Executive Director's Report

Staffing Update

- Have hired a Secondary Engineering Teacher (Lauchlin Blue) and Compliance and Replication Officer (Dr. Carletta Stewart)
- Positions that we are hiring for:
  - Campus Security Specialist - New
  - Post-Graduate Assistant - New
  - English Language Development Teacher (K-12)- New
  - Secondary Computer Science (additional)
  - Secondary Engineering/Science Teacher (additional)
  - In-House Substitute Teacher (Full Time)
  - Elementary Instructional Assistant (Full Time)
  - Elementary Educational Assistant (Part-Time)
  - Secondary Educational Assistant (Full Time)
  - Secondary Educational Assistant (Part-Time)

COVID Update

- In total, we've had 52 student cases and five staff cases at STEM.
- Currently, Second Grade is under "Outbreak" status and is fully remote.
- We are closely watching first grade, which currently has two connected cases.
- On-site testing to start with staff on Tuesday, Oct. 12
- Will open it up to students on Tuesday, Oct. 26; consent forms and information going out this week.

Teacher Care Model

Board Meeting
10/5/2021

Teacher Retention and Attrition Rate

STEM 2013-2021

Year	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Teacher Retention Rate	**58%**	**82%**	**69%**	**73%**	**83%**	**80%**	**67%**	**70%**	**64%**
Attrition Rate	**42%**	**18%**	**31%**	**27%**	**17%**	**20%**	**33%**	**30%**	**36%**

- Attrition refers to the loss of employees through a natural process, such as retirement, resignation, elimination of a position, personal health, or other similar reasons. With attrition, an employer will not fill the vacancy left by the former employee.

Turnover Data

	STEM (2019-2020)	STEM (2020-2021)	Charter School Institute (2020-2021)
Administrators	22.3%	0% (BoY)/50% (EoY)	62.3%
Teachers	33.3%	30%	26.8%
Paraprofessionals	36.4%	32%	41.4%
Office Staff	25%	18%	27.2%
Total Staff	29%	20% (Boy) /32.5% (EoY)	31.4%

Turnover and How it is Calculated

- The voluntary or involuntary loss of an employee, with the organization's intent to fill the position vacancy. Turnover can be caused by similar reasons as attrition, but turnover is usually viewed negatively and as a burden for employers.
    - Voluntary turnover refers to an employee's decision to leave the organization, possibly due a better job offer, a lack of amble growth or development opportunities in the current role, poor pay, a feeling that they did not fit the company culture, or more.
    - Involuntary turnover refers to the termination or firing of an employee (with intent to replace) due to factors such as poor performance, behavioral issues, or serious maliciousness, or more.
- To calculate your company's turnover rate, you divide the number of employees who leave in a given year by the total number of positions you have available.

Breakdown of Numbers

Elementary			Secondary		
Title	Turn Over	# of positions needing to be filled	Title	Turn Over	# of positions needing to be filled
Administrators	0	0	Administrators	5	3
Teachers (K-5)	5	9	Teachers (6-12)	18	13
Explanation: • We added 1 additional 4th grade and one addition 5th grade class • 1 teacher moved from 1st to kindergarten • 1 teacher moved from 2nd to 1st • 1 teacher moved from 4th to kindergarten • 1 teacher moved from 4th to Director of Professional Development • 1 teacher moved from 5th to PBL Specialist			Explanation: • We had 7 positions which were a reduction in force- meaning we are not filling those positions • 1 teacher retired • 1 teacher became the MS Director • 1 teacher became the GT Coordinator/Instructional coach Total we had 10 teachers leave due to reasons other than reduction in force or movement within the organization.		

Focus and Goals for Teacher Support Team

By May 2022, we will have provided support through professional development and coaching to our teachers as measured by a 3 out of 4 on the staff satisfaction survey.

- Improve School Culture
- Standards Based Learning
- Problem Based Learning
- Using data to drive instruction

Teacher Care Plan

Teacher Support

- 3 full-time specialists and 1 part time specialist
- Supports teachers with:
  - Instructional pedagogy
  - PBL development and implementation
  - Standards Based Learning development and implementation

Teacher Care Plan

Additional support:

- Unit planning
- Feedback/observations
- Coverage for teachers to observe others
- Quick breaks
- Co- teaching/Model teaching
- Instructional Technology support
- Curriculum implementation
- Differentiation
- Resource procurement

New Teacher Induction

All teachers who are new to teaching and have an interim license or are new to Colorado, must participate in a New Teacher Induction program.

This is meant to provide supports for new teachers as they learn the requirements of the school, district and state.

Mentor's Role

CONSULTANT: Offering Support and Providing Resources

- Establish early contact
- Orient the new teacher to the school, and its routines and practices
- Ensure that the new teacher understands the students, parents and community served by the school
- Model effective teaching practices

COLLABORATOR: Creating Challenge and Encouraging Growth

- Work with the new teacher to develop an Individual NTIP Strategy
- Assist the new teacher in planning the first day, first week, first month
- Work collaboratively to identify the new teachers' needs and adjust the mentoring process throughout the year

INSTRUCTOR: Facilitating Professional Vision

- Provide support in effective classroom management, parent communication and other critical facets of professional practice
- Provide emotional support and encouragement
- Provide professional feedback

Adapted from: Lipton, L. & Wellman, B.(2003). Mentoring Matters: A Practical Guide to Learning-Focused Relationships, 2nd Ed. Sherman CT. MiraVia, LLC. For additional information go to: www.miravia.com

New Teachers Needing Induction	Mentors
24	16

Roles and Responsibilities:

- 1 monthly observation
- 1 monthly meeting to discuss observation and set goals
- Inductees attend 1 monthly induction meeting to work on their portfolios

Total time for induction is 2 years.

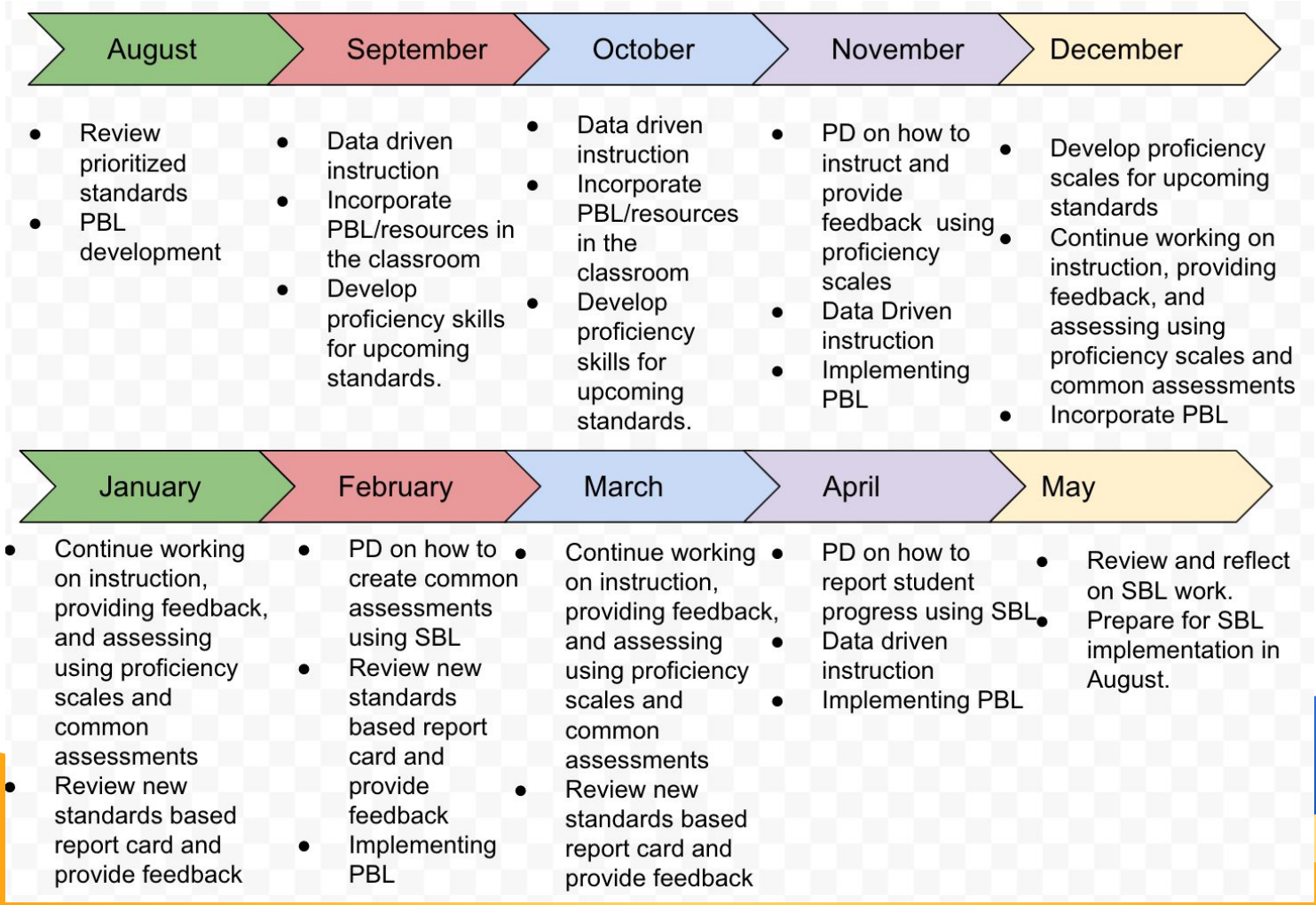
Professional Development

Focus

- Standards Based Learning- Goal Aug.2022
- Problem Based Learning- ongoing
- Data Driven Instruction- ongoing

Elementary

- Guided Reading Training


August
September
October
November
December
Review prioritized standards
PBL development
Data driven instruction
Incorporate PBL/resources in the classroom
Develop proficiency skills for upcoming standards.
Data driven instruction
Incorporate PBL/resources in the classroom
Develop proficiency skills for upcoming standards.
PD on how to instruct and provide feedback using proficiency scales
Data Driven instruction
Implementing PBL
Develop proficiency scales for upcoming standards
Continue working on instruction, providing feedback, and assessing using proficiency scales and common assessments
Incorporate PBL
January
February
March
April
May
Continue working on instruction, providing feedback, and assessing using proficiency scales and common assessments
Review new standards based report card and provide feedback
PD on how to create common assessments using SBL
Review new standards based report card and provide feedback
Implementing PBL
Continue working on instruction, providing feedback, and assessing using proficiency scales and common assessments
Review new standards based report card and provide feedback
PD on how to report student progress using SBL
Data driven instruction
Implementing PBL
Review and reflect on SBL work.
Prepare for SBL implementation in August.

PD Support

Weekly PD Newsletter

- Instructional videos
- Reminders
- Upcoming PD announcements
- Culture Building activities/ideas
- Classroom instruction ideas

- PLC time every other Monday
- Release days for teachers to work with their team/ department

How Will We Know It's Working?

- Feedback during coaching
- Monthly PD surveys
- Quarterly staff satisfaction surveys.
- Staff retention will be higher.

Parent Survey 2020 - 2021

STEM School Highlands Ranch

The Parent Survey is distributed each year in the spring. The School Accountability Committee leads the development, administration, and analysis of the survey each year. Multiple messages were sent out and it is announced in the weekly newsletter. The 2020-21 survey was open for feedback from May 1, 2021- May 25, 2021. There were 83 Elementary responses and 196 Secondary responses.

Summary of Results

(% of Agree/Strongly Agree)

	Elementary	Secondary	Change from 2019-20
Curriculum	86%	82%	+1% (ES), -4% (SS)
Staff	79%	86%	-6% (ES), -6% (SS)
Conferences	95%	54%	+8% (ES), +8%(SS)
Parent Engagement and Diversity	75%	56%	+1% (ES), - 5% (SS)
Culture and Environment	92	82	No change (ES), -2% (SS)
Virtual e-learning	6.5 (1 too little-10 too much)	5.6 (1 too little-10 too much)	

Summary of Results

Overall, the results of the 2020-21 survey indicate that parents are highly satisfied with the Teaching Staff, Curriculum and Culture, and Parent Engagement, in both the elementary and secondary levels.

The following areas were identified as goals for improvement in the 2021-22 school year:

Communication surrounding the specific academic needs of students,

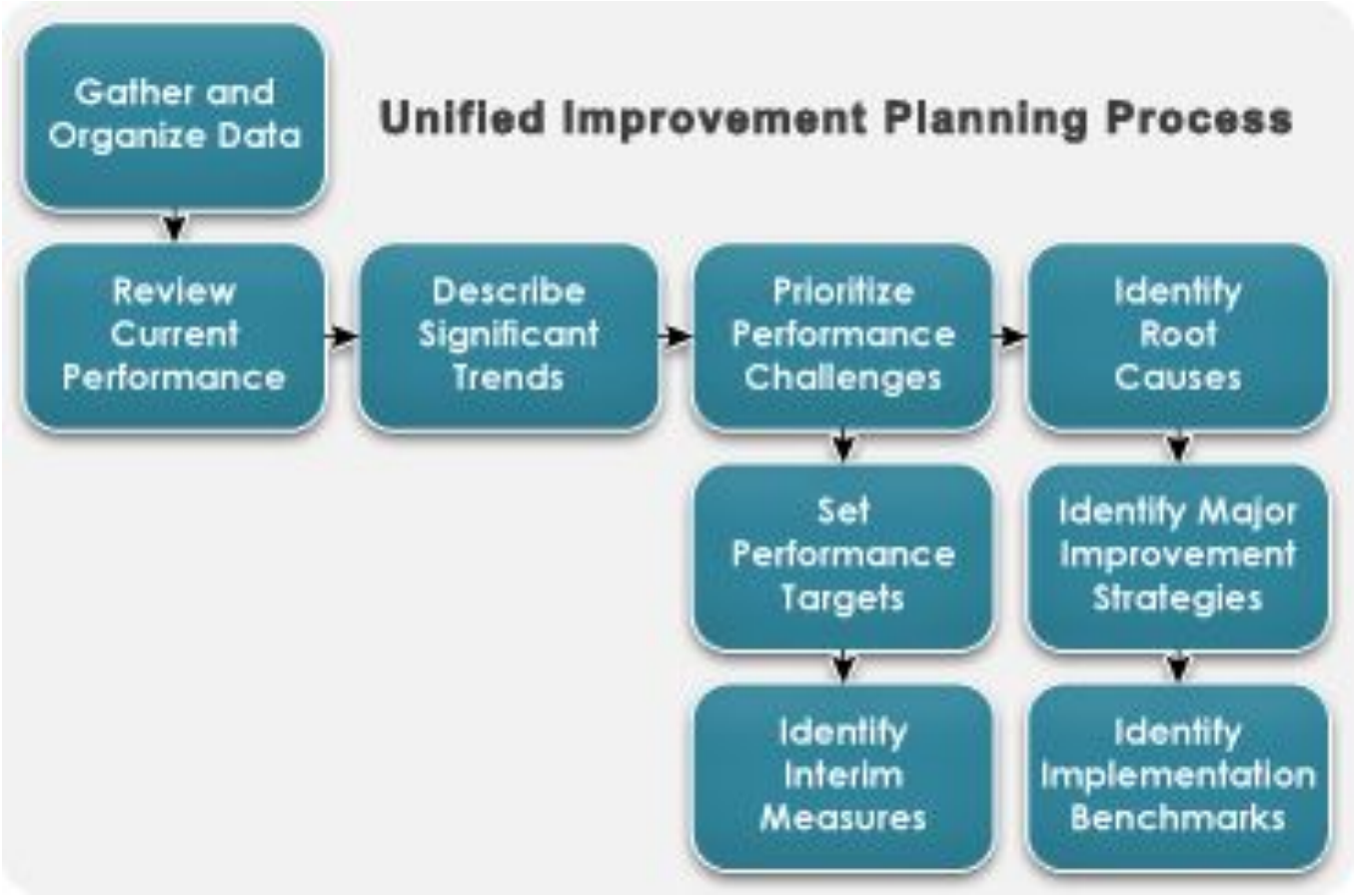
A focus on diversity and equity to enhance engagement, and

A continued focus on the social-emotional needs of students.

The School Accountability Committee (SAC) has formed a Diversity, Equity, and Inclusion Committee to address these areas. In addition, the SAC is also proposing a second survey to parents in order to determine progress toward these goals, implemented during the first semester.

Unified Improvement Plan Data Informed Instruction

September 2021


Unified Improvement Planning Process
Gather and Organize Data
Review Current Performance
Describe Significant Trends
Prioritize Performance Challenges
Identify Root Causes
Set Performance Targets
Identify Major Improvement Strategies
Identify Interim Measures
Identify Implementation Benchmarks

Major Improvement Strategies

Alignment to Strategic Plan

Alignment of Professional Development

Data Informed Instruction

Unified Improvement Plan

(CDE, UIP)

2019 - 1 Year SPF Report - Official 2019 - Multi-Year SPF Report

Implementation of Data Driven instruction to ensure learning for all students in all content areas

Focused time for department and grade level teams to implement the Atlas protocol to determine goals of instruction.

Analysis of multiple data points throughout the school year, to ensure success for all students.

A focus on student demographic data is a goal. How do we ensure equity and access for all learners?

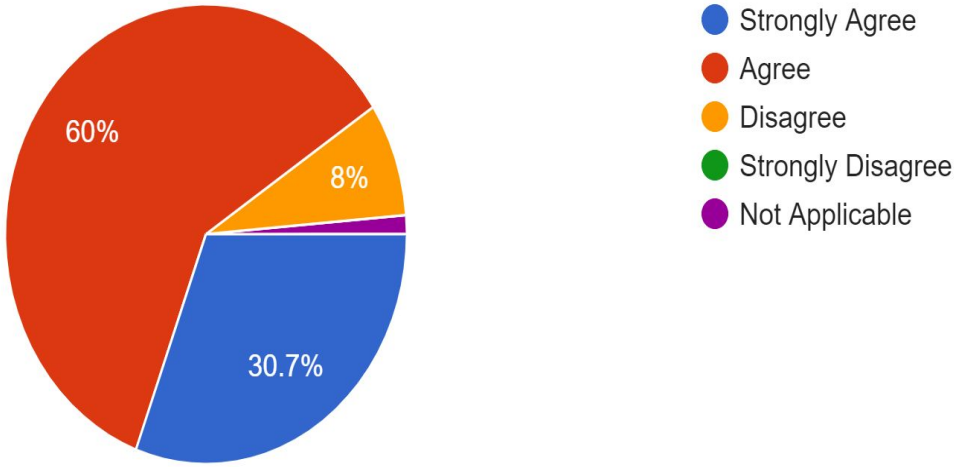
Data discussions (monthly, quarterly review)

Development of assessments, aligned to 2020 Academic Standards, in order for teams to review and analyze real time data and create a plan of instruction for reteaching as needed. Teachers collaboratively score, analyze, and plan based on student data.

Parent Survey Results 2020-2021 (elementary)

My student is academically challenged through rigorous curriculum at STEM.

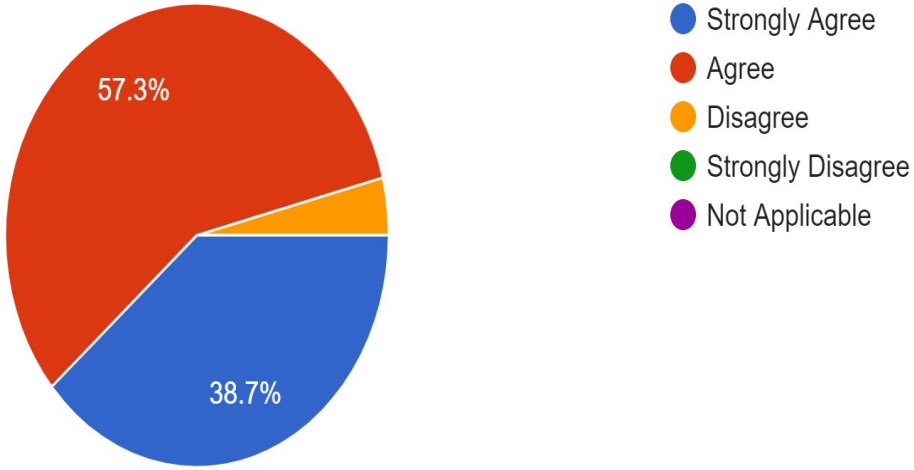
75 responses



Parent Survey Results 2020-2021 (elementary)

STEM concepts such as real world application, problem based learning, and integrated technology, are effectively embedded into all courses.

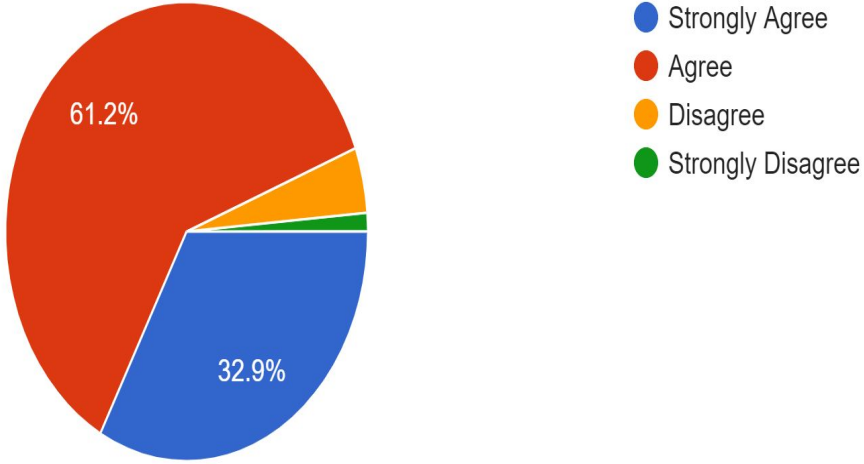
75 responses



Secondary

My student is academically challenged through rigorous curriculum at STEM.

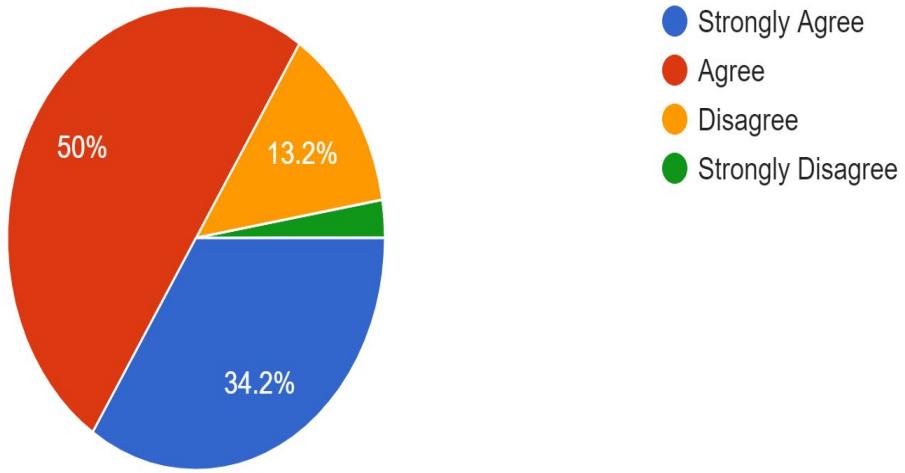
152 responses



Secondary

STEM concepts such as real world application, problem based learning, and integrated technology are effectively embedded into all courses.

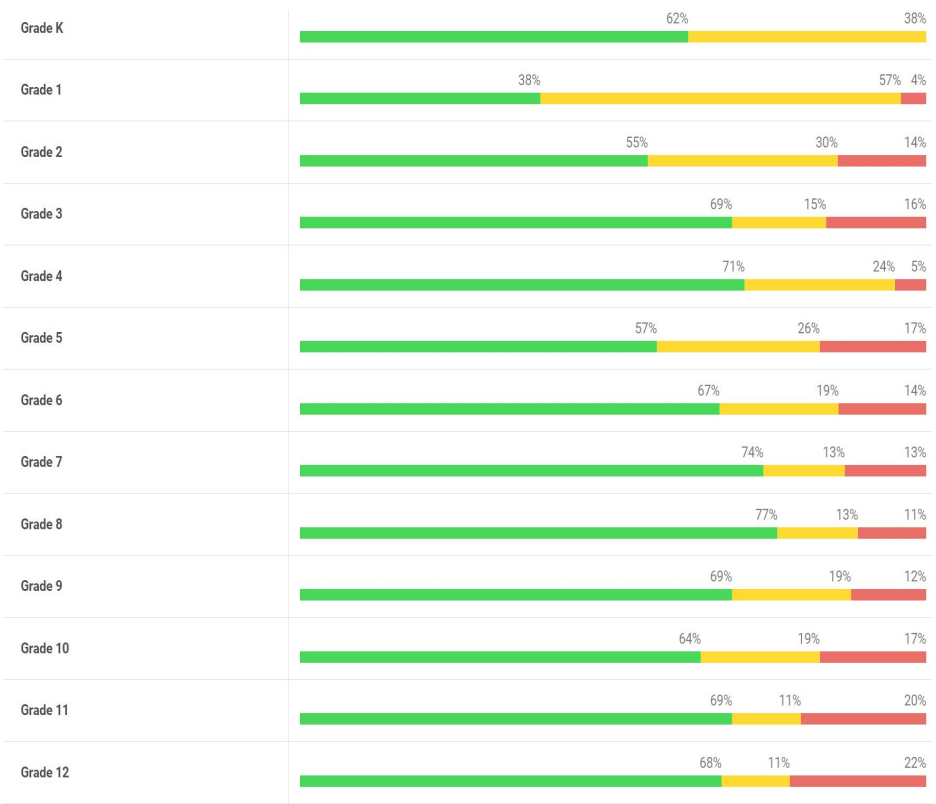
152 responses

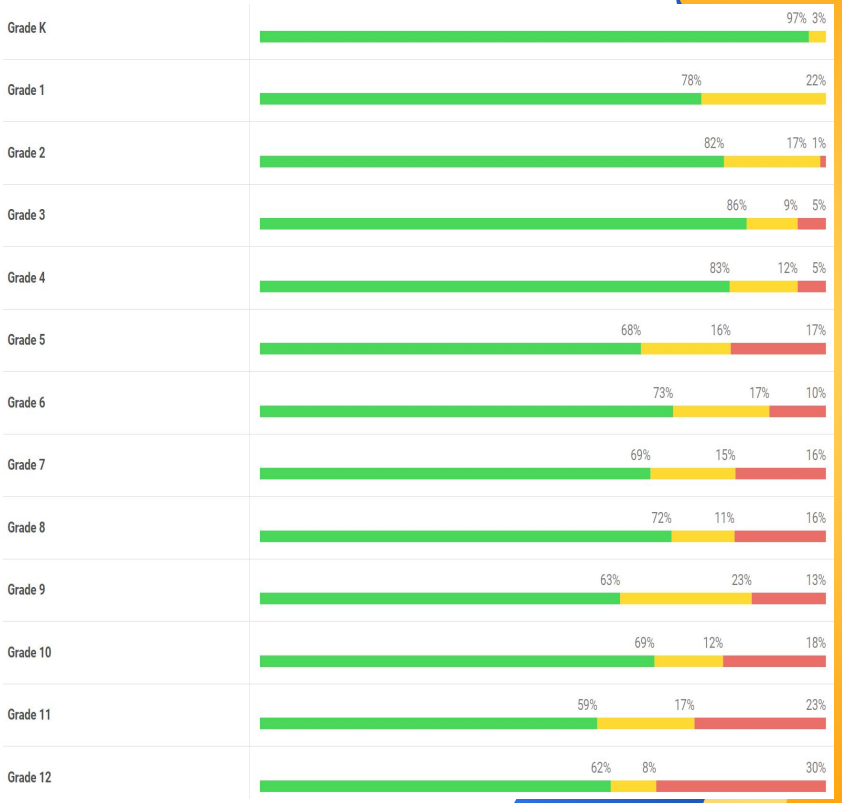


Spring 2020/2021

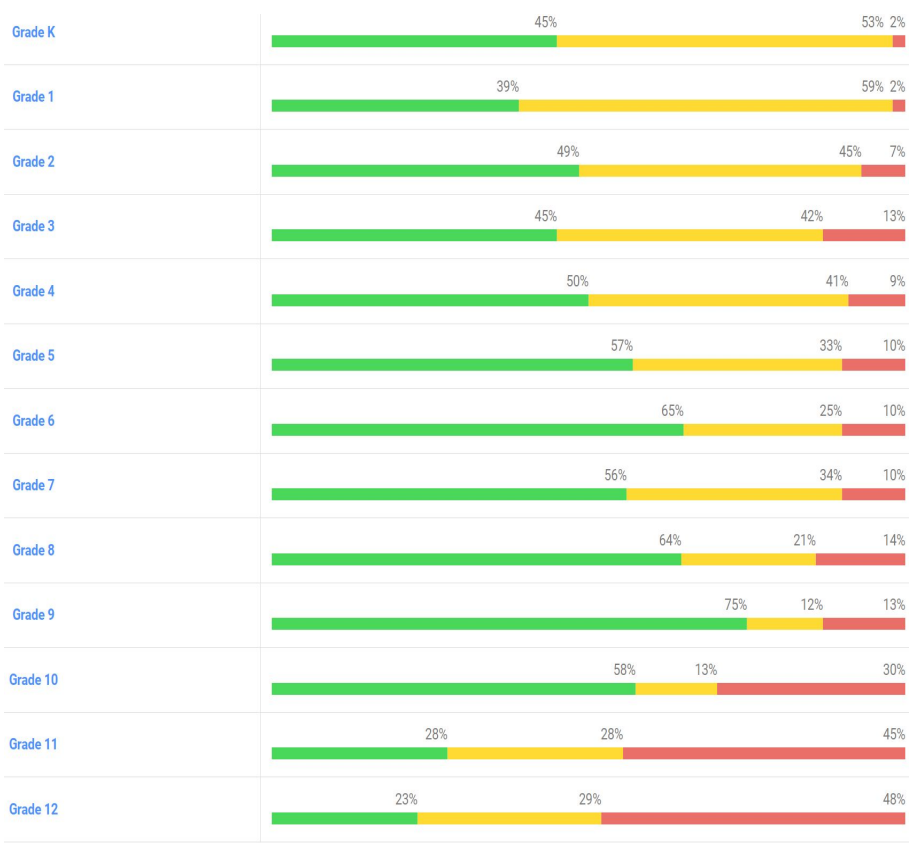
Assessment	Subject(s)	Grade Level(s)
iReady	Reading, Math	K-12th
MAP (NWEA)	Science	3rd - 8th
CMAS (Colorado Measure Academic Success)	English Language Arts *anticipated (3rd-8th) Math *anticipated (3rd-8th) Science *anticipated (5th, 8th, 11th) Social Studies (on hold - not assessed)	3rd, 5th, 7th 4th, 6th, 8th 8th
PSAT 8/9	Evidence Based Reading & Writing Math	7th, 8th
PSAT 10	Evidence Based Reading & Writing Math	10th
SAT	Evidence Based Reading & Writing Math	11th
Advanced Placement	Science, English, Math, Computer Science, World Language, Social Studies	9th - 12th
ACCESS		

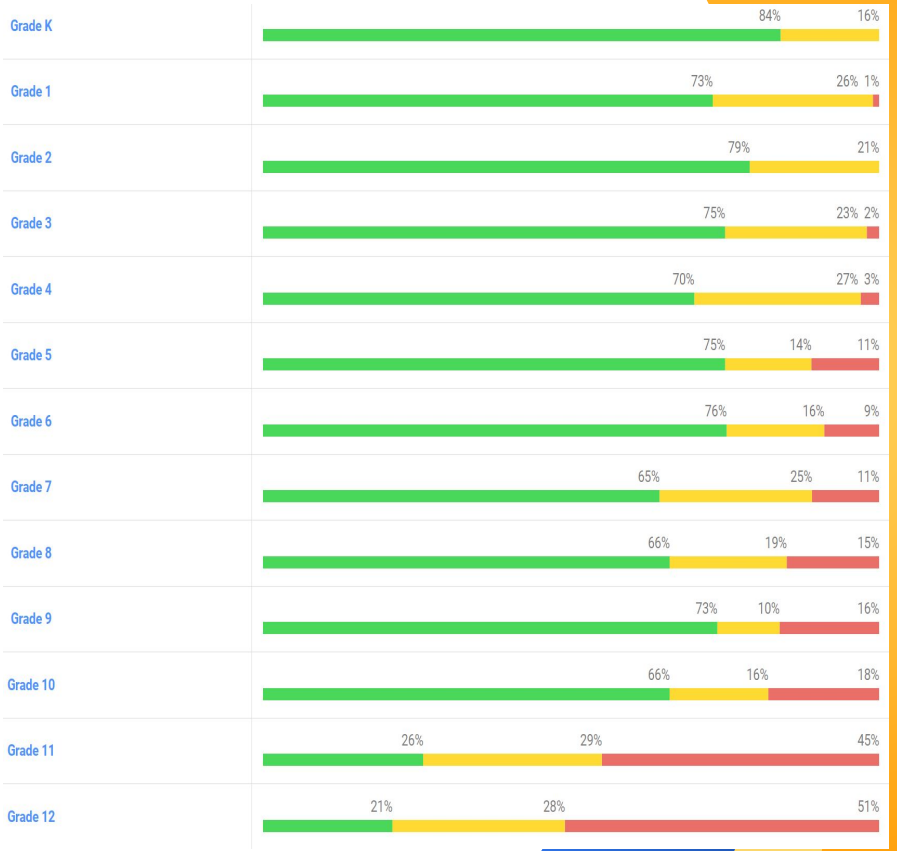
iREADY Reading: FALL 2020-Spring 2021





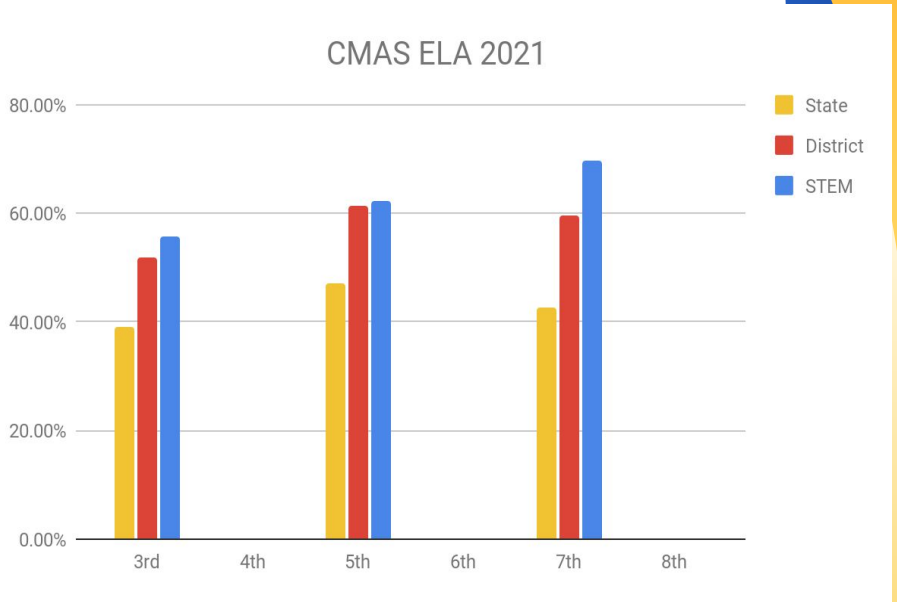
iREADY Math: Fall 2020 - Spring 2021

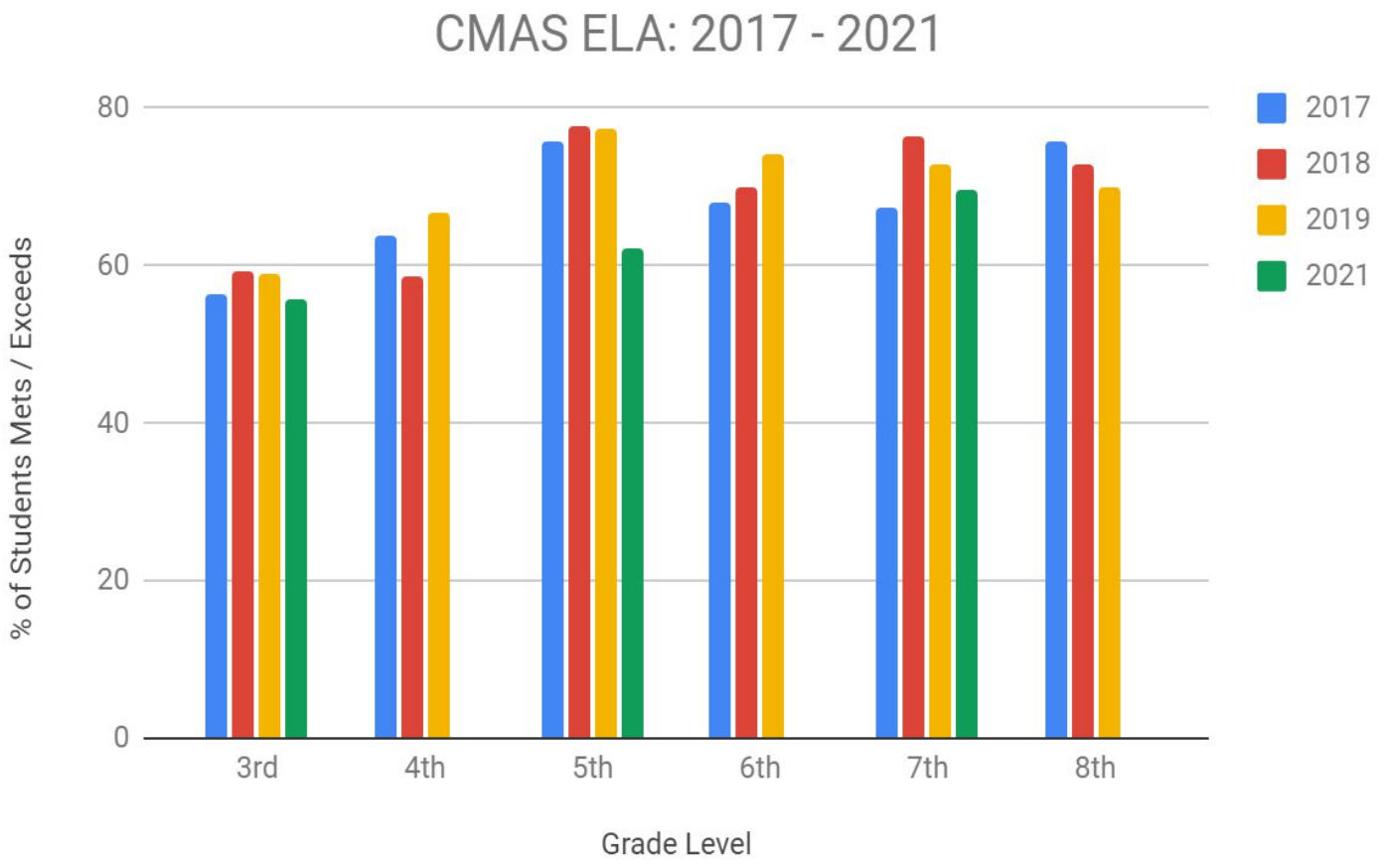




CMAS: ELA

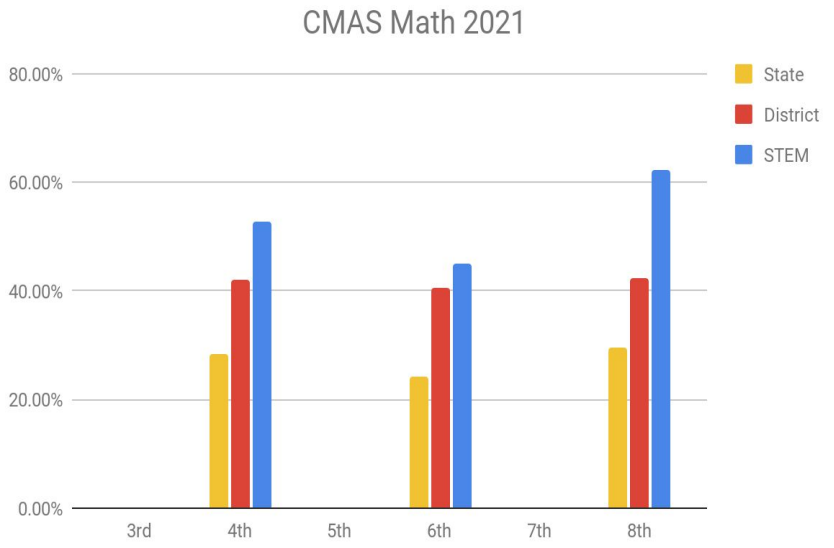
	3rd	4th	5th	6th	7th	8th
State	39.1%	NA	47.2%	NA	42.6%	NA
District	51.9%	NA	61.3%	NA	59.5%	NA
STEM	55.7%	NA	62.2%	NA	69.7%	NA

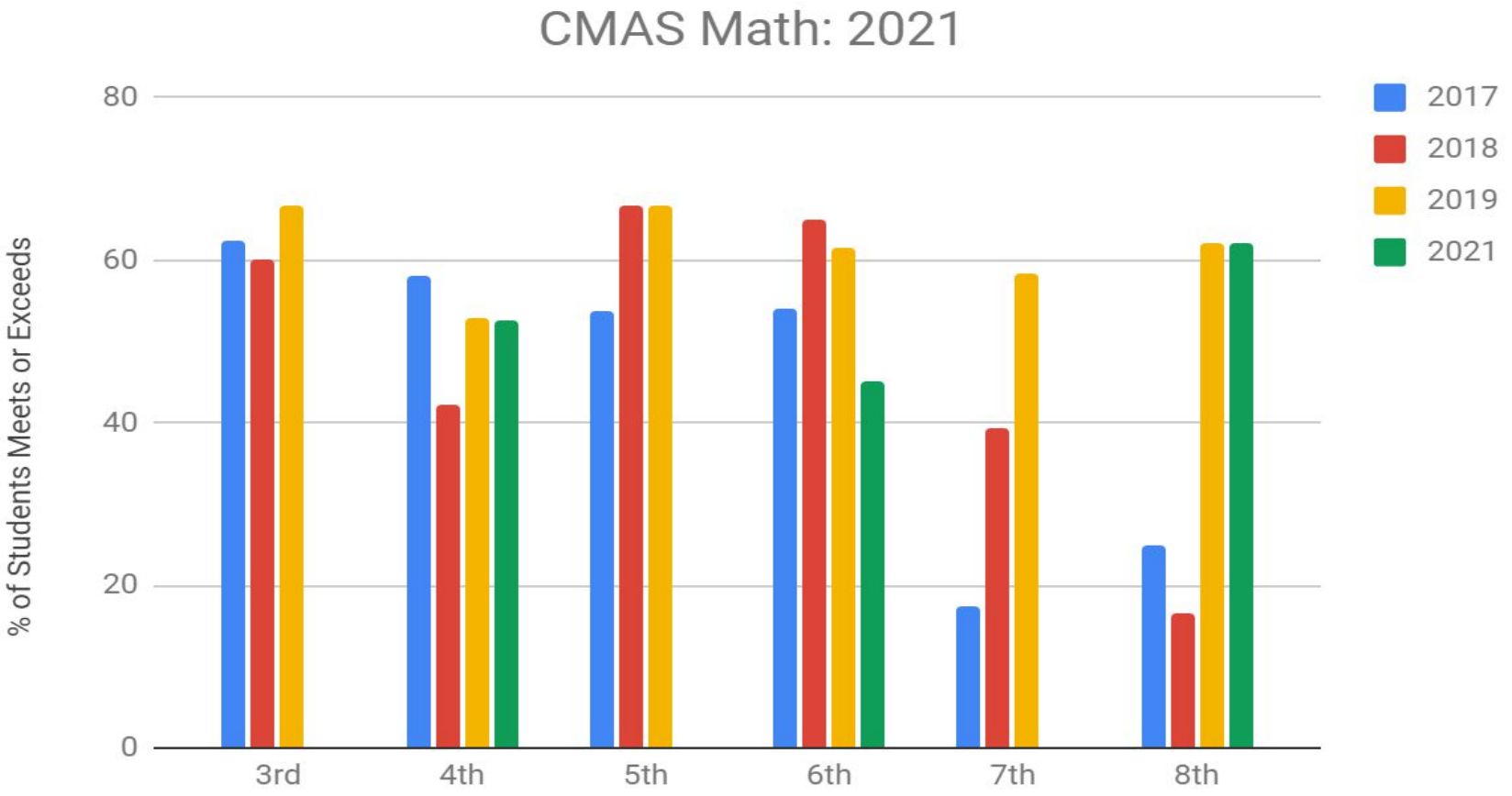



CMAS ELA: 2017 - 2021
% of Students Mets / Exceeds
80
60
40
20
0
3rd
4th
5th
6th
7th
8th
Grade Level
2017
2018
2019
2021

CMAS: Math

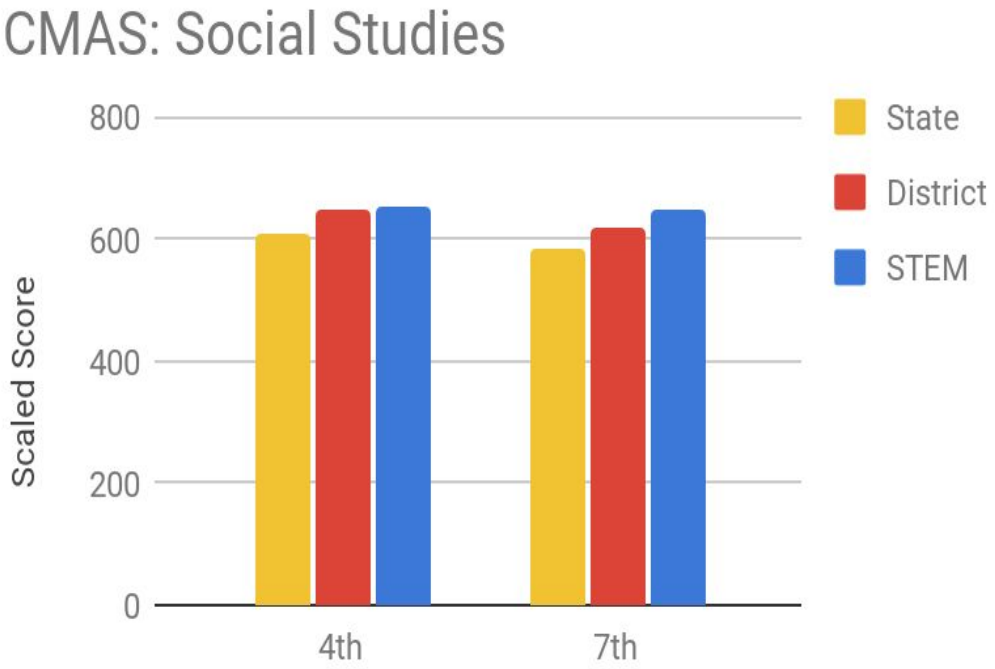
	3rd	4th	5th	6th	7th	8th
State	NA	28.5%	NA	24.1%	NA	29.5%
District	NA	42.1%	NA	40.6%	NA	42.5%
STEM	NA	52.7%	NA	45.1%	NA	62.2%



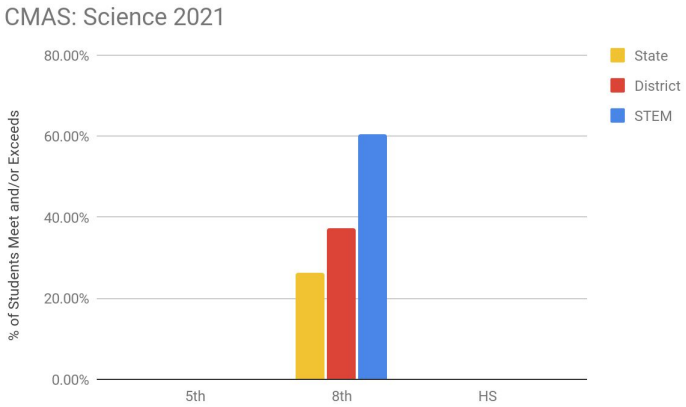

CMAS Math: 2021
% of Students Meets or Exceeds
80
60
40
20
0
3rd
4th
5th
6th
7th
8th
2017
2018
2019
2021

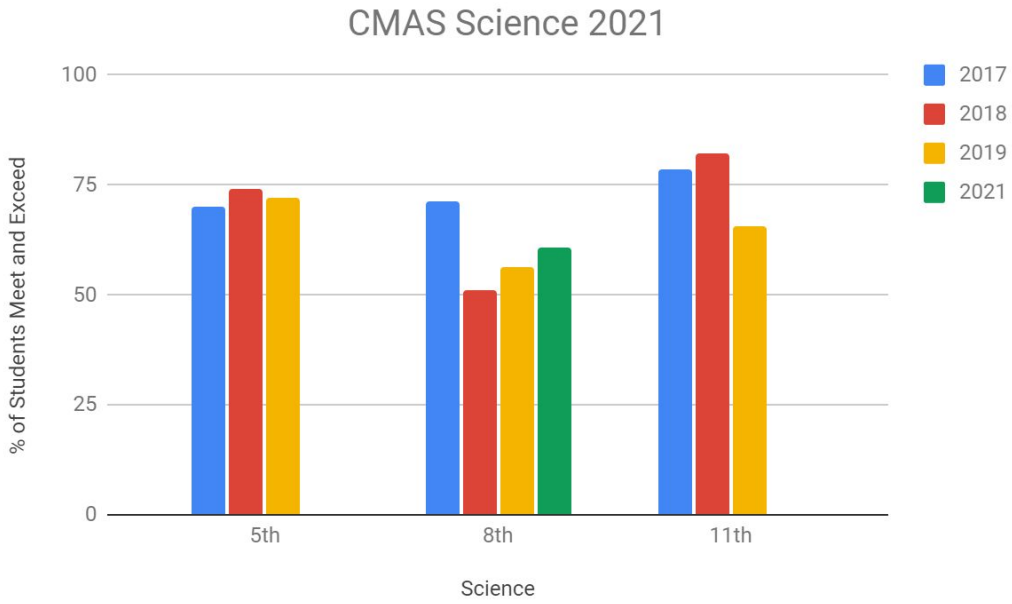
CMAS: Social Studies 2018

	4th	7th
State	609	585
District	646	617
STEM	655	650



CMAS: Science





PSAT: 8/9 (140 students)

Evidence-Based Reading and Writing

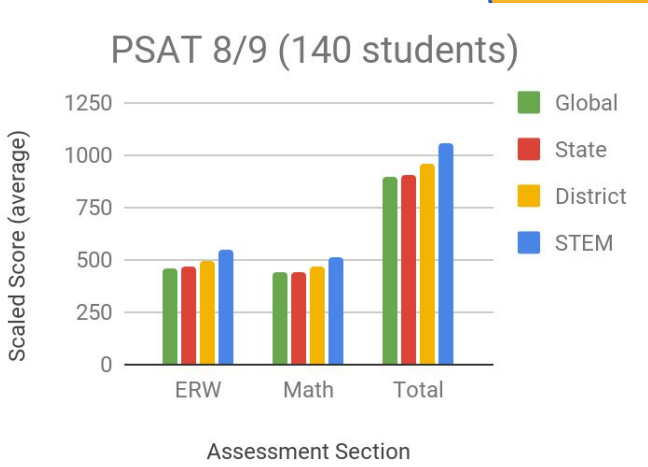
Mean Score **545**

	Need to Strengthen Skills		Approaching Benchmark		Meets Or Exceeds Benchmark	
School	2%	3 Test Taker(s)	1%	1 Test Taker(s)	97%	136 Test Taker(s)
District	13%		5%		81%	
State	24%		7%		69%	
Total Group	26%		7%		68%	

Math

Mean Score **514**

	Need to Strengthen Skills		Approaching Benchmark		Meets Or Exceeds Benchmark	
School	19%	27 Test Taker(s)	7%	10 Test Taker(s)	74%	103 Test Taker(s)
District	34%		11%		56%	
State	48%		9%		43%	
Total Group	48%		8%		44%	



During the 2020-2021 school year, the Total Mean Score for STEM students was **1059**, as compared to the district (956), the state (903) and nationally (897). The PSAT 8/9 Mean Score for the Evidence-Based Reading and Writing exam for STEM students was 545, the district (488), the state (462), and nationally (458). The Mean Score for Math for STEM students was 514, the district (468), the state (441), and nationally (439).

In 2020-2021, **97% of STEM students met the ERW benchmark,** which is 16% higher than the district and 28 % higher than the state. **74% of STEM School students met the Math benchmarks**, which is 18% higher than the district and 27% higher than the state.

PSAT 10 (120 students)

Evidence-Based Reading and Writing

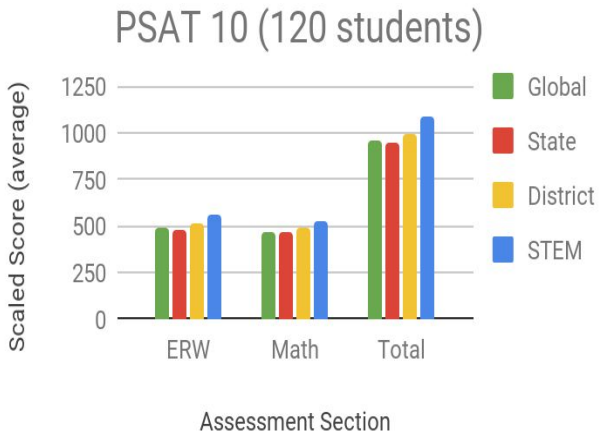
Mean Score 562

	Need to Strengthen Skills		Approaching Benchmark		Meets Or Exceeds Benchmark	
School	4%	5 Test Taker(s)	1%	1 Test Taker(s)	95%	114 Test Taker(s)
District	14%		5%		81%	
State	24%		6%		69%	
Total Group	24%		6%		71%	

Math

Mean Score 520

	Need to Strengthen Skills		Approaching Benchmark		Meets Or Exceeds Benchmark	
School	19%	23 Test Taker(s)	14%	17 Test Taker(s)	67%	80 Test Taker(s)
District	32%		15%		53%	
State	44%		15%		40%	
Total Group	43%		15%		42%	



During the Spring 2021, the Total Mean Score for STEM students on the PSAT 10 was **1082,** as compared to the district (997), the state (948) and nationally (958). The PSAT 10 Mean Score for the Evidence-Based Reading and Writing exam for STEM students was 562, the district (509), the state (484), and nationally (489). The Mean Score for Math for STEM students was 520, the district (488), the state (464), and nationally (469).

In 2021, **95% of 10th graders met the ERW benchmark,** which is 14% higher than the district and 26% higher than the state. **67% of STEM School 10th graders met the Math benchmarks**, which is 14% higher than the district and 27% higher than the state.

PSAT/NMSQT (133 students)

Evidence-Based Reading and Writing — Mean Score **569**

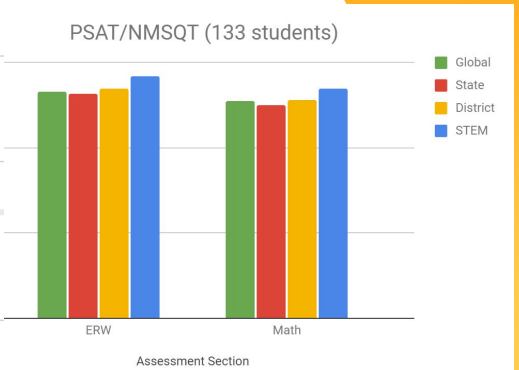
	Need To Strengthen Skills	Approaching Benchmark	Meets Or Exceeds Benchmark
School	5% — 7 Test Taker(s)	7% — 9 Test Taker(s)	88% — 117 Test Taker(s)
District	9%	8%	82%
State	16%	9%	75%
Total Group	16%	8%	76%

See Students in Each Performance Group See Question Analysis Report

Math — Mean Score **538**

	Need To Strengthen Skills	Approaching Benchmark	Meets Or Exceeds Benchmark
School	23% — 30 Test Taker(s)	7% — 9 Test Taker(s)	71% — 94 Test Taker(s)
District	34%	13%	53%
State	41%	12%	47%
Total Group	37%	12%	51%

See Students in Each Performance Group See Question Analysis Report



During the Spring 2021, the Total Mean Score for STEM students on the PSAT/NMSQT was **1107**, as compared to the district (1051), the state (1027) and nationally (1044). The PSAT/NMSQT Mean Score for the Evidence-Based Reading and Writing exam for STEM students was 569, the district (539), the state (526), and nationally (533). The Mean Score for Math for STEM students was 538, the district (512), the state (501), and nationally (510).

In 2021, **88% of students met the ERW benchmark,** which is 6% higher than the district and 13% higher than the state. **71% of STEM School students met the Math benchmarks**, which is 18% higher than the district and 24% higher than the state.

SAT (139 students)

Evidence-Based Reading and Writing

Mean Score **608**

	Need To Strengthen Skills		Approaching Benchmark		Meets Or Exceeds Benchmark	
School	4%	6 Test Taker(s)	5%	7 Test Taker(s)	91%	126 Test Taker(s)
District	20%		7%		73%	
State	33%		7%		60%	
Total Group	35%		7%		57%	

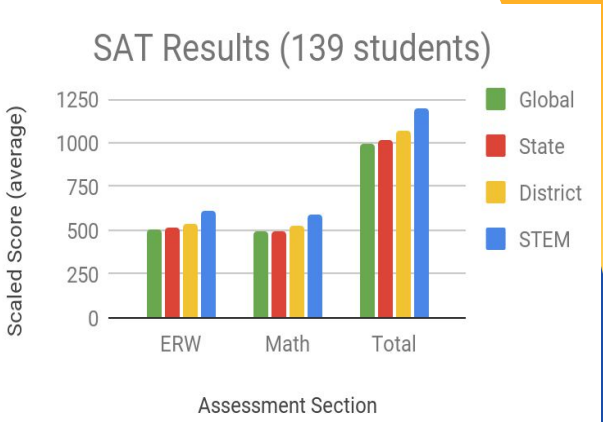
See Students in Each Performance Group See Question Analysis Report

Math

Mean Score **594**

	Need To Strengthen Skills		Approaching Benchmark		Meets Or Exceeds Benchmark	
School	17%	23 Test Taker(s)	7%	10 Test Taker(s)	76%	106 Test Taker(s)
District	42%		9%		49%	
State	55%		8%		36%	
Total Group	57%		8%		35%	

See Students in Each Performance Group See Question Analysis Report



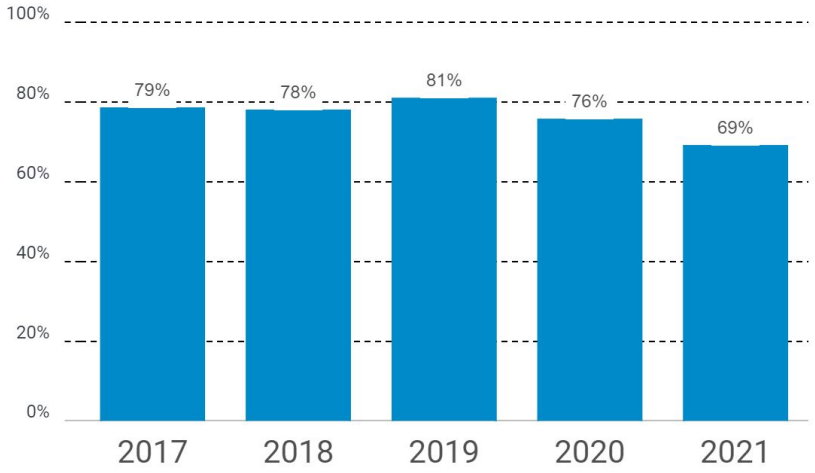
In 2021, **91% of STEM students met the ERW benchmark** which is 18% higher than the district and 31% higher than the state. **76% of STEM students met the Math benchmark**, which is 27% higher than the district and 40% higher than the state.

In 2021, STEM students scored an average total score on the SAT of **1202**! The DCSD average score was 1067 and the state average was 1011. **STEM Students are ranked #7 in the State!**

The average Math SAT score was 594 compared to the district average of 527 and state average of 498.
The average Evidence Based Reading Writing score for STEM students was 608 compared to the district average of 540 and state average of 513.

Advanced Placement

% OF TOTAL AP STUDENTS WITH SCORES 3+



SCHOOL SUMMARY

	2017	2018	2019	2020	2021
Total AP Students	131	187	174	223	253
Number of Exams	245	332	283	404	484
AP Students with Scores 3+	103	146	141	169	175
% of Total AP Students with Scores 3+	78.63	78.07	81.03	75.78	69.17

STEM Average Score and CO Average AP Scores (485 exams)