Exemplar Application Sample: This document is being provided as a resource for the MAF Coaching Cohort 2 RFA. This is the highest scoring grant from the FY22 Math Coaching Grant. However, this grant is not perfect. Please note that the FY25 MAF RFA has been changed.

MAF RFA Application Cover Page

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

DISTRICT NAME	**Anderson County**	
DISTRICT ADDRESS	**1160 Bypass N. Lawrenceburg, KY 40342**	
SCHOOL NAME	**Ezra Sparrow Early Childhood Center**	
SCHOOL ADDRESS	**1154 Bypass N. Lawrenceburg, KY 40342**	
PRINCIPAL NAME	**Janice Meredith**	Phone: 502-839-2504 Email: Janice.Meredith@anderson.kyschools.us
SUPERINTENDENT	**Sheila Mitchell**	Phone: 502- 839- 3406 Email: sheila.mitchell@anderson.kyschools.us
DISTRICT LEVEL PERSONNEL (Supervisor/Evaluator of the mathematics coach)	**Bobby Murphy**	Phone: 502- 839- 3406 Email:bobby.murphy@anderson.kyschools.us
GRANT CONTACT/WRITER	**Carrie Riggs**	Phone: 502-839-2504 Email: carrie.riggs@anderson.kyschools.us

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: 10/4/21

District Level Personnel — Date: 10-4-2021

Principal — Date: 10/4/21

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Part 1: Shared Vision using Kentucky Academic Standards for Mathematics

The Kentucky Academic Standards are aligned to early numeracy trajectories for learning mathematics. Our school's mathematical vision is to use developmentally appropriate tasks, instructional strategies and assessments that focus on conceptual understanding. The shared teaching vision at our school includes teachers engaging students in high-cognitive-demand tasks to promote problem solving while connecting concrete models to real world application of mathematics. Teachers will use purposeful questioning to help assess and advance students' understanding based on the learning progression for mathematics. The role of the teacher is to facilitate exploration and guide understanding of concepts through various instructional settings using high-quality instructional resources (whole group and guided small group instruction).

The shared vision of mathematical learning at our school includes students exploring various real world and instructional math manipulatives to make sense of and persevere in solving mathematical problems. The role of the student is to work collaboratively with one another to solve engaging high-cognitive-demand tasks.

- Our school will use the Kentucky Academic Standards (KAS) for mathematics through Professional Learning Communities (PLCs) that focus on vertically aligning standards in order to meet the needs of all students. Professional Development for all teachers will include instructional strategies, resources and materials to support conceptual hands-on learning.
- Teachers and the mathematics coach work collaboratively during monthly planning meetings to create the monthly pacing guide. The pacing guide will include grade level standards along with a virtual link to KAS so that teachers

can utilize the Mathematical Practice Standards, vertical alignment and clarification of standards. Teachers and the mathematics coach will work collaboratively to align grade level standards to common assessments, district standards trackers and report cards.

- 100% of our elementary teachers (kindergarten) will be coached within the first year of the grant cycles. This is approximately 8 teachers. Each teacher will participate in a coaching cycle once a month. Based on skill and experience level, additional coaching cycles will be scheduled throughout the year. The mathematics coach will support teachers through modeling, co-teaching and co-planning throughout the year.
- The coach and teachers will work collaboratively through monthly data team meetings where teachers analyze and reflect on their students' progress based on pre/post common assessments. The goal of data team meetings is to reflect, support and share what instructional strategies and resources are successful in improving student achievement, and to identify gaps in instruction or pacing.

Part 2: Teacher Engagement in Instructional Practices

A survey was shared with teachers regarding what effective teaching practices they would want additional support with for the upcoming two school years. Based on teacher input our school will be focusing on the following practices:

- Practice 2: Implement Tasks that Promote Reasoning and Problem Solving
- Practice 3: Use and connect mathematical representations
- Practice 5: Pose purposeful questions

- Practice 7: Support productive struggle

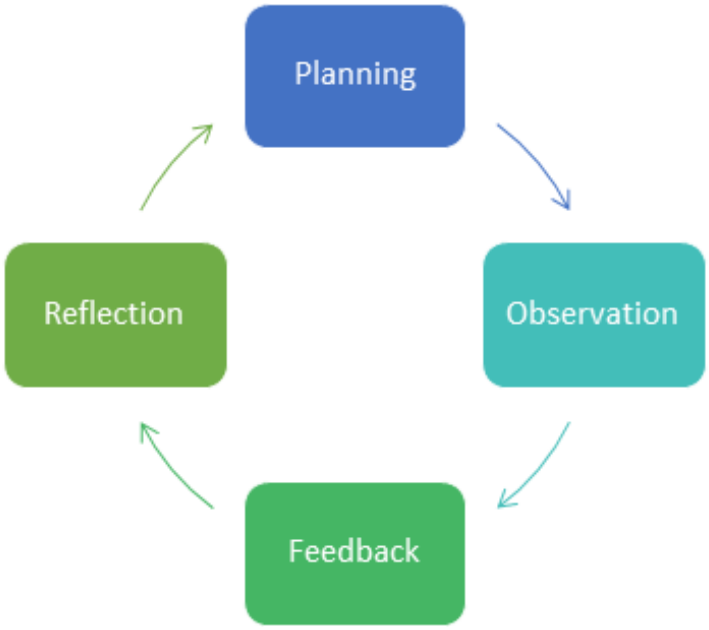
The school principal and the coach will collaborate to identify two mathematical practices to focus on for each school year. The coach will create a ratings document for teachers to reflect on their effectiveness in incorporating the teaching practices and their students' engagement with each practice.

The coach will observe each classroom teacher the first month of school to get baseline data on effective teaching practices. Using the ratings document and observational data, together the teacher and the coach will identify an area of strength and growth for each teaching practice. They will collaborate together to create a plan to improve on each practice using NCTM Effective Teaching Practice in Mathematics guidelines. Lessons and tasks will be modeled by the coach to help support the teacher in becoming more effective with the instructional practices. The coach will observe and monitor the instructional practices of the teacher over the year using an observational data collection form. Through observational data it will be determined that the teacher has shown mastery of the NCTM Effective Teaching Practice. After mastery has been determined the coach and teacher will collaborate together to begin to focus on another effective teaching practice.

Part 3: Mathematics Coaching

The coach will support classroom instruction through coaching cycles that include planning, observing, providing feedback and reflection. The cycle is continuous and supports on-going growth of classroom teachers (see Figure 1).

Figure 1



- Planning: the coach and classroom teacher will collaborate together to generate a goal that the teacher wants to achieve within the classroom. The goal will be content and instructionally based, and will focus on one of the NCTM Effective Mathematical Practices. The coach and teacher will plan together lessons, activities, instructional strategies and classroom routines that support the school's mathematical vision of teaching and learning. Tandem teaching will be implemented to help model and coach teachers in the moment. The coach will model lessons and tasks to help support the teacher in becoming more effective with instructional practices.

- Observation: the classroom teacher will be observed by the coach and data will be collected using an observation tool that includes NCTM Effective Teaching Practice checklist. The coach will document teacher's interactions along with student engagement in tasks relating to the school's vision of mathematical teaching and learning.
- Provide feedback: the coach will give immediate written feedback of a positive observation made before leaving the classroom. This helps support teacher efficacy and morale regarding the coaching cycle process. The coach and teacher will have a formal feedback session where all of the observational data will be shared and reviewed together.
- Reflection: after the feedback session the classroom teacher will reflect on the coaching cycle and the progress towards meeting the instructional goal. The teacher will identify successes and areas of continued improvement. The coach will reflect on the progress made in the coaching cycle, and how to continue to support the teacher's growth in effective teaching practices. Student achievement will be a focus of the reflection and how coaching has supported student mastery of standards.

Within our school 100% of kindergarten teachers will participate in mathematics content coaching. Each teacher will complete 9 coaching cycles throughout the year. The coach will provide additional coaching cycles to teachers based on experience and skill level. For example, new teachers will have additional coaching cycles to model and support our school's mathematical vision of teaching and learning. The coaching cycle

schedule includes the timeline for the 9 coaching cycles and supporting collaboration at the beginning/end of each school year (see Figure 2).

Figure 2

Coaching Cycle Schedule	
August	- Coach completes informal observations of classroom teachers - Teacher completion of Effective Teaching Practices Rating Scales (2 practices) - Teacher and coach collaborate to identify areas of strength and growth within teaching practices (2 practices) - Coaching Cycle # 1
September	- Coaching Cycle # 2
October	- Coaching Cycle # 3
November	- Coaching Cycle # 4
December	- Coaching Cycle # 5
January	- Coaching Cycle # 6
February	- Coaching Cycle # 7
March	- Coaching Cycle # 8
April	- Coaching Cycle # 9
May	- Teacher completion of Effective Teaching Practices Rating Scales - Teacher reflection on areas of strength and growth within teaching practices - Coach and teacher will analyze student data for growth and achievement. - Coach will plan and support Professional Development opportunities for teachers

Part 4: Collaboration

The coach will facilitate many different interactions among teachers to encourage collaboration and meet individual needs. The PLC and Data Team process is continuous throughout the school year in order to ensure students are mastering grade level standards and that effective teaching practices are supporting mathematics instruction in every classroom. Classroom teachers will conduct peer observations based on the coach and principal suggestions. Peer observations are used to model effective classroom practices that reflect our school's mathematical vision for learning and teaching. This also encourages collaboration among teachers as they learn and grow from one another.

The coach will analyze the pre-assessment data from the common assessments to plan PLCs. Teachers will collaborate with the coach and each other on High-Quality Instructional Resources and professional learning throughout monthly PLC opportunities. Through this collaboration teachers will have access to high-quality instructional resources used by their peers. PLC opportunities also grow teacher leaders, and offer an opportunity for all teachers to share their expertise which builds teacher efficacy.

The coach will foster an environment of collaboration through valuing all teachers' contributions to discussions and resources. Along with creating a safe space to ask questions or for support if needed. The coach will offer their expertise while teachers share their ideas on resources that are researched based and aligned to the KAS. During these collaborative PLC, the coach will help individual teachers and the grade level with any misconceptions or needs they might have. PLCs take place right

after the pre-assessment, and before instruction on the standards for the unit begins. This allows teachers time to learn and reflect on any new strategies or practices that the coach might model.

Throughout the instructional units, teachers along with the coach will meet in Data Teams, where they will use their pre/post common assessment data to track mastery of the KAS, and make informed and supported decisions about student needs based on that data. The goal of Data Team meetings is to reflect, support and share what instructional strategies and resources are successful in improving student achievement, and to identify gaps in instruction or pacing.

Part 5: Mathematics Coach Qualities

Professional experiences of a mathematics coach within our school would include being a master teacher with at least 5 years of experience teaching mathematics. The coach would need to have extensive knowledge of learning progressions regarding early numeracy. The professional experiences of the coach would be crucial in coaching Kindergarten teachers along with supporting intervention services, and leading the mathematics portion of the Multi-Tier System of Support within the building. Another qualification of the coach would be knowledge of the vertical alignment of Kentucky Academic Standards from early childhood (preschool) through first grade. Knowledge of standards and mathematical learning progressions will be helpful in leading professional development and professional learning opportunities within the building.

Leadership qualities of the coach within our building would include being a servant leader. The coach should have a strong drive to help grow teacher leaders in the area of mathematics by building teachers' efficacy. An effective coach can recognize teachers' strengths and abilities in order to maximize potential growth in all teachers. The coach within our school should place a high emphasis on building relationships through collaborative dialogue with teachers of all levels of knowledge and experience. Content coaching includes teacher/classroom observations and feedback to teachers. The coach needs to be able to facilitate a growth mindset by having teachers reflect on their own teaching practices while providing support for areas of growth.

Personal characteristics of the mathematics coach within our school would include being a lifelong learner. The coach will have to stay current with best practices and high yield instructional strategies in order to help support and coach classroom teachers. The position requires completion of numerous coaching professional development opportunities as well as completion of a mathematics endorsement from the University of Louisville.

Data analysis is an important aspect of being the coach within our school. The coach must be able to interpret data at the school, classroom and student level. Data analysis is crucial when discussing the Multi-Tiered System of Supports, along with the effectiveness of instructional strategies and resources. Our school's data is the key component in creating goals and guiding instructional decisions.

Another characteristic that the mathematics coach would need to have is the ability to be innovative. The coach must be able to take risks and try new instructional

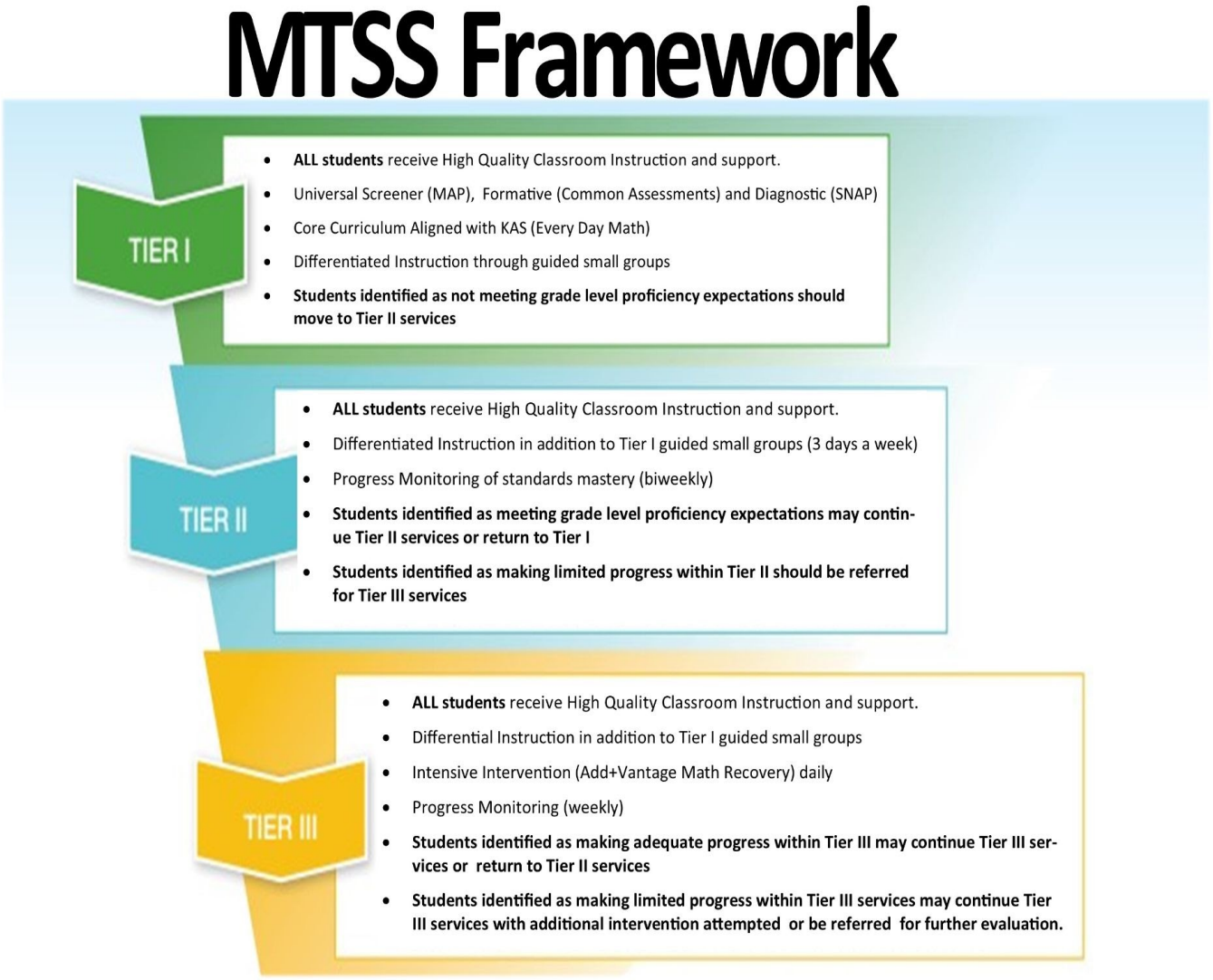
ideas and resources to help support student achievement and teacher effectiveness. Along with being innovative the coach should be engaging. The position requires co-teaching within the classrooms. As a co-teacher the coach uses purposeful questioning to assess and advance students' reasoning. The coach will model high-cognitive demand tasks that allow for multiple entry points for all students, and varied solutions strategies. The coach overlaps co-accountability with teachers for student learning and growth.

Our school will support the mathematics coach in earning their Elementary Mathematics Endorsement through intentional blocked planning everyday for the purpose of completing graduate assignments. The school/district will also contribute funds to support the coach's Elementary Mathematics Endorsement including a $600 textbook allotment within the budget.

Part 6: Mathematics Coach Role is Multi-tiered System of Supports

The school's current Multi-Tiered Systems of Supports (MTSS) includes effective classroom instruction (tier 1) and interventions (tier 2 and 3) that increase the learning rate of all students, especially those students who are not meeting grade level expectations. Please refer to the school's MTSS Framework figure 3.

Figure 3



The school's MTSS model includes a Student Intervention Team consisting of: Principal, School Psychologist, reading and math interventionists. The Student Intervention Team meets 3 times a year with individual classroom teachers to discuss universal screener data (MAP), formative common assessment data and diagnostic assessment (SNAP) data. During the Student Intervention Team meetings data is used

to place students within a tiered delivery system. Criteria for placement within Response to Intervention (RtI) tier 2 and tier 3 includes student assessment data scoring within the apprentice or novice ranges.

If students meet the Response to Intervention criteria the Math Interventionist (MIT) uses SNAP diagnostic data and classroom common assessment data to place students within tier 2 or tier 3 services. Students who are identified as needing additional support through tier 2 intervention services will receive targeted small group instruction 3 days a week. Students needing the most intensive math support will receive daily pull out instruction from the MIT, who is highly trained in Add+Vantage Math Recovery. The Student Intervention Team will meet to review students' tier placement and progress monitoring data throughout the school year. The school's MTSS/RtI model has fluid tiers that allow students to move within the tiered systems using progress monitoring, universal screening, diagnostic and common assessment data.

The mathematics coach will facilitate Student Intervention Team meetings along with the school principal. The responsibility of the coach will be to organize and analyze schoolwide and classroom universal screening (MAP), diagnostic assessment (SNAP) and common assessment data. The math coach will collaborate in the determination of eligibility in or movement within MTSS for each student.

Another role of the coach within MTSS is to work with the classroom teachers through analyzing universal screener (MAP), common assessment and SNAP data (diagnostic assessment) for their classroom. The math coach monitors KAS taught and the progression of standards through curriculum pacing. An important role of the coach

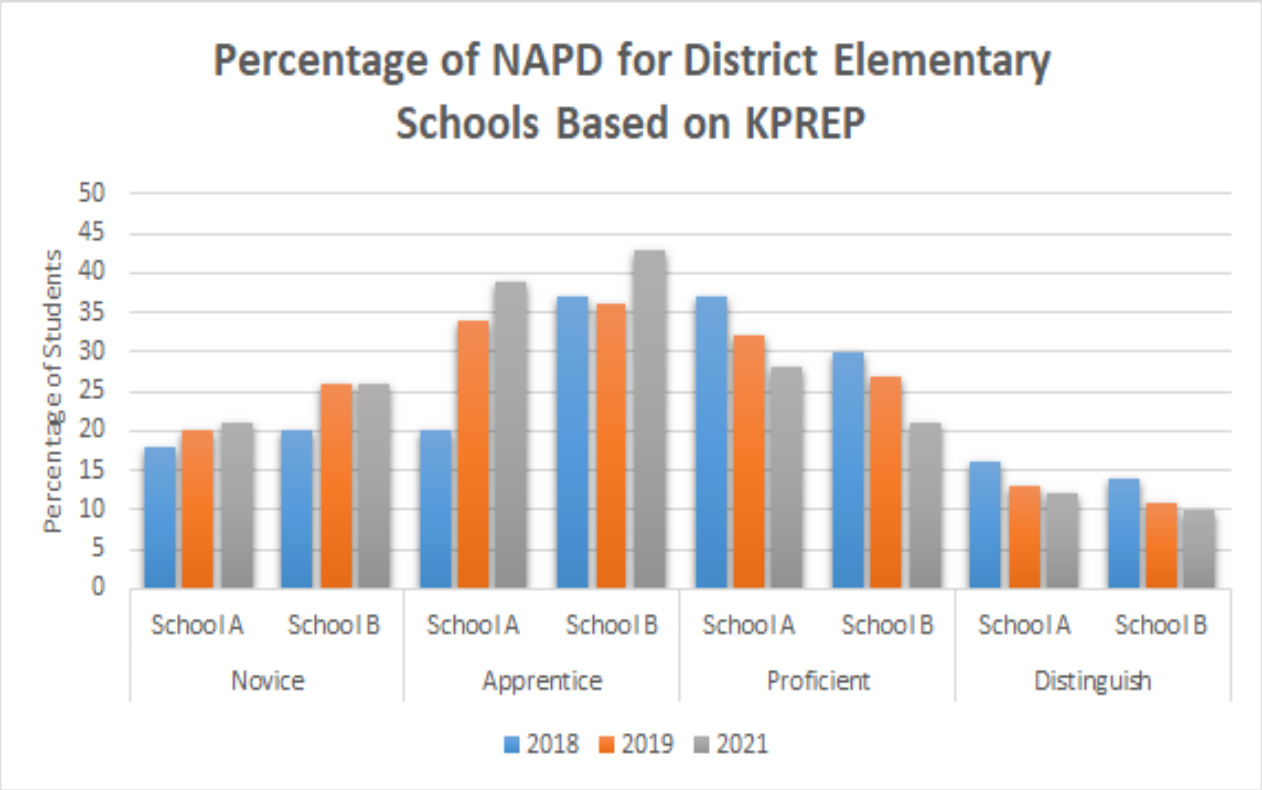
is to support and provide resources for high quality math instruction for all students within the tier 1 classroom.

The MIT and the coach work closely on providing high quality instructional resources for the intervention classroom. These resources include diagnostic assessments (AVMR) for intervention students, progress monitoring probes and math manipulatives. The math coach will be a resource to the MIT; supporting tier 2 and tier 3 RtI instruction through professional development, professional learning communities, math resources and data analysis.

Part 7: Data Analysis

Our school serves as the primary setting for 75% of the kindergarten students within the district. While students at our school are not assessed on the KPREP assessment, research indicates, “mastery of early math skills predicts not only future math achievement, it also predicts future reading achievement," (Duncan, North Western University, 2007). The KPREP data generated in figure 4 represents the shared responsibility for students’ achievement within two district elementary schools that our kindergarten students attend. The graph in figure 4 shows the overall math achievement from grades 3-5 for the school years of 2017-18, 2018-19 and 2020-21.

Figure 4



Based on longitudinal KPREP data the number of proficient and distinguished students are decreasing while the number of novice and apprentice students are increasing at our district elementary schools. To ensure our students reach proficiency by third grade the coach will use KPREP data to analyze the effectiveness of MTSS instructional practices within each tier. Our students are not assessed using KPREP, however the data can be utilized to inform early intervention to address and mitigate common areas of weakness observed in intermediate grades. The growth/achievement of each student placed throughout the MTSS tiers will be monitored by the coach and classroom teachers. The purpose of the KPREP data analysis is to identify, create and implement an action plan focused on improving student achievement.

Figure 5

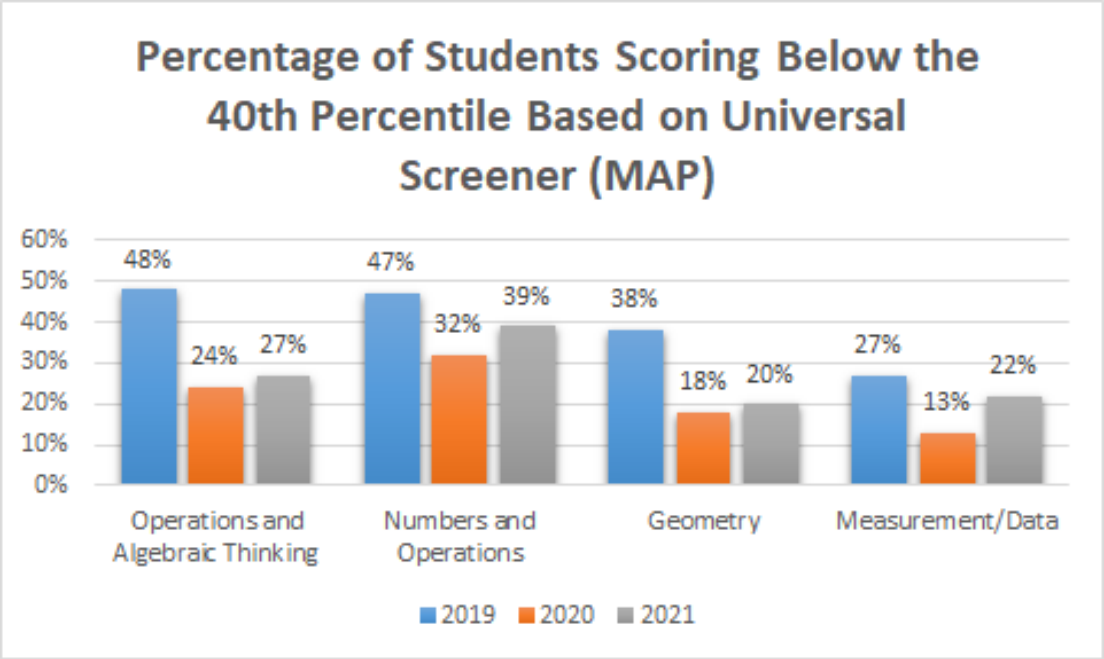


Figure 5 displays longitudinal data of the percentage of students who are not meeting grade level proficiency expectations within the four math strands assessed through the universal screener (MAP). Based on current MAP data (2021), a strength of incoming kindergarten students are foundational skills in Geometry (20% of students below proficiency) and Measurement/Data (22% of students below proficiency). Curriculum and instruction focus areas, based on current MAP data, for incoming Kindergarten students are Numbers and Operation (39% of students below proficiency) and Operations and Algebraic Thinking (27% below proficiency). Universal screener data (MAP) will be used by the coach to help guide and support instructional needs of each classroom and grade level.

Figure 6

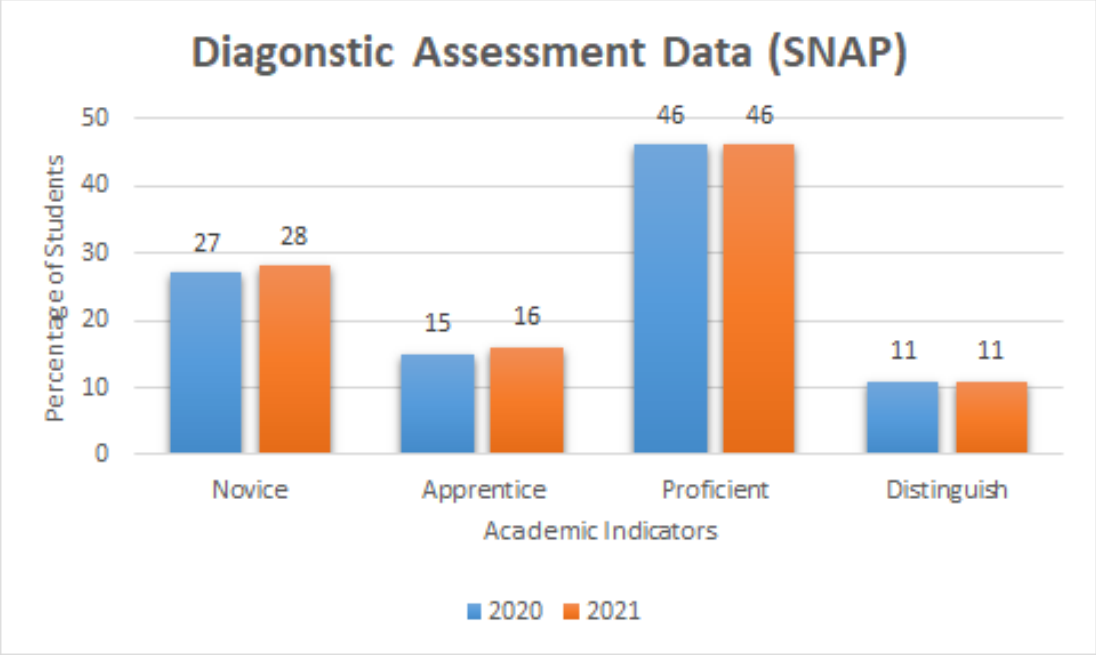


Figure 6 displays diagnostic assessment data (SNAP) for all students. Students' scores have been categorized by academic indicators (NAPD). The Student Numeracy Assessment Profile (SNAP) is a diagnostics assessment given to every student. It consists of early numeracy concepts: forward/backward counting, numeral identification and sequencing, finger and spatial patterns along with addition/subtraction. Based on SNAP data from the two previous years more than 42% of students are not meeting proficiency expectations. The coach will support classroom teachers to help progress all students with early numeracy skills. For those students who are scoring within the novice range, based on the SNAP assessment, the coach will support intervention services through RtI.

The coach will use diagnostic (SNAP), universal screening (MAP) and common assessment data to predict KPREP achievement of students. This data will be

compiled in a student tracker and monitored throughout the year. Teachers will use this data to help identify students for MTSS tiers and reflect on the effectiveness of the instruction within each tier.

Part 8: Budget Summary

To support the coach's position, 25% of the MAF funds will go to the coach's salary. The coach will attend Cognitive and Mathematics Coaching, along with content support from the Kentucky Center for Mathematics. Tuition for the Elementary Mathematics Endorsement from the University of Louisville and a textbook allowance will also be funded from the MAF grant. The MAF funds will be used for professional development of the coach, interventionist and classroom teachers through Kentucky Center for Mathematics training along with Vonda Stamms Making Math Magic early numeracy training. Grant funds will support sending the coach, math interventionist and two classroom teachers to attend the Kentucky Center for Mathematics conference yearly.

District and MAF grant funds will equally share the financial contributions to two yearly family math nights. These community events will be open to all students and will focus on supporting mathematics instruction at home through games and cooperative learning.

MAF grant funds will support tier 1 core instruction of Everyday Math curriculum through the purchase of Everyday Math Teacher resources, classroom manipulative kits, hands-on math games and a classroom library of math related picture books. The grant will also support tier 2 and tier 3 instruction through the purchase of Marilyn Burns Do the Math intervention and Origo Box of Facts materials for each classroom teacher.

The district will match the MAF funds with 25% of funds to pay for the coach's salary. Our school's mathematical vision for teaching and learning will be the focus of the following district funded professional development:

- Summer Professional Development for Vertical Alignment of KAS - provided by district instructional leaders
- Add+Vantage Math Recovery training for the coach to support mathematical learning progressions and intervention strategies
- Growth Mindset training for coach, interventionist and classroom teachers

The district will fund registrations and travel for the coach to attend the International Center for Leadership in Education (ICLE) conference along with school and district administration. This conference will offer teacher leadership training that the coach will utilize throughout the grant cycle. Another conference registration and travel expense that the district will fund is for the Kagan Cooperative Learning Conference. Cooperative learning through Kagan structures is a district initiative that supports the mathematical vision of learning for our school.

The district will support the coach and mathematics instruction through the purchase of technology. The district will fund a laptop, desktop and an IPAD for the coach to utilize to help plan and implement the coaching cycles. The district will purchase document cameras for classroom use to help support hands-on learning and modeling of mathematics. Another technology purchase for classroom use is for 5 touch screen chromebooks to be used in guided small group instruction.

Software to support mathematics instruction and assessment that the district will fund includes:

- Dreambox Learning - adaptive math instruction and progress monitoring of standards
- Edulastic - assessment builder and online assessment bank for benchmark testing of standards mastery
- Easy CBM - tier 2 and tier 3 progress monitoring software
- MAP Assessment - universal screener for all students given 3 times a year

The software used by our school will help meet the needs of all students and provide numerous data points to help support MTSS tiers and instructional needs.

Mathematics Achievement Fund Budget Form

Anderson County

District

Ezra Sparrow Early Childhood Center

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
110	Certified Services - (Contract)	$14,865	Coach's Salary (25% of funds)	$14,865
111	Extended Day (Contract)			
112	Extra Duty (Contract)			
113	Other Certified (Not part of Contract)		Summer Professional Development for vertical alignment of KAS - Provided by district instructional leaders (2 days)	$4,000
211	Life Insurance			
212	Health Insurance			
214	Dental Insurance			
221	Employer FICA Contribution			

222	Employer Medicare Contribution	$188		$188
231	Ky. Teacher Retirement Systems (KTRS)	$446		$446
321	Workshop Consultant			
322	Educational Consultant	$3,000	Kentucky Center for Mathematics Coaching Support	
		$5,000	Mathematics Coaching - Dr. Jennifer Bays Williams	
		$5,000	Professional Development Making Math Magic Primary Focus	
			Add+Vantage Math Recovery Training for coach - increase knowledge of diagnostic assessments and learning progressions	$2,000
		$2,000	Kentucky Center for Mathematics Professional Development Opportunities for Classroom teachers	$2,000
			Growth Mindset Training for coach, interventionist and classroom teachers	$600
335	Professional Consultant	$1,500	Cognitive Coaching - M² Consulting	
338	Registration Fees	$800	Kentucky Center for Mathematics Conference for Coach, MIT and 2 Classroom Teachers $200 x 4	
			International Center for Leadership in Education (ICLE)	$700

			Conference	
			Kagan Live 4 Day Training - District Initiative of Cooperative Learning	$900
339	Other Professional Services:			
569	Tuition: Other	$7,000	University of Louisville Tuition Elementary Math Endorsement	
580	Travel		Mileage to Frankfort/ Louisville for Math Content/Cognitive Coaching	$300
			Flight, hotel stay and meal reimbursement for ICLE Conference	$4,000
			Flight, hotel stay and meal reimbursement for Kagan Conference	$4,000
591	Services Purchased from another district or Educational Agency within the state			
592	Services Purchased from another district or Educational Agency out of state			
610	General Supplies	$2,000	Family Night $2,000 x 2 - funds to purchase games and activities for families to engage in mathematics	$2,000
			Additional Classroom Supplies	$5,000
643	Supplemental	$2,100	Everyday Math Classroom	

	Books, Study Guides & Curriculum		Games Kit $210 x 10	
		$5,080	Everyday Math Manipulative Kit $635 x 8	
		$2,520	Everyday Math Print and Digital Kit for 5 years $280 x 9	
		$5,000	Classroom Picture Books support for Everyday Math Curriculum	$5,000
		$600	UofL Elementary Mathematics Endorsement Textbooks	
			MAP - universal screener for 200 licenses	$1,200
		$2,000	Marilyn Burns - Do the Math RtI Curriculum - supplemental tier 3 RtI materials	$1,000
		$2,560	Origo - Box of Facts Addition/Subtraction $330 x 8 - to support small group intervention	
			Laptop - mobile computer for coach	$1,500
			IPAD - to use for collecting data during observations	$400
			Document Cameras $200 x 8- for classroom use for instruction and modeling mathematics	$1,600
			Desktop - coach primary computer	$1,500
734	Technology Related Hardware		5 Touch Screen Chromebook- for small group instruction	$1,500
			Edulastic - online assessment banks and benchmark assessments	$400
735	Supplies – Technology Related		Dreambox - school-wide	$5,000

			adaptive math program	
			Progress Monitoring Easycbm-tier 3 RtI	$100
810	Due and Fees			
Total		$61,659		$60,199