Math Innovation Zones
Fidelity of Implementation Overview

Math Innovation Zones (MIZ) seeks to assist school districts in a high-fidelity implementation of high-quality blended learning programs in math. Implementing MIZ with a high degree of fidelity is critical to the program goal of improving Algebra I readiness and participation in 8th grade. Through monitoring Fidelity of Implementation (FOI), TEA will be able to both support and evaluate MIZ sites.

To maintain positive standing as a MIZ and to be eligible for any outcomes-based funding opportunities, campuses must meet minimum FOI requirements. FOI is evaluated in three parts: **Commitment, Fidelity of Planning (FOP) and Fidelity of Execution (FOE)**. **Commitment** provides for the buy-in and investment necessary at the school and district level to initiate, scale, and sustain MIZ. **FOP** requirements are designed to ensure a comprehensive implementation strategy is present, providing a successful foundation for MIZ. **FOE** requirements are designed to ensure that the program is being executed as intended at the classroom, school, and district or network levels. The following table represents the MIZ FOI Requirements.

Catalyst	Category	#	Sub-Category	Deliverables	Method of Submission	Criteria for Fulfillment	Scope of Evaluation
Commitment	Vision & Strategy	1	District Commitment	Evaluated in Letter of Interest	LOI Submission	Assessed in LOI	District
		2	School Commitment	Evaluated in Letter of Interest	LOI Submission	Assessed in LOI	School
Fidelity of Planning	Sustainable Implementation	3	Design and Implementation	Design and Implementation Plan	MIZ Project Manager emails completed deliverables to MIZ@tea.texas.gov	Evaluated on FOI Rubric	District and School
		4	Budget and Financial Planning	District Financial Plan	MIZ Project Manager emails completed deliverables to MIZ@tea.texas.gov	Evaluated on FOI Rubric	District and School
		5	Professional Development	Professional Development Plan; Teacher Proficiency Rubrics; PD Efficacy Surveys	MIZ Project Manager emails completed deliverables to MIZ@tea.texas.gov	Evaluated on FOI Rubric	District and School
	Technology	6	Infrastructure	Infrastructure Improvement Plan; Technical Support Plan	MIZ Project Manager emails completed deliverables to MIZ@tea.texas.gov	Evaluated on FOI Rubric	District and School
		7	Software	Use of State Approved Software Vendor	TEA Collects License Data from Software Vendor	Licenses for All Students in MIZ Grades	Participating MIZ Classrooms
Fidelity of Execution	Continuous Development	8	Data Driven Instruction	Use of Approved Formative Assessments; Quarterly Data Deep Dives; Weekly PLC Meetings	MIZ Project Manager emails score reports and completed deliverables to MIZ@tea.texas.gov	Evaluated Every Six Weeks on FOI Rubric	Participating MIZ Classrooms
		9	Ongoing Capacity Building	Evidence of Meaningful Learning Experience	MIZ Project Manager emails completed deliverables to MIZ@tea.texas.gov	Evaluated Every Six Weeks on FOI Rubric	Participating MIZ Classrooms
	Execution Metrics	10	Teacher Usage	Teacher FOE Metric from Selected Software Program	TEA Collects Usage Information from Software Vendor	Meets Metric Proposed by Software Vendor	Participating MIZ Classrooms
		11	Student Progress	Student FOE Metric(s) from Selected Software Program	TEA Collects Usage Information from Software Vendor	Meets Metric Proposed by Software Vendor	Participating MIZ Classrooms

Fidelity of Implementation Rubric - Guiding Questions

Catalyst	Bucket	#	FOI Category	Method of Evaluation	Guiding Questions
Commitment	District and School Vision	1	District Commitment	Assessed in LOI	What is the **vision** for ensuring an excellent education for all of students in the district? Why is personalized and/or blended learning a **critical component** of this vision? Which **stakeholders** should be involved in the creation of this vision? How will the district know whether or not it is **on track** (both qualitative and quantitative) to meet this vision? What **resources** (time/money/people) is the district willing to devote to attaining this vision through blended and personalized learning?
		2	School Commitment	Assessed in LOI	What is the **vision** for ensuring an excellent education for all students that attend or will attend this school? Why is personalized and/or blended learning a **critical component** of this vision? Which **stakeholders** should be involved in the creation of this vision at the school level? How will the school know whether or not it is **on track** to meet this vision, both qualitatively and quantitatively? What **resources** (time/money/people) is the school willing to devote to attaining this vision through blended and personalized learning?
Fidelity of Planning	Implementation Strategy	3	Design and Implementation	Evaluated on FOI Rubric	What is the **identified problem** that the district is working to solve by implementing blended learning and why will solving this problem dramatically impact the lives of students? What are the **goals for student achievement** that the district and schools will work to achieve? Which **classrooms, teachers, and support staff** will be charged with implementing Math Innovation Zones? **Who** are the people that will be in place at the district and school levels **to support teachers** in reaching the goals of MIZ? Which **blended learning model** (or hybrid of models) will the school employ to meet the stated goals of the program? Which **data driven instruction structures** must be in place to give timely and unbiased feedback to schools, teachers, and students throughout the school year? Which **district and school policies** will need to be adopted to ensure that schools are able to meet stated goals?
		4	Budget and Financial Planning	Evaluated on FOI Rubric	How will the district achieve **cost savings** from blended learning in the long run? Which structures will the district put in place to ensure **alignment** between finance and blended learning teams? How will the district ensure that blended learning is **scalable** across the MIZ awarded feeder pattern? Which **revenue sources** are available to the district to scale blended learning across feeder patterns? How will the **district pay for costs** related to blended learning in a sustainable way over time?
		5	Professional Development Plan	Evaluated on FOI Rubric	What is the vision for how the district retains, supports, and **develops teachers** throughout the district? Which **teams and/or people are responsible for the development** of coaches and teachers throughout the district and at each school? What are the **rubrics and tools** that the district will use to deliberately support the development of teachers and leaders over time? What **structures** (observations, PLCs, one-on-ones, PD sessions, data stepbacks, observations, real-time-coaching, etc...) will the district execute to ensure a continuum of meaningful learning experiences, both at the beginning and throughout the school year? What **tools will the district use to capture data** and feedback on learning experiences for teachers and coaches to ensure constant improvement?

Catalyst	Bucket	#	FOI Category	Method of Evaluation	Guiding Questions
Fidelity of Planning	TECHNOLOGY	6	Infrastructure	Evaluated on FOI Rubric	What is the level of **internet connectivity** necessary to ensure an uninterrupted use of blended learning throughout the school district, both now and in the future? What is the **Local and Wide Area Network** capacity necessary throughout all buildings in the district to deliver a seamless user experience with blended learning? What is the plan for **device access** for all users of blended learning in the district? What is the **IT support** that is available to all teachers, support staff and administrators throughout the district? Which **policies** related to technology infrastructure must be updated at the district?
		7	Software	Licenses Purchased for All Students in MIZ Grade Levels	Given what the district is solving for in blended learning and the capacity of district and school personnel, which **state approved software program(s)** are viable options? Specifically, which state approved software vendor will **each grade** within MIZ implement? What are the **steps necessary to ensure a contract is in place**, software is able to be deployed, and that teachers and/or trainers are able to implement the program at the beginning of the school year?
Fidelity of Execution	CONTINUOUS DEVELOPMENT	8	Data Driven Instruction	Evaluated on FOI Rubric	In execution, which **daily, weekly, monthly, or unit based assessments** are being used to assess student growth over the academic year? What quality **norm referenced formative assessment** (NWEA MAP, Renaissance STAR, STAAR Interim Tests) is being used to assess student growth at key points during the year (BOY, MOY, EOY)? How are teachers **accessing and analyzing** the data provided by assessments? Howare teachers using data to **communicate** progress and areas of focus to students, parents, and other faculty? What structures are in place to allow teachers **time and space** to understand the data and plan for future adjustments in instruction?
		9	Ongoing Capacity Building	Evaluated on FOI Rubric	In execution, what **structures are being used to develop teachers**, both initially and throughout the academic year? How do school and district leaders know if teachers are **improving their practice** with regard to blended learning? How are **tools** to support PD being used to support teachers and coaches?
	EXECUTION METRICS	10	Teacher Usage	Meets Metric Proposed by Software Vendor, Agreed Upon by MIZ PM & TEA	Given the chosen software vendor, how will the district ensure adequate **teacher usage** of the program?
		11	Student Progress	Meets Metric Proposed by Software Vendor	Given the chosen software vendor, how will the district ensure adequate **student usage, monitoring, and progress** on the program?

Fidelity of Implementation Overview

Fidelity of Planning – Districts and charter schools must effectively meet a distinct set of planning criteria to demonstrate readiness to implement blended learning in schools**.**

> **How is FOP evaluated/assessed?** TEA, with the assistance of the MIZ Technical Assistance Network, will develop a **FOP Rubric** in summer of 2018 and circulate with districts. FOP plans **do not** have a recommended template and will be evaluated towards the FOP rubric for key components of strong plans. District MIZ Project Managers will email plans to MIZ@tea.texas.gov upon completion.

> **When is FOP assessed?** For 2018-2019 Math Innovation Zones, Fidelity of Planning is assessed **upon completion of the indicated plans.** For future Math Innovation Zones, Fidelity of Planning is assessed in **May of the Planning Year**, followed by a follow up assessment (if necessary) in June of the Planning Year.

> **At which level (district/school/grade) is FOP assessed?** Fidelity of Planning will be assessed **at both the district and school level**. Only schools participating in Math Innovation Zones will be assessed.

Fidelity of Execution – Districts and charter schools must effectively meet a set of execution requirements to demonstrate effective implementation of Math Innovation Zones. **Fidelity of Execution (FOE) is assessed every six weeks** throughout the academic year and districts must meet the Fidelity of Execution requirements for **at least five of the six Fidelity of Execution checkpoints.**

> **How is FOE evaluated/assessed?** FOE is assessed in three ways:

> **Data Driven Instruction and Ongoing Teacher Capacity Building** will be assessed for completion and quality; Deliverables will be emailed to MIZ@tea.texas.gov
> **Teacher Usage** will be assessed towards a district-determined metric; TEA will monitor through the selected software program
> **Student Usage** will be assessed towards the FOE Metrics provided by the Math Innovation Zones Software Vendor (**Figure A**); TEA will monitor through the selected software program

> **How is Student Usage/Progress FOE assessed?** Each software vendor has proposed student usage and/or progress metrics to ensure a high-fidelity use of the program. These metrics are identified in **Figure A**.

> **When is FOE assessed?** FOE will be assessed at the **end of each six-week time period**. To achieve the Math Innovation Zones Designation, each grade level participating in MIZ must achieve FOE requirements **for 5 of the 6 six-week periods**.

> **At which level (district/school/grade) is FOE assessed?** Each **classroom in each grade level** participating in Math Innovation Zones will be assessed towards FOE metrics.

Fidelity of Implementation Details: Fidelity of Planning Requirements

FOP Requirement #1: Design and Implementation Deliverable
Districts and charter schools will be **required** to complete the following Design and Implementation deliverable. Districts and charter schools must obtain TEA approval of plan (as assessed by a rubric to be created in summer 2018) to satisfy Fidelity of Planning Requirements.

1. **Blended Learning Program Design and Plan:** School or district-specific blended learning strategy that includes context unique for each intended school site. This should include a needs assessment, launch plan for blended learning in new grade levels over time, the identification of the appropriate instructional model for each classroom, assessment and selection of approved blended learning vendor, human capital considerations, and plan for data driven decision making across the campus.

    Emailed to MIZ@tea.texas.gov and assessed upon document completion

FOP Requirement #2: Budget and Financial Planning Deliverable
Districts and charter schools will be **required** to complete the following Budget and Financial Planning deliverable. Districts and charter schools must obtain TEA approval of plan (as assessed by a rubric to be created in summer 2018) to satisfy Fidelity of Planning Requirements.

1. **District Financial Plan:** Sustainable long-term budget that accounts for blended learning specific considerations including adjustment of staffing ratios to promote cost savings, instructional materials tradeoffs, and ongoing blended learning specific costs. Plan includes one-time and recurring funding sources and program expenses, including the identification of alternative sources of operating funds. The plan also includes a list of inputs and assumptions that are approved by the full blended learning team, including district staff - across multiple functions including finance, curriculum, and teacher support - school leadership, and teachers.

    Emailed to MIZ@tea.texas.gov and assessed upon document completion

FOP Requirement #3: Professional Development Deliverable
Districts and charter schools will be **required** to complete the following Professional Development deliverables. Districts and charter schools must obtain TEA approval of plan (as assessed by a rubric to be created in Summer 2018) to satisfy Fidelity of Planning Requirements.

1. **Professional Development Plan:** Work with districts to set district training goals, identify roles and responsibilities of teachers and coaches, proposed professional development delivery model, create training timeline, and design coaching feedback system.
2. **Tools to Evaluate Participant Proficiency:** Build tools including **rubrics**, templates, and other resources, to assess blended learning readiness, development, and proficiency at the campus and district level.
3. **Tools to Evaluate Professional Development Efficacy:** Create resources **(a survey)** to evaluate efficacy of professional development including surveys for teachers, administrators, and district officials. Provide alternative means for documenting and sharing district successes and challenges.

    Emailed to MIZ@tea.texas.gov and assessed upon document completion

As part of the requirements related to professional development, districts and charter schools awarded with Math Innovation Zone pilot or planning grants may be required to:

a. Participate in up to 5 Math Innovation Zone **cohort professional development opportunities** and/or conferences involving the project manager or other district or open-enrollment charter schools leader(s) of the initiative
b. **Host TEA and other Math Innovation Zone cohort members** for occasional **site visits** to learn from implementation across the state
c. **Share relevant data** from the Math Innovation Zone with TEA, as required by Texas Education Code Section 28.020

Pilot sites should use funds from Math Innovation Zones grants to assist with expenses related to these requirements. Non-granted Math Innovation Zones may consult with TEA to consider opting out of any professional development that may add an unreasonable strain on the program budget.

FOP Requirement #4: Technology Infrastructure Deliverable
Districts and charter schools will be **required** to complete the following Technology Infrastructure deliverables. Districts and charter schools must obtain TEA Approval of plan (as assessed by a rubric to be created in Summer 2018) to satisfy Fidelity of Planning Requirements.

1. **Infrastructure Improvement Plan:** Develop a clear plan and timeline to create a robust infrastructure that supports the long-term vision of blended learning within district or open-enrollment charter schools and assist in executing plan.
2. **Technical Support Capacity Building Plan:** Create strategy for capacity development within district to ensure high quality ongoing technical support and information technology function across the district or charter schools.

   Emailed to MIZ@tea.texas.gov and assessed upon document completion

FOP Requirement #5: Use of State Approved Online Curriculum Vendor
Districts and open-enrollment charter schools participating in Math Innovation Zones will be **required to select a math online curriculum program from the Math Innovation Zones State Approved Online Curriculum Vendors List**. State Approved Online Curriculum Vendors have been evaluated and chosen based on the following criteria:

- Demonstrated impact on student achievement
- Product alignment with TEKS
- Service plan for implementation within district or open-enrollment charter schools
- Strong metrics to assess fidelity of implementation

The four **State Approved Software Vendors** for online curriculum are:
- Reasoning Mind
- ST Math (from MIND Research)
- IXL Math
- Imagine Math

Participating districts and open enrollment charter schools must implement the selected software program in all participating MIZ classrooms of a chosen grade level. If a district or charter school chooses, it may select different programs to be implemented at different schools or different grade levels as long as all participating classrooms within a grade level are using the same software program.

Fidelity of Implementation Details: Fidelity of Execution Requirements

In addition to Fidelity of Planning, districts and charter schools will be **required** to exhibit evidence of ongoing progress and program development through Fidelity of Execution Metrics as required by Math Innovation Zones.

FOE Requirement #1: Formative Assessment & Data Analysis
During implementation of Math Innovation Zones, TEA will assess the ongoing level of Data Driven Instruction. Although the type of formative assessment may vary, TEA seeks evidence of the use of formative assessments, analysis of data, and improvement of practice regarding Math Innovation Zones. Districts and charter schools will be required to complete the following Fidelity of Execution requirements and share relevant data with TEA:

1. **Administer Quarterly Formative Assessments**: All Math Innovation Zone classrooms launching blended learning programs must administer formative assessments on a quarterly (Fall, Winter, Spring) basis and send results to TEA.
2. **Weekly PLC Meetings:** All teachers in grade level(s) participating in Math Innovation Zones must meet once weekly in Professional Learning Communities (PLCs) to analyze relevant data and plan based on data analysis; TEA may require the submission of an agenda or notes from meeting.
3. **Quarterly Step Back:** All teachers in grade level(s) participating in Math Innovation Zones must participate in quarterly (or other cadence as required by the formative assessment) data step backs to assess progress towards growth goals and plan based on their analysis; TEA may require the submission of an agenda or notes from the step back or attend the step back meeting.

    Submitted to MIZ@tea.texas.gov at end of each six weeks and assessed on completion & quality

FOE Requirement #2: Meaningful Learning Experiences
During implementation of Math Innovation Zones, TEA will assess the level to which districts and charter schools are actively supporting teachers in their own professional development with regard to the Professional Development Plan created in the planning stages. Meaningful Learning Experiences (MLEs) can be a variety of professional development structures including: district or vendor-led classroom observations; 1:1 blended learning coaching sessions; meaningful workshops; and excellent school visits to high quality blended learning programs. Although MLEs may look different across campuses, all MLEs will result in a change in teacher knowledge, skill, and/or mindset. Districts and charter schools will be **required** to complete the following Fidelity of Execution requirements and share relevant data with TEA:

1. **Meaningful Learning Experiences:** All teachers in grade level(s) participating in Math Innovation Zones must participate in **2 Meaningful Learning Experiences (MLEs) per month** for the first three months of the school year and then **1 MLE per month for the following 6 months**. TEA reserves the right to reject a learning experience as a fulfillment of FOE requirements due to a lack in quality. **A quality submission of evidence of MLEs will include:**

a. All **attendees** of the MLE including the facilitator of the learning experience
b. The **objective** of the MLE including the expected teacher change as a result of a successful execution of this learning experience
c. An **agenda** or overview of the components of the MLE

Submitted to MIZ@tea.texas.gov at end of each six weeks and assessed on completion & quality

FOE Requirement #3: Exhibit Sufficient Teacher Usage
During implementation of Math Innovation Zones, TEA will assess the level to which classroom teachers using the software platform to gather insights and to take action.

Due to the variation in teacher usage by model, each MIZ Project Manager and TEA will determine the appropriate Teacher Usage metric to determine fulfillment of this FOE measure.

Assessed by TEA at the end of each six weeks through selected software program
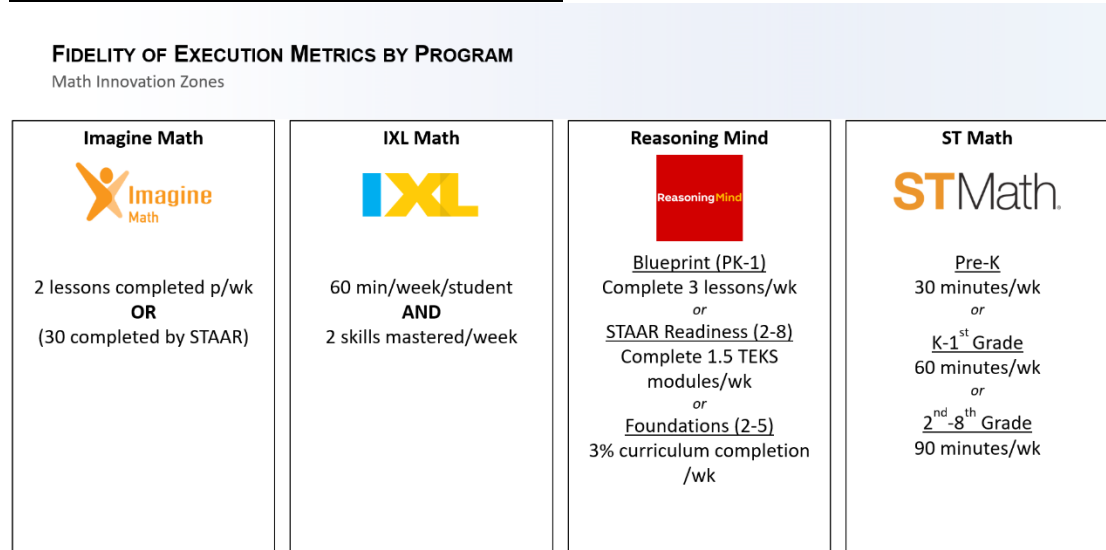
FOE Requirement #4: Students Progress Towards Learning Goals
During implementation of Math Innovation Zones, TEA will assess the level to which students are progressing towards the individualized learning goals set forth by the chosen online curriculum program. As required by Math Innovation Zones, districts and charter schools must share outcomes data from the selected online curriculum program with TEA using whichever data collection mechanism required by TEA.
Assessed by TEA at the end of each six weeks through selected software program

To maintain good standing as a Math Innovation Zone**, each student on average per week**, must meet the program specific Fidelity of Execution Requirements as indicated in Figure A. For example: if Student A meets 50% of the FOE requirement one week and 150% of the FOE requirement the next week, that student has met Fidelity of Execution.

Figure A: Fidelity of Execution Metrics by Program

FIDELITY OF EXECUTION METRICS BY PROGRAM
Math Innovation Zones

Imagine Math	IXL Math	Reasoning Mind	ST Math
2 lessons completed p/wk **OR** (30 completed by STAAR)	60 min/week/student **AND** 2 skills mastered/week	Blueprint (PK-1) Complete 3 lessons/wk *or* STAAR Readiness (2-8) Complete 1.5 TEKS modules/wk *or* Foundations (2-5) 3% curriculum completion /wk	Pre-K 30 minutes/wk *or* K-1st Grade 60 minutes/wk *or* 2nd-8th Grade 90 minutes/wk

Note: All FOE Metrics will be assessed "on average per student" and will be assessed each 6 week period; Fidelity of Execution must be achieved in 5/6 six weeks to achieve Math Innovation Zone Designation

All questions should be directed to MIZ@tea.texas.gov