ST. ZENOBIUS MODEL STEM STRATEGIC PLAN

Goals → Strategies → Tactics → Outcomes (GSTO)

Definitions	**Time Frame**
Goals: What you want to achieve.	**3-5 years**
Strategies: Broad statements of how you will achieve your goals.	**1-2 years**
Tactics: The actionable steps, activities, and tools needed to execute a strategy.	**1-6 months**
Outcomes: The measured goals.	

Goals	**Strategies**	**Tactics (Linked to Implementation Table)**	**Outcomes**
All students will participate annually in engineering design challenges that address an important local, national, or global need.	Develop teachers' knowledge of fundamental engineering design practices and engineering instructional approaches.	1. Identify a K-8 appropriate, day-long PD workshop on engineering education. 2. Coordinate PD date with principal. 3. Provide brief overview of engineering education at a faculty meeting that reduces anxieties. 4. Engage in day-long PD. 5. Facilitate conversation at faculty meeting about big ideas and further needed supports for teaching engineering.	
	Create structures and processes for lowering the implementation energy for faculty and staff.	1. Develop calendar for faculty/PLC meetings dedicated to curriculum adaptation/development (for '22-'23). 2. Develop calendar for engineering design day implementation (for '23-'24) 3. Recruit a parent from each grade level as the 'engineering captain' who will secure supplies and two volunteer parents for engineering day. 4. Provide checklist for capturing artifacts of engineering design experience for communication & teacher review.	
	Develop grade level specific engineering design challenges and accompanying lesson plan materials.	1. Hold grade band team meetings to identify potential themes. 2. Review Engineering is Elementary Units (K-5) for ideas/selection. 3. Review Engineering Everywhere or Engineering Tomorrow units for ideas/selection.	
Students from underrepresented populations develop engineering identities at a rate equivalent to members of the dominant population.	Construct an engineering design challenge within each grade band that explicitly addresses relevant contexts to underrepresented students.	1. Gather baseline data for engineering identity for all students. 2. Interview underrepresented students about local and national issues that are important to their identities and culture. 3. Develop draft engineering design challenge contexts. 4. Form an informal advisory board to get feedback on engineering design challenge contexts and their relationship to students' interests and cultures. 5. Finalize contexts for engineering design challenges.	
	Embed explicit reflection on STEM/engineering identity across grade levels.	1. Create engineering journals for all grade levels. 2. Develop grade band level reflective prompts that include initial and final reflections on engineering identity.	