

Conn Magnet Elementary School of Entrepreneurial Design

STEM Education Plan

Ultimate Vision For STEM Learning

We believe that STEM Learning is a mindset that:

- Connects students with their school, community and world to create solutions to problems using design & thinking processes
- Engages students in hands-on, personally connected, project/inquiry-based cross-curricular learning experiences
- Fosters inquiry, curiosity, confidence, creative problem-solving, collaboration, critical thinking, and communication
- Activates learners to identify and contribute solutions to novel local, regional, and global challenges.

Mission/Vision

At Conn Magnet Elementary School of Entrepreneurial Design our vision is that all Conn students will be lifelong learners equipped with a growth mindset and the ability to work collaboratively within diverse communities.

Long-Term STEM Outcomes

By the end of 5th grade, learners will be able to:

- Identify and utilize a design or thinking framework for understanding the process for solving complex problems collaboratively.
- Seek out and examine the resources/technologies needed to solve complex problems.
- Pose questions that arise from natural curiosity and posit strategies to find answers to questions and solutions to challenges.
- Explain connections between curricula and STEM learning experiences & careers.
- Articulate the impact of STEM on individuals and society.

By the end of 8th grade, learners will be able to:

- Evaluate and revise frameworks/processes for solving complex problems collaboratively.

- Evaluate resources for accuracy, reliability, and credibility that can be utilized to solve complex problems.
- Explore technological models and simulations that can be utilized to solve problems.
- Analyze phenomena and derive complex questions/identify challenges, and formulate and enact a plan to answer questions and solve those challenges.
- Incorporate the essential skills needed to be successful in STEM careers through authentic STEM career learning experiences.
- Articulate the interconnectedness of STEM knowledge, individuals, and society.

By the end of 12th grade, learners will be able to:

- Analyze observations to collaboratively pose complex problems and identify challenges.
- Create, revise, and evaluate frameworks/processes for solving complex problems collaboratively.
- Collaborate to design accurate, reliable, and credible resources that others can use to solve complex problems/find solutions to complex challenges.
- Explain phenomena in a complex way using STEM specific language.
- Reflect on customized STEM-specific learning experience by analyzing and assessing personal career pathways.
- Self-assess STEM-literacy and impact on other individuals and society.

	Strategies			Data	Outcomes
Goals	2023-2024	2024-2025	2025-2026		
Goal 1 By the end of the 2025-2026 school year, Conn will increase the number of student participation in STEM instruction which will occur at least 2 times a week through in-school or outside-of-school opportunities.	-Begin discussion about student engagement opportunities for STEM instruction with the STEM team. -Implemented our First Annual Technology Day	-STEM Teacher Team will plan professional learning to present to all staff during at least two staff meetings -Improve structure of Annual Technology Day through staff feedback	-Instructional Technology Teacher will deliver professional learning opportunities for staff three times a year -Involve business and technology companies in Annual Tech Day	-STEM Team meeting Agendas -Amount of professional learning time allocated to digital tools -PD agendas	-Opportunities for students to identify, evaluate, and use digital tools and resources related to learning objectives will increase as a result of professional learning by staff -Increased collaboration with district Digital Learning Coordinators
Goal 2 By the end of the 2025-2026 school year, 95% of our teachers will collaborate with colleagues at least twice per	-Maintain Monday Magnet Meetings -Teams will meet with the Magnet Coordinator/Teacher to plan STEM integrated lessons -Teams will begin	-Maintain Monday Magnet Meetings -Teams will continue to meet with the Magnet Coordinator/Magnet Teacher to plan STEM integrated	-Maintain Monday Magnet Meetings -Teams will continue to meet with the Magnet Coordinator/Magnet Teacher to plan STEM integrated	-Monday Magnet Meeting Agendas -Lessons and activities -Observations of co-teaching STEM instruction in classrooms -Magnet	-Teachers will enhance their knowledge of curriculum integration with STEM instruction -Students will further see connections in their learning through project-based and hands-on learning opportunities -5th grade science EOG scores will gradually improve each year by at

<p>month to plan lessons and activities that integrate core content and STEM instruction.</p>	<p>co-teaching with the Instructional Technology Teacher at least one time per month integrating STEM instruction with core content</p>	<p>lessons. Teachers will then co-teach these lessons with the Magnet Coordinator/Teacher</p> <p>-Teams will co-teach with the Instructional Technology Teacher at least one time per month integrating STEM instruction with core content</p>	<p>lessons. Teachers will then teach these lessons independently</p> <p>-Teams will co-teach with the Instructional Technology Teacher at least twice a month integrating STEM instruction with core content</p>	<p>Coordinator/Teacher's lesson plans</p> <p>-Instructional Technology Teacher's lesson plans</p>	<p>least 2%</p>
<p>Goal 3</p> <p>By the end of the 2025-2026 school year, Conn will have structured opportunities for STEM integration and participation through the STEM Education Plan which will include monthly opportunities for staff to engage in STEM</p>	<p>-Staff will utilize the IDEAS Factory and classrooms for STEM instruction.</p> <p>-Administration and hiring team will onboard new teachers to ensure a strong vision for STEM instruction is maintained.</p>	<p>-Staff meetings will include a specific learning opportunity each month.</p> <p>-Differentiated STEM learning moments provided by the STEM Team, Media/Technology Teacher, Instructional Technology Teacher, and Magnet Coordinator/Teacher</p>	<p>-Continued STEM learning moments during monthly Staff meetings</p> <p>-Include a STEM Showcase during monthly Staff meeting</p>	<p>-Staff Meeting Agendas</p> <p>-Staff PDP Goals</p> <p>-Staff Lesson Plans</p> <p>-Online Entrepreneurial Design Framework</p> <p>-Updated Digital Tool Inventory</p>	<p>-Collective ownership of growing our STEM education impact</p> <p>-Intentional focus on goals to grow our collective teacher craft with embedding STEM education</p> <p>-Enhanced collaboration with Digital Learning Coordinators to improve STEM integration</p> <p>-Full use of Digital Tools school-wide</p> <p>-Documented Entrepreneurial Design Core Embedment and Framework</p>

professional development.					
<p>Goal 4</p> <p>By the end of the 2025-2026 school year, Conn will continuously review and adjust the STEM Education Plan to maintain alignment to SIP.</p>	<ul style="list-style-type: none"> -STEM Team will continue to adjust and review the STEM Education Plan -Present the STEM Education Plan at a Staff meeting -Ensure all student are afforded an opportunity to participates in Robotics club through an application submission process -Ensure barriers to student participation in Robotics Club are removed 	<ul style="list-style-type: none"> -STEM team will meet at least two times a year to review the STEM Education Plan and make adjustments as needed -STEM team will establish tools to collect STEM integration opportunities and intended outcomes 	<ul style="list-style-type: none"> -Monitor STEM Education Plan to review and adjust as needed 	<ul style="list-style-type: none"> -STEM Education Plan -STEM Team agendas -SIP meeting agendas 	<ul style="list-style-type: none"> -Conn Magnet Elementary will receive STEM recognition -Conn Magnet Elementary will revise and enhance the STEM Education Plan year to improve student achievement
<p>Goal 5</p> <p>By the end of the 2025-2026 school year, Conn will establish a</p>	<ul style="list-style-type: none"> -Compile a current list of community partnerships and local entrepreneurs -Maintain school-evet community 	<ul style="list-style-type: none"> -Work collaboratively with the PTA to add additional community partners to the master list 	<ul style="list-style-type: none"> -Maintain and add new community partnerships to master list -Review and gather feedback on school-wide initiatives 	<ul style="list-style-type: none"> -Master list of community partners -Master list of annual community partnership opportunities -Photo evidence of 	<ul style="list-style-type: none"> -Community partners will support STEM initiatives -Community will promote and recruit more families to Conn by sharing STEM opportunities with friends and family

confirmed list of community partnerships and entrepreneurs to support STEM integration and instruction.	partnership events -Career Day -STEM Day -Entrepreneur Day -Begin collaborating with other STEM certified schools on additional ways to integrate STEM instruction		with community partnerships during one Monday Magnet meeting	community partnership participation with STEM initiatives	-Student achievement will increase due to the community outreach efforts and enhanced STEM instruction.
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