Lake Washington School District

Tesla STEM High School

School Improvement Plan

Annual Update: 2022-23

This school improvement plan meets the requirements of WAC 180-16-220 and WAC 180-105-020.[1]

SCHOOL OVERVIEW

Description: Tesla STEM High School is a science, technology, engineering, and mathematics high school that uses problem-based learning to prepare students for future STEM professions. Students conduct research in STEM Lab Concentrations, investigate real world problems, and bring research and debate into the equation while working towards viable resolutions. Students enroll in on average, six Science courses and four Math courses for the duration of their high school years. Engineering and Technology are integrated into all grade level classes throughout a student's four years at Tesla STEM.

During the first two years of a student's experience at STEM, students are immersed in an integrated Science, Engineering, and Humanities sequence where the focus is on the students' development of multiple skills, including conducting authentic research, working with primary source documents, developing scientific investigations, understanding and applying the engineering design process, collaboratively working in the Problem-Based Learning environment, developing digital literacy, and expanding critical thinking skills. As a critical component in STEM education, students work in a STEM Lab Concentration and/or STEM Pathway in their Junior and Senior years, conducting inquiry and research, exploring questions of their own, and championing their own ideas to the level of publication and/or production. The STEM Lab Concentrations and STEM Pathways continue to address the goals of the *Grand Challenges for Engineering* to support a bright and sustainable future on a global scale.

Mission Statement: *Each student will graduate prepared to lead a rewarding, responsible life as a contributing member of our community and greater society.*

2022-23 PRIORITIES AT A GLANCE

Priority	Priority Area	Focus Grade Level(s) and/or Student Group(s)	Desired Outcome
1	Mathematics	9-12	By the end of the year, 90% of students will score above standard on the Communicating Reasoning sub-category of the Math SBA.
2	English Language Arts/Literacy	9-12	By the end of the year, 90% of students will be able to appropriately self-assess and peer-assess using the universal essay rubric.
3	Social and Emotional	9-11	Over the next three years we will close the gap between our level 1 and 2 student performance commensurate with our level 3 and 4 student performance as shown on Smarter Balance Tests.

CONTINUOUS IMPROVEMENT PRIORITIES

Our target is that all students and student groups are improving, with all gaps closing, each year. The following priorities have been set to guide us in achieving this.

Priority #1	
Priority Area	Mathematics
Focus Area	Improving the students' ability to clearly communicate well-reasoned mathematical arguments and proofs.
Focus Grade Level(s) and/or Student Group(s)	9-12
Desired Outcome	Over the next year, 90% of students will score above standard on the Communicating Reasoning sub-category of the Math SBA.
Alignment with District Strategic Initiatives	MTSS
Data and Rationale Supporting Focus Area	After studying David Conley's work regarding college readiness, the Mathematics department chose to focus on the key cognitive strategy of reasoning, argument, and proof. This goal connected to our Math SBA data for the sub-category of Communicating Reasoning. Although our students have performed well on the SBA, 15% of students had not reached Above Standard on the Communicating Reasoning sub-category.

Strategy to Address Priority	Action	Measure of Fidelity of Implementation
	Scoring free response questions with rubric	Class discussions about the distinctions between different levels of proficiency when communicating reasoning
	Formative Assessments	Students given problems requiring explanatory work to justify solutions and given multiple opportunities to distinguish the proper inference method

Timeline for Focus	Fall, 2021 - Spring, 2023
Method(s) to Monitor Progress	We will gather data from the Math SBA to monitor our progress toward raising the percentage of students scoring Above Standard on Communicating Reasoning and free response questions.

Priority #2	
Priority Area	English Language Arts/Literacy
Focus Area	Academic Self-Management
Focus Grade Level(s) and/or Student Group(s)	9-12
Desired Outcome	By the end of the year, 90% of students will be able to appropriately self-assess and peer-assess using the universal essay rubric.
Alignment with District Strategic Initiatives	MTSS
Data and Rationale Supporting Focus Area	From studying David Conley's work regarding college readiness, the Language Arts department chose to focus on the key academic behavior of self-management. Early essay assignments showed that students were struggling to use the universal essay rubric and peer-assessments to reflect on their work and base their revisions on those reflections.

Strategy to Address Priority

Action	Measure of Fidelity of Implementation
Book study of *The Motivate Brain*	Classes establish norms for how students work together successfully and productively
Universal essay rubric	Universal essay rubric reviewed with students at the start of the year and beginning or major writing assignments
Scoring sample essays	Class discussion about the distinctions between different levels of proficiency

Timeline for Focus	Fall, 2022 - Spring, 2023
Method(s) to Monitor Progress	Throughout the year, we will gather data on students' ability to reflect on the quality of their work and then base their revisions on those reflections when given the opportunity to rewrite.

Priority #3	
Priority Area	Social and Emotional
Focus Area	PERC (Peer Enabled Restructured Classroom)
Focus Grade Level(s) and/or Student Group(s)	9-11
Desired Outcome	Over the next three years we will close the gap between our level 1 and 2 student performance commensurate with our level 3 and 4 student performance as shown on Smarter Balance Tests.
Alignment with District Strategic Initiatives	MTSS
Data and Rationale Supporting Focus Area	After analyzing trends over the last 3 years in Algebra 1 and 2 classes, we identified that there is a student group that is math-adverse and need focused instruction and support to build up content knowledge and application skills.

Strategy to Address Priority	Action	Measure of Fidelity of Implementation
	Compare test scores of our PERC classes with previous non-PERC Algebra 1 and 2 scores	Looking at Average assessment scores from year-to-year
	Peer Leaders added to Algebra 1 and Algebra 2 classrooms	Peer leaders class periods added to their course schedule
	Peer Leader training	Course instructors train peer leaders on the expectations and responsibilities of the PERC program

Timeline for Focus	Fall, 2021 - Spring, 2023
Method(s) to Monitor Progress	We will gather student data from assessments and progress reports to measure impact of implementing PERC in our Algebra 1 and 2 classes.

STATE ASSESSMENT PARTICIPATION

The Every Student Succeeds Act (ESSA) requires that all schools meet at least a 95% participation rate for state assessments for all students as well as each subgroup. Schools that fall below this threshold in any group must include goals and actions the school will take to ensure 95% of students participate.

Strategies the school is using to meet participation requirements include:
- Common language on the importance of state testing is used by all schools in the district.
- Staff receive training on the administration of state assessments, including the use of supports and accommodations to ensure all students have an equal opportunity to demonstrate learning.
- Make-up testing is provided for students that miss the school's date.
- Test completion lists are monitored by both school testing coordinators and district personnel.
- The district is using the recommended refusal procedures and form developed by the Washington Educational Research Association.

COMMUNITY ENGAGEMENT PLAN

As a district of doers, learners, and believers, our "why" drives us. We do this all-important work because we want all of our students to have equitable and quality experiences in the Lake Washington School District in order to ensure that they get to choose their futures instead of their circumstances choosing them.

Research has consistently shown that family and community engagement is key to increasing the academic success and positive connections that students have at school, especially students from groups that are demographically under-represented or those historically marginalized. Therefore, it is imperative that we consistently plan and implement strategies to engage our families and school communities in authentic and culturally appropriate approaches.

To ensure that families have the support that they need to assist their children, OSPI requires that school districts have a family engagement policy in place that applies to all families.[2] The specific strategy our school is using to involve and inform the community of the School Improvement Plan is as follows:

Strategy to Engage Students, Families, Parents and Community Members in the development of the SIP	Action	Timeline
	PTSA Co-Chair/Leadership Meetings.	Quarterly
	Internship/Business Partner meetings.	Quarterly

Strategy to Inform Students, Families, Parents and Community Members of the SIP	Action	Timeline
	PTSA General Meetings	Quarterly
	PTSA Newsletter	Quarterly
	PTSA Co-Chair/Leadership Meetings	Quarterly
	Principal's Message	Biweekly

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[2] LWSD's policy is found at: https://www.lwsd.org/about-us/policy-and-regulations/community-relations-4000/community-education-program-4265