

PROPOSAL COVER SHEET**Educational Consulting Services****Vendor Information**

Name and Title Chuck Marable, CEO and Lead Math Consultant

Company Name Premier Global Services, Inc dba EZ as Pi Educational Services

Submission Date March 30, 2025

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By my signature below, I hereby represent that I am authorized to and do bind the offering vendor to the provisions of the attached proposal. The undersigned offers and agrees to perform the specified personal and professional services in accordance with provisions set forth in the Request for Proposals (RFP). Furthermore, the undersigned fully understands and assures compliance with the Conditions of Solicitation and Standard Terms and Conditions contained in the RFP. The undersigned is fully aware of the evaluation criteria to be utilized in vendor selection for approval. I further certify that EZ as Pi Educational Services is an authorized dealer in good standing of the products/services included in the proposal submitted in response to the RFP.


Authorized Signature

30 MAR 2025

Date

Coaching/Mentoring Experience in Mathematics

Chuck Marable, Jr. is a dedicated nonprofit professional with a wealth of experience in educational leadership, curriculum design, and STEM initiatives. For over two decades, he has worked to elevate the educational experiences of both students and teachers, with a special focus on math and STEM education through educational consulting. His passion for fostering academic excellence extends beyond the classroom, as he has become a trusted consultant for K-8 math educators, Algebra 1 teachers, preservice teachers, and instructional leaders, helping them strengthen their instructional practices and deepen their content knowledge.

Currently, Chuck serves as the Curriculum & STEM Executive Programs Director at Creating Opportunities for Girls, Inc. in Atlanta, Georgia. In this role, he has played a key part in designing and delivering innovative STEM programs that infuse K-8 math and science concepts into engaging, hands-on learning experiences. His work has not only provided students with critical skills in math but has also fostered a love for problem-solving and exploration. Through his leadership, Chuck has been able to create programs that focus on the integration of math into broader topics like financial literacy and healthy lifestyles, showing students the real-world applications of STEM disciplines.

As a founding partner and principal consultant of IronHorseman Consulting, Inc., Chuck has consulted with various school districts and organizations on best practices in math instruction and STEM education, including DeKalb County School District's Stephenson Middle School (GA) and Birmingham City Schools' Smith Middle School (AL) .

From conducting professional development workshops and family engagement initiatives to observing and modeling in classroom walkthroughs, the goal is always to enhance student achievement. Chuck's data-driven processes and multisensory teaching approach helps educators at all levels create inclusive, standards-based classrooms that support all students, particularly those in underrepresented communities. His experience in coaching teachers with less than five years of experience has led to significant improvements in instructional practices and teacher retention.

Chuck's commitment to fostering a more inclusive and diverse STEM workforce is evident in his involvement with Omega Psi Phi Fraternity, Inc. Launched at the 2018 Omega Psi Phi Conclave in New Orleans, OmegaSTEM seeks to spark the interest of young minds, from K-12 to college students, in technical fields. Since 2018, he has been an active contributor to OmegaSTEM, the fraternity's national initiative to inspire and encourage students to pursue careers in science, technology, engineering, and mathematics. Chuck has supported this program by providing guidance on curriculum development, leading STEM workshops, and mentoring students interested in STEM careers.

With a track record of success in STEM nonprofit leadership, curriculum development, and Math & STEM education, Chuck continues to make a lasting impact on the academic success of students and the professional growth of educators. His unwavering commitment to empowering students, especially those from underserved communities, and his dedication to enhancing the quality of Math, STEM and CTAE education has made him a respected figure in

the education community. As he advances in his career, Chuck remains focused on bridging gaps in educational equity and inspiring the next generation of STEM leaders.

While young people today have greater exposure to math subjects than they did at the turn of the century, two decades ago, there is still significant work to be done in supporting students' mathematical learning and fostering a deeper connection to the field. As a program creator and site facilitator of out-of-school programs, I have built STEM programs that encourage engagement in mathematics and worked to ensure the long-term sustainability and effectiveness of these programs.

Through programs such as STEAM Atlanta's 'The M in STEM' and Math Parent Institute (Math PI), our network of providers have focused on fostering a strong connection to mathematical knowledge, creating spaces where emerging talent can thrive. By sharing insights, connecting math being taught to real-world application, discussing how various career clusters and pathways utilize math, and guiding parents through academic math challenges, our system of services offer invaluable support that can directly impact a student's confidence and drive to pursue a math-related career.

Conclusion

By expanding mentorship opportunities in mathematics and incorporating financial literacy into math education, EZ as Pi has fostered a cohort of students, particularly young women, who are not only mathematically proficient but also equipped to navigate financial landscapes with confidence and competence.

To address the challenges identified through teacher and district observations, particularly the lack of intrinsic motivation in students and the time spent redirecting and motivating them during small group instruction, EZ as Pi will implement targeted coaching and mentoring strategies. These strategies will focus on improving teacher effectiveness in small group settings, while fostering increased student engagement and meeting academic standards more efficiently.

Coaching and Mentoring Strategies

1. Differentiated Instructional Support

- **Objective:** Provide tailored support for educators to address diverse student needs utilizing small group format.
- **Strategy:** Offer coaching on how to create personalized learning plans based on student performance, using real-time data from an approach that helps teachers adapt instruction to meet varying levels of student readiness, ensuring that standards are being uncovered.

2. Modeling Gamified Instruction

- **Objective:** Demonstrate how to effectively integrate gamification into both small group and whole group instruction to increase student motivation and engagement.
- **Strategy:** EZ as Pi will model platform activities where students answer multiple-choice questions in a gamified setting, providing immediate feedback. During these sessions, the math facilitator will coach teachers on managing the lesson flow, guiding students through think-time, and using tools to enhance problem-solving.
- **Outcome:** Teachers observe the dynamic use of gamification in action, learning techniques to implement it in their own classrooms.

3. Effective Feedback and Misconception Management

- **Objective:** Enhance teacher capacity to provide immediate, actionable feedback that addresses student misconceptions.
- **Strategy:** Through coaching sessions, teachers will be trained to deliver effective feedback based on results, addressing misunderstandings in real-time and encourage thoughtful student responses. Teachers will also be mentored on how to model correct reasoning and offer strategies for misconception remediation.
- **Outcome:** Teachers will be able to manage classroom dynamics more effectively, correcting student errors and misconceptions without time wasted on redirection.

4. Utilizing the 3-Read Protocol

- **Objective:** Strengthen teachers' ability to guide students through complex word problems and support their comprehension.
- **Strategy:** Coaches will mentor teachers on how to use the 3-Read Protocol. This approach will be modeled during small group instruction using word problems, with teachers observing how to scaffold and guide students through the process.
- **Outcome:** Teachers will improve their ability to guide students through word problems, making sure students fully understand the task before attempting to solve it.

5. Classroom Management Strategies for Gamified Instruction

- **Objective:** Help educators manage classroom behavior more efficiently while maintaining high levels of engagement through gamification.

- **Strategy:** Mentors will work with teachers to establish clear expectations for participation in gamified activities, ensuring that students stay engaged with the material. Specific strategies for minimizing off-task behavior will be shared.
- **Outcome:** Classroom time is optimized as students remain engaged, reducing the need for redirection.

6. Peer Observation and Feedback

- **Objective:** Foster a culture of continuous improvement through collaboration.
- **Strategy:** Teachers will participate in peer observation sessions where they observe their colleagues using the strategies demonstrated, followed by reflection and discussion. This practice will allow teachers to gain insights into what works in different settings and share best practices.
- **Outcome:** Teachers will refine their own practices through collaborative learning and support from their peers.

7. Progress Monitoring and Reflection

- **Objective:** Provide ongoing support to ensure the successful implementation of coaching strategies.
- **Strategy:** After the initial modeling and coaching sessions, EZ as Pi will conduct follow-up mentoring sessions to discuss the progress and challenges teachers are facing. Teachers will be encouraged to reflect on their experiences, share feedback, and adjust their instructional methods based on real-time observations and student performance data.
- **Outcome:** Continuous professional growth and adaptation to ensure sustained improvements in student engagement and instructional effectiveness.

Expected Impact

- **Reduced Time on Redirection:** Teachers will spend less time trying to motivate students and more time facilitating meaningful learning, thanks to the engaging nature of gamified instruction.
- **Increased Student Motivation:** Gamification and the focus on intrinsic learning will lead to heightened student engagement and participation.
- **More Effective Use of Classroom Time:** With structured support and effective gamification, instructional time will be used more efficiently, ensuring that standards are met within small group settings.
- **Sustained Professional Growth:** Through mentoring and coaching, teachers will develop more effective strategies for managing small group instruction and addressing student misconceptions.

By utilizing these coaching and mentoring strategies, EZ as Pi supports educators in creating a more motivating and efficient classroom environment, ultimately improving student outcomes and maximizing instructional time.

To further strengthen the coaching and mentoring strategies proposed, evidence-based research provide a foundation for the effectiveness of the suggested approaches. Below are some relevant studies and frameworks that align with the strategies outlined:

1. Differentiated Instructional Support

- **Research:** Tomlinson, C. A. (2001). *How to differentiate instruction in mixed-ability classrooms*.
 - **Findings:** Differentiated instruction (DI) has been shown to effectively meet the needs of diverse learners by tailoring teaching methods and materials to student readiness, interests, and learning profiles. DI leads to increased engagement and academic performance, especially for students who may otherwise struggle in one-size-fits-all environments.
 - **Application to Strategy:** The tailored support for educators in small group settings, focusing on individual student needs through real-time data and differentiation, follows Tomlinson's framework, ensuring students' diverse learning needs are met.

2. Model Gamified Instruction

- **Research:** Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). *From game design elements to gamefulness: defining "gamification"*.
 - **Findings:** Research supports that gamification can enhance student motivation, engagement, and participation. By incorporating game elements such as competition, rewards, and feedback, gamification makes learning more dynamic and engaging, leading to increased student intrinsic motivation.
 - **Application to Strategy:** Using a gamification platform directly supports these findings, as it increases student engagement and provides immediate feedback, which research has shown to improve learning outcomes.

3. Effective Feedback and Misconception Management

- **Research:** Hattie, J., & Timperley, H. (2007). *The power of feedback*. Review of Educational Research, 77(1), 81-112.
 - **Findings:** Hattie and Timperley's research highlights that feedback is one of the most powerful influences on student learning. Immediate feedback helps students identify mistakes and misconceptions, while also guiding them toward improvements. The effectiveness of feedback is enhanced when it is specific, actionable, and provided in a timely manner.

- **Application to Strategy:** The immediate feedback provided is an example of how feedback, when offered in real-time and connected to actionable strategies (such as think-time and Kindlin’s Law), can lead to significant improvements in student learning and concept mastery.

4. Utilizing the 3-Read Protocol

- **Research:** Smith, M. S., & Stein, M. K. (2011). *Five Practices for Orchestrating Productive Mathematics Discussions*.
 - **Findings:** The 3-Read Protocol is an effective strategy for enhancing students' comprehension of word problems. By reading the problem three times—once for understanding the context, once for mathematical relationships, and once for problem-solving—it improves both reading comprehension and problem-solving skills. The use of structured problem-solving protocols also ensures that students engage deeply with the problem, leading to better outcomes in mathematical reasoning.
 - **Application to Strategy:** The implementation of the 3-Read Protocol in the coaching model aligns directly with evidence supporting its ability to enhance comprehension and problem-solving, particularly in the context of word problems.

5. Classroom Management Strategies for Gamified Instruction

- **Research:** Emmer, E. T., & Sabornie, E. J. (2015). *Handbook of Classroom Management*.
 - **Findings:** Effective classroom management is crucial for maintaining focus and reducing disruptive behaviors. Gamified environments, when properly managed, foster motivation and provide structured participation opportunities that keep students engaged. Positive reinforcement and clear expectations are key to maintaining a smooth and productive gamified classroom environment.
 - **Application to Strategy:** The incentive-based systems and competitive rewards within activities directly correlate with Emmer and Sabornie’s findings, which emphasize the role of structured participation and motivation systems in reducing classroom distractions.

6. Peer Observation and Feedback

- **Research:** Joyce, B., & Showers, B. (2002). *Student achievement through staff development* (3rd ed.). Alexandria, VA: ASCD.
 - **Findings:** Peer observation and feedback are vital for teacher development. Studies show that peer learning and observation lead to greater instructional effectiveness and personal reflection, fostering a culture of continuous improvement. Teachers benefit from observing their peers, reflecting on their practice, and discussing strategies that improve student outcomes.

- **Application to Strategy:** The use of peer observation and feedback in the proposed model aligns with research showing that peer collaboration and reflection enhance teaching practices and student achievement.

7. Progress Monitoring and Reflection

- **Research:** Guskey, T. R. (2000). *Evaluating professional development*. Thousand Oaks, CA: Corwin Press.
 - **Findings:** Continuous progress monitoring and reflection are crucial elements of effective professional development. When teachers reflect on their practices and receive ongoing feedback, they are more likely to adjust their teaching strategies to improve student outcomes. This iterative process leads to sustained improvements in both teaching effectiveness and student learning.
 - **Application to Strategy:** The follow-up mentoring sessions and reflection periods outlined in the strategy reflect Guskey's findings on the importance of continuous professional development and progress monitoring to ensure that strategies are being implemented effectively.
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Conclusion

The strategies proposed in the coaching and mentoring plan are grounded in evidence-based research that supports the effectiveness of gamification, differentiated instruction, feedback, and peer collaboration in enhancing student motivation, engagement, and achievement. By incorporating these strategies, EZ as Pi creates an instructional environment that fosters increased intrinsic motivation among students while simultaneously improving teacher effectiveness. These approaches, underpinned by research, will ultimately lead to more efficient and impactful small group instruction, helping educators meet the diverse needs of their students.

Support Checklist of Services

1. Pedagogical and Teaching Strategy Support

- **Small & Whole Group Instructional Demonstrations:**
 - Provide modeling sessions where expert instructors demonstrate effective teaching strategies.
 - Offer guidance on structuring small group and whole group lessons for optimal student engagement.
 - Hands-on demonstrations of math lessons that emphasize active participation and concept exploration.
- **Differentiated Instruction Techniques:**

- Offer strategies for adapting math lessons to meet the needs of diverse learners in grades 3-6.
- Support in creating learning pathways based on students' varying abilities and learning styles.
- Provide tools for adjusting instruction to help students with learning disabilities, English language learners, and gifted students.

2. Facilitation of Mathematical Discussions

- **Facilitation Training for Teachers:**
 - Guide teachers in creating a classroom environment conducive to mathematical discussions.
 - Offer interactive workshops to help teachers foster a community where students can express their reasoning, ask questions, and develop problem-solving skills.
 - Provide strategies for encouraging student-to-student interaction through discussions and peer feedback.
- **Questioning and Communication Techniques:**
 - Teach strategies for posing open-ended questions that promote critical thinking.
 - Offer techniques for guiding students through constructive discussions where they can explain their solutions and thinking processes.

3. Integration of Literacy into Mathematics Instruction

- **Literacy-Based Math Strategies:**
 - Provide methods for integrating reading, writing, and speaking into math lessons.
 - Develop literacy-based assignments where students explain math concepts in writing or verbal formats.
 - Offer vocabulary-building techniques that help students understand and use mathematical language in context.
- **Mathematical Storytelling and Word Problems:**
 - Develop strategies for using storytelling to explain math concepts, making them more relatable and memorable.
 - Create real-world problem-solving scenarios that incorporate literacy elements (e.g., math word problems, math journals, etc.).

4. Professional Development & Training for Teachers

- **Workshops on Effective Math Instruction:**
 - Provide specialized workshops for grades 3-6 teachers on best practices for teaching elementary mathematics.
 - Train teachers on new instructional strategies and techniques in mathematics education, including collaborative learning and student-centered approaches.
- **Early Childhood Pedagogy for 0-5 Year Teachers:**
 - Offer professional development focused on early childhood education (0-5 years), especially for those teachers who prepare children for elementary school math.
 - Develop foundational math instruction strategies to be used in early childhood settings, supporting transitions to formal math education.
- **Coaching & Mentorship:**
 - Provide one-on-one coaching for teachers to implement newly learned strategies in their classrooms.
 - Offer classroom observations followed by actionable feedback for improving math teaching techniques.
 - Provide ongoing mentorship programs to support continuous teacher growth.

5. Curriculum Design & Resource Development

- **Custom Math Curriculum Design:**
 - Assist in designing math curricula that is engaging and aligned with state standards.
 - Provide resource materials for teachers, including worksheets, activities, and math games.
 - Develop cross-curricular lesson plans that integrate literacy into math instruction.
- **Resource Creation for Teachers:**
 - Create customizable math instruction tools, such as visual aids, interactive digital resources, and manipulatives.
 - Develop instructional guides to support teachers in delivering effective math lessons that include literacy integration.

6. Classroom Management & Student Engagement Support

- **Student-Centered Learning Support:**

- Provide strategies to help teachers create a student-centered learning environment, where students take an active role in their learning.
- Offer engagement techniques that motivate students to stay active in math discussions and activities.
- **Behavioral and Classroom Management Techniques:**
 - Provide strategies to address classroom management challenges that may arise during group discussions or hands-on math activities.
 - Offer tips for maintaining focus and minimizing disruptions during math lessons.

7. Assessment & Feedback

- **Formative Assessment Strategies:**
 - Offer strategies for implementing formative assessments that help teachers gauge student understanding throughout the lesson.
 - Guide on how to use student responses in discussions as a form of assessment to adjust teaching approaches.
 - **Math Discourse Tools:** Developing resources like question prompts and discussion frameworks to guide productive mathematical discussions.
 - **Effective Feedback:** Providing teachers with strategies to give constructive feedback that encourages students to refine their thinking and problem-solving skills.
- **Feedback Systems for Students:**
 - Provide methods for giving constructive feedback to students, helping them improve their mathematical reasoning and problem-solving skills.
 - **Facilitating Student Thinking:** Encouraging students to discuss their math reasoning openly through number talks and structured discussions.
 - **Peer Feedback & Reflection:** Creating systems where students can evaluate and reflect on their own thinking, while also learning to give peer feedback effectively.
 - Offer tools for tracking student progress and adjusting instruction based on their needs.

Organizational Goals and Objectives

Goal 1: Improve Mathematical Understanding and Problem-Solving Skills

- **Objective 1.1:** Provide professional development for teachers to integrate problem-solving strategies into their math instruction, with a focus on the NCTM Process Standards (Problem Solving, Reasoning and Proof, Communication, Representation, and Connections).
- **Objective 1.2:** Support the development of a curriculum that encourages mathematical discourse, critical thinking, and collaborative learning to help students develop a deeper understanding of mathematical concepts.

Goal 2: Foster Conceptual Understanding and Procedural Fluency

- **Objective 2.1:** Introduce a balanced approach to instruction, where students engage in both hands-on experiences and traditional algorithms to build conceptual understanding alongside procedural fluency, as suggested in the NCTM Principles and Standards.
- **Objective 2.2:** Develop assessment tools aligned with the NCTM standards to track student progress in both understanding and applying mathematical concepts.

Goal 3: Enhance Equity and Access to Quality Math Education

- **Objective 3.1:** Implement differentiated math instruction strategies that ensure all learners, including English language learners (ELLs) and students with special needs, are provided with equitable access to math resources.
- **Objective 3.2:** Provide after-school enrichment programs and interventions that target struggling learners to bridge the achievement gap.

Goal 4: Foster Student Engagement and Motivation in Mathematics

- **Objective 4.1:** Introduce interactive math games, technology tools, and real-world problem-solving scenarios to engage students in mathematical thinking.
- **Objective 4.2:** Organize math-related events (e.g., math fairs or competitions) to promote excitement and interest in math beyond the classroom setting.

Measurable Targets for a 4% Increase in Math Proficiency

To achieve a 4% increase in overall math proficiency, the following targets can be set:

Target 1: Increase the percentage of students scoring at or above grade-level standards in state assessments

- **Outcome:** Achieve a 4% increase in the percentage of students performing at or above grade-level proficiency on state standardized math assessments.

Target 2: Improve student growth in mathematical problem-solving skills

- **Outcome:** Achieve a 4% increase in student performance on district-developed assessments measuring problem-solving, reasoning, and critical thinking in mathematics.

Target 3: Increase teacher confidence and instructional quality

- **Outcome:** Achieve a 90% satisfaction rate from teachers in post-training surveys, indicating increased confidence and the application of NCTM-aligned best practices in their classrooms.

Target 4: Reduce the achievement gap among subgroups

- **Outcome:** Achieve at least a 4% increase in math proficiency for historically underserved student groups (e.g., ELL, students with disabilities, and economically disadvantaged students) on district and state assessments.

Target 5: Increase student participation and engagement in math activities

- **Outcome:** Achieve a 10% increase in student participation in extracurricular math programs (e.g., after-school math clubs, math competitions), demonstrating greater interest and engagement in mathematics.

These goals and targets are designed to align with the NCTM standards while aiming for measurable outcomes to demonstrate the effectiveness of the math consulting services provided to the school district.

Math Consulting Services Offered

1. Professional Development (PD) for Teachers

Service:

- Conduct workshops and training sessions on the NCTM Principles and Standards for School Mathematics, focusing on how to implement problem-solving strategies, encourage mathematical discourse, and balance procedural fluency with conceptual understanding.
- **Measurable Outcome:**
 - 90% of teachers report increased confidence in applying NCTM standards in the classroom (measured through surveys or feedback forms).
- **Evaluation Method:**
 - Post-workshop surveys to assess teacher knowledge before and after training.
 - Follow-up surveys 3–6 months later to assess the application of learned strategies.

2. Parallel Content and Lesson Plan Development

Service:

- Collaborate with district math specialists and teachers to design a content map and lesson plans that aligns with NCTM standards, ensuring balanced instruction in problem-solving, reasoning, and procedural fluency.
- **Measurable Outcome:**

- 80% of teachers report using the newly designed curriculum effectively.
- **Evaluation Method:**
 - Teacher feedback surveys on curriculum effectiveness (via Google Forms or SurveyMonkey).
 - Classroom observations to evaluate lesson implementation.

3. Math Assessment Tools and Formative Feedback

Service:

- Develop and implement formative assessments aligned with NCTM standards that measure both conceptual understanding and procedural fluency. Provide feedback on student performance to inform instruction.
- **Measurable Outcome:**
 - 85% of students show growth in math proficiency (measured by district assessments).
- **Evaluation Method:**
 - Review of student performance data from formative assessments.
 - Teacher feedback on the utility and clarity of assessments (via Google Forms or SurveyMonkey).

4. Modeling Differentiated Instruction for Diverse Learners

Service:

- Provide targeted interventions and instructional strategies for English Language Learners (ELLs), students with disabilities, and students needing enrichment, following the principles of equity and access in the NCTM standards.
- **Measurable Outcome:**
 - 4% increase in proficiency for students in subgroups (measured through district assessments).
- **Evaluation Method:**
 - Monitoring of subgroup performance on district/state assessments.
 - Feedback from intervention teachers or support staff.

5. After-School Math Enrichment Programs

Service:

- Offer enrichment programs like math clubs or competitions to engage students beyond the classroom and foster enthusiasm for math.

- **Measurable Outcome:**
 - 10% increase in participation from students, with 75% of participants demonstrating increased confidence in math.
 - **Evaluation Method:**
 - Enrollment tracking and pre/post-program surveys to measure student confidence.
 - Regular check-ins with students to gather qualitative feedback.
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How Google Forms, Mentimeter, and SurveyMonkey Can Be Used for Internal Checks

These tools are excellent for tracking progress, gathering real-time feedback, and making necessary course corrections. Below is a detailed explanation of how each tool could be used to ensure services are on track.

1. Google Forms for Collecting Feedback and Data

Internal Check:

- **Pre- and Post-Service Surveys:** Create surveys to assess teacher understanding and application of concepts before and after workshops or PD sessions. These can also be used to gather feedback on lesson effectiveness or student engagement in enrichment programs.
- **Question Example:** "On a scale of 1-5, how confident do you feel in integrating problem-solving into your math lessons?"

Progress Evaluation:

- The data collected from these surveys can be automatically analyzed through Google Forms to identify trends over time.
- If 80% or more of teachers rate the service as effective, this is a good indication the services are meeting goals.
- If feedback indicates areas for improvement (e.g., only 50% of teachers feel confident), follow-up PD sessions can be scheduled to address those gaps.

Course Corrections:

- If surveys reveal dissatisfaction or lack of confidence, the consulting company can refine its training, lesson plans, or resources.
- Feedback can be used to adjust PD content or delivery methods in real-time.

2. Mentimeter for Interactive Engagement and Real-Time Feedback

Internal Check:

- **Live Polling and Questionnaires:** Use Mentimeter during PD sessions to ask teachers questions in real-time about what strategies they plan to use in the classroom, or what

challenges they are facing. This tool could also be used to gather instant feedback during math enrichment programs or after-school sessions.

- **Question Example:** "What is the biggest barrier you face in implementing differentiated instruction for ELL students?"

Progress Evaluation:

- Mentimeter allows the consulting company to see instant results on participant responses. If many teachers respond with the same challenge (e.g., difficulty in differentiation), this may indicate a need for additional resources or clarification on how to differentiate instruction.
- By monitoring trends over time, the company can assess whether teachers are improving their implementation of math best practices.

Course Corrections:

- If data from Mentimeter reveals consistent barriers or confusion, additional support materials, coaching, or follow-up sessions can be offered.

3. SurveyMonkey for Comprehensive Surveys and Progress Tracking

Internal Check:

- **End-of-Program and Follow-Up Surveys:** SurveyMonkey can be used to gather detailed feedback from teachers and students at various points in time, especially after the completion of PD sessions, workshops, or after-school programs.
- **Question Example:** "Has your math proficiency improved since participating in the after-school math program? Please explain."

Progress Evaluation:

- SurveyMonkey's detailed analytics help track changes in responses over time. For example, a 4% increase in teacher satisfaction or student proficiency rates can be tracked and compared against baseline data.
- Data can be segmented by grade level, subject area, or subgroup, making it easier to identify areas that need improvement.

Course Corrections:

- If the results show that fewer students are demonstrating increased proficiency than expected (e.g., a 2% instead of a 4% improvement), then specific corrective measures, such as curriculum adjustments, differentiated resources, or additional after-school sessions, could be implemented.

Presentation of Progress or Lack of Progress

Reporting and Visualizing Data:

- **Google Forms:** Can automatically generate charts and graphs that illustrate changes in teacher confidence or student engagement, which can be shared with school district administrators.
- **Mentimeter:** Provides live, real-time visual feedback that can be used in PD sessions or meetings to demonstrate participant understanding and engagement.
- **SurveyMonkey:** Provides advanced reporting tools to generate detailed reports that can track whether objectives, such as a 4% increase in proficiency, are being met over time.

By regularly collecting data from these tools, the math consulting company can monitor progress, ensure services are on course, and make any necessary adjustments to stay aligned with the goals. These tools provide the district with both qualitative and quantitative evidence to show if the desired outcomes are being achieved.

Implementation Plan for Math Services (Grades 3-6)

1. Instructional Demonstrations (Small-Group & Whole-Group)

Goal: To ensure teachers effectively understand and apply the 2025 Mississippi Math State Standards through hands-on instructional strategies that support conceptual understanding, procedural fluency, and mathematical communication.

Services:

- **Small-Group Instruction Demonstrations:** Provide targeted, hands-on demonstrations of **differentiated instruction** in math. Teachers observe and participate in small-group teaching that focuses on personalized support based on student learning needs.
 - *Example:* Conduct a small-group session on fractions, where a few students work on manipulating fraction tiles while others work on visualizing fractions on a number line.
- **Whole-Group Instruction Demonstrations:** Model whole-group math instruction where teachers learn to balance the use of direct instruction and student-led discussions. Demonstrate how to pose rich, open-ended questions that encourage student reasoning.
 - *Example:* During a lesson on multi-digit multiplication, demonstrate how to lead a discussion where students explain their thinking and strategies, promoting mathematical discourse.

Measurable Outcomes:

- **Teacher Feedback:** 80% of teachers report gaining valuable strategies they can implement in their own classrooms (via surveys after each demonstration).

- **Student Growth:** 75% of students in classrooms of participating teachers show an improvement in their understanding of key math concepts, based on pre- and post-assessments.

Evaluation:

- **Lesson Plans Review:** Evaluate how teachers incorporate small-group and whole-group strategies into their daily lessons through submitted lesson plans.
- **Classroom Observations:** Conduct follow-up classroom observations to see if teachers are applying demonstrated strategies.
- **Surveys:** Administer post-demonstration surveys to gauge teacher satisfaction, understanding, and planned implementation.

2. Facilitation of Mathematical Discussions

Goal: To enhance student understanding and reasoning by promoting mathematical discussions that align with the Mississippi State Standards.

Services:

- **Facilitate Collaborative Math Discussions:** Demonstrate how to guide students through **mathematical discourse**—asking probing questions, encouraging peer explanations, and ensuring all students are engaged in the discussion.
 - *Example:* After solving a problem, ask, “Why did you choose this method? Can anyone think of a different way to approach this problem?” This encourages students to discuss their reasoning and listen to others.
- **Peer-to-Peer Communication:** Encourage teachers to implement **peer collaboration** strategies, where students work together to solve problems, share solutions, and discuss different mathematical approaches.
 - *Example:* Use **think-pair-share** activities where students solve problems individually and then discuss their solutions with a peer before sharing with the whole class.

Measurable Outcomes:

- **Teacher Confidence in Facilitating Discussions:** 85% of teachers report feeling confident in facilitating meaningful math discussions in their classrooms (measured through self-assessment surveys).
- **Student Engagement:** 90% of students in participating classrooms show active engagement during discussions, with 80% demonstrating the ability to explain their thinking clearly.

Evaluation:

- **Student Artifacts:** Collect examples of student work and evidence of their ability to articulate their reasoning during discussions.
- **Classroom Observations:** Observe teachers facilitating discussions to ensure effective questioning techniques and student participation.
- **Teacher Feedback:** Gather feedback from teachers on the perceived effectiveness of discussion facilitation and make adjustments to support ongoing development.

3. Integration of Literacy in Mathematics

Goal: To support students' literacy development through **math-integrated literacy strategies** that enhance comprehension and problem-solving abilities.

Services:

- **Modeling Math and Literacy Integration:** Demonstrate how to integrate reading and writing activities into math lessons. This can include reading math word problems aloud, Math Chalk Talks, and having students write reflections on their mathematical thinking.
 - *Example:* After a lesson on geometry, ask students to write a paragraph explaining how they would explain the concepts to a younger student, using math vocabulary learned in class.
- **Math Journals & Reading in Math:** Encourage the use of **math journals**, where students write their thinking, reflect on problem-solving processes, and explain their strategies in writing. This aligns with Mississippi's focus on literacy in math instruction.
 - *Example:* Have students write an explanation of how they solved a multi-step word problem and what strategies they used.

Measurable Outcomes:

- **Student Writing Proficiency:** 80% of students demonstrate improvement in their ability to communicate mathematical thinking through writing, as observed in math journal assessments.
- **Teacher Use of Literacy Strategies:** 90% of teachers consistently implement math-integrated literacy strategies in their classrooms.

Evaluation:

- **Review of Math Journals:** Evaluate students' math journals for clarity, coherence, and use of mathematical vocabulary.
- **Classroom Observations:** Observe teachers to assess how they are integrating literacy into math instruction.
- **Surveys:** Collect teacher feedback to determine how often they implement literacy strategies and their perceived effectiveness.

Parent Engagement Workshop (1 Introductory Session)

Goal: To enhance family involvement in their child's math learning through targeted workshops that equip parents with strategies, resources, and an understanding of the math standards.

Full-Scope Service (for this proposal, one of the following will be chosen by instructional leadership team or family engagement team) :

- **Session 1: Understanding the Mississippi Math Standards (2025)**
 - Overview of the state math standards for Grades 3-6, focusing on key concepts and expectations.
 - How parents can support their children at home based on these standards.
 - **Hands-on Activity:** Parents will try solving problems similar to those that their children encounter, using problem-solving strategies.
- **Session 2: Math Strategies and Resources for Home Use**
 - Provide parents with practical math strategies (e.g., how to support students with multiplication, division, fractions, and problem-solving) they can use at home.
 - Introduce accessible math resources that align with the MS Math Standards.
 - **Activity:** Work through examples using math manipulatives or online resources.
- **Session 3: Supporting Math Discourse and Growth Mindset**
 - Teach parents how to foster **mathematical discussions** at home, encouraging their children to explain their thinking and reasoning.
 - Emphasize the importance of a **growth mindset** and how parents can encourage persistence and resilience when students struggle with math.
 - **Activity:** Parents practice asking open-ended questions to prompt mathematical thinking.

Measurable Outcomes:

- **Parental Knowledge:** 85% of parents report a better understanding of the Mississippi Math Standards and feel more equipped to support their child's math learning at home (survey after each session).
- **Increased Parent-Child Engagement:** 80% of parents implement at least one strategy or resource from the workshop in their home routine (measured through a follow-up survey).

Evaluation:

- **Session Feedback:** After each session, use **Google Forms** or **SurveyMonkey** to collect immediate feedback on the workshop's content, delivery, and perceived usefulness.
- **Follow-Up Survey:** Send out a follow-up survey 2-7 days after workshops to assess whether parents are continuing to use the strategies and resources shared during the sessions.
- **Participation Tracking:** Track attendance at each session to ensure active participation and engagement.

Using Google Forms, Mentimeter, or SurveyMonkey for Parental Engagement Workshops

- **Pre- and Post-Surveys:** Use **Google Forms** or **SurveyMonkey** to gauge parents' knowledge before and after each session. Questions can assess their understanding of the Mississippi Math Standards, as well as their confidence in helping with math at home.
- **Real-Time Feedback:** During the workshops, use **Mentimeter** to ask parents for live input on how they would support math learning at home, or to gauge their comfort level with specific concepts and strategies.
- **Follow-Up Surveys:** After the three sessions, send a **SurveyMonkey** follow-up to assess the effectiveness of the workshops. Questions address parent application of strategies, confidence in supporting their child's math learning, and any additional resource questions.

Resource Allocation for Proposal (\$24,500)

The following breakdown outlines the revised resource allocation for the **\$24,500** budget, providing an overview of key categories and their respective costs. Each category is strategically aligned to support the overarching goals of enhancing math instruction and fostering teacher professional development.

1. Pedagogy & Teaching Strategy Development: \$6,000

This category covers the creation of teaching materials and frameworks for small and whole-group instructional demonstrations tailored to grades 3-6. This includes developing strategies that support effective teaching in diverse classroom settings.

Service Breakdown:

- **Curriculum/ Content Mapping: \$3,000**
 - Tailoring lesson plans for teachers in grades 3-6.

- Creating frameworks for small and whole-group instruction.
 - Developing resources and activities aligned with standards.
 - **Pedagogical Strategy Guides: \$3,000**
 - Developing guides for differentiated instruction.
 - Creating problem-solving strategies.
 - Effective teaching approaches for grades 3-6.
-

2. Facilitation of Mathematical Discussions: \$5,000

This category focuses on developing resources and hosting workshops to train teachers in facilitating mathematical discussions that encourage student inquiry and reasoning, enabling students to become more actively engaged in their learning.

Service Breakdown:

- **Professional Development Workshops: \$3,500**
 - Hosting workshops that train teachers in facilitation techniques for mathematical discussions.
 - Encouraging inquiry-based learning and collaborative problem-solving.
 - **Classroom Materials for Discussions: \$1,500**
 - Developing resources like discussion prompts, activity sheets, and reflection tools.
 - Providing teachers with materials to guide and facilitate mathematical conversations.
-

3. Integration of Literacy into Math Instruction: \$5,000

This section involves developing strategies and resources to integrate literacy skills into math instruction. The goal is to ensure that students are using verbal and written skills alongside their math learning, enhancing both literacy and mathematical thinking.

Service Breakdown:

- **Literacy Integration Strategies: \$3,000**
 - Creating strategies for teachers to integrate reading, writing, and communication into math lessons.
 - Providing frameworks that align literacy with math instruction.
- **Literacy-Based Math Resources: \$2,000**

- Designing literacy-based math resources such as word problems, math journals, and writing prompts.
 - Creating tools that help teachers blend reading and math in engaging ways.
-

4. Professional Development & Coaching: \$5,000

This category is crucial for providing ongoing coaching and support for teachers, ensuring that strategies are implemented effectively in the classroom. It also includes specialized training for early childhood educators to help prepare students for future math learning.

Service Breakdown:

- **Teacher Coaching & Mentoring: \$3,500**
 - Offering one-on-one coaching for teachers in grades 3-6.
 - Classroom observations and feedback to enhance instructional practices.
 - **Early Childhood Pedagogy Training: \$1,500**
 - Providing specialized training for 0-5 year educators on foundational math pedagogy.
 - Ensuring teachers are equipped to prepare young learners for elementary school math.
-

5. Curriculum/Content Mapping & Resource Development: \$5,000

This category covers the creation of math curriculum resources and materials, focusing on aligning with grade-level standards and integrating literacy and mathematical thinking.

Service Breakdown:

- **Curriculum/Content Mapping: \$3,000**
 - Designing custom math curricula that integrates literacy.
 - Aligning materials with state and national standards.
 - **Resource Kit Development (Math Knowledge Packets, Games, etc.): \$2,000**
 - Developing interactive teacher resources like mnemonic/ fundamental math rules/strategy tips handouts, math games, and manipulatives.
 - Creating digital tools and materials that promote active learning.
-

6. Assessment & Feedback Systems: \$2,500

This section includes the development of formative assessment tools and feedback systems that will help teachers evaluate student progress and adjust their instruction to meet individual learning needs.

Service Breakdown:

- **Formative Assessment Development: \$2,000**
 - Creating tools and strategies for assessing student understanding during math lessons.
 - Ensuring assessments are aligned with the learning objectives.
- **Feedback and Tracking Systems: \$500**
 - Developing systems to provide timely, actionable feedback to students.
 - Creating tracking mechanisms to monitor student progress in math learning.

7. Miscellaneous (Contingency Fund): \$2,000

A contingency fund allocated for unexpected costs or additional needs that may arise during the development and implementation of the project. This ensures flexibility in addressing unforeseen circumstances.

Summary of Resource Allocation

Category	Estimated Cost
Pedagogy & Teaching Strategy Development	\$6,000
Facilitation of Mathematical Discussions	\$5,000
Integration of Literacy into Math Instruction	\$5,000
Professional Development & Coaching	\$5,000
Curriculum/Content Mapping & Resource Development	\$5,000
Assessment & Feedback Systems	\$2,500
Miscellaneous (Contingency Fund)	\$2,000
Total Budget	\$24,500

This resource allocation breakdown ensures a comprehensive approach to enhancing mathematical teaching and learning across grades 3-6 while providing adequate support for professional development, curriculum design, and student assessment.

Education Resume

Chuck Marable, Jr.
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Ellenwood, GA 30294

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Objective

To enhance student achievement in mathematics by supporting teachers & stakeholders in instructional and non-instructional areas as an educational professional.

Experience

Creating Opportunities for Girls, Inc.
Atlanta, GA
Curriculum & STEM Executive Programs Director
August 2012 to Present

- Design STEM programs for 501c3 STEM organization
- Create innovative programs that infused K-8 Math and Science concepts
- Facilitate innovative STEM and STEM+Art (STEAM) programs
- Co-Develop STEM programs in Financial Literacy and Healthy Lifestyles & Living

IronHorseman Consulting, Inc. Pine Lake, GA
Math & STEM Education Consultant June 2008 to December 2022

- Conducted standards-based walkthroughs in Math & Science classrooms.
- Conducted & facilitate family engagement workshops in STEM, Math & Science.
- Conducted professional development on Best Practices in Math and STEM.
- Analyzed data; provide support and feedback on technology-enriched, standards-based classrooms.
- Conducted & engaged in educational workshops on Differentiated Instruction and Integration in Math.

EZ as Pi Consulting, Inc.
Atlanta, GA
February 2009 to Present

- Conduct standards-based walkthroughs in Math & Science classrooms.
- Conduct & facilitated peer group discussions on standards-based Math instruction.
- Provide support and feedback on characteristics of standards-based classrooms.
- Provide instructional feedback in standards-based classrooms
- Increase teacher retention of math instructors (<3 years experiences) by 20%.

Education

The University of Georgia Athens, GA
Education Specialist –
Workforce Education, Leadership & Social Foundations
May 2016

The University of Georgia Athens, GA
Masters of Education-
Educational Administration and Policy May 2006

Brenau University Gainesville, GA
Bachelor of Science-
Middle Grades Science Education August 1998

References and information of other education-related experience
Available upon request

References

Dr. Chuck Willis, Jr.

Instructional Superintendent

Birmingham City Schools

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James Jackson Elementary

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