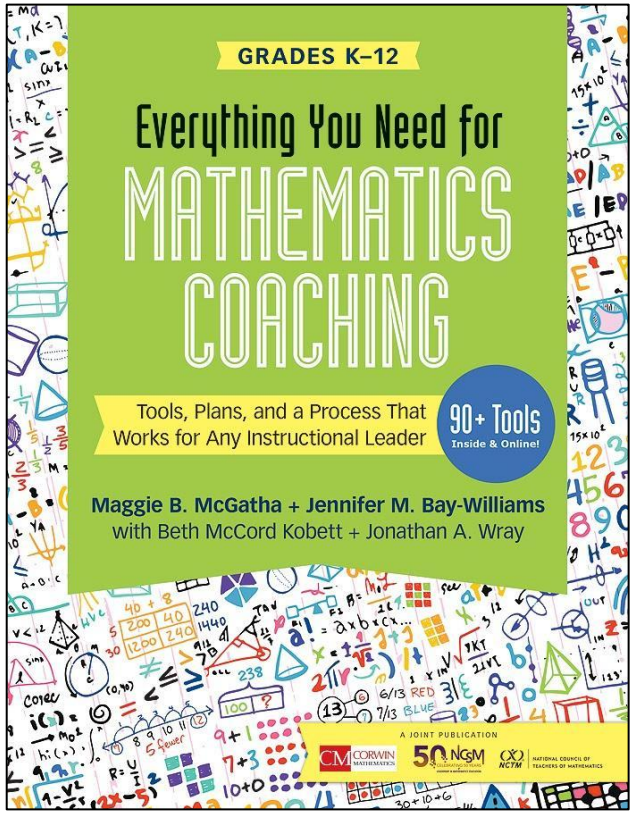
M^2 Consulting



Cognitive Coaching℠



Mathematics Coaching

So, you're a new mathematics coach...

What is Cognitive Coaching℠?

Mediate Thinking

3 Coaching Maps

Coaching Tools

Why Cognitive Coaching℠?

- Not a deficit model
- Substantial research base
- Connections to Brain-based Learning, Growth Mindset, SEL, Thinking Strategies, & Deeper Learning
- Focuses on thinking

Fall 2022

- Days 1-4 in Frankfort
- 4 additional hours of mentoring

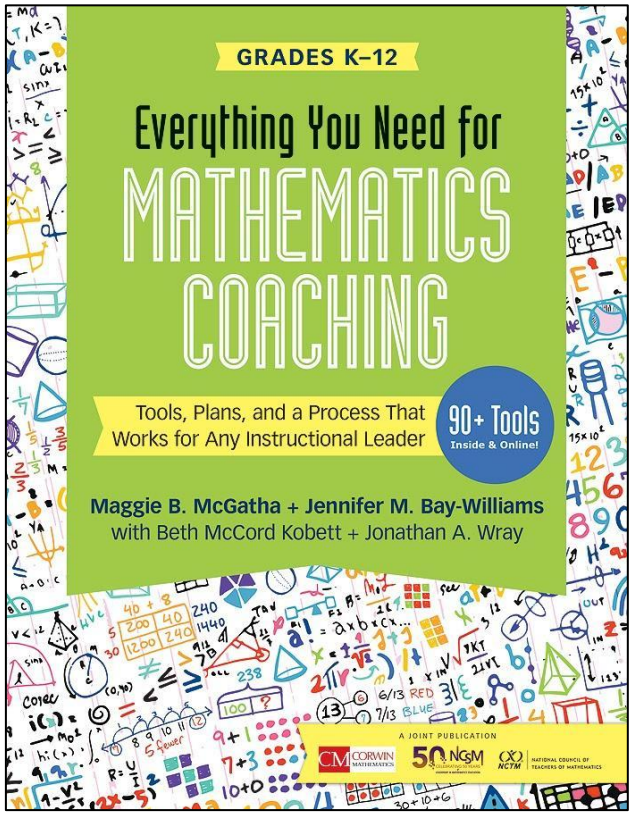
Spring 2023

- Days 5-8 in Frankfort
- 4 additional hours of mentoring

Cost: $1,500

Coaching Resources

- Resources valued at $500

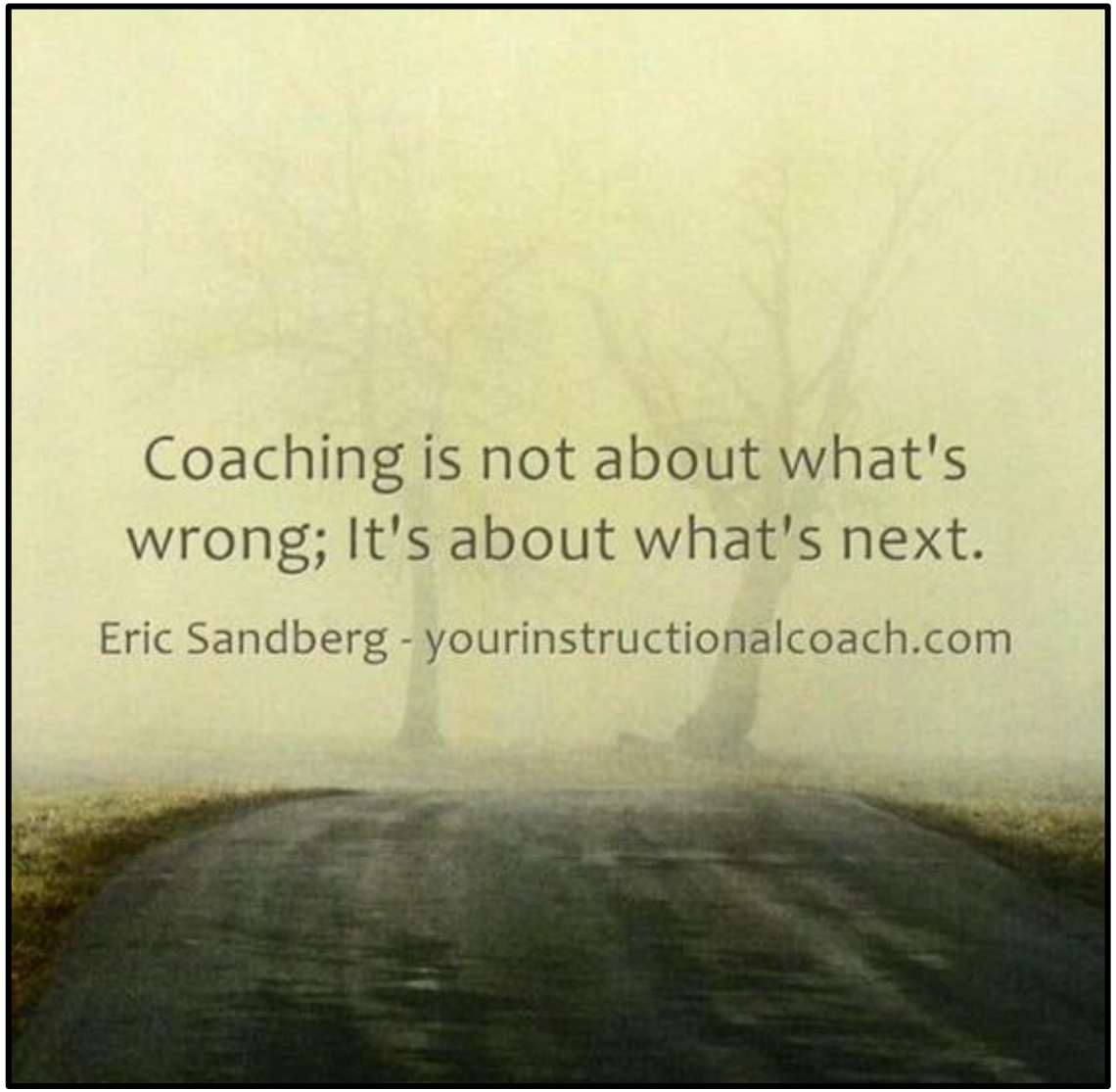


Mathematics Coaching

Dr. Maggie B. McGatha, M^2 Consulting
Dr. Jennifer M. Bay-Williams, University of Louisville

Mathematics Coaching is...

- Coaching conversations with teachers
- Working with PLCs
- Leading PL with teachers
- Collecting data for teachers during observations



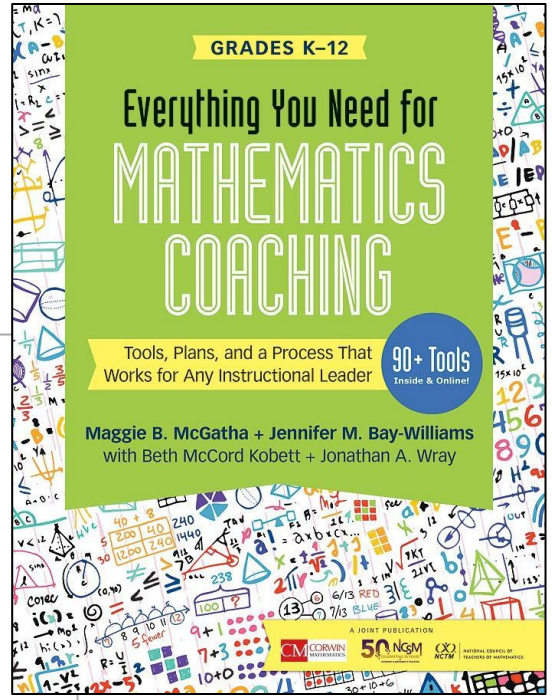
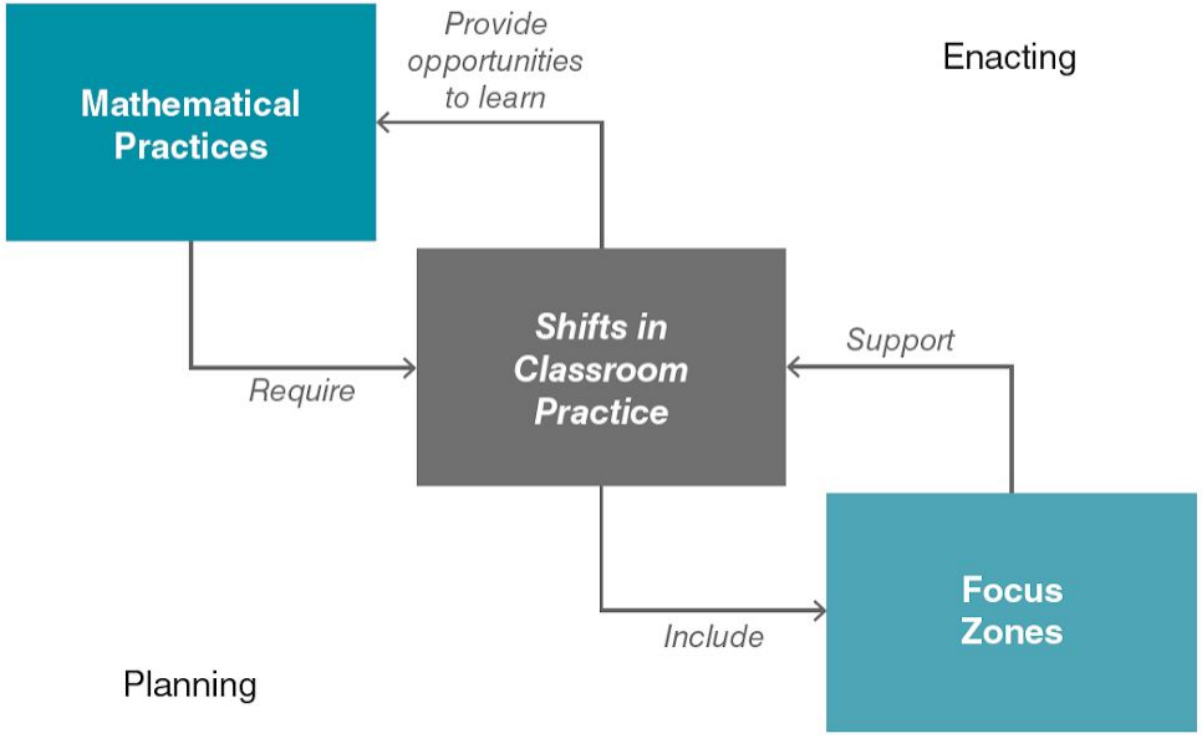


Figure 1.1 Leading for Mathematical Proficiency (LMP) Framework



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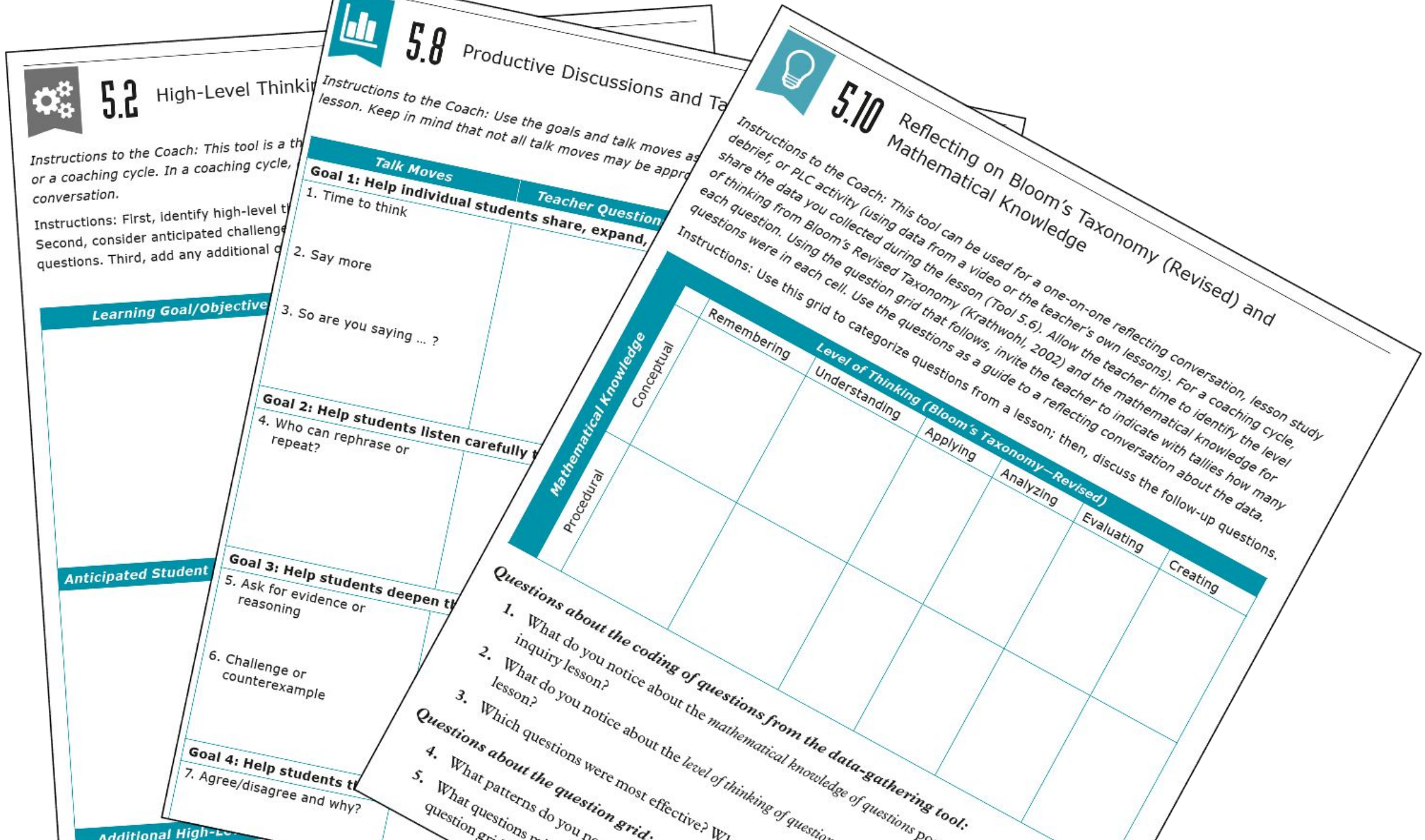

5.2 High-Level Thinki

Instructions to the Coach: This tool is a th
or a coaching cycle. In a coaching cycle,
conversation.

Instructions: First, identify high-level t
Second, consider anticipated challenge
questions. Third, add any additional q

Learning Goal/Objective

Anticipated Student

Additional High-Le

5.8 Productive Discussions and Ta

Instructions to the Coach: Use the goals and talk moves as
lesson. Keep in mind that not all talk moves may be appro

Talk Moves	Teacher Question
Goal 1: Help individual students share, expand,	
1. Time to think	
2. Say more	
3. So are you saying … ?	
Goal 2: Help students listen carefully t	
4. Who can rephrase or repeat?	
Goal 3: Help students deepen th	
5. Ask for evidence or reasoning	
6. Challenge or counterexample	
Goal 4: Help students th	
7. Agree/disagree and why?	

5.10 Reflecting on Bloom's Taxonomy (Revised) and Mathematical Knowledge

Instructions to the Coach: This tool can be used for a one-on-one reflecting conversation, lesson study debrief, or PLC activity (using data from a video or the teacher's own lessons). For a coaching cycle, share the data you collected during the lesson (Tool 5.6). Allow the teacher time to identify the level of thinking from Bloom's Revised Taxonomy (Krathwohl, 2002) and the mathematical knowledge for each question. Using the question grid that follows, invite the teacher to indicate with tallies how many questions were in each cell. Use the questions as a guide to a reflecting conversation about the data.

Instructions: Use this grid to categorize questions from a lesson; then, discuss the follow-up questions.

Mathematical Knowledge	Level of Thinking (Bloom's Taxonomy—Revised)					
	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating
Conceptual						
Procedural						

Questions about the coding of questions from the data-gathering tool:

1. What do you notice about the *mathematical knowledge of questions* po
2. What do you notice about the *level of thinking of questions* inquiry lesson?
3. Which questions were most effective? W lesson?

Questions about the question grid:

4. What patterns do you
5. What questions
question gri

July 2022

- Full-day seminar in Frankfort

2022-2023 school year

- Monthly virtual meetings on ZOOM

July 2023

- Full-day seminar in Frankfort

Fall 2023

- Conference registration

Cost: $5,000

Mathematics Coaching Library

- Resources valued at $1,000

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ELEMENTARY MATHEMATICS SPECIALIST

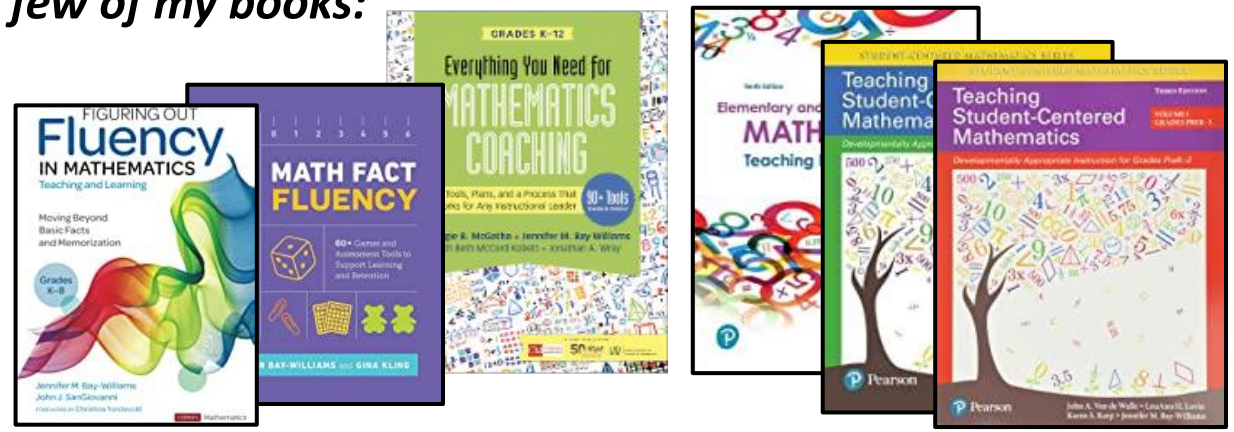
Kentucky Department of EDUCATION

Welcome to the UofL Elementary Math Specialist!

Dr. Jennifer Bay-Williams
Professor, University of Louisville

About me: I believe every student can be successful in math and feel that they are good at math. My career has focused on this vision. Critical to student success is onsite expertise in elementary mathematics! My teaching, workshops, and books are all efforts to support math teachers and leaders.

A few of my books:



Dr. Katherine Marin
Assistant Professor, University of Louisville

About me: Everybody Maths! This is my core belief and it shapes all of my work in math education. When I teach, coach, deliver professional development, or research, I think about how to make math inclusive and for everyone!

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ELEMENTARY MATHEMATICS SPECIALIST

Five Courses:

1. **Math Reasoning**
2. **Teaching Numbers**
3. **Teaching Fractions**
4. **Teaching Geometry, Measurement, and Data**
5. **Math Coaching or Cognitive Coaching***

Courses focused on…

- ✔ Ensuring the success of every child
- ✔ K.A.S. Content Standards in K-5
- ✔ Standards for Mathematical Practice
- ✔ NCTM *Principles to Actions*

SEQUENCE OF CLASSES

Summer F2F Launch

July 21, 2022	Day after Math Coaching launch

Fall 2022 - ONLINE

Math Reasoning

Spring 2023: ONLINE - Choice Advanced Content Methods (1 of 3)

Teaching Number	**Teaching Fractions**	**Teaching Geometry**

Summer F2F MidPoint Meeting

July 20, 2023	Day after Math Coaching event

Fall 2023: ONLINE - Choice Advanced Content Methods (2 of 3)

Teaching Number	**Teaching Fractions**	**Teaching Geometry**

Spring 2024: ONLINE - Choice Advanced Content Methods (3 of 3)

Teaching Number	**Teaching Fractions**	**Teaching Geometry**

EMS Completion Celebration (optional): May 2024 TBD

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Budgeting for the E.M.S.

Teacher tuition: $575 per credit hour (est.2022-23) **Fees**: $35 per semester

Options	Course totals	Est. Tuition	Fees	Total (Estimated)
Courses - YEAR 1				
EMS Course 1, 2 + MC	3 courses	$5,175.00	$70	$5,245.00
EMS Course 1, 2 + MC + CC	4 courses	$6,900.00	$70	$6,970.00
Courses - YEAR 2				
EMS Course 3, 4	2 courses	$3,450.00	$70	$3,520.00
Courses to complete a degree	??			

Other expenses: Books (estimated $600 for Math Coach, $_____ Teacher Book Study);
Manipulatives (self and others); and
Travel to summer F2F days (3 events)

Additional providers

- Schools may select other providers
- Providers must be evaluated with the Elevating Evidence Tool to ensure alignment with the HQPL
- The alignment must be submitted to KDE for approval during Year 1 of the grant award

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Break for questions…

Please submit questions to the following Google form:

https://forms.gle/u7A3AChGDC9josvo7

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Brief recap…

- Approved Providers
- To improve mathematics instruction in K-5
- Purpose of grants
- And more…

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Annual evaluation…

- Page 5
- KDE will conduct the evaluation based on data collected by each Mathematics Coach at each school site
- The evaluation will consider four levels of data:
  - Student data
  - Teacher data
  - Mathematics Coach data
  - School Wide data

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Narrative questions…

- The narrative is what you write—your grant proposal—where you "propose"…
  - To meet required standards and engage teachers
  - How the Coach will work with teachers in cycles of planning
  - How the Coach will facilitate collaborate teacher interaction
  - The qualities of an effective Mathematics Coach
  - And more
- Questions are listed on page 6, however…
- **The questions on pages 10-11 are a better guide for writing**

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Submitting your questions…

- Page 7
- Questions will only be answered during this live presentation and through the KDE email (KDERFP@education.ky.gov)
- Deadline for questions: September 22 at 4 p.m. ET
- Responses will post: On/About September 27 alongside the RFA

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Application components…

- This is the order in which you present your proposal
  - Application Cover Page (page 12 of the RFA)
  - Table of Contents with page numbers (your document)
  - Answers to the Narrative Questions (pages 6, 10-11) limited to 600 words per question
  - Budget Form with expandable lines (page 13-14)
  - Budget Summary (600 words; page 11)
  - There is no “page limit” for the grant proposal, per se
- However, submissions should **only include** these sections

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Formatting requirements…

- Page 7
- 12-point Arial (not condensed)
- Double-space all pages in the narrative
- Bullets may be single-spaced
- Number pages consecutively beginning on narrative page 1
- Narrative shall not exceed 600 words per narrative question and budget summary (pp. 10-11)
- Narrative should have 1-inch margins

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Blinding (redacting)…

- Remove all identifying information from the application, including:
  - District name
  - School name
  - County name
  - City name
- Names of individuals and signatures should **NOT be blinded**
- At the top of page 8, the RFA states, “Blind copies will be scored as received…” That is, they will not fix blinding errors

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The rain in [redacted] falls mainly on the plains. Now is the time for all good men to come to the aid of their country. The rain in XXXXX falls mainly on the plains. Now is the time for all good men to come to the aid of their country.

The rain in falls mainly on the plains. Now is the time for all good men to come to the aid of their country. The rain in [redacted] falls mainly on the plains. Now is the time for all good men to come to the aid of their country. The rain in XXXXX falls mainly on the plains. Now is the time for all good men to come to the aid of their country. The rain in [redacted] falls mainly on the plains. Now is the time for all good men to come to the aid of their country. The rain in falls mainly on the plains. Now is the time for all good men to come to the aid of their country.

Submission…

- Page 8
- Electronic submission of a single PDF file if possible
- Be sure to use the naming conventions noted on page 8
- If you must send two files—redacted and original—both must be received by the 4 p.m. ET deadline on Oct. 8
- It is perfectly acceptable to email the KDERFP email after you submit to ensure your proposal was received

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Contract award…

- Notification of awards will be in early December
- Funding will begin July 1, 2022
- In between those dates, KDE will work with awardees to develop and complete the Memorandums of Agreement (MOAs)
- The initial MOA will be in effect through June 30, 2024
- As noted, the award may be renewed for an additional 2 years

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Evaluation of applications…

- Page 9
- KDE does not score the proposals
- A “call for reviewers” has been issued for knowledgeable reviewers (math specialists, teachers, grant professionals, etc.)
- We anticipate up to 100 reviewers will be needed

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Evaluation of applications…

- The independent reviewers are selected through the KDE Grants Branch and are trained on how to score the proposals
- Reviewers work in teams of 3 to …
  - Read and score 10-14 applications using a provided rubric
  - Work as a team to calibrate those scores based on the strengths and weaknesses they see in each proposal
  - Submit their scores and comments to the KDE Grants Branch

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The scoring rubric…

- Pages 10-11
- The Grants Branch will create a scoring rubric that replicates the Evaluation Criteria
- Reviewers will independently determine how well the proposal addresses each of the 7 narrative questions as noted here
- Reviewers will also score the budget provided and the pledged matching funds (Question #8; form and summary)

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Mathematics Achievement Fund Grant

Evaluation Criteria

The narrative description should be written in the chronological order in which the criteria are written below. Questions 1-7 should be limited to six hundred (600) words per question, single-sided, double-spaced pages and have margins of one inch. **Do not include any additional attachments.**

Evaluation Criteria	Maximum Points
Question 1: Utilizing the *KAS for Mathematics,* describe the shared vision for what mathematics teaching and learning will look like for the teachers and students whom the school serves.	**10 points**
The answer should include a description of the school's mathematics shared vision of what mathematics teaching and learning will look like for teachers and students. The answer should reference the bulleted items below: • Focus on the *KAS for Mathematics* and how students learn mathematics; • Actively engage teachers in understanding *KAS for Mathematics* and evidence based instructional practices in mathematics; • Coach teachers in cycles of planning (at least 8 cycles per 50% of mathematics teachers), observation, feedback and reflection; and • Facilitate collaborative teacher interaction addressing models of instructional practice.	
Question 2: Describe how teachers will actively engage in understanding *KAS for*	**10 points**

595 words

To be clear, the NAEP reading assessment measures **reading comprehension** by providing sections of literary and informational text. It gauges a student's ability to read and understand—which is the whole purpose of learning to read, that is, to teach students how to think when they [illegible]eadi[illegible] [illegible]ahar[illegible] And, again, two of three students in America cannot do th[illegible]at [illegible] tha[illegible] [illegible]eve[illegible] [illegible]he impact[illegible] [illegible]he [illegible]me[illegible] [illegible]o [illegible]hree[illegible] [illegible]de[illegible] [illegible]ikely[illegible] [illegible]ll ea[illegible]les[illegible] m[illegible]y in adul[illegible]od. [illegible]uch[illegible]uette et al. [illegible]4) [illegible] inc[illegible] in[illegible]ease[illegible] readi[illegible] [illegible]ency increases; 75% of proficient readers had household incomes of $60,000 as compared to **just 7% of below-basic readers**. Reading well isn't just a nice thing; it's a life changer.

Admittedly, learning to read is a complex, layered process that can be achieved through multiple paths; there is no one-size-fits-all. In simplest terms, children learn the mechanics of reading in early grades and build their abilities to comprehend as they move through and beyond school, that is, as they begin to take on more and more content.

But Shanahan et al., in the 2010 What Works Practice Guide (IES), says we must shift the comprehension piece to early years. It cannot wait until 3rd or 4th grade. It should begin in K-1. "Devoting time only to word-level skills will not be sufficient to help primary grade students become effective readers. Students developing decoding skills and fluency also need to develop their knowledge of the world and their ability to think about what they read." (p. 29) Pearson in Israel and Duffy (2014) looks to research on explicitly teaching comprehension strategies—a lesser-developed area of literature—and sees two emerging themes.

- As students learn and apply strategies to texts, **comprehension improves**, and
- As they transfer those strategies to <u>new</u> texts and tasks, **comprehension improves**.

Perkins (2017) citing Pressley and Allington (2015) puts it more succinctly: If struggling readers learn to apply comprehension strategies that have been taught to them, they will develop into **exceptionally skilled readers**. (p. 33)

So, what's stopping us? Why aren't we bringing comprehension strategies to earlier grades? Why are we still expecting students to naturally shift from learning to decode to full-blown comprehension? (Denton & Fletcher, 2003) It may be, as Pearson notes, failed experiences with strategy instruction. Specifically, strategies alone won't work. Research over the past three decades is filled with tales of stop-and-drop strategies applied in elementary grades with greater and lesser effect. But, Pearson says, "... the 'Achilles heel' both in [the 1980s] and even today, is finding a way to make them part of 'daily life' in classrooms." (p. 22) Teaching a strategy in isolation becomes disconnected; it cannot be sustained for an entire school year.

Shanahan et al. and the 2010 IES Practice Guide concur; stop-and-drop doesn't work. Comprehension strategies need to be part of the learning framework. Teachers should not only teach students how to read the text but how to think while they are reading. Students can and should learn to infer, compare, question, visualize, predict, clarify, monitor, identify text structure, and more—all with an eye toward understanding. While this will look different at K-1 than grades 2-3, the IES report stresses the need to teach mechanics and comprehension strategies "in concert" (p. 8) and with the appropriate literacy-rich curriculum, time for student reading and writing, and adequate teacher and student resources. But, he warns, "Constructing meaning while reading is demanding intellectual work, and teachers who hold their students' interests may be more effective in helping them to develop good comprehension skills."

rtment of
T·I O N

97 words

2018-2019 Kentucky Assessment*

Reading	3rd		4th		
	Dis	Ky	Dis	Ky	D
All	35.9	52.7	33.8	53.0	52
Bl./Af Am	25.0	29.7	13.3	29.3	50
White	42.2	57.4	31.0	57.9	52
F/R Lun	31.1	44.4	32.8	44.0	45

99 words

The rain in Spain falls mainly in the plains. The rain in Spain falls mainly in the plains. The rain in Spain falls mainly in the plains. The rain in Spain falls mainly in the plains. The rain in Spain falls mainly in the plains. The rain in Spain falls mainly in the plains. The rain in Spain falls mainly in the plains. The rain in Spain falls mainly in the plains. The rain in Spain falls mainly in the plains. The rain in Spain falls mainly in the plains. The rain in Spain falls mainly in the plains.

97 words

2018-2019 Kentucky Assessment* by Grade & Other Characteristics **Table 4**

Reading	3rd		4th		5th		6th		7th		8th		11th	
	Dis	Ky	Dis	Ky	Dis	Ky	Dis	Ky	Dis	Ky	Dis	Ky	Dis	Ky
All	35.9	52.7	33.8	53.0	52.8	57.9	54.9	59.0	46.0	57.4	43.0	62.6	**55.6**	44.5
Bl./Af Am	25.0	29.7	13.3	29.3	**50.0**	34.2	23.1	35.1	**38.9**	34.0	17.6	38.5	- -	21.1
White	42.2	57.4	31.0	57.9	52.9	62.5	**72.5**	63.5	57.7	61.5	**60.9**	66.8	**72.7**	49.0
F/R Lun	31.1	44.4	32.8	44.0	45.0	49.1	44.6	50.0	41.9	46.9	36.1	62.6	**47.2**	32.3

99 words

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“So what?” you may say…

- As you develop your narrative, you must:
  - Understand your audience (reviewers)
  - Write to those reviewers (and the rubric)
  - Help the reviewers **easily** score your proposal (i.e., help them find the information)

Kentucky Department of EDUCATION

Mathematics Achievement Fund Grant

Evaluation Criteria

The narrative description should be written in the chronological order in which the criteria are written below. Questions 1-7 should be limited to six hundred (600) words per question, single-sided, double-spaced pages and have margins of one inch. **Do not include any additional attachments.**

Evaluation Criteria	Maximum Points
Question 1: Utilizing the *KAS for Mathematics,* describe the shared vision for what mathematics teaching and learning will look like for the teachers and students whom the school serves.	**10 points**
The answer should include a description of the school's mathematics shared vision of what mathematics teaching and learning will look like for teachers and students. The answer should reference the bulleted items below: • Focus on the *KAS for Mathematics* and how students learn mathematics; • Actively engage teachers in understanding *KAS for Mathematics* and evidence based instructional practices in mathematics; • Coach teachers in cycles of planning (at least 8 cycles per 50% of mathematics teachers), observation, feedback and reflection; and • Facilitate collaborative teacher interaction addressing models of instructional practice.	
Question 2: Describe how teachers will actively engage in understanding *KAS for*	**10 points**

Mathematics Achievement Fund Grant

Evaluation Criteria

The narrative description should be written in the chronological order in which the criteria are written below. Questions 1-7 should be limited to six hundred (600) words per question, single-sided, double-spaced pages and have margins of one inch. **Do not include any attachments.**

Question 7: Utilizing KPREP data, identify the students with the most need in the area of mathematics. Discuss how the MAF grant will specifically meet the needs of those students? This answer should include a needs assessment based on KPREP data addressing the past three years.	**10 points**

...school's mathematics shared vision of what mathematics ...look like for teachers and students. The answer should reference the bulleted items below:

- Focus on the *KAS for Mathematics* and how students learn mathematics;
- Actively engage teachers in understanding *KAS for Mathematics* and evidence based instructional practices in mathematics;
- Coach teachers in cycles of planning (at least 8 cycles per 50% of mathematics teachers), observation, feedback and reflection; and
- Facilitate collaborative teacher interaction addressing models of instructional practice.

Question 2: Describe how teachers will actively engage in understanding *KAS for*	**10 points**

Question 2: Describe how teachers will actively engage in understanding *KAS for Mathematics* and evidence based instructional practices in mathematics within the shared mathematics vision for the school.	**10 points**
This answer should describe what evidence based instructional practices in mathematics (NCTM Effective Teaching Practices in Mathematics) will be of focus in the delivery of the *KAS for Mathematics* within the first year. Research suggest starting with one or two effective teaching practices to focus on within the first year).	
Question 3: Describe how the coach will work with teachers in cycles of planning, observation, feedback and reflection within the shared mathematics vision for the school.	**20 points**
This answer should explain what each of the four components of the coaching cycle would look like in the school and the schedule of what it might look like throughout the school year. (Remember, at least 8 cycles per 50% of mathematics teachers will be coached within a school year).	
Question 4: Describe how the coach will facilitate collaborative teacher interaction addressing models of instructional practice within the shared mathematics vision for the school.	**10 points**
This answer will address how the coach will meet the needs of all adult learners while building a culture of trust and collaboration (reference HQPL).	

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Question 5: Based on the responses provided above, describe the qualities your school would look for in a prospective mathematics coach.	**10 points**
This answer should address the qualities from up above including the dispositions your school looks for when hiring a mathematics coaching position. Include rationale on how the school would support the mathematics coach in earning their Elementary Mathematics Endorsement.	
Question 6: Describe how the role of the mathematics coach would be integrated into the school's multi-tiered system of supports (utilizing https://kymtss.org/)?	**10 points**
This answer should include background of how the MTSS functions at the school level and how the mathematics coach would play a role in data, intervention practices, diagnostic assessment and how students move through a tiered delivery system (tier one, two and three) with a continuum of supports.	
Question 7: Utilizing KPREP data, identify the students with the most need in the area of mathematics. Discuss how the MAF grant will specifically meet the needs of those students?	**10 points**
This answer should include a needs assessment based on KPREP data addressing the past three years.	
Budget Form and Summary	**20 points**
Include a school budget form and summary that includes how the district will match the funds of $62,000 per school year for their professional learning plan in mathematics.	

Evaluation Criteria Grand Total of Points	100 points
Consideration for Schools in Need	**20 points**
20 points will be awarded to the lowest 20% of applicants based on grade 3 KPREP math data from school year 2018-2019.	

- Application of “Schools in Need” points…
  - In the last MAF competition, 200 applications were received
  - If that remains the same, 40 schools will receive the additional points
  - 75 awards will be made (page 2)

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Budget…

- Form, pages 13-14
- Summary, limited to 600 words

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Mathematics Achievement Fund Budget Form

District

Name of School

Instructions: Use this form to provide a detailed, itemized explanation of expenditures for each MUNIS Code. Not all MUNIS codes listed need to be used. However, the school may not use MAF grant monies for any MUNIS code that is not listed. Matching funds from the district are required. Successful approval of budget is pending further review by the KDE.

MUNIS Code	Description	Amount	Explanation of Expenditures	Matching Funds
0110	Certified Services - (Contract)			
0211	Life Insurance			
0212	Health Insurance			
0214	Dental Insurance			
0221	Employer FICA Contribution			
0222	Employer Medicare Contribution			
0231	Ky. Teacher Retirement Systems (KTRS)			
0321	Workshop Consultant			
0322	Educational Consultant			
0335	Professional Consultant			
0338	Registration Fees			
0339	Other Professional Services:			
0569	Tuition: Other			
0580	Travel			
0591	Services Purchased from another district or Educational Agency within the state			
0592	Services Purchased from another district or Educational Agency out of state			
0610	General Supplies			
0643	Supplemental Books, Study Guides & Curriculum			
0734	Technology Related Hardware			
0735	Supplies – Technology Related			
0810	Due and Fees			
Total				

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Mathematics Achievement Fund Budget Form

District

Name of School

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0211	Life Insurance			
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0214	Dental Insurance			
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0222	Employer Medicare Contribution			
0231	Ky. Teacher Retirement Systems (KTRS)			
0321	Workshop Consultant			
0322	Educational Consultant			
0335	Professional Consultant			
0338	Registration Fees			
0339	Other Professional Services:			
0569	Tuition: Other			
0580	Travel			
0591	Services Purchased from another district or Educational Agency within the state			
0592	Services Purchased from another district or Educational Agency out of state			
0610	General Supplies			
0643	Supplemental Books, Study Guides & Curriculum			
0734	Technology Related Hardware			
0735	Supplies – Technology Related			
0810	Due and Fees			
Total				

PLUS...

0111 Extended Day

0112 Extra Duty

0113 Other Certified

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Budget…

- To estimate expenses, you will need to know your **vision** for the project as well as…
  - The costs for selected professional learning models
  - Estimated salary of a Mathematics Coach
  - Materials and supplies for coaching, professional learning
  - Etc.

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Budget summary…

- 600 word description of your professional learning plan for the Mathematics Coach and teachers
- KDE will provide information from the four approved vendors to help you determine the funding
- It is up to the school/district to determine how the co-facilitation will occur (how, when, how often, etc.)
- For example, a strong budget might include information on how you will determine which teachers are receiving coaching (50% of teachers through 8 cycles)

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Matching funds…

- Earlier, we described a grant as a coupon
- That is, a grant provides funds (a discount) on the good work your school needs to do for students and families
- Therefore, matching funds are simply the other costs that the grant cannot or does not cover
- In addition, all rules that apply to grant funds will apply to your matching funds (e.g., 25% salary limitation)
- You may want to include matching in your Budget Summary as well

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Matching funds…

- Other sources of match may include…
  - Time and effort of the principal in setting and monitoring the vision
  - Any professional supports from a co-op not funded by your project
  - Materials not covered by the grant
  - School/District funded PD days or stipends
  - Materials for PLCs (books, other)
  - Lesson study materials and time
  - Volunteer services and supports
  - Anything or anyone that supports the project

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Matching funds…

- As a practical example, think about Thanksgiving Dinner
- Imagine that you have $75 budgeted for the day
- Then, imagine that your spouse invites the 25 members of your extended family
- How would you manage to feed all those people on $75?

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Matching funds…

- Some “matching funds” for Thanksgiving…
  - Your nephew is a hunter and brings you 3 turkeys
  - Put the young children to work as they arrive to “find” decorations in the woods (acorns, leaves, etc.)
  - Make it a potluck! Everyone brings something savory, something sweet, and a beverage!
  - You raid your summer picnic supplies for napkins, plates and cups
  - You get your neighbor to pick up your groceries so you don’t have to use your own gas (i.e., mileage)

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MAF RFA Application Cover Page

Type of Application: Please select one.
____New applicant (never awarded the MAF grant)
____Repeat applicant (awarded the MAF grant previously)

DISTRICT NAME		
DISTRICT ADDRESS		
SCHOOL NAME		
SCHOOL ADDRESS		
PRINCIPAL NAME		Phone: Email:
SUPERINTENDENT		Phone: Email:
DISTRICT LEVEL PERSONNEL (Supervisor/Evaluator of the mathematics coach)		Phone: Email:
GRANT CONTACT/WRITER		Phone: Email:

I assure the attached application contains accurate information. I understand grant applications with incorrect or falsified information will not be considered for review or will be revoked once awarded. I assure the application has been reviewed and approved for implementation by all shareholders and the district and school will comply with all requirements, both technical and programmatic, pertaining to the grant. Failure to continuously meet compliance requirements and deadlines could result in partial or complete loss of funding of grant and may impact future funding.

Assurance of Commitment from the Superintendent, District Level Personnel and Principal

Superintendent _____ Date _____

District Level Personnel _____ Date _____

Principal _____ Date _____

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Break for questions…

Please submit questions to the following Google form:

https://forms.gle/u7A3AChGDC9josvo7

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Wrap up…

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