

FOCUS AREA:	STEM Academy	STRATEGY 1A	
STRATEGY:	Implement a STEM Academy at Methacton High School		
OBJECTIVE:	Increasing favorable feedback Increasing District rank	RESPONSIBLE PERSONS:	-Superintendent -Director of Curriculum -Building Principal
IMPLEMENTATION SUMMARY:	<p>CONCEPT DESIGN</p> <ul style="list-style-type: none"> -Use the Problem and Pathway Project Design <ul style="list-style-type: none"> • Leverage FAB Lab as the High School's core learning/resource hub • Include access to all instructional disciplines • Required HS course sequencing to support engineering for all • Expose all students to real world problem solving • Student is part of multi-year group project based • Culminates in a seminar/project/internship with a STEM endorsement on graduation diploma <div style="text-align: center;"> </div> <ul style="list-style-type: none"> - Focus on project-based learning, inquiry-based learning, entrepreneurial experiences, authentic experiences, and work-based learning -Develop marketing/media/communications campaign -Form committee to complete research, design, pathway structure, costs analysis, staffing, and resource need determinations -Seek overall plan approval -Form Industry/Higher Education Advisory Committee -Form fundraising team, determine scope and targets, develop media campaign, implement solicitation program (engage Education Foundation) -Seek approval of plan -Requires re-thinking of HS course structure (consider Pathways) and graduation requirements -Engage consultants (engineer/architect/curriculum specialist) -Organize existing curricular offerings into STEM umbrella structure with marketing plan 		
TIMELINE TARGET:	Start: September 1, 2022 Mid: Q3 of 2023 End: Q3 of 2024		
KPI/DELIVERABLES:	<ul style="list-style-type: none"> -Development of comprehensive plan -Approval of plan by School Board -Secure alternative funding resources -Construct FAB Lab -Organize HS structure 		

FOCUS AREA:	STEM Academy	STRATEGY 1B	
STRATEGY:	Develop alignment of core program at lower levels (5 th -8 th) with resulting HS STEM/Pathway structure to ensure all students have access to engineering		
OBJECTIVE:	Increasing favorable feedback Increasing District rank	RESPONSIBLE PERSONS:	-Superintendent -Director of Curriculum -Building Principal
IMPLEMENTATION SUMMARY:	<p>-Concept Design</p> <ul style="list-style-type: none"> • All students are required to have an engineering course upon graduation (preferably 9th/10th grade) • Prepares student for success in High School STEM Academy • Problem/Pathway Project design model • Focus on problem solving • Requires curriculum progression alignment at lower levels to ensure continuity and pre-requisite knowledge and skill for success in HS <p>-Curriculum Department and grades 5th-12th Principals review scope and sequence against pre-requisite knowledge and skill required for engineering core course in HS. Requires review of standards, scope and sequence, and learning outcomes</p> <p>-Research project based/group based learning opportunities (local/state/national competitions) for students K-8th to assist in preparing pathway forward</p> <p>-Determine other curricular, co-curricular or extra-curricular opportunities appropriate to advance student's exposure, knowledge and skill</p>		
TIMELINE TARGET:	Start: January 1, 2023 Mid: Q4 of 2023 End: Q2 of 2024		
KPI/DELIVERABLES:	<p>-Recommendations provided to Superintendent on curricular, co-curricular or extra-curricular opportunities</p> <p>-Scope and sequence documents (grades 5th-8th) aligned with required engineering course in 9th/10th grade</p>		

FOCUS AREA:	STEM Academy	STRATEGY 1C	
STRATEGY:	Implement FAB Labs incrementally downward for all buildings and levels		
OBJECTIVE:	Increasing favorable feedback Increasing District rank	RESPONSIBLE PERSONS:	-Superintendent -Director of Curriculum -Building Principals
IMPLEMENTATION SUMMARY:	-Based on HS design/impact/feedback, design structure/location/funding for implementation of FAB Lab (level appropriate) for each of the remaining 6 buildings over a 4 year period		
TIMELINE TARGET:	Start: January 1, 2024 Mid: Q2 of 2026 End: Q4 of 2027		
KPI/DELIVERABLES:	<p>-Implementation of FAB Lab in Arcola and Skyview</p> <p>-Plans for implementation of FAB Lab in each Elementary School</p>		