



# Tesla STEM High School

## School Improvement Plan

### Annual Update: 2020-21

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

#### 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, Entrepreneurship, and Technology are integrated into 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.*

#### Demographics:<sup>1</sup>

		2016-17	2017-18	2018-19	2019-20
Student Enrollment (count)		580	609	603	604
Racial Diversity (%)	American Indian/Alaskan Native	0.2	0.2	0.0	0.0
	Asian	44.0	48.9	52.9	60.8
	Black/African American	0.5	0.5	0.5	0.5
	Hispanic/Latino of any race(s)	4.8	4.3	4.1	3.3
	Native Hawaiian/Other Pacific Islander	0.0	0.0	0.2	0.2
	Two or more races	7.1	6.2	5.1	5.5
	White	43.4	39.9	37.1	29.8
Students Eligible for Free/Reduced Price Meals (%)		2.1	2.6	2.7	2.5
Students Receiving Special Education Services (%)		5.2	4.8	4.6	3.3
English Language Learners (%)		0.2	0.2	0.3	0.2
Students with a First Language Other Than English (%)		23.5	24.2	27.3	31.5

<sup>1</sup>Enrollment and racial diversity based on annual October 1 headcount. Students included in program count (FRL, SpEd, EL) if enrolled on October 1 and receiving services at any time during that school year.

**ACADEMIC PERFORMANCE DATA:  
LITERACY**

**ACADEMIC PERFORMANCE DATA:  
MATH**

**ELA: By Grade Level, Smarter Balanced Assessment**

**MATH: By Grade Level, Smarter Balanced Assessment<sup>2</sup>**

Grade	Percent at or above standard			
	2016-17	2017-18	2018-19	2019-20
10 <sup>th</sup> Grade	99	94	97	n/a

Grade	Percent at or above standard			
	2016-17	2017-18	2018-19	2019-20
10 <sup>th</sup> Grade	n/a	89	94	n/a

**ELA: By Group/Program, Smarter Balanced Assessment<sup>3</sup>**

**MATH: By Group/Program, Smarter Balanced Assessment<sup>4</sup>**

Group/Program	Percent at or above standard			
	2016-17	2017-18	2018-19	2019-20
Asian	98	94	98	n/a
Black/African American	-	-	-	n/a
Hispanic/Latino	-	-	-	n/a
Two or more races	-	100	-	n/a
White	100	92	98	n/a
English Learner	-	-	-	n/a
Low Income	-	-	-	n/a
Special Education	-	-	-	n/a

Group/Program	Percent at or above standard			
	2016-17	2017-18	2018-19	2019-20
Asian	n/a	90	95	n/a
Black/African American	n/a	-	-	n/a
Hispanic/Latino	n/a	-	-	n/a
Two or more races	n/a	91	-	n/a
White	n/a	87	96	n/a
English Learner	n/a	-	-	n/a
Low Income	n/a	-	-	n/a
Special Education	n/a	-	-	n/a

**ACADEMIC PERFORMANCE DATA:  
CREDITS EARNED**

**ACADEMIC PERFORMANCE DATA:  
DUAL CREDIT COMPLETION**

**EARNING CREDIT FOR ALL COURSES, 9<sup>th</sup> Grade**

**DUAL CREDIT COMPLETION, By Grad Year**

Grade	Percent 9 <sup>th</sup> graders earning credit for all courses attempted			
	2016-17	2017-18	2018-19	2019-20
9 <sup>th</sup> Grade	100	100	100	94

	Percent of graduates completing at least one dual credit course with a B or higher			
	Class of 2017	Class of 2018	Class of 2019	Class of 2020
All Graduates	100	100	100	100

**EARNING CREDIT FOR ALL COURSES, By Group/Program**

**DUAL CREDIT PARTICIPATION, By Group/Program<sup>4</sup>**

Group/Program	Percent 9 <sup>th</sup> graders earning credit for all courses attempted			
	2016-17	2017-18	2018-19	2019-20
Asian	100	100	100	95
Black/African American	-	-	-	-
Hispanic/Latino	-	-	-	-
Two or more races	100	100	100	90
White	100	100	100	90
English Learner	-	-	-	-
Low Income	-	-	-	-

Group/Program	Percent of graduates completing at least one dual credit course with a B or higher			
	2017	2018	2019	2020
Asian	100	100	100	100
Black/African American	-	-	-	-
Hispanic/Latino	-	-	-	-
Two or more races	100	100	100	100
White	100	100	98	100
English Learner	-	-	-	-
Low Income	-	-	-	-

<sup>2</sup> The Smarter Balanced Mathematics assessment was given to all 10<sup>th</sup> graders beginning in spring, 2018.

<sup>3</sup> Student/Program groups with less than 10 students marked as “-” and data not displayed due to privacy reasons. “American Indian/Alaskan Native” and “Native Hawaiian/Other Pacific Islander” not included in report due to fewer than 10 students in all categories.

<sup>4</sup> Student/Program groups with less than 10 students marked as “-” and data not displayed due to privacy reasons.

## ATTENDANCE DATA

## GRADUATION RATE DATA

### ATTENDANCE: By Group/Program

Grade	Percent avoiding chronic absenteeism			
	2016-17	2017-18	2018-19	2019-20
9 <sup>th</sup> Grade	98	98	97	n/a
10 <sup>th</sup> Grade	97	95	97	n/a
11 <sup>th</sup> Grade	98	96	97	n/a
12 <sup>th</sup> Grade	86	90	89	n/a

### GRADUATION RATE

Grad Type	Class of				
	2016	2017	2018	2019	2020
Graduating in 4 years	97.7	99.2	100.0	99.2	100.0
Graduating in 5 years	98.5	99.2	100.0	99.2	n/a
Graduating in 6 years	98.5	99.2	100.0	n/a	n/a
Graduating in 7 years	98.5	99.2	n/a	n/a	n/a

### ATTENDANCE: By Group/Program<sup>5</sup>

Group/Program	Percent avoiding chronic absenteeism			
	2016-17	2017-18	2018-19	2019-20
Asian	94	97	97	n/a
Black/African American	-	-	-	n/a
Hispanic/Latino	89	88	88	n/a
Two or more races	95	86	87	n/a
White	97	94	95	n/a
English Learner	-	-	-	n/a
Low Income	90	-	94	n/a
Special Education	93	96	95	n/a

### GRADUATING IN 4 YEARS, By Group/Program

Group/Program	Class of				
	2016	2017	2018	2019	2020
Asian	96.4	100.0	100.0	100.0	100.0
Black/African American	-	-	100.0	0.0	100.0
Hispanic/Latino	100.0	100.0	100.0	100.0	100.0
Two or more races	100.0	100.0	100.0	100.0	100.0
White	98.5	98.1	100.0	98.3	100.0
English Learner	-	-	-	-	100.0
Low Income	-	100.0	100.0	100.0	100.0
Special Education	-	100.0	90.0	100.0	100.0

= Cohort Track  
 n/a = not available

## WASHINGTON SCHOOL IMPROVEMENT FRAMEWORK (WSIF) DATA

### MOST RECENT WSIF 3-YEAR SUMMARY<sup>6</sup>

	All Students	Asian	Black/ African American	Hispanic/ Latino	Two or more races	White	English Language Learners	Low income	Students with disabilities
ELA Proficiency Rate	-	-	-	-	-	-	-	-	88
Math Proficiency Rate	97	97	-	-	-	97	-	-	71
Graduation Rate	-	-	-	-	-	-	-	-	-
EL Progress Rate	-	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Regular Attendance Rate	94	96	-	86	92	94	-	91	91
Ninth Grade On Track Rate	-	-	-	-	-	-	-	-	-
Dual Credit Rate	-	-	-	-	-	-	-	-	95

<sup>5</sup> Grades 9-12 combined. Student/Program groups with less than 10 students marked as “-” and data not displayed due to privacy reasons.

<sup>6</sup> Washington School Improvement Framework measures compile data across three years (2017-2019) and include both the general education assessment (Smarter Balanced assessments) and the alternative assessment for student with severe cognitive disabilities (WA-AIM). OSPI suppression rules apply to some data marked as “-” and not displayed due to privacy reasons.

**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.

<b>Priority #1</b>		
<b>Priority Area</b>	Science /Math	
<b>Focus Area</b>	Narrowing the achievement gap between the average male and female assessment scores including AP test scores.	
<b>Focus Grade Level(s)</b>	9-12	
<b>Desired Outcome</b>	Over the next three years, we will narrow the gap between average scores on the AP tests in Science and Math by 0.1 test points each year based on an average gap of 0.2 over the last 5 years. We will use this year to research and inform our practices moving forward.	
<b>Alignment with District Strategic Initiatives</b>	School Equity Teams	
<b>Data and Rationale Supporting Focus Area</b>	After analyzing trends that have been surfacing in our AP test scores, we identified that there is a gender inequality in the average test score. Year over year, we identified that on average male students scored 0.1 to 0.6 points higher than female students in Chemistry and AP Calculus AB/BC.	
<b>Strategy to Address Priority</b>	<b>Action</b>	<b>Measure of Fidelity of Implementation</b>
	Survey Data.	Percent of male and female students that self-identify as good at math, science, writing, problem solving, etc.
	Assessments.	Analyzing student data to look at average female and male test scores as well as identifying minimum and maximum test scores looking for outliers that need extra support.
	Research best instructional practices for male and female students and implementing those practices.	Track students' assessment results and success rates
<b>Timeline for Focus</b>	Fall, 2020 - Spring, 2022	
<b>Method(s) to Monitor Progress</b>	Each year, STEM will continue to gather data from AP tests to monitor progress toward narrowing the gap in average test scores.	

**Priority #2**

<b>Priority Area</b>	English Language Arts/Literacy	
<b>Focus Area</b>	Narrowing the achievement gap between the average female and male assessment scores including AP test scores.	
<b>Focus Grade Level(s)</b>	9-12	
<b>Desired Outcome</b>	Over the next three years, STEM will narrow the gap between average scores on the AP English Language and Composition test by 0.1 test points each year based on an average gap of 0.2 over the last 5 years. STEM will use this year to research and inform practices moving forward.	
<b>Alignment with District Strategic Initiatives</b>	School Equity Teams	
<b>Data and Rationale Supporting Focus Area</b>	After analyzing trends that have been surfacing in our AP test scores, STEM identified that there is a gender inequality in the average test score. Year over year, we identified that on average female students scored 0.1 to 0.4 points higher than male students.	
<b>Strategy to Address Priority</b>	<b>Action</b>	<b>Measure of Fidelity of Implementation</b>
	Survey Data.	Percent of male and female students that self-identify as good at math, science, writing, problem solving, etc.
	Assessments.	Analyzing student data to look at average female and male test scores as well as identifying minimum and maximum test scores looking for outliers that need extra support.
	Research best instructional practices for male and female students and implementing those practices.	Track students' assessment results and success rates.
<b>Timeline for Focus</b>	Fall, 2020 - Spring, 2022	
<b>Method(s) to Monitor Progress</b>	Each year, STEM will continue to gather data from AP tests to monitor progress toward narrowing the gap in average test scores.	

**Priority #3**

<b>Priority Area</b>	Social and Emotional	
<b>Focus Area</b>	PERC (Peer Enabled Restructured Classroom)	
<b>Focus Grade Level(s)</b>	9-11	
<b>Desired Outcome</b>	Over the next three years, STEM will level the gap between level 1 and 2 student performance commensurate with level 3 and 4 student performance as shown on Smarter Balance Tests.	
<b>Alignment with District Strategic Initiatives</b>	Multi-Tiered Systems of Support - Academics (MTSS-A)	
<b>Data and Rationale Supporting Focus Area</b>	After analyzing trends over the last three years in Algebra 1 and 2 classes, STEM 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.	
<b>Strategy to Address Priority</b>	<b>Action</b>	<b>Measure of Fidelity of Implementation</b>
	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.
<b>Timeline for Focus</b>	Fall, 2020 - Spring, 2022	
<b>Method(s) to Monitor Progress</b>	We will gather student data from assessments and progress reports to measure impact of implementing PERC in our Algebra 1 and 2 classes.	

**Priority #4**

<b>Priority Area</b>	Effective School Leadership									
<b>Focus Area</b>	Improve teacher leadership opportunities.									
<b>Focus Grade Level(s)</b>	Grades 9-12									
<b>Desired Outcome</b>	By June 2021, 100% of returning faculty will take on a leadership role within the school.									
<b>Alignment with District Strategic Initiatives</b>	Professional Learning									
<b>Data and Rationale Supporting Focus Area</b>	After reviewing the staff Nine Characteristics Survey data from 2018, STEM found that many staff did not feel they had an opportunity to have a leadership role within the school. STEM started work to ensure that staff had the opportunity to hold leadership roles within the school and had good success with getting 95% of returning staff involved in leadership roles. However, STEM also has had significant changes to staffing and programs. Therefore, STEM felt it necessary to continue focus on building staff leadership.									
<b>Strategy to Address Priority</b>	<table border="1"> <thead> <tr> <th align="center"><b>Action</b></th> <th align="center"><b>Measure of Fidelity of Implementation</b></th> </tr> </thead> <tbody> <tr> <td>Use regular staff meetings to discuss the work of our school and how staff can support.</td> <td>Percent of staff who have a leadership role within the school.</td> </tr> <tr> <td>PLC meetings.</td> <td>Percent of staff who have an instructional leadership role within the school.</td> </tr> <tr> <td>Professional Development Opportunities.</td> <td>Percent of staff who have an instructional leadership role within the school.</td> </tr> </tbody> </table>	<b>Action</b>	<b>Measure of Fidelity of Implementation</b>	Use regular staff meetings to discuss the work of our school and how staff can support.	Percent of staff who have a leadership role within the school.	PLC meetings.	Percent of staff who have an instructional leadership role within the school.	Professional Development Opportunities.	Percent of staff who have an instructional leadership role within the school.	
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PLC meetings.	Percent of staff who have an instructional leadership role within the school.									
Professional Development Opportunities.	Percent of staff who have an instructional leadership role within the school.									
<b>Timeline for Focus</b>	Fall, 2020 - Spring, 2022									
<b>Method(s) to Monitor Progress</b>	Progress will be monitored throughout the year by administrator check-ins and leadership meetings.									

## **TECHNOLOGY INTEGRATION PLAN**

The Washington Basic Education Act requires schools to “integrate technology literacy and fluency” in their curriculum. The updated K-12 Educational Technology Learning Standards emphasize the ways technology can be used to amplify and transform learning and teaching.

The Technology Integration Facilitator Program (TIF) and Building Instructional Technology Plan (BIT) provide the structure and funding to support this requirement.

The goals of the TIF program are to support teachers in effectively:

1. Integrating the use of core instructional technologies within teaching and learning.
2. Utilizing digital tools to enhance the learning process for all students in all classrooms.
3. Understanding and applying the Educational Technology Learning Standards across content areas.
4. Embedding digital citizenship and media literacy within instruction.

Building administrators work with their Technology Integration Facilitator (TIF) to identify needs based on the TIF program goals and develop the BIT Plan to meet those needs. Beginning and end of year survey data informs the personalization of individual school plans.

Based on Fall data, strategic implementations and OSPI requirements, the BIT Plan will focus on the following:

- Digital Citizenship
- Integrating core instructional technologies
- Utilizing digital tools to enhance learning
- Applying Ed Tech Learning Standards
- Embedding digital citizenship & media literacy
- Teaching digital literacy in both traditional and remote learning settings

## **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. The latest participation rate that has been published by OSPI for the school was for state testing in spring 2019. During that year, the participation rate was not met.

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.<sup>7</sup> The specific strategy our school is using to involve and inform the community of the School Improvement Plan is as follows:

<b>Strategy to Engage Students, Families, Parents and Community Members in the development of the SIP</b>	<b>Action</b>	<b>Timeline</b>
	PTSA Co-Chair/Leadership Meetings.	Quarterly
	Internship/Business Partner meetings.	Quarterly
<b>Strategy to Inform Students, Families, Parents and Community Members of the SIP</b>	<b>Action</b>	<b>Timeline</b>
	PTSA General Meetings.	Quarterly
	PTSA News Letter.	Quarterly
	PTSA Co-Chair/Leadership Meetings.	Quarterly
	Principal’s Message.	Weekly

<sup>7</sup> LWSD’s policy is found at: <https://www.lwsd.org/about-us/policy-and-regulations/community-relations-4000/community-education-program-4265>