

*S²TEM SC Innovation Configuration Maps
STEM Mindedness*

Standard: STEM schools are engaged learning communities driven by a vision of an America as a secure and economically viable global leader, values that inspire innovation and data that supports and informs that process.

STEM Mindedness				
Sustaining	Fully Implementing	Refining and Expanding	Progressing	Getting Started
Desired Outcome 1: STEM for All ensures gate-keeping processes are fair, course offerings are comprehensive and all students receive support to achieve success in STEM.				
Ensures stakeholders support all students equally in their pursuit of STEM careers	Engages stakeholders in the support of all students in pursuit of STEM careers	Establishes a support system for students in pursuit of STEM careers	Determines trends in STEM interests based on student data	Identifies students' needs and interests
Revisits and revises plan based on patterns and trends of multiple measures of assessment to appropriately determine needs and placement for students in STEM	Uses multiple measures of assessment to appropriately determine needs and placement for students in STEM	Implements a plan for addressing student needs and interests	Creates a plan for addressing student needs and interests	Determines student needs and interests
Promotes a broad vision for the world of STEM career opportunities	Provides comprehensive STEM opportunities	Plans for comprehensive STEM opportunities	Considers job trends in STEM fields globally	Analyzes STEM –field related data within surrounding school community
Desired Outcome 2: A culture that inspires innovation motivates school leaders, teachers, students and community alliances to think, dream and do in an atmosphere that has been thoughtfully created to embody a spirit of American ingenuity and inquiry.				
Embraces an environment alive with possibility thinking while incorporating 21st Century practices	Implements student-centered environment incorporating 21st Century practices	Exhibits characteristics of a student-centered environment	Plans for transitioning to student-centered environment	Exhibits characteristics of a teacher-centered environment
Inspires self-directed thinkers, risk-takers	Exhibits self-directed thinkers; Encourages risk-taking	Implements a plan to support students in becoming self-monitoring, self-managing, and self-modifying	Establishes a plan to support students in becoming self-monitoring, self-managing, and self-modifying	Recognizes the need to develop independent thinkers and learners
Inspires stakeholders to deliberately: (1) question the status quo, (2) deliberate about complex problems, and (3) pose creative solutions, through applying an engineering design process	Promotes stakeholders to think outside the box	Encourages stakeholders to think outside the box	Engages stakeholders in identifying STEM needs within the school	Identifies stakeholders within the STEM community

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Desired Outcome 3: Data-informed decision-making in a STEM school is a collaborative, recursive process that includes the analysis of school-based data, along with workforce and global needs projections, to gain actionable information used to guide and monitor school decisions.				
Drives all plans and actions, with intention and purpose, by and for the collaborative STEM community	Involves multiple stakeholders through a collaborative process appropriately and with intentionality	Includes multiple stakeholders through a collaborative process	Includes school and teacher leaders recognizing patterns and trends through formal dialogue	Includes school leaders talking in an informal process
Drives the school's existing and desired state which should reflect the nation's need for more individuals earning STEM-specific degrees and choosing STEM careers		Involves the use of school's existing and desired state with intentionality and purpose		Involves limited data points to determine existing and desired state
Ensures that all school actions are examined for their impact on student achievement and on the school's goals for teaching and learning using the "Cycle of Inquiry"	Implements the "Cycle of Inquiry" to examine school actions based on student achievement and goals	Uses aspects of the "Cycle of Inquiry" to examine school actions based on student achievement and goals	Experiments with using aspects of the "Cycle of Inquiry" to examine school actions based on student achievement and goals	Identifies some school actions based on student achievement and school's goals
Desired Outcome 4: A culture of collaboration in a STEM school is defined as an environment in which all stakeholders work interdependently and share accountability for student success.				
Encompasses trust and collective responsibility; Utilizes communal strengths to prepare students for college, careers, and citizenship	Welcomes trust and collective responsibility; Possesses communal strengths to prepare students for college, careers, and citizenship	Shifts from contrived, collegial relationships to a collaborative environment	Recognizes the difference between contrived, collegial and true, collaborative relationships	Exhibits characteristics of contrived, collegial relationships
Embraces trustworthiness for all stakeholders by showing: respect, competence, integrity, and personal regard for others	Supports a trustworthy environment for all stakeholders by showing: respect, competence, integrity, and personal regard for others	Demonstrates characteristics of relational trust: respect, competence, integrity, and personal regard for others	Creates an environment conducive for relational trust: respect, competence, integrity, and personal regard for others	Recognizes the importance and value of relational trust: respect, competence, integrity, and personal regard for others

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Desired Outcome 5: Continuous learning is an active and ongoing process in which self-directed learners at all levels of the school pursue goals they identify through a reflective learning cycle.				
Integrates research on change and drives all stakeholders to actively pursue learning goals aligned with the school's vision for STEM	Drives all stakeholders to actively pursue learning goals aligned with the school's vision for STEM	Drives all stakeholders to actively pursue learning goals	Prompts school leaders to implement school wide learning goals without consideration of the research on change	
Inspires self-directed learners to seek ongoing improvement with purpose and self-awareness enabling learners at all levels of the school community to accurately assess their progress towards meeting challenging goals and persevere in the face of barriers	Motivates learners to seek ongoing improvement with purpose and self-awareness	Motivates learners to seek improvement and self-assess progress towards learning goals	Motivates learners to refine learning goals based on feedback	Motivates learners to seek improvement towards multiple learning goals
Employs the essential elements of a reflective cycle with fidelity including: <ul style="list-style-type: none"> identifying goals planning implementing gathering evidence self-assessing adapting 	Employs the essential elements of a reflective cycle including: <ul style="list-style-type: none"> identifying goals planning implementing gathering evidence self-assessing adapting 	Encourages the identification of goals followed by planning, implementation, and reflection	Encourages the identification of goals followed by planning and implementation	Supports goal setting

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