CFSD Assessment Program

Summary Report

Catalina Foothills School District

November 2021

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DEEP LEARNING • CFSD

Catalina Foothills School District
Assessment Program Summary Report for 2021

Purpose of assessment

The primary purpose of assessment is to improve student learning. All assessments, including state assessments, provide a way to gather relevant information about student performance and make educational decisions. No single assessment is able to provide a complete picture of student performance or progress. An effective assessment system utilizes different types of assessments to gather multiple pieces of evidence about how students have grown over time and how they are performing relative to a set of standards.

Addressing the COVID-19 learning recovery in CFSD

During a typical school year, CFSD students are assessed through both external and internal assessments to measure achievement and readiness for college and career. Multiple types of assessments are needed to make instructional decisions and monitor student progress toward grade level/course learning goals. They include:
- Classroom- and team-based evaluations of student learning during the learning process and at the conclusion of a defined instructional period.
- District Common Assessments used to measure transfer and cross-disciplinary skills such as critical thinking, problem solving, and communication.
- Standardized norm-referenced and criterion-referenced evaluations of student performance (e.g., large-scale statewide assessments or other external tests).

The COVID-19 pandemic impacted most aspects of education in the 2020-2021 school year, including assessment practices. Teachers had to find new ways to create and administer classroom/content area assessments for both remote and in-person learners, and the district's common assessments (DCAs) were optional in many cases. In addition, schools were required to administer the annual statewide assessment (AzM2) in person to all in-person and remote learning students in spring 2021. The resulting assessment processes / structures for internal and external student tests varied from site to site. For all assessments, factors such as learning disruptions, test modifications, chronic absenteeism, and student participation rates may have impacted classroom, school, and district results, including the spring 2021 state assessment results. Notwithstanding these issues, there are insights to be gained from these results and other available data sources to inform COVID-19 school recovery efforts and improvement.

The focus of this year's assessment report is mainly on student achievement results from the spring 2021 state test administration (AzM2) and finalized A-F indicator data for the 2020-2021 school year. The indicator data is reported through each school's A-F components. We recognize that the statewide assessment is just one indicator at a given point in time. However, it's purpose is to measure learning of the state standards. The results provide a large-scale common set of data (albeit one) that we can use with other data sources to identify in the short and long term where we need to accelerate learning opportunities to effectively support the academic needs of our students.

For example, we continue to analyze test results (proficiency and growth) in the aggregate, but also disaggregated by subgroup. This year, we have the state testing results for in-person and remote learners. We also know from the participation data who did and did not take the state assessments. A-F indicator data at the

school and student level provide information about proficiency, but also growth for the students that have prior year data. We have mobility data (transfers in and out), current and past grades, and graduation/dropout, course-taking, and chronic absenteeism data. In the early grades, we know which students did and did not attend pre-kindergarten and kindergarten and can use the literacy screening results to inform reading instruction. Data sources such as the aforementioned help us better understand the scope of the academic impact and what resources are most needed to implement the most appropriate interventions / learning supports.

Statewide COVID-19 academic impact

Executive Order 2021-03 required the Arizona State Board of Education (SBE) to issue a report on the impact of COVID-19 on student learning. The State Board released the report, *Using Data to Support Success for Arizona Students – Assessing COVID-19 Impact on Student Learning*, on November 1st. The report uses data from the 2020-2021 school year to assess the "academic impact" of COVID-19. Emphasis was placed on understanding how the data impacts students of various demographic subgroups. Other areas addressed include academic growth and proficiency, English learner growth and proficiency, and student mobility and enrollment. Due to the varied and diverse COVID-19 impacts, data from the 2020-2021 school year is considered not as complete or reliable as prior years, and schools / districts are advised to consider other contextual factors, such as testing participation rates and a review of enrollment data, when interpreting the effects on student academic performance.

Note: Academic impact" is defined as the pandemic and all of the ensuing disruptions (e.g., mode of learning, quality of and access to learning supports/services, reduced instructional time, technology challenges, availability of materials/resources) that impede (in general) the academic progress of students. The disruptions impede progress in two ways: (1) they slow one's rate of progress; and (2) the slower rate of progress leads to less distance being traveled. In education these two outcomes represent themselves as a decrease in student growth and a decrease in student attainment.

Significant takeaways gleaned at the state level include the following:
- Academic impacts have been unprecedented and large nationwide and in Arizona;
- Early grades saw larger academic impacts;
- The impact to mathematics is larger than the impact to English language arts, but both are significant and broad;
- The decreases in growth, especially at the state level, are unprecedented;
- Proficiency was down across all demographic subgroups and grade levels; the most significant decline was in ELA proficiency in grades 3 to 5;
- English learners continue to struggle more than their English-language proficient peers;
- Pandemic related impact was less for special education students than for non-special education students;
- There was substantial variation in academic impact at the school level;
- High-performing schools were not immune to academic impact from the pandemic;
- Student mobility (i.e., students moving to different schools or to homeschooling) was higher compared to prior years;
- More mobility was seen in the elementary grade levels versus the high schools; and
- Large percent of students who left for homeschool returned in 2020-2021 or at the start of 2020-2021.

Analyses of statewide data for 2020-2021 show pandemic-related academic impact by grade and content area, demographic subgroups, including ethnicity, poverty, academic subgroups (e.g., special education, low/high achievers), and by district and school. Although the most often referenced "impact" is academic impact (often referred to as learning loss or unfinished learning), students' social, emotional, and physical health were also

impacted. A downfall in one can lead to a downfall in another. The report concludes that it is likely that learning recovery will be a multi-year effort due to the uneven impact of the pandemic on Arizona students.

In December, the State Board will issue a follow-up report that identifies schools that had a positive impact on student learning in the 2020-2021 school year despite the challenges of COVID-19. The follow-up report is intended to present information to schools to further learn "what worked" in this unprecedented situation.

State testing results in CFSD

Although the 2020-2021 school year was far from typical, information gleaned from AzM2 can help us better understand how students who took the test are performing academically – especially given the fact that testing was canceled in 2020. Similarly, participation data provides demographic information about who did and did not take the assessment.

AzM2 (Arizona's Statewide Achievement Assessment for English Language Arts and Mathematics)

The AzM2 was Arizona's statewide achievement test designed to meet federal and state requirements to measure proficiency of the English Language Arts and Mathematics Standards. The U.S. Department of Education requires all states to administer content-based assessments annually in grades 3-8 and once in high school, and they must be aligned to the State Academic Content Standards. Spring 2020 was intended to be the first year of AzM2. However, the AzM2 tests for English language arts and mathematics at grades 3-8 and grade 10 were canceled due to COVID-19-related school closures.

As part of the test administration of AzM2, all End-of-Course high school tests were permanently eliminated, which also included the CFSD 8th grade students taking advanced high school math courses. Regardless of course enrollment, all 8th graders took the 8th grade ELA and Math assessments. The grade 10 math assessment was only administered one time – spring 2021 – and was comprised of Algebra 1 (60%) and Geometry (40%) standards. Given that this assessment was administered one time, only performance levels were reported out on school, district, and individual student reports.

AzM2 was a computer-based assessment that measured critical thinking skills in the context of academic content. It included different types of questions, including items that have multiple-steps. Students were asked to apply their knowledge and skills to address real-world problems. In English language arts, students had to apply their research and writing skills. In math, students solved complex problems and then described and defended their reasoning. The test also included traditional multiple choice questions, as well as interactive questions that required students to drag and drop their answers into a box, create equations, and fill in the answer. A writing performance task was included at every tested grade level. AzM2 is aligned to the 2016 ELA and Math standards, which are the most current standards available. Only eligible students with significant cognitive disabilities participated in other alternate achievement tests.

The AzMERIT tests administered in 2015 were the first to be aligned to the 2010 ELA and mathematics academic standards. The 2019 test administration was the fifth year of the tests. We have five years of comparable results for English language arts and mathematics using AzMERIT. 2021 was the first year of the AzM2 tests, and new statewide tests will be administered in spring 2022.

AzM2 Performance Levels

Student performance on AzM2 was reported as one of four performance levels.

Level 1: Minimally Proficient	Level 2: Partially Proficient	Level 3: Proficient ⭐	Level 4: Highly Proficient ⭐

The performance levels delineate the knowledge, skills, and practices that students are able to demonstrate. Students who score in the (1) Minimally Proficient or (2) Partially Proficient levels are likely to need support to be ready for the next grade or course. Students who score in the (3) Proficient or (4) Highly Proficient levels are likely to be ready for the next grade or course. Annually, each school examines the overall and individual student scores in order to develop strategies and interventions to increase the academic success of students.

Spring 2021 participation rates for AzM2

The federal Every Student Succeeds Act (ESSA) requires that 95 percent of students participate in state assessments in grades 3-8 and at least once in high school. Throughout the state, there were considerable differences in participation rates across schools and districts. Overall, CFSD had high participation rates for spring 2021 testing. Many of our students who were enrolled in 100% remote learning were present for testing. Schools implemented a variety of structures – separate testing days and/or varying locations throughout the school to accommodate in-person and remote learners, as well as those students who needed accommodations for testing. Participation rates for English language arts and math are displayed in Table 1 and Table 2. The total number of students was derived from the number of enrolled students on the first day of the testing window for CFSD.

Test participation rates for English language arts ranged from 86% - 95%, with participation higher at the elementary level, most notably, third grade at 95%. Grade 3 is the first year of statewide testing. It is also the year that the Move on When Reading (MOWR) cut score/indicator is used. As part of the MOWR legislation (ARS 15-701), third-grade students who fail to reach the MOWR cut score on the reading portion of the third-grade statewide English Language Arts (ELA) exam are candidates for retention.

CFSD tenth graders had a 16-18% higher participation rate than the state average for 10th graders at 71% (ELA) and 73% (Math). Across all grades, CFSD had higher participation rates than the average for all schools in Pima County (77-79%). Across all tested grades, 84-90% of students, statewide, participated in testing, except for 10th graders as noted above.

Table 1: CFSD Spring 2021 AzM2 Participation Rates for English Language Arts (ELA)

Spring 2021 AzM2 Participation Rates for ELA			
Grade 3	ELA	95%	317/335
Grade 4	ELA	91%	324/357
Grade 5	ELA	94%	328/350
Grade 6	ELA	91%	369/404
Grade 7	ELA	86%	315/365
Grade 8	ELA	89%	398/448
Grade 10	ELA	89%	397/445

Participation rates for Math are displayed in Table 2. They range from 88% to 96% with participation highest at third grade and at the elementary level, overall.

Table 2: CFSD Spring 2021 AzM2 Participation Rates for Math

Spring 2021 AzM2 Participation Rates for Math			
Grade 3	Math	96%	320/335
Grade 4	Math	92%	327/357
Grade 5	Math	94%	328/350
Grade 6	Math	93%	374/404
Grade 7	Math	88%	320/365
Grade 8	Math	90%	402/448
Grade 10	Math	89%	397/445

Disaggregation of AzM2 data by subgroup

ESSA requires states to disaggregate testing data for accountability purposes for the following subgroups:

- Race/ethnicity
- Gender
- Socioeconomic status
- Disability
- English learners

ESSA also added three new subgroups for data reporting, but not accountability purposes:

- Homeless status (McKinney-Vento)
- Students with a parent in the military
- Students in foster care

This breakdown brings focus to the performance of low-performing groups of students in order to identify any performance gaps, and reveals trends in achievement and behavior. For school accountability purposes, subgroup data are only used when the number of students in the subgroup meets or exceeds the N-size of 10. Table 3 displays CFSD student demographics by subgroup for grades K-12. The districtwide subgroup data serves as a reference point when examining subgroup assessment results by grade level and school.

Table 3: CFSD Student Demographics for K-12**

Student Demographics	Number	Percent
All Students	5,113	100%`AZs
Female	2522	49%
Male	2591	51%
Asian	311	6%
Black	93	2%
Hispanic	1,474	29%
Native American	10	0.2%
Pacific Islander	12	0.2%
Two or More Races	366	7%
White	2847	56%
Income Eligibility 1 & 2	718	14%
Special Education	419	8%
English Learners	160	3%
Military	27	0.5%
Foster	*	---
McKinney-Vento	*	---

*N-size is less than 10
**Data taken from Synergy on November 18, 2021

AzM2 performance outcomes
The data in Table 4 and Table 5 show the passing rates for subgroups that were assessed in English language arts and Math during the spring 2018, 2019, and 2021 test administrations. The percent passing is the total percentage of students scoring at the performance levels of Proficient and Highly Proficient.

During the 2020-2021 school year, teachers used universal screeners (e.g., DIBELS 8, MindPlay), district-created diagnostics, and classroom-based assessments to gauge student understanding, address gaps, and provide advanced learning opportunities. Data from these assessments were used to inform instructional decisions, such as small group instruction and intervention experiences. When examining student performance data by subgroup, it is also important to consider other variables such as students' social and emotional well-being, absenteeism, active engagement in learning, etc.

Percent passing for English language arts by subgroup
Table 4 shows the percent passing for all subgroups in English language arts over three years. The data also show:

- The percent passing for All Students in English language arts decreased by 3% over three years, which is similar to the statewide decline of 4% for all tested students.
- Over the three-year period, female students are outperforming male students by 6-7 percent.
- In 2021, all ethnicity subgroups with the exception of Two or More Races, had a lower percentage of students scoring at Proficient and Highly Proficient than the subgroup of White students.
- African American and Hispanic/Latino students are performing below the White subgroup of students by 22% and 21% respectively. Additionally, for two of the three years (2018, 2019), less than 50% of African American students scored at Proficient and Highly Proficient in English language arts.
- Less than 50% of the students in the Economically Disadvantaged/Income Eligibility 1 and 2 subgroups are demonstrating proficient performance in the ELA standards.
- Of particular concern is the subgroup of Students with Disabilities. Approximately 22% are demonstrating proficient performance in the ELA standards.
- The passing rate for the Military subgroup is 5% -19% higher than All Students.

Table 4: Comparison of 2018-2019 CFSD AzMERIT & 2021 AzM2
Percent Passing for English Language Arts by Subgroup

Subgroup	2018	2019	2021
Female	71	69	66
Male	64	63	60
Military	N/A	71	82
Homeless/McKinney-Vento	*	---	---
Economically Disadvantaged	44	N/A	N/A
Income Eligibility 1 and 2	N/A	45	35
Limited English Proficient	13	*	*
Students w/Disabilities	22	22	22
Asian	75	72	67
African American	43	51	47
Hispanic/Latino	56	56	48
American Indian / Alaska Native	*	*	*
Native Hawaiian / Other Pacific Islander	67	*	*
Two or More Races	67	75	72
White	73	69	69
All Students	68	66	63

1. No data is displayed for subgroups with less than 10 students - shown with an asterisk.

Below are overall findings for **statewide** proficiency in English language arts:
- The overall statewide proficiency for English language arts is 38%. In Pima County it is 37%.
- The most significant decline in statewide ELA proficiency was in grades 3-5 with passing rates of 35%. 45% and 45% respectively.

Percent passing for math by subgroup
Table 5 shows the percent passing for all subgroups in math over three years. The data also show:
- Consistent with the statewide results, math proficiency is down across all subgroups.
- The percent passing for All Students in Math decreased by 12% between 2019 and 2021 and by 16% since 2018.
- There was a significant decline in the percent passing for both the Female and Male subgroups from 2019 to 2021 (15% and 10% respectively).
- The Military subgroup is out-performing All Students by 17%.
- The African-American and Hispanic/Latino subgroups have continued to have academic proficiency gaps at higher rates than other ethnic groups.
- There was a 14% decline in percent passing for the Income Eligibility subgroup.
- Similar to ELA, there is concern about the percent proficient in math for Students with Disabilities. In 2021, the percent passing is 18%.

Table 5: Comparison of 2018-2019 CFSD AzMERIT & 2021 AzM2
Percent Passing for Math by Subgroup

Subgroup	2018	2019	2021
Female	69	67	52
Male	73	67	57
Military	N/A	76	72
Homeless	*	---	---
Economically Disadvantaged	49	N/A	N/A
Income Eligibility 1 and 2	N/A	42	28
Limited English Proficient	40	28	*
Students w/Disabilities	24	24	18
Asian	84	83	78
African American	50	38	34
Hispanic/Latino	59	55	39
American Indian / Alaska Native	*	*	*
Native Hawaiian / Other Pacific Islander	46	*	*
Two or More Races	74	69	58
White	75	72	60
All Students	71	67	55

* Data for subgroups with less than 10 students are not displayed.
Note: 2019 is first year for data for "Military" subgroup. "Economically Disadvantaged" subgroup changed to Income "Eligibility 1 and 2" subgroup in 2019.

Below are overall findings for **statewide** proficiency in Math:
- The overall statewide proficiency for Math is 31%. In Pima County it is 28%.
- Math proficiency is down 11% for all tested students in 2021. However the percent of students tested across the state is lower than it was in 2019.

- Native American, African American, and Hispanics continue to have academic proficiency gaps at higher rates than other ethnic groups.
- Percent proficient is higher at grades 3 (36%) and 4 (35%) than all other grades. Percent passing for all grades ranges from 26% to 36%.
- English learners continue to show significant gaps in achievement.

Table 6 shows the percent passing English language arts by subgroup and grade level for grades 3-5. Specifically:
- The Female subgroup consistently scored higher than the Male subgroup across the three grade levels with the exception of third grade in 2021 where the percent passing is the same as All Students (67%).
- Well below half of students in the Students with Disabilities subgroup are demonstrating proficiency in the ELA standards across the three years at grades 3-5.
- There was a significant decrease in the percent passing (30%, 19% respectively) in the Income Eligibility 1 and 2 subgroup at grade 3 and grade 4 between 2019 and 2021.
- There was a decline in percent passing for the Two or More Races subgroup from 2019 to 2021 at grades 3 and 5. There was a 9% increase at grade 5.
- Overall, students at grade 3 experienced the largest decline in percent passing from 2019 to 2021.
- Statewide the percent passing in 2021 for grades 3, 4, and 5 are 35%, 45%, 45% respectively. CFSD percent passing is 29-33% higher than the statewide percent proficient at these grade levels.

Table 6: Comparison of CFSD 2018-2019 AzMERIT & 2021 AzM2 Percent Passing for English Language Arts by Subgroup and Grade Levels 3-5

Subgroup	3-2018	3-2019	3-2021	4-2018	4-2019	4-2021	5-2018	5-2019	5-2021
Female	78	82	67	80	82	76	79	80	80
Male	63	75	67	79	73	72	74	76	75
Military		*	*		*	92		*	*
Homeless/McKinney-Vento	N/A	N/A	N/A	*	N/A	N/A	N/A	N/A	N/A
Economically Disadvantaged	37		N/A	54		N/A	61	N/A	N/A
Income Eligibility 1 and 2		61	31		57	38		51	52
Limited English Proficient	*	*	*	*	*	*	23	*	*
Students w/Disabilities	19	*	31	30	29	29	36	*	30
Asian	58	66	73	90	74	75	75	71	67
African American	*	*	*	*	*	*	*	*	*
Hispanic/Latino	58	73	57	78	73	62	64	73	68
American Indian / Alaska Native	N/A	*	*	*	*	N/A	*	*	*
Native Hawaiian / Other Pacific Islander	*	N/A	N/A	N/A	*	*	N/A	*	*
Two or More Races	55	95	73	82	84	72	80	80	89
White	79	80	70	78	80	81	83	82	82
All Students	70	78	67	79	77	74	77	78	78

1. * Data for subgroups with less than 10 students are not displayed.
2. 2019 was the first year for data for "Military" subgroup.
3. Economically Disadvantaged subgroup changed to Income Eligibility 1 and 2 subgroup in 2019.

Table 7 shows the percentage of students that passed the English language arts test by subgroup and grade level for grades 6-8. Specifically:

- The Female subgroup is outperforming the Male subgroup all three years for grades 6-8.
- In 2018, eighteen percent of 6th grade LEP students performed at proficiency or above; however, this passing rate is in the bottom quartile when compared to All Students.
- The percent passing for Hispanic/Latino students in grades 6-8 is lower than students in grades 3-5.
- The subgroup Two or More Races outperformed All Students across all three years.
- The percent passing in the Hispanic/Latino subgroup declined across all three years with the largest decline at grade 8.
- The Asian subgroup increased by 10% from 2019 to 2021.
- The percent passing decreased 5-7% for All Students for grades 6-8 from 2019 to 2021.
- The percent passing for All Students at grades 6-8 is 18-25% higher than the state averages for percent passing. However, percent passing for all three grade levels declined from 2018 to 2019 and from 2019 to 2021.

Table 7: Comparison of CFSD 2018-2019 AzMERIT & 2021 AzM2 Percent Passing for English Language Arts by Subgroup and Grade Levels 6-8

Subgroup	6-2018	6-2019	6-2021	7-2018	7-2019	7-2021	8-2018	8-2019	8-2021
Female	65	63	61	80	69	66	65	68	56
Male	61	58	51	65	65	58	60	55	51
Military		*	*		*	*		*	*
Homeless	N/A	N/A	N/A	N/A	N/A	N/A	*	N/A	N/A
Economically Disadvantaged	45			38			45		
Income Eligibility 1 and 2		39	27		50	30		39	29
Limited English Proficient	18	*	*	*	*	*	*	*	*
Students w/Disabilities	12	22	*	23	*	*	15	*	*
Asian	63	70	*	65	72	82	92	65	65
African American	*	*	*	31	*	*	*	*	*
Hispanic/Latino	50	51	37	67	57	48	50	51	34
American Indian / Alaska Native	N/A	*	N/A	*	*	N/A	N/A	*	*
Native Hawaiian / Other Pacific Islander	*	N/A	*	*	*	N/A	N/A	*	*
Two or More Races	61	66	61	81	70	77	52	81	62
White	70	65	66	74	69	65	67	63	61
All Students	63	61	55	71	67	62	63	60	53

*1. * Data for subgroups with less than 10 students are not displayed.*
2. 2019 was the first year for data for "Military" subgroup.
3. Economically Disadvantaged subgroup changed to Income Eligibility 1 and 2 subgroup in 2019.

Table 8 shows the percentage of students that passed the English language arts test by subgroup and grade level for grades 9-12 from 2018-2019 and for grade 10 in 2021. Specifically:

- The percent passing for All Students declined from 56% to 54% from 2019 to 2021. The overall statewide percent passing for grade 10 was 32%.
- The Asian subgroup had the largest decline from 2019 to 2021. Percent passing decreased from 69% to 57%.
- The percent passing for the Income Eligibility subgroup increased by 13% in 2021.
- Less than 50% of students in the Hispanic/Latino subgroup are proficient in ELA. This achievement gap is consistent with statewide results.
- Concerning is the percent passing at 10th grade, which is only 4% above 50% and not significantly different from 2019.

Table 8: Comparison of Percent Passing for CFSD 2018-2019 AzMERIT (Grades 9-11) & 2021 AzM2 (Grade 10) for English Language Arts by Subgroup

Subgroup	9-2018	9-2019	10-2018	10-2019	10-2021	11-2018	11-2019
Female	72	60	66	58	56	61	67
Male	62	59	59	54	53	59	60
Military		*		*	*		*
Homeless/McKinney-Vento	*	N/A	N/A	N/A	N/A	N/A	N/A
Economically Disadvantaged	46	N/A	31	N/A	N/A	40	
Income Eligibility 1 and 2		41		34	47		40
Limited English Proficient	*	*	*	*	*	*	*
Students w/Disabilities	12	*	24	*	*	21	*
Asian	84	75	87	69	57	56	84
African American	43	*	*	*	*	*	*
Hispanic/Latino	55	44	41	46	41	51	47
American Indian / Alaska Native	N/A	*	*	N/A	*	*	*
Native Hawaiian / Other Pacific Islander	*	N/A	*	*	N/A	N/A	*
Two or More Races	52	57	83	70	72	44	85
White	72	66	67	58	59	66	65
All Students	67	60	62	56	54	60	63

*1. * Data for subgroups with less than 10 students are not displayed.*
2. 2019 was the first year for data for "Military" subgroup.
3. Economically Disadvantaged subgroup changed to Income Eligibility 1 and 2 subgroup in 2019.

Table 9 below shows the passing rates by subgroup and for All Students for grades 3-5 in Math for spring 2018-2019 and spring 2021.

- The percent pass for all subgroups at grade 3 decreased from 2019 to 2021. The most significant was the Income Eligibility and Hispanic/Latino subgroups at 34% and 25% respectively. All Students declined by 13%.
- The percent passing for the Female subgroup decreased at grades 3, 4, and 5 from 2019 to 2021. The largest decrease was at grade 3.
- The passing rates for All Students are inconsistent across the three years for all groups, but especially at fourth grade.
- The passing rates for the Hispanic/Latino subgroup declined at all grades from 209 to 2021 with the largest decrease at grade 3.
- In 2021, the Two or More Races subgroup increased by 7%. This subgroup outperformed All Students all three years except for grade 3 in 2018 and grade 4 in 2019.
- The percent passing for the Male subgroup declined by 10% at grade 5 from 2019 to 2021.

Table 9: Comparison of CFSD 2018-2019 AzMERIT & 2021 AzM2 Percent Passing for Math by Subgroup and Grade Levels 3-5

Subgroup	3-2018	3-2019	3-2021	4-2018	4-2019	4-2021	5-2018	5-2019	5-2021
Female	75	79	63	68	65	54	70	70	66
Male	71	81	72	73	61	62	73	72	62
Military		*	*		*	*		*	*
Homeless	N/A	N/A	N/A	*	N/A	N/A	N/A	N/A	N/A
Economically Disadvantaged	42			41			49		
Income Eligibility 1 and 2		59	25		36	26		41	*
Limited English Proficient	*	*	*	*	*	*	62	*	*
Students w/Disabilities	32	44	33	28	*	*	29	*	*
Asian	73	86	82	83	82	88	88	86	74
African American	*	*	*	*	*	*	*	*	*
Hispanic/Latino	59	69	44	63	47	43	59	67	52
American Indian / Alaska Native	N/A	*	*	*	*	N/A	*	*	*
Native Hawaiian / Other Pacific Islander	*	N/A	N/A	*	*	*	N/A	*	N/A
Two or More Races	70	85	77	82	55	62	80	80	74
White	79	83	73	70	70	62	75	71	67
All Students	73	80	67	70	63	58	72	71	64

*1. * Data for subgroups with less than 10 students are not displayed.*
2. 2019 was the first year for data for "Military" subgroup.
3. Economically Disadvantaged subgroup changed to Income Eligibility 1 and 2 subgroup in 2019.

Table 10 below shows the passing rates by subgroup and for All Students in grades 6-8 in Math for spring 2018-2019 and spring 2021:

- There was a significant decrease in percent passing for grades 6, 7, and 8 from 2019 to 2021 (13%, 10%, and 23% respectively). The most significant was at grade 8.
- There was a significant decrease in the percent passing for all subgroups at grade 6. All Students declined by 13%. The other subgroups declined between 11% and 21%.
- The percent passing for the Two or More Races subgroup declined at all three grades from 2019 to 2021. The most significant was at grade 8 with 38%.
- The percent passing for the Male and Female subgroups at grade 8 decreased by 33% and 16% respectively.
- The percent proficient for the Income Eligibility subgroup declined by 22% at grade 8. The Hispanic/Latino subgroup declined by 26%.

Table 10: Comparison of CFSD 2018-2019 AzMERIT & 2021 AzM2 Percent Passing for Math by Subgroup and Grade Levels 6-8

Subgroup	6-2018	6-2019	6-2021	7-2018	7-2019	7-2021	8-2018	8-2019	8-2021
Female	65	61	50	61	63	50	67	72	39
Male	72	63	49	63	64	58	79	65	49
Military		*	*		*	*		*	*
Homeless	N/A	N/A	N/A	N/A	N/A	N/A	*	N/A	N/A
Economically Disadvantaged	47			38			53		
Income Eligibility 1 and 2		33	*		47	40		41	19
Limited English Proficient	27	*	*	*	*	*	*	*	*
Students w/Disabilities	10	*	*	16	*	*	21	27	*
Asian	80	82	61	78	78	86	93	77	78
African American	*	*	*	38	*	*	*	*	*
Hispanic/Latino	59	50	29	49	50	43	62	55	31
American Indian / Alaska Native	N/A	*	N/A	*	*	N/A	N/A	*	N/A
Native Hawaiian / Other Pacific Islander	*	N/A	*	*	*	N/A	N/A	*	N/A
Two or More Races	65	66	50	73	57	50	83	83	45
White	74	67	59	67	71	57	75	73	49
All Students	69	62	49	63	64	54	73	68	45

*1. * Data for subgroups with less than 10 students are not displayed.*
2. 2019 was the first year for data for "Military" subgroup.
3. Economically Disadvantaged subgroup changed to Income Eligibility 1 and 2 subgroup in 2019.

Table 11 below shows the passing rates by subgroup and for All Students for Algebra I, Geometry, and Algebra II for spring 2018-2019 and Grade 10 Math for 2021. Grade 10 Math included standards from Algebra I and Geometry. All students in the cohort, regardless of enrolled math course took the AzM2 math test in 2021. This means that advanced math students enrolled in grade 10 took the math test in 2021.

- The percent proficient for All Students was 52%. This is lower than all of the individual scores for Algebra I and Geometry across 2018 and 2019.
- Overall, the Male and Female subgroups in 2021 had lower passing rates than in Algebra I and Geometry in 2018 and 2019.
- There was a significant increase in the percent passing of Students with Disabilities in Algebra II between 2018 and 2019.
- Asian students had the highest percent passing rate in all three years except for 20-19 Algebra I.

Table 11: Comparison of CFSD 2018-2019 AzMERIT (Grades 9-11: Algebra 1, Geometry, Algebra 2) & 2021 AzM2 (Grade 10 – Algebra 1, Geometry Combined) for High School Math by Subgroup and Tested Math Courses (Algebra 1, Geometry, Algebra 2)

Subgroup	Alg1 2018	Alg1 2019	Geo 2018	Geo 2019	Alg2 2018	Alg2 2019	GR10 2021
Female	78	65	68	70	76	69	46
Male	82	66	71	73	78	71	56
Military		*		*		*	*
Homeless	*	N/A	N/A	N/A	N/A	N/A	N/A
Economically Disadvantaged	68		44		67		
Income Eligibility 1 and 2		38		52		50	47
Limited English Proficient	*	*	*	*	*	*	*
Students w/Disabilities	31	*	37	*	18	52	*
Asian	85	70	87	88	92	97	76
African American	*	*	*	*	*	*	*
Hispanic/Latino	70	53	53	61	67	54	41
American Indian / Alaska Native	N/A	*	*	N/A	N/A	*	*
Native Hawaiian / Other Pacific Islander	*	N/A	*	*	*	*	*
Two or More Races	74	59	63	72	80	87	56
White	86	74	76	74	80	73	55
All Students	80	66	70	71	77	70	52

*1. * Data for subgroups with less than 10 students are not displayed.*
2. 2019 was the first year for data for "Military" subgroup.
3. Economically Disadvantaged subgroup changed to Income Eligibility 1 and 2 subgroup in 2019.

Disaggregating subgroup data at the district level is only the first step in identifying the academic impact of the pandemic among subgroups of students. To make this data actionable, a multi-layer analysis of cause and effect data are needed as well as an examination of individual student data and the variables that may impact learning (e.g., absenteeism, discipline, mobility, social/emotional - well-being). This type of analysis is best completed at the school level so that teachers and administrators can work collaboratively to identify the students and determine what programs, services, and interventions, and at what intensity need to be implemented to improve learning results.

Performance on the Spring 2021 AzM2 ELA Test Based on Learning Options

[100% Remote Learning | In-Person | Movement between Remote & In-Person]

All CFSD students participated in 100% remote learning from August 17 – October 26, 2020. When CFSD re-opened for In-Person Learning on October 26, 2020, families had the option to continue with 100% remote learning or request in-person learning based on each school's capacity and learning model. "In-Person" is defined as continuously attending the in-person learning option offered at the school, recognizing that it was not 100% until spring 2021. "Movement between Remote and In-Person" (referenced as "combination" in the tables below) accounts for those students who moved in and out of in-person and remote learning at various times during the school year. The school-based spreadsheets that were used to track and report the mode of learning to the ADE provided the student data for each group.

During the spring 2021 statewide test administration, we added rosters of students into the testing portal based on the learning option(s) selected: (1) 100% remote learning; (2) continuous in-person learning based on the school's learning model until all schools opened for 100% in-person learning in March 2021; and (3) combination of remote learning and in-person learning (student movement in and out of remote and in-person learning). This data provides another lens for analyzing student performance.

Nationally, various reports (e.g., RAND, McKinsey & Company) on the overall achievement of students who were full-time remote learners indicate that they received less instructional time, were less engaged, more likely to be absent, and receive a failing grade more than those students who were attending classes in person. Teachers of remote learners and those teaching in hybrid schools also indicated that they were less likely to teach all of the content compared to their counterparts in fully in-person settings. For many students, the result was significant academic learning loss in classes and a decline in overall achievement results that resulted in a widening gap between academically struggling and high-performing students.

Looking at the results for CFSD students, the percent passing for in-person learners in ELA and Math is higher, near, or at the same proficiency level as that of All Students. There are some stand-out results for remote learners at grade 3 at Canyon View and Sunrise Drive, and at grade 7 at Orange Grove for ELA where the passing rate is much higher than those attending in person and for All Students. The same was true for Math at grade 3 at Canyon View, Manzanita, and Sunrise Drive. The percent passing was significantly higher than the percent passing for All Students at those schools.

Table 12 through Table 17 show the percent passing in English language arts for 100% remote learners, in-person learners, and learners who moved between remote and in-person learning (combination).

Table 12: Canyon View Percent Passing for English Language Arts Based on Learning Option

Grade	100% Remote	100% In-Person	Combination	All Students	District	Arizona
Grade 3	85	53	53	59	67	35
Grade 4	63	69	66	65	74	45
Grade 5	67	81	76	76	78	45

Table 13: Manzanita Percent Passing for English Language Arts Based on Learning Option

Grade	100% Remote	100% In-Person	Combination	All Students	District	Arizona
Grade 3	71	80	80	78	67	35
Grade 4	75	82	79	78	74	45
Grade 5	67	77	79	77	78	45

Table 14: Sunrise Drive Percent Passing for English Language Arts Based on Learning Option

Grade	100% Remote	100% In-Person	Combination	All Students	District	Arizona
Grade 3	91	56	62	68	67	35
Grade 4	45	79	80	75	74	45
Grade 5	69	80	82	80	78	45

Table 15: Ventana Vista Percent Passing for English Language Arts Based on Learning Option

Grade	100% Remote	100% In-Person	Combination	All Students	District	Arizona
Grade 3	57	63	64	62	67	35
Grade 4	67	81	82	78	74	45
Grade 5	56	81	81	78	78	45

Table 16: Esperero Canyon Percent Passing for English Language Arts Based on Learning Option

Grade	100% Remote	100% In-Person	Combination	All Students	District	Arizona
Grade 6	64	55	55	57	55	35
Grade 7	67	55	56	59	62	37
Grade 8	47	54	55	52	53	35

Table 16: Orange Grove Percent Passing for English Language Arts Based on Learning Option

Grade	100% Remote	100% In-Person	Combination	All Students	District	Arizona
Grade 6	58	58	53	54	55	35
Grade 7	75	63	61	65	62	37
Grade 8	45	62	57	54	53	35

Table 17: Catalina Foothills High School Percent Passing for English Language Arts Based on Learning Option

Grade	100% Remote	100% In-Person	Combination	All Students	District	Arizona
Grade 10	51	60	56	54	54	32

Table 18 through Table 24 show the percent passing in Math for 100% remote learners, in-person learners, and learners who moved between remote and in-person learning (combination).

Table 18: Canyon View Percent Passing for Math Based on Learning Option

Grade	100% Remote	100% In-Person	Combination	All Students	District	Arizona
Grade 3	85	62	61	65	67	36
Grade 4	13	49	46	43	58	35
Grade 5	33	70	64	63	64	32

Table 19: Manzanita Percent Passing for Math Based on Learning Option

Grade	100% Remote	100% In-Person	Combination	All Students	District	Arizona
Grade 3	86	69	70	72	67	36
Grade 4	65	67	64	64	58	35
Grade 5	33	61	64	59	64	32

Table 20: Sunrise Drive Percent Passing for Math Based on Learning Option

Grade	100% Remote	100% In-Person	Combination	All Students	District	Arizona
Grade 3	91	68	71	74	67	36
Grade 4	27	74	72	66	58	35
Grade 5	56	75	74	72	64	32

Table 21: Ventana Vista Percent Passing for Math Based on Learning Option

Grade	100% Remote	100% In-Person	Combination	All Students	District	Arizona
Grade 3	29	52	54	51	67	36
Grade 4	53	59	58	57	58	35
Grade 5	63	63	61	61	64	32

Table 22: Esperero Canyon Percent Passing for Math Based on Learning Option

Grade	100% Remote	100% In-Person	Combination	All Students	District	Arizona
Grade 6	36	49	49	46	49	30
Grade 7	61	49	45	48	54	30
Grade 8	31	49	44	40	45	27

Table 23: Orange Grove Percent Passing for Math Based on Learning Option

Grade	100% Remote	100% In-Person	Combination	All Students	District	Arizona
Grade 6	55	54	50	51	49	30
Grade 7	65	62	57	60	54	30
Grade 8	42	54	50	48	45	27

Table 24: Catalina Foothills High School Percent Passing for Math Based on Learning Option

Grade	100% Remote	100% In-Person	Combination	All Students	District	Arizona
Grade 10	53	52	50	52	52	27

AzSCI (Arizona's Science Assessment)

AIMS Science is now retired. The spring 2019 administration of AIMS Science was the twelfth year of this test administration for grades 4, 8, and high school. Due to the COVID-19 pandemic, the spring 2020 test administration of AIMS Science was canceled.

The Arizona Science Assessment (AzSCI) is the new science test for Arizona students. A census field test was administered to all students in grades 5, 8, and 11 during spring 2021. The Arizona State Board of Education took advantage of a waiver from the U.S. Department of Education to eliminate the testing of AIMS Science in spring 2021 as it was scheduled to be administered in 4th, 8th, and 9th/10th grade for the final time before being replaced by AzSCI. This allowed schools and districts to focus on the new assessment, which is aligned to the 2018 science standards. Districts, schools, and families did not receive student test results from the field test. The ADE gave bonus points to schools based on participation rates for AzSCI. The bonus points are included in the A-F components.

AzSCI is a standards-based assessment that measures student proficiency of the Arizona Science Standards. This test meets federal requirements for student assessment. AzSCI will be administered to students in grades 5, 8, and 11 in spring 2022.

College Work Readiness Assessment (CWRA+)

The College Work Readiness Assessment (CWRA+) was not administered to Catalina Foothills High School freshmen and juniors during fall 2020 (freshmen) and spring 2021 (juniors). Complexities arose for securing devices and the platform for proctoring for both 100% remote learning in the fall and the combination of in-person and remote learning in the spring. Scores for the 2017-2018 through the 2019-2020 school year can be found in the Appendix of this report.

Why does Arizona have an A-F system of grading schools?
Federal and state law require it. The federal Every Student Succeeds Act (ESSA) requires states to measure school performance. State law (A.R.S. 15-241) mandates the A-F letter grade system, which is based on a range of quantitative measures including the statewide assessment.

What does each letter grade mean?
A (excellent): Distinguished performance on the statewide assessment, significant student growth, high four-year graduation rates, students on track to proficiency; overall performance is significantly higher than the statewide average.

B (highly performing): High performance on statewide assessment and/or significant student growth and/or higher four-year graduation rates and/or moving students to proficiency at a higher rate than the state average.

C (performing): Adequate performance by needs improvement on some indicators, such as proficiency, growth, or graduation rate.

D (minimally performing): Inadequate performance in proficiency, growth, and/or four-year graduation rate relative to the state average.

F (failing): Systematic failures in proficiency, growth, and graduation rates (below 67%); performance is in the bottom 5% of the state.

What do the letter grades measure?
Five quantifiable factors go into the letter grades.
- Student growth from year to year, or for high-performing students, maintenance of top achievement. Individual students are compared year to year, rather than comparing one class to the previous year's class. For elementary schools, growth accounts for 50% of a school's grade.
- Proficiency on the statewide assessment.
- English language proficiency and growth.
- Indicators that an elementary student is ready for success in high school, and that high school students are ready for success in a career or higher education.
- High school graduation rates (9-12).

The current letter grades were released by the Arizona Department of Education (ADE) in October 2019 based on the A-F Accountability System. Due to closures resulting from COVID-19 in spring 2020, statewide testing was canceled. House Bill 2910 carried over 2018-2019 A-F letter grades to 2019-2020. Therefore, the 2019-2020 letter grades were the same as those awarded in October 2019 for the 2018-2019 school year.

In February 2021, the State Board of Education was directed to collect achievement data for the 2020-2021 school year, and report it, drawing comparisons to prior years by identifying the learning that took place during the pandemic. The ADE was directed to calculate and report A-F components, but not to issue letter grades for the 2020-2021 school year. In lieu of issuing A-F letter grades, the ADE was also directed to identify schools with a below average level of performance and to release academic data to the public. As stated previously in this report, that information was released on November 1, 2021. No CFSD schools were identified as below average schools

Student test data from AzM2, MSAA, AzSCI Field Test, MSAA Science Field Test, and AZELLA were used to calculate the letter grade components. The following criteria outline specific details and descriptions of student data included in the 2021 calculation of the A-F components (indicator data) for schools and districts:

- **1-year FAY (Full Academic Year)**: Students were included in the proficiency, growth, and acceleration/readiness metrics of the A-F Letter Grade models if they were enrolled within the first ten days of the school's calendar year and continuously enrolled until the first week day in May (May 3, 2021). Students with breaks in enrollment fewer than 10 calendar days in the same school are still considered FAY.
- **2-year FAY**: Students who are FAY two consecutive years in a row (FY20, FY21) at the same school.
- **3-year FAY**: Students who are FAY three consecutive years in a row (FY19, FY20, FY21) at the same school.
- **AZELLA FAY**: Students were included in the EL calculations if they were enrolled within the first ten days of the school's calendar and continuously enrolled until the last day of the state testing window for AZELLA. Students with breaks in enrollment fewer than 10 calendar days in the same school are still considered AZELLA FAY.
- **English Learner (EL)**: Any student identified with an EL need (e.g., with a less than proficient score on AZELLA in the current or prior fiscal year; students who may have been identified during the pandemic based on the Home Language Survey).
- **Ethnicity**: Student data submitted in the ethnicity fields (i.e., White, African American, Hispanic, Native American/Alaskan Indian, Asian, or Pacific Islander) that is used for the subgroup calculations.
- **Fluent English Proficient**: Any student identified with an EL need in a prior fiscal year who has reclassified as Proficient on the AZELLA 1, 2, 3, or 4 years ago.
- **Homeless** – Student data submitted to ADE in the Homeless field.
- **Income Eligibility 1 & 2**: A student is defined as Income Eligibility 1 & 2 if the school submits a 1/yes for either the Income Eligibility 1 or 2 field. Income Eligibility 1 & 2 was lower for FY21 due to COVID-19 impact on the ability of schools to collect and report this data. ADE's Health and Nutrition Service Division has worked with the field in supporting and feeding more students during the pandemic than in previous years under the Summer Food Service Program instead of the National School Lunch Program.
- **Special Education Student**: Any student receiving special education services on October 1, 2021 as defined by federal law.
- **N-Size**: The minimum number of students required in order for the indicator to be calculated and the school eligible to earn the points. The n-size for all indicators is 10 FAY students.
- **Current Year**: Refers to FY21
- **Prior Year**: Refers to FY20
- **Chronically Absent**: A student is chronically absent if that student has absences (excused and unexcused) greater than 10% of a school's calendar (e.g., 18 days for a school meeting 5 days per week).

Regardless of a student's special education status, the accountability system used all verified AzM2 data from students enrolled the full academic year. For students who take the MSAA [alternative] assessment and are enrolled the full academic year, these data are used in the percent proficient not the calculation of student growth percentiles.

The information that follows reflects the A-F **components** that were calculated and reported for the K-8 and 9-12 models using the results from the spring 2021 statewide tests.

K-8 Model: A-F Components Summary for 2021

Using the A-F Letter Grade Accountability System, Arizona makes accountability determinations for K-8 schools based on student academic outcomes, growth, and acceleration/readiness. Specifically, the metrics include the following:

1. Percentage of full academic year (FAY) proficient students on the AzM2 grade level assessment and Multi-State Alternate Assessment
2. Longitudinal indicators of relative student gain and growth towards proficiency/maintenance of proficiency
3. EL proficiency and growth
4. Indicators to measure students' ability to accelerate beyond elementary school (Acceleration/Readiness)
5. Bonus Points

Indicator	Component	FAY	Grades
Proficiency	AzM2 ELA and Math	✓	3-8
	MSAA ELA and Math	✓	3-8
Growth	Growth on AzM2 ELA and Math	✓	5-8
EL	EL Proficiency and Growth	✓	K-8
Acceleration / Readiness	Grade 8 Mathematics Performance	✓	8
	Grade 3 ELA	✓	3
	Chronic Absenteeism		1-8
	Subgroup Improvement	✓	3-8
	Special Education Inclusion	✓	K-8
Bonus	AzSci Field Test and MSAA Science Field Test	✓	5-8
	Special Education Enrollment	✓	K-8

The K-8 model is based on a scale of 0-100 points for schools that have all available indicators. All indicators are capped at the total percent possible.

Weight	Indicators
30%	Proficiency on Statewide Assessment
50%	Growth on Statewide Assessment
10%	Proficiency and Growth - English Language Learners*
10%	Acceleration/Readiness Measures

* Recently Arrived English Learner (RAEL) students in year 1 and year 2 are excluded from proficiency calculations for ELA only.
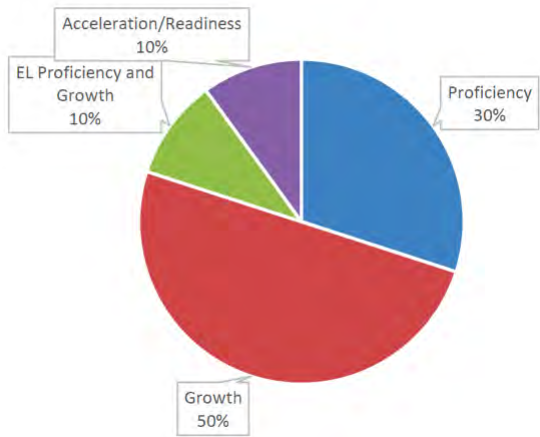
The scale is adjusted for those indicators that do not meet the N-Size. Indicators must have a minimum of 10 FAY students to earn the points. Exceptions to this rule are:

- Acceleration/Readiness Chronic Absenteeism requires an N-Size of 10 students including FAY and non-FAY
- Special Education enrollment bonus points do not require an N-Size of 10
- Science Proficiency bonus points do not require N-Size of 10

Proficiency
Proficiency results are worth 30% of a K-8 school's letter grade. The achievement levels are weighted such that students scoring highly proficient earn the most points.

Stability Model
This model weights student scores higher for students that have been at the same school for multiple years, and where the school has had the greatest opportunity to have the most impact. Schools that only have one or two years of proficiency will be weighted accordingly. Schools must have a minimum of 10 FAY students for each year. If the minimum is not met, those students are added to the next year. The percent proficient for each year of FAY for which a school is eligible is then weighted accordingly to determine points earned.

Percent Tested
Proficiency calculations are impacted by percent tested. Schools that do not meet the 95% test threshold mandated by law are negatively impacted on the proficiency calculation. Students are included in the 95% tested for a school if they are enrolled in a tested grade, 3-8, on the first day of the state testing window.

Growth Model
The purpose of the growth indicator is to recognize the academic growth a student has made in the past year, even if he/she has not yet reached grade-level proficiency. State statute mandates that the selected growth model measures even the lowest achieving students and the extent to which they grow academically from one year to the next.

Growth results are worth 50% of a K-8 school's letter grade. Schools must have a minimum of 10 FAY students with a Student Growth Percentile (SGP) in each subject, ELA and Math, to be eligible for growth points. Thus, SGP for ELA is worth 25% and SGP for Math is worth 25%. Math points are capped at 25 and ELA points are capped at 25, making growth points capped at 50.

Student Growth Percentile
SGP describes how a "typical" student's current-year test score is compared with the current-year test scores of those students with the exact same prior test scores – his/her academic peers. In this sense, SGP is a "norm-referenced quantification (Betebenner, 2011, p. 3) of student academic growth. An SGP of 40 means that the student grew more than 40% of his academic peers in a year. The use of this particular type of normed growth measure ensures that very low and/or high performing students can receive high growth scores relative to their peers with the same academic achievement history.

Due to cancellations of statewide assessments in spring 2020, the growth indicator for the 2020-2021 school year was calculated by linking the 2018-2019 school year data (and prior year data if available in 2017-2018) to the 2020-2021 school year data. Therefore, student growth in 2021 was calculated across a two-year span, and is referenced as a "skip-year" methodology, which was modeled and validated.

In order to examine the "slow down" due to the pandemic, growth was compared to pre-pandemic student growth from 2017 to 2019 – these are the baseline norms. For example, to calculate the SGP for a student in Grade 5 from the 2020-2021 school year, her test records in Grade 5 in the current year will be linked to her test records in Grade 3 from the 2018-2019 school year. And to calculate the SGP for a student in Grade 8 in the 2020-2021 school year, his test records in Grade 8 in the current year will be linked to his test records in Grade 6 from the 2018-2019 school year as well as to the ones in Grade 5 from the 2017-2018 school year. In this skip-year SGP model, Grade 5 is the first possible opportunity to assess growth for a student. Students in grades 3 and 4 will not have an SGP as they do not have test records in the 2018-2019 school year.

Data in the Growth Model

For FY21, valid student assessment results had to meet four criteria for inclusion in the growth model:

1. Student enrollment generates ADM in any Arizona public school.
2. Student has a test record from the 2020-2021 school-year.
3. Student also has a test record from the 2018-2019 school-year in the same subject.
4. Each student's test records in the current year and in the prior year(s) should be "consecutive" with the grade in the 2019-2020 to be skipped.

Note that student growth targets (SGT) were not calculated as a new test platform will be used in the 2021-2022 school year. Student growth targets are based on achieving proficiency, or maintaining proficiency, within three years. After the first administration of the new assessment (AASA), the SGT is expected to be used again in the Growth component.

EL Proficiency and Growth

English Learner proficiency and growth is worth 10% of a K-8 school's letter grade. Schools must have a minimum of 10 FAY EL students to be eligible for the points. EL proficiency is worth 5% and EL growth is worth 5%. EL calculations include students in grades K-8 with an EL need (e.g., with a less than proficient score on AZELLA in the current or prior fiscal year), including recent arrivals. EL students must also be FAY on AZELLA. To be included in the EL growth calculations, two test records are required.

Acceleration/Readiness

The acceleration/readiness indicator is worth 10% of a K-8 school's letter grade. Not all schools are eligible for each metric. Acceleration/Readiness points are capped at 10. The following will be utilized in the Acceleration/Readiness indicator to determine eligibility and points:

Metric	N-size of 10 or more FAY students to be eligible	Points Available to Earn
Grade 8 Math Performance	√	5
Grade 3 ELA Minimally Proficient	√	5
Chronic Absenteeism	10 N-size FAY and non-FAY	2
Subgroup Improvement	√ By subgroup	2 points per subgroup up to 6 points total
Special Education Inclusion	√	2

Grade 8 Math Performance

The intent of this metric is to incentivize schools to annually increase their percent highly proficient and decrease their minimally proficient on the Grade 8 AzM2/MSAA Mathematics assessment. Schools can earn points for either the increase of highly proficient, the decrease of minimally proficient, and/or maintaining applicable thresholds of highly proficient and minimally proficient students. It is possible for a school to earn only 2.5 points for meeting highly proficient or minimally proficient criteria or 5 points for meeting both highly proficient and minimally proficient criteria.

COVID-19 Notification:
Calculation will remain the same due to no letter grades being awarded. However, the comparison will be to the state assessment results from the 2018-2019 school year.

Grade 3 ELA Reduction in FAY Minimally Proficient

The intent of this metric is to reduce the percentage of grade 3 students who are minimally proficient on AzM2 ELA from prior year to current year. To be eligible for these points, a school must meet the minimum N-Size of 10 FAY students. Schools can earn five points two different ways:

- Decreasing the school's prior year percent minimally proficient
- Have a current year percent minimally proficient less than 12%

COVID-19 Notification:
Calculation will remain the same due to no letter grades being awarded. However, the comparison will be to the state assessment results from the 2018-2019 school year.

Reduction in Chronic Absenteeism

The intent of this metric is to reduce the school's chronic absenteeism percentage from prior year to current year. This calculation includes grades 1-8 students. All absences reported for a student whether excused or unexcused are included. To be eligible for these points, a school must meet the minimum N-Size of 10 students. Schools can earn two points two different ways:

- Decreasing the school's prior year chronic absenteeism percentage
- Have a current year chronic absenteeism percentage less than 4%

Subgroup Improvement

The intent of this metric is to see annual improvement in subgroup (SG) proficiency in AzM2 ELA and Math. To be eligible, each subgroup must have a least 10 FAY students at the school level. Each subgroup is evaluated separately. The N-count must be met in both the current year and prior year.

Special Education Inclusion

The intent of this metric is to reward schools that have greater than the state average (9.17%) of special education (SPED) students in general education classroom at least 80% of the day. This calculation includes grades K-8 students. To be eligible for these points, a school must meet the minimum N-Size of 10 FAY students.

Bonus Points

Schools can earn bonus points two different ways.

Special Education Enrollment

Schools with high populations of FAY students enrolled in special education earned bonus points. Bonus points were awarded based on the distance from the school's percentage to the statewide average (9.89%).

Science Proficiency

Schools earned up to 3 bonus points on science achievement of FAY students in the following ways:

- A school's current year percent tested is greater than or equal to 95% = 3 points
- A school's current year percent tested is less than is greater than or equal to 90% and less than 95% = 1.5 points.

9-12 Model: A-F Components Summary

Using the A-F Letter Grade Accountability System, Arizona makes accountability determinations for 9-12 schools based on student academic outcomes, subgroup improvement, graduation rate, and college and career readiness. Specifically, the metrics include the following:
1. Percentage of full academic year (FAY) proficient students on the AzM2 assessment and Multi-State Alternate Assessment
2. Longitudinal indicators of relative student gain and growth towards proficiency/maintenance of proficiency
3. EL proficiency and growth
4. Graduation rate
5. Indicators to measure students' readiness to succeed in a career or post-secondary enrollment.
6. Bonus Points

Indicator	Component	FAY	Grades	Cohort/Year (if applicable)
Proficiency	AzM2 ELA and Math	✓	10	
	MSAA ELA and Math	✓	11	
Growth	Student Growth Percentiles (SGPs)	✓	Cohort 2023 (all students in Cohort 2023 regardless of enrolled grade, typically 10th grade)	
EL	EL Proficiency and Growth	✓	9-12	
Graduation Rate	4-year Graduation rate		12	Cohort 2020
	5-year Graduation rate		12	Cohort 2019
	6-year Graduation rate		12	Cohort 2018
	7-year Graduation rate		12	Cohort 2017
College and Career Readiness	Career and College Readiness Self-Report		9-12	2021 Cohort that were enrolled by October 1 and continuously enrolled until May 1 or graduated early in the current or a prior fiscal year.
Bonus	Science Proficiency	✓	9 or 10th grade students assessed in the current school year	
	Special Education Enrollment	✓	9-12	
	Enrollment in Post-secondary/military		9-12	Cohort 2019 and Cohort 2020

The 9-12 model is based on a scale of 0-100 points for schools that have all available indicators; the scale is adjusted for those indicators that don't meet the N-size. All indicators must have a minimum of 10 FAY students to count with the exception of special education enrollment bonus points and science proficiency bonus points. All indicators are capped at the total percent possible.

Weight	Indicators
30%	Proficiency on Statewide Assessment
20%	Growth
10%	Proficiency and Growth - English Language Learners*
20%	Graduation Rate
20%	College and Career Readiness
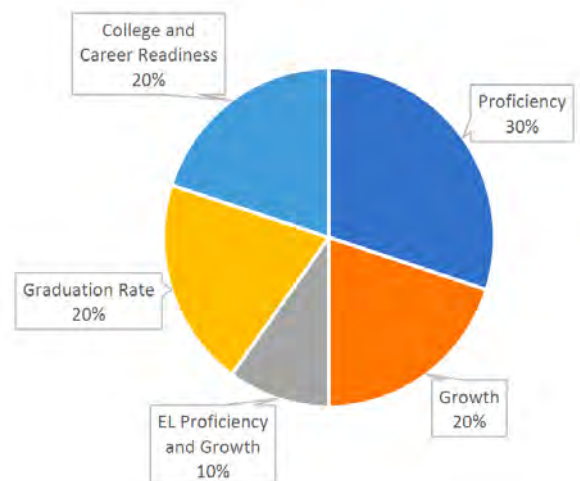
* Recently Arrived English Learner (RAEL) students in year 1 and year 2 are excluded from proficiency calculations for ELA only.

Proficiency
Proficiency results are worth 30% of a 9-12 school's letter grade. The 2021 AzM2 or MSAA ELA and Math were utilized for grade 10 (11th grade for MSAA) FAY students. , or Menu of Assessments State Administration ELA and Math scores are utilized for grades 9-12 FAY students. Proficiency points are capped at 30.

Percent Tested
Proficiency calculations are impacted by percent tested. Schools that do not meet the 95% test threshold mandated by law are negatively impacted on the proficiency calculation. 95% tested was more complicated at the high school level as students may have taken the AzM2 or the MSAA assessments in grades 10 (Cohort 2023) or 11 (Cohort 2022), respectively. Thus, if a student tested on one of these assessments in school year 2021, they counted as tested. Note: The AzM2 assessment was administered to all Grade 10 students. The MSAA assessment was administered to all Grade 11 students with severe cognitive disabilities.

Growth
The purpose of the growth indicator is to recognize the academic growth a student has made in the past year, even if he/she has not yet reached grade-level proficiency. State statute mandates that the selected growth model measures even the lowest achieving students and the extent to which they grow academically from one year to the next.

Growth results are worth 20% of a 9-12 school's letter grade. Schools must have a minimum of 10 FAY students with a Student Growth Percentile (SGP) in each subject, ELA and Math, to be eligible for growth points. The SGP for ELA is capped at 10, and the SGP for Math is capped at 10 this making growth points capped at 20.

Student Growth Percentile
SGP describes how a "typical" student's current-year test score is compared with the current-year test scores of those students with the exact same prior test scores – his/her academic peers. In this sense, SGP is a "norm-referenced quantification (Betebenner, 2011, p. 3) of student academic growth. An SGP of 40 means that the student grew more than 40% of his academic peers in a year. The use of this particular type of normed growth measure ensures that very low and/or high performing students can receive high growth scores relative to their peers with the same academic achievement history.

Due to cancellations of statewide assessments in spring 2020, the growth indicator for the 2020-2021 school year was calculated by linking the 2018-2019 school year data (and prior year data if available in 2017-2018) to the 2020-2021 school year data. Therefore, student growth in 2021 was calculated across a two-year span, and is referenced as a "skip-year" methodology, which was modeled and validated.

In order to examine the "slow down" due to the pandemic, growth was compared to pre-pandemic student growth from 2017 to 2019 – these are the baseline norms. For an example, see K-8.

Data in the Growth Model
For FY21, valid student assessment results had to meet four criteria for inclusion in the growth model:
1. Student enrollment generates ADM in any Arizona public school.
2. Student has a test record from the 2020-2021 school-year.
3. Student also has a test record from the 2018-2019 school-year in the same subject.
4. Each student's test records in the current year and in the prior year(s) should be "consecutive" with the grade in the 2019-2020 to be skipped.

EL Proficiency and Growth
English Learner proficiency and growth is worth 10% of a 9-12 school's letter grade. Schools must have a minimum of 10 FAY EL students to be eligible for the points. EL proficiency is worth 5% and EL growth is worth 5%. (See K-8)

Subgroup Improvement
The intent of this metric is to see annual growth in subgroups' proficiency in ELA and Mathematics assessments and graduation rates, and see annual decreases in subgroups' dropout rates. The following subgroups are evaluated for proficiency in ELA and Mathematics assessments, graduation rates, and dropout rates: White, Hispanic, Native American/Alaskan Indian, Asian, African American, Pacific Islander, Two or More Races, English Learner, Special Education, Economically Disadvantaged, Parent in Military (reported for Fiscal Year 2019 only, no points available). Subgroup improvement is worth 20% of a 9-12 school's letter grade. The subgroup proficiency component is worth 10%, subgroup graduation rate is worth 5%, and subgroup dropout rate is worth 5%.

Graduation Rate
The graduation (Grad) rate indicator is worth 20% of a 9-12 school's letter grade. Schools must have a minimum of 10 students in the 4-year cohort to be eligible for points. Graduation rate points include two measures each worth 10%: (1) a 4-, 5-, 6-, and 7-year calculation and (2) an improvement calculation.

<u>4-, 5-, 6-, and 7-year Calculation (10%)</u>
The intent of the multiple year calculation is to hold schools accountable to multiple cohorts. The cohorts are weighted accordingly with the greatest emphasis on the 4-year cohort (see below). These points are capped at 10.

Graduation Rate	Cohort	Weight
4-year	2020	5%
5-year	2019	4%
6-year	2018	2.5%
7-year	2017	0.5%

<u>Graduation Improvement Calculation (10%)</u>
The intent of the improvement calculation is for schools to increase their 4-year graduation rate compared to prior year or maintain a current year 4-year graduation rate of 90% or higher. (Improvement Rate Points – 0, 5, or 10 points)

College and Career Ready
The College and Career Ready (CCR) indicator is worth 20% of a 9-12 school's letter grade. College and Career Ready points are self-reported through ADEConnect. Schools must have 10 students in the cohort of 2021 to be eligible for these points. These students should have been enrolled by October 1 and stayed continuously enrolled until May 3, 2021. Cohort 2021 students who graduated either during fiscal year 2021 or a prior fiscal year would also be included.

A student level spreadsheet from ADE was used to assist with the calculations for CCR. Each student's high school experience was reviewed to determine how each student performed on the metrics outlined below. Total points earned by the school were submitted to ADE through ADEConnect. The total Earned Points were scaled by the ADE Accountability Team to the 20% weighting adopted by the SBE.

Scoring:
- A student who accumulates at least 1 indicator point will generate 10 CCR points.
- A student who accumulates at least 2 indicator points will generate 20 CCR points.
- A student who accumulates at least 1 indicator point of Red indicators and at least 1 indicator point of Blue indicators will generate 22 CCR points.
- Schools that increase their prior year post-secondary and military enrollment percentage or have 85% enrollment earn one bonus point.
- A student receives 0.5 points for each credential/certificate or license earned (maximum of 1.0 points in this category)

Bonus Points
Schools were able to earn bonus points three ways. Bonus points are added after the total score is calculated.

College and Career Readiness
Schools that increase their prior year post-secondary and military enrollment percentage or have 85% enrollment earn on bonus point which is calculated and self-reported as part of the CCRI data submission.

Special Education Enrollment
Schools with high populations of FAY students enrolled in special education earned bonus points. Bonus points were awarded based on the distance from the school's percentage to the statewide average (8.59%).

Science Proficiency
Schools earned up to 3 bonus points on science achievement of FAY students in the following ways:

- A school's current year percentage of proficient students is greater than or equal to 95% = 3 points
- A school's current year percentage of proficient students is less than is greater than or equal to 90% and less than 95%.

A-F School Letter Grade Components/Indicator Data for CFSD

The letter grade component data displayed below reflect the current letter grades, which were carried over from 2019, and the 2021 A-F component calculations just released on November 1, 2021. The ADE advises that care be taken when working with data from the 2020-2021 school year due to the impact of the COVID-19 pandemic. While the ADE has made every effort to calculate the measures as they were in previous years, the pandemic may have impacted the data in unforeseen ways. Therefore, all analysis needs to take pandemic effects into account (e.g., missing data, change in demographics) or other unforeseen impacts.

Catalina Foothills High School		Weight 2019	Weight 2021	Points 2019	Points 2021
Category					
Proficiency		30%	30%	23.92	20.12
Subgroup Improvement	Subgroup Proficiency Improvement	10%	X	1.25	X
	Subgroup Graduation Rate Improvement	5%	X	3.33	X
	Subgroup Dropout Rate Improvement	5%	X	2.50	X
EL Proficiency and Growth		10%	10%	10.00	10.00
Growth		X	20%	X	20.00
Graduation Rate	Graduation Rate (4-, 5-, 6-, 7-)	10%	10%	10.00	10.00
	Graduation Rate (4-year)	10%	10%	10.00	10.00
College and Career Ready – Self-Report Score		20%	20%	19.00	17.80
All Students Total Points				80.00	87.92
Total Points Eligible				100.00	100.00
Percentage Earned				80%	87.92%
Total Bonus Points*				4.00	3.50
Total Points Earned				84.00	91.42
Percent Tested				97.13%	89.62%
A-F Letter Grade				**A**	**N/A**

*Bonus Points: Special Education – 1.00, Science – 1.5, CCR – 1.00

Canyon View	Weight 2019	Weight 2021	Points 2019	Points 2021
Category				
Proficiency/Stability Proficiency	30%	30%	28.18	24.22
Growth	50%	50%	45.25	43.00
EL Proficiency and Growth	10%	10%	N/A	5.00
Acceleration/Readiness	10%	10%	10.00	4.00
All Students Total Points			83.43	76.22
Total Points Eligible			90.00	100
Percentage Earned			92.70%	76.22%
Total Bonus Points*			5.00	5.00
Total Points Earned			97.70	81.22
Percent Tested*			99.54%	96.89%
A-F Letter Grade			**A**	**N/A**

*Bonus Points: Special Education – 2.00, Science – 3.00

Manzanita				
Category	Weight 2019	Weight 2021	Points 2019	Points 2021
Proficiency/Stability Proficiency	30%	30%	29.20	26.03
Growth	50%	50%	36.49	41.71
EL Proficiency and Growth	10%	10%	N/A	10.00
Acceleration/Readiness	10%	10%	10.00	9.00
All Students Total Points			75.69	86.74
Total Points Eligible			90.00	100
Percentage Earned			84.10%	86.74%
Total Bonus Points*			3.00	2.50
Total Points Earned			87.10	89.24
Percent Tested*			99.68%	90.39%
A-F Letter Grade			**A**	**N/A**

*Bonus Points: Special Education – 1.00, Science – 1.50

Sunrise Drive				
Category	Weight 2019	Weight 2021	Points 2019	Points 2021
Proficiency/Stability Proficiency	30%	30%	30.00	28.53
Growth	50%	50%	43.12	48.16
EL Proficiency and Growth	10%	10%	10.00	9.00
Acceleration/Readiness	10%	10%	10.00	6.00
All Students Total Points			93.12	91.69
Total Points Eligible			100.00	100.00
Percentage Earned			93.12%	91.69
Total Bonus Points*			3.00	4.00
Total Points Earned			96.12	95.69
Percent Tested*			99.47%	98.44%
A-F Letter Grade			**A**	**N/A**

*Bonus Points: Special Education – 1.00, Science – 3.00

Ventana Vista				
Category	**Weight 2019**	**Weight 2021**	**Points 2019**	**Points 2021**
Proficiency/Stability Proficiency	30%	30%	26.20	24.48
Growth	50%	50%	38.44	49.30
EL Proficiency and Growth	10%	10%	10.00	---
Acceleration/Readiness	10%	10%	10.00	6.00
All Students Total Points			84.63	79.78
Total Points Eligible			100.00	100.00
Percentage Earned			84.63%	79.78%
Total Bonus Points*			1.50	1.00
Total Points Earned			86.13	80.78
Percent Tested*			99.23%	89.26%
A-F Letter Grade			**A**	**N/A**

*Bonus Points: Special Education – 1.00, Science – 0

Esperero Canyon				
Category	**Weight 2019**	**Weight 2021**	**Points 2019**	**Points 2021**
Proficiency/Stability Proficiency	30%	30%	23.22	19.22
Growth	50%	50%	33.62	42.29
EL Proficiency and Growth	10%	10%	10.00	10.00
Acceleration/Readiness	10%	10%	10.00	6.00
All Students Total Points			76.84	77.51
Total Points Eligible			100.00	100.00
Percentage Earned			76.84%	77.51%
Total Bonus Points*			1.50	1.50
Total Points Earned			78.34	79.01
Percent Tested*			99.78%	89.00%
A-F Letter Grade			**B**	**N/A**

*Bonus Points: Special Education – 1.50, Science – 0

Orange Grove				
Category	Weight 2019	Weight 2021	Points 2019	Points 2021
Proficiency/Stability Proficiency	30%	30%	26.69	21.17
Growth	50%	50%	41.25	40.45
EL Proficiency and Growth	10%	10%	9.00	---
Acceleration/Readiness	10%	10%	10.00	2.00
All Students Total Points			86.95	63.62
Total Points Eligible			100.00	100.00
Percentage Earned			86.95%	63.62%
Total Bonus Points*			5.00	3.50
Total Points Earned			91.95	67.12
Percent Tested*			99.53%	91.05%
A-F Letter Grade			**A**	**N/A**

*Bonus Points: Special Education – 2.00, Science – 1.50

Arizona's Federal Accountability School Improvement (CSI/ATSI & TSI)

In 2015, ESSA (Every Student Succeeds Act) replaced No Child Left Behind (NCLB) and became the latest iteration or extension of the 1965 Elementary and Secondary Education Act (ESEA). ESSA's provisions help to ensure success for all students and all schools. Among these provisions is the expectation that there will be accountability and action to effect positive change in Arizona's lowest performing schools, where groups of students are not making progress and where graduation rates are low over extended periods of time.

Under ESSA, each state is required to create an ESSA State Plan and to identify the criteria that will be used to identify the schools that need the most support as part of their plan. Arizona uses data from the state's accountability system (A-F letter grade components) to identify schools in need of improvement in three categories:

- Comprehensive School Improvement (CSI)
- Additional Targeted Support and Improvement (ATSI)
- Targeted School Improvement (TSI)

Arizona received a waiver for federal accountability and school identification requirements for the 2020-2021 school year due to the COVID-19 pandemic. The ADE will be identifying comprehensive, targeted, or additional targeted support and improvement schools using data from the 2021-2022 school year to designate schools in need of improvement in the fall of 2022.

School identification is based on multiple years of data, and schools must have at least 20 eligible students in order to receive points for a given indicator for CSI and must have a subgroup within that school of at least 20 for ATSI and TSI. In the event a school or subgroup has less than 20 students for an indicator, then their performance is assessed as a proportion of remaining indicators. Each type of school improvement identification method has a different schedule.

Identification of schools for CSI, ATSI, and TSI are for federal purposes only. This is not factored into the Arizona accountability system's letter grade components.

Below is an overview of each of the improvement categories and the school identification schedule:

Comprehensive School Improvement (CSI)
Schools are identified for CSI due to low achievement or a low graduation rate:
- Perform in the bottom 5% of all schools (low achievement) [K-8: proficiency, growth, EI proficiency and growth, chronic absenteeism; 9-12: proficiency EI proficiency and growth] (Title I funded schools only)
- Graduate less than 2/3 or 66.7% of their fifth year cohort (low graduation) [9-12: graduation rate, dropout rate]

Schools must test at last 95% of their students or will have a penalty applied to their proficiency calculation. All schools can be identified as CSI due to subgroups not exiting ATSI regardless of Title 1 status. Identification occurs four years after a school's subgroups are identified for ATSI.

    Identification for CSI (bottom 5% of Title I funded schools) is as follows:
- Year Identified: Fall of 2022 using 2021-2022 data
- Identification Schedule: Every three years (e.g., 2022, 2025, 2028)

    Identification for CSI (all schools – based on subgroups not exiting low achievement for four years) is as follows:
- Year Identified: Fall of 2023 using previous 4 years of ATSI indicators
- Identification Schedule: Four years after reidentification

Additional Targeted Support and Improvement (ATSI)
Schools are identified for ATSI based on subgroup performance. Designations are determined for each individual subgroup with N-size of 20 or more:
- Underperforming subgroups of students based on the CSI criteria
- Subgroup is performing below the bottom 5% of Title I funded schools

    Identification for ATSI (all schools) is as follows:
- Year Identified: Fall of 2022 using 2021-2022 data
- Identification Schedule: Every three years (e.g., 2022, 2025, 2028)

Any ATSI school identified in 2018-2019 that does not exit after four years, based on closing the achievement gap between subgroups or raising the achievement level of low achieving subgroups, will be identified as CSI.

CSI – State Letter Grades: Schools will also be identified for CSI based on their performance on Arizona's state accountability system. Schools that receive a letter grade of "F" are identified as CSI. All schools are eligible for being identified for CSI based on their letter grade regardless of their Title I status. Schools will be identified for CSI annually due to receiving an "F" letter grade.

Targeted Support and Improvement (TSI)
Schools are identified for TSI based on subgroup performance. Designations are determined for each individual subgroup with N-size of 20 or more:
- Consistently underperforming subgroups of students based on the CSI criteria
- Subgroup is performing below the bottom 2% (of Title I funded schools) on ATSI indicators during the prior three years of most current data

Identification for TSI (all schools) is as follows:
- Year Identified: Fall of 2022 using ATSI indicators from 2021-2022, 2020-2021, 2018-2019 data
- Identification Schedule: Annually (but initial identification will not occur until 2025)

Arizona State University (ASU) and Helios' Decision Center for Educational Excellence, along with the ASU Mary Lou Fulton Teachers College and the Arizona Department of Education (ADE), released a 2020 Arizona Teacher Workforce Report and an Impact of the Pandemic report, comparing the teacher workforce across two years. The Impact of the Pandemic report, released on July 28, 2021, found that the pandemic had a limited impact on the size and demographics of the 2021 teaching workforce. The teacher workforce data in 2017, 2018, and 2019 was also examined to ensure that 2020 was not an anomaly. The ADE Teacher Information Application (TIA) database was used as the source for the data. Districts use this application to report demographic information on their teachers.

Major Findings

The pandemic had a limited impact on the size of the 2021 teaching workforce overall. There was not a mass exodus due to retirement and resignations as some predicted. The number of teachers did not change significantly – this held in both rural and urban areas and most counties. The average age of classroom teachers and years of experience remained unchanged, indicating there was not a massive outflow of experienced teachers and an influx of young, new teachers.

However, where teachers worked did change with more teachers working in charter schools and online schools. District schools had a slight decline in the number of teachers, but the charter increase was three times the district decline. Federal relief dollars and some level of budget stability provided by the state may have prevented a more dramatic decline in the number of teachers at district schools.

CFSD had 11 teachers who left the district during the 2020-2021 school year due to COVID. Nine teachers did not return to in-person teaching when the district returned to in-person learning on October 26, 2020. Two teachers did not return to in-person teaching, but continued to work in a fully remote position for the remainder of the year with a reduced contract.

OVERALL	CHARTERS	DISTRICTS
38,000 fewer students OCTOBER 2020 vs 2019	**18,000** more students IN 2020	**55,000** fewer students IN 2020

There were around 38,000 fewer students in school in October 2020 compared to October 2019. However, charters had over 18,000 more students in 2020, while districts had around 55,000 fewer students.
The number of certain types of teachers did change. The number of reading interventionists, bilingual teachers, and elective teachers all declined. These declines represent a loss of specialized support in high need areas and highlight a pressing need to fill in learning gaps, especially in reading and English language acquisition in school years ahead.

Teacher retirements did not surge. There was not a massive move toward retirement as predicted. Teachers start hitting their maximum retirement multiplier at 30 years, which could be age 52 for teachers that started teaching right out of college. Instead of seeing more teachers in this age bracket retire, the number of teachers aged 50 to 55 increased from 2020 to 2021 by 7.9%. Due to the pandemic, social isolation measures in place,

such as limited travel and social events, may have made retirement less attractive to these teachers. If that is true, the state may face higher teacher retirements over the next few years.

CFSD had 6 teacher retirements at the end of the 2020-2021 school year. No one indicated that it was due to the pandemic.

The percentage of teachers aged 65+ leaving the classroom increased by 5%. The cause is not known, but it could be due to health concerns or discomfort with technology. Some districts have reported losing more teachers due to technology-related issues than health concerns.

The average age of teachers was virtually unchanged in 2020 vs. 2021 (42.87 to 42.88), as were years of experience (11.05 to 11.06). However, there has been a steady increase in the average age of teachers and years of experience over the past five years. The average age has been slowly increasing year over year (42.5, 42.63, 42.79, 42.87, 42.88), as have years of experience (10.43, 10.50, 10.76, 11.05, 11.06).

Teacher demographics remained mostly the same. The number of classroom teachers did not significantly change. There were no significant differences in urban, suburban, or rural areas and most counties.

The number of classroom teachers in traditional school districts did not change significantly. Federal relief dollars and some level of budget stability from the state relieved some amount of budgetary pressure.

- The percentage of women as classroom teachers remained steady overall at 76%.
- The percentage of White and Hispanic teachers was unchanged. The number of Asian and African American teachers was up 3.1% and 3.8%, respectively. The number of Native teachers declined by 6.1%.
- The number of teachers in non-Title I eligible schools increased by 6.5%. However, looking at long-term trends, it appears this may be due to small numbers in 2020, with 2021's numbers being consistent with 2019 and earlier.

ASIAN TEACHERS	AFRICAN AMERICAN TEACHERS	NATIVE TEACHERS
3.1%	**3.8%**	**6.1%**
increase	increase	decline
OVERALL	OVERALL	OVERALL

Other Changes

# OF TEACHERS	# OF TEACHERS	# OF EMERGENCY SUBSTITUTES
13.9%	**136%**	**25.2%**
increase	increase	decrease
CHARTER SCHOOLS	ONLINE SCHOOLS	OVERALL

While teacher numbers stayed stable overall, non-core teachers that support student learning declined: bilingual teachers declined by 12.2%; the small number of Native American Culture teachers shrank from 74 to 64 or 13.5%; reading interventionists were down 2.8%, and 'other' teachers, who typically provide electives, were down

3%. These declines reflect a loss of support for our most vulnerable students. These trends will impact the achievement of Arizona's students for many years to come unless steps are taken to correct these trends.

> **In previous years, CFSD would receive 20-30 applications for positions. Today, we may receive 1-5 applications. The more specialized the position, the fewer applications we receive.**

The number of reading interventionists declined from 922 to 690 – a loss of talent and expertise from our schools. One hundred fifty-one left teaching altogether, 67 became regular classroom teachers, and 14 added classroom teaching to their intervention duties. When there is a shortage of qualified teachers, the loss of the most expert teachers will make it harder to serve our students well in the future.

The number of teachers working in charter schools increased significantly, up 13.9% (8,645 to 9,843). Some charter schools remained in-person and increased their enrollment as parents left schools that were delivering remote learning. Many of the larger online schools are also charter schools, so their growth also fueled this increase.

Teachers working in online schools also increased significantly, up 136%, from 788 teachers to 1860. This increase in teachers also reflects increased capacity, with more schools (district and charter) and more teachers per school. There was an increase of 13 new online schools, 11 of which were district schools, with 920 teachers. District online schools accounted for 62% of online schools in 2020 and 69% in 2021. The average number of teachers per online school also went up (20 to 36) while traditional schools were relatively unchanged (30 to 31). Most alternative certified teacher classifications were down. There were fewer Emergency Substitutes (-25.2%), Emergency Teachers (-14.9%), and international teachers (-2.7%). The one category that increased was non-certified teachers (+16.9%), who almost exclusively teach in charter schools.

Implications

Teacher staffing numbers may change next year. Districts did not significantly adjust the teacher workforce despite the loss of student enrollment. However, if enrollment loss continues, public schools could resort to layoffs.

Although there was no spike in retirements this year, public schools may be facing an increase in retirements in the next few years. The increase in teachers aged 50 to 55 may signal a coming wave of retirements. Also, workers – including teachers – tend to stay in jobs when the economy is tight and move when the economy grows.

As the pandemic wanes and the economy picks up, teachers may leave in higher numbers. Both of these scenarios suggest that the teacher shortages we have been experiencing may only get worse. Last year one in every twenty district classrooms had an emergency teacher, emergency substitute, or other less well prepared and inexperienced instructors.

A clear focus on students' academic and social-emotional needs is vital to long-term success.
The loss of specialty teachers such as bilingual teachers and reading interventionists likely means that student needs were not as adequately met as when students were attending in person.

Online instructional schools, particularly those not classified as district part-time credit recovery or acceleration program, have historically had poor academic outcomes such as low test scores, graduation rates, and post-secondary attainment rates. As more students enroll, these online schools may be serving a different type of student than they traditionally have. Closely monitoring student outcomes in this environment will be critical.

As more students return to in-person instruction, they may need extra supports to catch up. The availability of

federal dollars provides an opportunity to give that support, but the spending must be targeted and well implemented. Although districts may have lower enrollments, there will be a need for skilled teachers to help students make up for any gaps in learning due to the pandemic.

New delivery models are likely here to stay.
The significant increase in online schools and the almost universal exposure to this type of instruction means it is likely that this will be an instructional delivery option well into the future. In the past, the student outcomes of online programs have been mixed, with some excellent programs and others that have abysmal results. As more families choose an online option for their students, it is increasingly vital that we focus on the effectiveness of the schools and teachers' ability to deliver quality instruction remotely.

From: *The Impact of the Pandemic: Comparing the 2020 and 2021 Arizona Teacher Workforce*. July 2021 (Ashley Bennet, Luis Silva, Joe O'Reilly, Edith Gummer, & Bruce Duplanty).

APPENDIX

The ultimate test of how much students are learning is their ability to transfer knowledge and skills to new or non-routine contexts. Since 2011, CFSD has been using the College and Work Readiness Assessment (CWRA+), an external assessment developed by the Council for Aid to Education (CAE), to measure students' higher-order thinking and written communication skills within multi-disciplinary contexts. Since 2002, more than 800,000 students at over 1,300 secondary and higher education institutions globally have completed CAE-designed performance assessments.

Currently, CFSD is the only public school district in Arizona that uses the CWRA+ as a tool for measuring college and career skills that determine student preparedness for college and the workplace. Our annual use of the CWRA+ makes it clear that higher-order thinking and learning is valued in CFSD because that is the emphasis of the assessment and its metrics.

The CWRA+ is administered to freshmen and juniors to provide longitudinal data at the high school level. The results provide the district with information on college readiness (national comparison of CFSD juniors to seniors in other participating high schools and college freshmen, and internal growth at the high school – actual freshmen to junior gains by cohort. The results from grade 9 provide valuable information for the elementary and middle school levels when analyzing local performance tasks and progress from grade-to-grade.

What is the CWRA+?
The CWRA+ is an online assessment that measures college and career readiness against standards determined by experts from K-12, higher education, and the workforce. The assessment consists of two components. The main component is a Performance Task – a multi-step problem that requires students to think critically while analyzing a real-world scenario and developing a viable yet creative solution. The performance task measures analytic reasoning, problem solving, and written communication – three essential skills needed for success in postsecondary endeavors.

The second component consists of a range of selected-response questions aimed at measuring quantitative and scientific reasoning, the ability to read and evaluate information, and the ability to recognize logical fallacies. When combined with the score of the Performance Task, the result is a reliable and valid measurement of critical thinking skills that are in high demand, not just in college, but among employers (Source: Council for Aid to Education). Our freshmen continue to do well compared to other freshmen that take the test nationally, and our juniors' average scores have been far above the average of all other CWRA+ seniors taking the test.

Table 22 displays a comparison of the summary CWRA+ mean scores for CFSD freshmen and freshmen from all participating CWRA+ institutions. Summary results include the Total CWRA+ score and scores for the performance task and selected-response questions. The CFSD freshmen continue to do well when compared with other freshmen at CWRA+ participating schools, but the gap is narrowing. The mean Total CWRA+ Score decreased by 49 points from 2018 to 2019. The test was re-normed in 2018, which may have impacted the overall decline in scores. A reminder that the scores across institutions do not change from year to year because those results come from the norm sample. The norm sample is a larger pool of student results that are used for scaling, equating, and benchmarking, and only get updated every 5 years or so, according to a psychometrician at the Council for Aid to Education (CAE), developers of the CWRA+.

Table 22. Summary CWRA+ Results for CFSD Freshmen & for Freshmen Across All CWRA+ Schools

Summary CWRA+ Results for CFSD Freshmen & for Freshmen Across All CWRA+ Schools						
	Total CWRA+ Score		Performance Task		Selected-Response Questions	
Year	CFSD	All Schools	CFSD	All Schools	CFSD	All Schools
2017-2018	1054	981	1055	976	1052	985
2018-2019	1021	969	1021	949	1021	979
2019-2020	972	969	972	949	972	979

Note: CWRA+ institutional scores represent freshmen at all participating institutions.
2019-2020 scores unrounded are 971.91, 972.11, and 971.71.

Table 22-A displays a comparison of the summary CWRA+ mean scores for CFSD juniors and the senior scores for all participating CWRA+ institutions. Summary results include the Total CWRA+ score and scores for the performance task and selected-response questions. Although all three scores for CFSD juniors declined from 2018-2019 to 2019-2020, they are still performing well when compared to seniors at all participating CWRA+ schools: +30 for total score, +72 for performance task, and the same score for selected response questions.

Table 22-A. Summary CWRA+ Results for CFSD Juniors & for Seniors Across All CWRA+ Schools

Summary CWRA+ Results for CFSD Juniors & for Seniors Across All CWRA+ Schools						
	Total CWRA+ Score		Performance Task		Selected-Response Questions	
Year	CFSD	All Schools	CFSD	All Schools	CFSD	All Schools
2017-2018	1097	1058	1100	1058	1094	1058
2018-2019	1085	1037	1111	1018	1058	1043
2019-2020	1067	1037	1090	1018	1043	1043

Note: CWRA+ institutional scores represent seniors at all participating institutions.

Note: Beginning in spring 2019, the CAE began reporting junior results across participating CWRA+ institutions. The results for juniors in spring 2020 are as follows: (1) Total CWRA+ Score: 994, (2) Performance Task: 968, and (3) Selected-Response Questions: 1005. The mean scores of CFSD juniors indicate that they are outperforming juniors in other participating CWRA+ institutions by 73, 122, and 38 points, respectively, for the 2019-2020 school year.

Table 23 and Table 23-A display the distribution of CFSD and all participating high school freshmen performance in the subscore categories of Analysis & Problem Solving, Writing Effectiveness, and Writing Mechanics on the Performance Task (PT) component of the CWRA+. Subscores range from 1 (low) to 6 (high). Each value is associated with a specific set of response characteristics in the CWRA+ scoring rubric. Below is the rubric continuum for Analysis and Problem Solving taken from the overall rubric that is used for scoring student responses.

CWRA+ Scoring Rubric

	1	2	3	4	5	6
Analysis and Problem Solving Making a logical decision or conclusion (or taking a position) and supporting it by utilizing appropriate information (facts, ideas, computed values, or salient features) from the Document Library	May state or imply a decision/conclusion/position Provides minimal analysis as support (e.g., briefly addresses only one idea from one document) or analysis is entirely inaccurate, illogical, unreliable, or unconnected to the decision/conclusion/position	States or implies a decision/conclusion/position Provides analysis that addresses a few ideas as support, some of which is inaccurate, illogical, unreliable, or unconnected to the decision/conclusion/position	States or implies a decision/conclusion/position Provides some valid support, but omits or misrepresents critical information, suggesting only superficial analysis and partial comprehension of the documents May not account for contradictory information (if applicable)	States an explicit decision/conclusion/position Provides valid support that addresses multiple pieces of relevant and credible information in a manner that demonstrates adequate analysis and comprehension of the documents; some information is omitted May attempt to address contradictory information or alternative decisions/conclusions/positions (if applicable)	States an explicit decision/conclusion/position Provides strong support that addresses much of the relevant and credible information, in a manner that demonstrates very good analysis and comprehension of the documents Refutes contradictory information or alternative decisions/conclusions/positions (if applicable)	States an explicit decision/conclusion/position Provides comprehensive support, including nearly all of the relevant and credible information, in a manner that demonstrates outstanding analysis and comprehension of the documents Thoroughly refutes contradictory evidence or alternative decisions/conclusions/positions (if applicable)

The rubric continuum is best described as improvement over a grades 9-16 spectrum, so the goal is for high schools to bring their students a certain distance (peaking at the 3s and 4s) with colleges/universities doing the rest. The data in Table 23 and Table 23-A show that CFSD and other freshmen in participating high schools are generally performing at the expected level at the beginning of their high school experience in all three subscore areas of the performance task.

Table 23. Distribution of CWRA+ Performance Task Subscores in Percentages for CFSD Freshmen

Distribution of CWRA+ Performance Task Subscores in Percentages for CFSD Freshmen																		
	Analysis & Problem Solving						Writing Effectiveness						Writing Mechanics					
Rubric Score	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
2017-2018	1	8	37	38	15	0	1	9	28	44	18	1	0	3	28	50	19	1
2018-2019	1	10	44	35	8	1	1	12	36	36	13	2	0	3	33	53	11	1
2019-2020	1	14	37	37	11	0	0	12	31	42	13	2	0	5	25	52	18	0

Source: *CWRA+ Institutional Reports for Catalina Foothills School District, Spring 2018 – Spring 2020*

Table 23-A. Distribution of CWRA+ Performance Task Subscores in Percentages for Freshmen Across CWRA+ Schools

Distribution of CWRA+ Performance Task Subscores in Percentages for Freshmen Across CWRA+ Institutions																		
	Analysis & Problem Solving						Writing Effectiveness						Writing Mechanics					
Rubric Score	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
2017-2018	4	18	40	31	6	0	4	19	38	31	7	0	3	9	36	45	7	0
2018-2019	4	19	38	31	7	0	4	19	36	32	8	1	2	9	35	44	10	1
2019-2020	4	19	38	31	7	0	4	19	36	32	8	1	2	9	35	44	10	1

Source: *CWRA+ Institutional Reports for Catalina Foothills School District, Spring 2018 – Spring 2020*

Table 23-B and Table 23-C display the distribution of CFSD junior performance and the performance of seniors in participating CWRA+ schools in the subscore categories of Analysis & Problem Solving, Writing Effectiveness, and Writing Mechanics on the Performance Task (PT). The percentage of CFSD juniors scoring at 3-6 for Analysis and Problem Solving (96%), Writing Effectiveness (96%), and Writing Mechanics (98%) is higher than all seniors (64%, 85%, 94% respectively) across all participating CWRA+ institutions. Based on these results, CFSD juniors are outperforming seniors, on average, by 32%, 11%, and 4%, respectively, across participating CWRA+ institutions.

Table 23-B. Distribution of CWRA+ Performance Task Subscores in Percentages for CFSD Juniors

Distribution of Performance Task Subscores in Percentages for CFSD Juniors																		
	Analysis & Problem Solving						Writing Effectiveness						Writing Mechanics					
Rubric Score	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
2017-2018	1	10	31	42	14	3	0	9	28	38	20	4	0	3	24	44	25	3
2018-2019	1	5	24	41	27	2	0	3	18	35	39	5	0	2	12	44	39	4
2019-2020	0	4	23	43	27	3	0	4	16	42	33	5	0	2	11	38	43	6

Source: *CWRA+ Institutional Reports for Catalina Foothills School District, Spring 2018 – Spring 2020*

Table 23-C. Distribution of CWRA+ Performance Task Subscores in Percentages for Seniors Across CWRA+ Schools

Distribution of Performance Task Subscores in Percentages for Seniors Across CWRA+ Schools																		
	Analysis & Problem Solving						Writing Effectiveness						Writing Mechanics					
Rubric Score	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
2017-2018	4	13	32	37	12	2	3	14	31	35	14	2	2	5	24	49	17	3
2018-2019	3	14	32	16	14	2	2	14	30	36	16	3	1	5	25	46	20	3
2019-2020	3	14	32	16	14	2	2	14	30	36	16	3	1	5	25	46	20	3

Source: *CWRA+ Institutional Reports for Catalina Foothills School District, Spring 2018 – Spring 2020*

Table 24 below displays the CFSD freshman results and the results for freshmen across all participating CWRA+ schools for the Selected Response Questions (SRQ) subscore categories and the overall mean SRQ score. Overall, CFSD freshmen are performing just below freshmen from participating CWRA+ schools with an overall mean score that is 7 points lower. The strongest area for our freshmen continues to be the critical reading and evaluation component of this part of the assessment.

Table 24-A displays the results for CFSD juniors and the seniors across all participating CWRA+ schools. Overall, CFSD juniors are scoring similarly with seniors at participating CWRA+ schools with an overall mean score of 1043. For all three years, the junior subscores for Scientific & Quantitative Reasoning have been lower than the "All Schools" subscores. CFSD juniors continue to outperform senior at "All Schools in Critical Reading & Evaluation and Critique an Argument.

Table 24. Comparison of CWRA+ Selected Response Questions: Mean Subscores and Overall Mean Scores for CFSD Freshmen & Freshmen Across Participating Institutions

Selected Response Questions: Mean Freshmen Subscores and Overall SRQ Score								
Scientific & Quantitative Reasoning		Critical Reading & Evaluation		Critique an Argument		Overall Mean SRQ Score		
Year	CFSD	All Schools	CFSD	All Schools	CFSD	All Schools	CFSD	All Schools
2017-2018	502	475	514	479	493	476	1052	985
2018-2019	480	478	506	472	488	471	1021	979
2019-2020	465	478	475	472	475	471	972	979

Note: The selected-response subscores are reported on a scale ranging approximately from 200 to 800.
Source: *CWRA+ Institutional Reports for Catalina Foothills School District, Spring 2018 – Spring 2020*

Table 25-A. Comparison of CWRA+ Selected Response Questions: Mean Subscores and Overall Mean Scores for CFSD Juniors & All Seniors Across Participating Institutions

Selected Response Questions: Mean Subscores and Overall SRQ Score							
Scientific & Quantitative Reasoning		Critical Reading & Evaluation		Critique an Argument		Overall Mean SRQ Score	
Year	CFSD	All Schools	CFSD	All Schools	CFSD	All Schools	CFSD	All Schools
2017-2018	502	507*	541	508*	527	508*	1094	1058
2018-2019	496	502*	512	501*	521	500*	1058	1043
2019-2020	488	502*	510	501*	508	500*	1043	1043

*Note: Scores are compared to seniors at all participating schools.
The selected-response subscores are reported on a scale ranging approximately from 200 to 800.
Source: *CWRA+ Institutional Reports for Catalina Foothills School District, Spring 2018 – Spring 2020*

Mastery Levels are criterion-referenced indicators of performance on the CWRA+. They provide distinctions in student performance relative to students' proficiency in critical thinking and written communication. The Mastery Levels are determined by students' Total CWRA+ scores. As a district, they are determined by each class level's mean Total CWRA+ score. Each mastery level – Below Basic, Basic, Proficient, Accomplished, and Advanced – corresponds to specific evidence of critical thinking and written communication skills.

Table 26 displays the Total CWRA+ mean scores and Mastery Levels for CFSD freshmen. The overall mean mastery level for freshmen is "Basic," which is lower than the "Proficient" level from the fall 2018 test administration. Fifty (50) percent of freshmen scored at the proficient, accomplished, and advanced mastery levels, which is an 11% decline from 2018.

Table 26. Comparison of Mean Total CWRA+ Score and Mean Mastery Levels of CFSD Freshmen

Summary of Total CWRA+ Mean Scores and Mastery Levels: CFSD Freshmen						
	Mean Total CWRA+ Score	Mean Mastery Level	Percent Below Basic	Percent Basic	Percent Proficient	Percent Accomplished	Percent Advanced
2017-2018	1054	Proficient	1	27	32	37	3
2018-2019	1021	Proficient	2	38	28	30	3
2019-2020	972	Basic	4	46	28	21	1

Source: *CWRA+ Institutional Reports for Catalina Foothills School District, Spring 2018 – Spring 2020*

Table 26-A displays the mean Total CWRA+ scores and Mastery Levels for CFSD juniors from 2018-2020. The mastery level for our juniors moved from "Accomplished" to "Proficient." This could be attributed to a reduction (by 6%) in the percentage of students moving from the "Advanced" level to either "Accomplished" or "Proficient" and the new 2018 norms for the test.

Table 26-A. Comparison of Mean Total CWRA+ Score and Mean Mastery Levels of Juniors

Summary of Total CWRA+ Mean Scores and Mastery Levels: Juniors						
	Mean Total CWRA+ Score	Mean Mastery Level	Percent Below Basic	Percent Basic	Percent Proficient	Percent Accomplished	Percent Advanced
2017-2018	1097	Accomplished	1	25	23	40	12
2018-2019	1085	Proficient	1	24	26	43	6
2019-2020	1067	Proficient	2	26	28	38	6

Source: *CWRA+ Institutional Reports for Catalina Foothills School District, Spring 2018 – Spring 2020*

Approximately 256 colleges/universities have participated in testing freshmen using the Collegiate Learning Assessment (CLA+). An analysis of the Total CWRA+/CLA+ mean scores from 2017-2020, as displayed in Table 27 below, shows that CFSD juniors, overall, are college ready based on this college and career readiness metric. This is the first year since we began testing that CFSD juniors or seniors have not outperformed college freshmen who are taking the Collegiate Learning Assessment (CLA+), which parallels the design of the CWRA+. Below are the mean scores for CFSD juniors and college/university freshmen that are taking the CLA+ at participating schools.

Table 27: Comparison of CFSD Juniors to Freshmen at Participating CLA+ Colleges/Universities

Comparison of Total CWRA+/CLA+ Scores of CFSD Juniors to Freshmen at Participating CLA+ Colleges/Universities		
Year	CFSD Juniors (CWRA+)	College Freshmen (CLA+)
2016-2017	1138	1032
2017-2018	1097	1031
2018-2019	1085	1056
2019-2020	1043	1056

The mean score for the performance task and the selected-response questions for the participating colleges/universities was 1049 and 1059 respectively. The mean scores for CFSD juniors were 1,111 for the performance task and 1058 for the selected-response questions. The district's focus on transfer of learning and the systematic implementation of performance assessments that measure transfer likely contribute to the ongoing positive achievement results on the CWRA+.