2022-2023 Outcomes Report

Prepared by Roderick MacNeal, Jr., Ed.D.
Assistant Superintendent for Curriculum and Instruction

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Objectives

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- Share statewide results and trends in Math and ELA
- Share district 2022 MCAS results
- Next Steps

MCAS Test Administration 2019-2022

2022 school year was the first full MCAS administration for grades 3-8 since 2019. Grade 10 students in 2022 had not taken an MCAS test since 2019 (grade 7).

Year	Grades 3-8	Grade 10
2019	Full test administration	Full test administration
2020	**No tests administered**	**No tests administered**
2021	**Half-test administered**	Full test administered
2022	Full test administered	Full test administered

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State Results and Trends

2022 MCAS summary notes **(STATE DATA)**

- The 2022 MCAS showed mixed results compared with 2021 scores:
  - Math scores increased
  - English Language Arts (ELA) scores declined
  - Science scores increased slightly
- When we compare these results to pre-pandemic levels, we have a ways to go across all subject areas to fully recover learning losses
- In ELA, two focus areas for improvement
  - Impact of lower writing scores
  - Early literacy challenges
- Student absenteeism remains a challenge across the board for recovery efforts

2019-2022 English Language Arts MCAS Results by Grade (STATE DATA)

Variable losses across grades 3-7 while grade 8 showed signs of recovery in 2022.
Total impact of 20% loss in grades 3-8 students meeting expectations since 2019.

Grade	2019 % M/E	2021 % M/E	2022 % M/E	Change M/E 19-21	Change M/E 21-22	Change M/E 19-22
03	56	51	44	-5	-7	-12
04	52	49	38	-3	-11	-14
05	52	47	41	-5	-6	-11
06	53	47	41	-6	-6	-12
07	48	43	41	-5	-2	-7
08	52	41	42	-11	1	-10
3-8	**52**	**46**	**41**	**-6**	**-5**	**-11**
10	**61**	**64**	**58**	**+3**	**-6**	**-3**

2019-2022 English Language Arts MCAS Results by Grade Span

(STATE DATA)

Early literacy can be isolated as area of concern while middle grades showed signs towards recovery.

Grade	2019 % M/E	2021 % M/E	2022 % M/E	Change M/E 19-21	Change M/E 21-22	Change M/E 19-22
3-5	53	49	41	-4	-8	-12
6-8	51	44	41	-7	-3	-10
3-8	52	46	41	-6	-5	-11

2022 ELA MCAS Results by Race/Ethnicity (STATE DATA)

Achievement gaps have remained similar or decreased

Grade	Race/Ethnicity	2019 % M/E	2022 % M/E	Gap vs. White 19	Gap vs. White 22
3-8	African-American	33	26	-26	-22
3-8	Asian	72	63	+13	+15
3-8	Hispanic	33	22	-26	-26
3-8	White	59	48	--	--

Grade	Race/Ethnicity	2019 % M/E	2022 % M/E	Gap vs. White 19	Gap vs. White 22
10	African-American	38	41	-31	-24
10	Asian	78	79	+9	+14
10	Hispanic	37	38	-32	-27
10	White	69	65	--	--

Impact of lower writing scores on grades 3-8 ELA results (STATE DATA)

- Each ELA test contains a required essay and the 2022 writing results declined significantly
  - The number of test takers receiving a score of 0 points increased from 19% in 2019 to 31% in 2022
  - The average points scored per essay decreased in grades 3-8 with larger decreases in grades 3-5

Grade	2019 Average Points Earned	2022 Average Points Earned	Possible Points	% Change 19-22
3-5	2.8	2.1	7	-25%
6-8	3.8	3.3	8	-13%

2019-2022 Mathematics MCAS Results by Grade (STATE DATA)

Recovery across all grades 3-8 in 2022. About 50% of "loss" from 2021 recovered in grades 3 and 4. Additional loss in grade 10 but slowing as compared to 2021.

Grade	2019 % M/E	2021 % M/E	2022 % M/E	Change M/E 19-21	Change M/E 21-22	Change M/E 19-22
03	49	33	41	-16	+8	-8
04	50	33	42	-17	+9	-8
05	48	33	36	-15	+3	-12
06	52	33	42	-19	+9	-10
07	48	35	37	-13	+2	-11
08	46	32	36	-14	+4	-10
3-8	**49**	**33**	**39**	**-16**	**+6**	**-10**
10	**59**	**52**	**50**	**-7**	**-2**	**-9**

2022 Mathematics MCAS Results by Race/Ethnicity (STATE DATA)

Math achievement for African-American and Hispanic students remains low but achievement gaps held steady or improved due to declining achievement of White students.

Grade	Race/Ethnicity	2019 % M/E	2021 % M/E	2022 % M/E	Gap vs. White 19	Gap vs. White 21	Gap vs. White 22
3-8	African-American	28	14	19	-28	-26	-28
3-8	Asian	76	64	69	+20	+24	+22
3-8	Hispanic	29	14	18	-27	-24	-22
3-8	White	56	40	47	--	--	--

Grade	Race/Ethnicity	2019 % M/E	2021 % M/E	2022 % M/E	Gap vs. White 19	Gap vs. White 21	Gap vs. White 22
10	African-American	35	27	26	-32	-33	-33
10	Asian	82	80	78	+15	+20	+19
10	Hispanic	33	26	26	-24	-24	-23
10	White	67	60	59	--	--	--

2019-2022 Science MCAS Results by Grade (STATE DATA)

Small recovery in grades 5 and 8 in 2022.

Grade	2019 % M/E	2021 % M/E	2022 % M/E	Change M/E 19-21	Change M/E 21-22	Change M/E 19-22
05	49	42	43	-7	+1	-6
08	46	41	42	-5	+1	-4
10*			47			

*First administration of the Next-Generation Science MCAS in grade 10 Physics and Biology and not comparable to prior years.

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Understanding Student Growth

Student Growth

- Availability of data allows for return to cohort model for student growth percentile calculations
- Should not be compared to 2021
- Old standards for understanding the means are applicable
  - Mean SGP of 1-19 = Very low growth
  - Mean SGP of 20-39 = Low growth
  - Mean SGP of 40-59 = Typical growth
  - Mean SGP of 60-79 = High growth
  - Mean SGP of 80-99 = Very high growth

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District Student Attendance Data

Student Attendance (2021-22) - End of Year						
Student Group	Attendance Rate	Average # of Absences	Absent 10 or more days	Chronically Absent (10% or more)	Chronically Absent (20% or more)	Unexcused > 9 days
All Student	94.1	10.3	40.9	13.5	2.9	0.9
Female	94.1	10.4	41.4	13.3	2.9	0.9
Male	94.2	10.2	40.4	13.6	2.9	0.9
Low Income	90.2	16.4	54.6	30.2	11.3	3.8
High Needs	92.2	13.3	48.4	21.5	6.9	2.2
LEP English language learner	93.2	10.6	43.6	17.6	5.1	1.3
Students with disabilities	91.6	14.7	51.1	23.4	8.2	3.1
African American/Black	92.0	13.7	48.1	25.0	9.4	3.3
American Indian or Alaskan Native						
Asian	95.0	8.5	33.3	11.8	2.4	0.1
Hispanic or Latino	92.0	13.6	50.3	22.8	6.8	3.3
Multi-race, non-Hispanic or Latino	93.9	10.6	37.6	14.5	3.7	1.1
Native Hawaiian or Pacific Islander						
White	94.3	10.1	41.4	12.2	2.2	0.7

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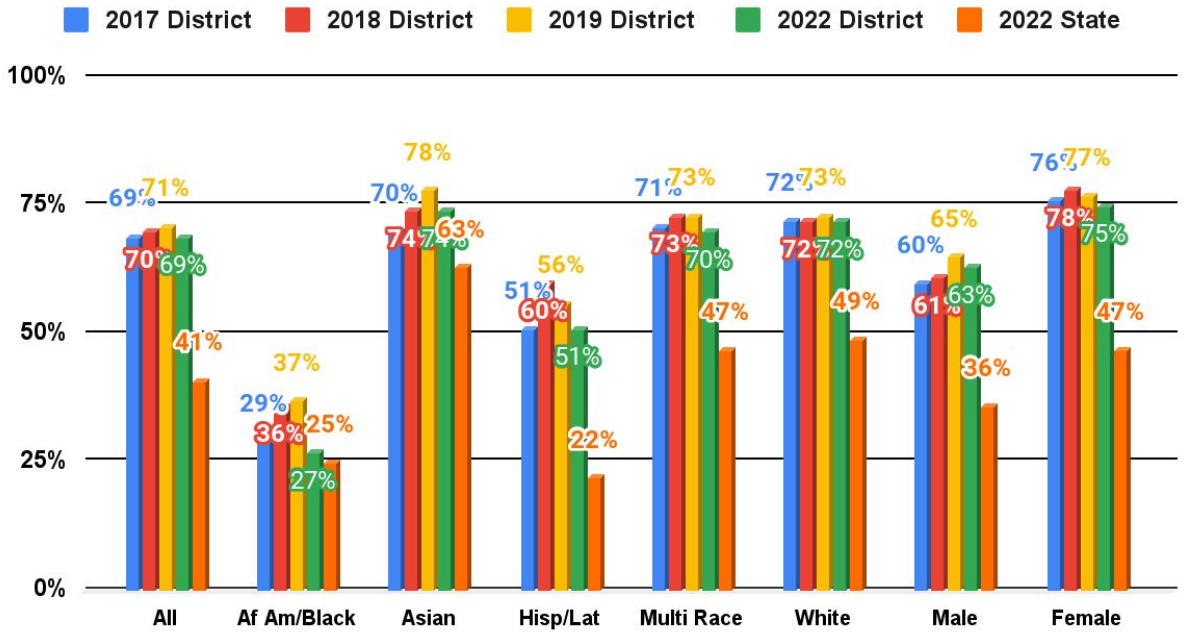
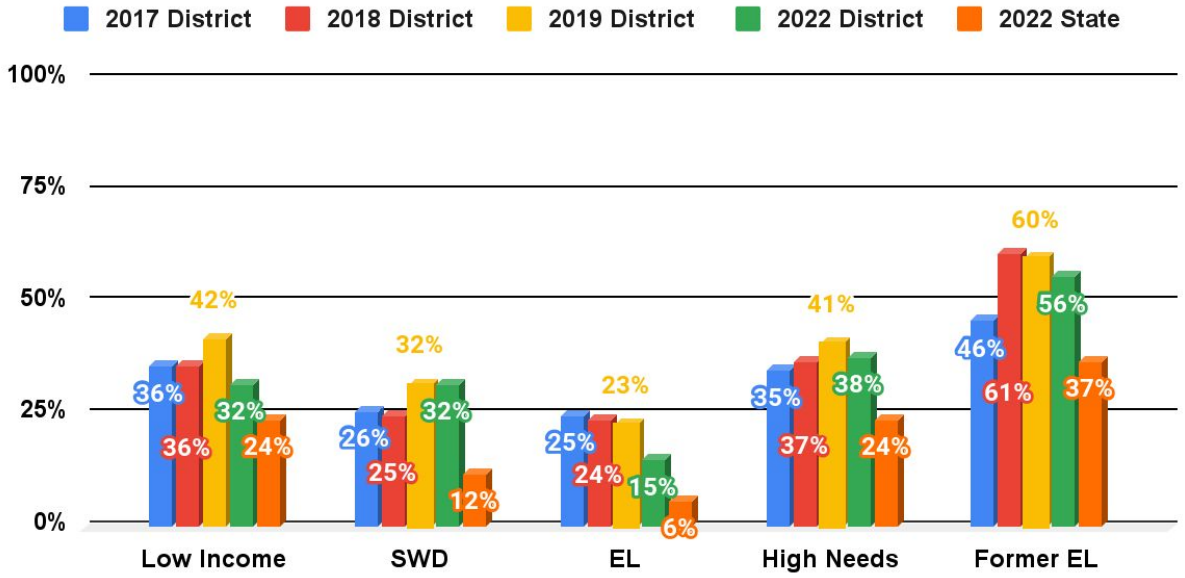
District ELA Achievement Results

Grades 3-8 ELA Race/Ethnicity/Gendar M/E Results

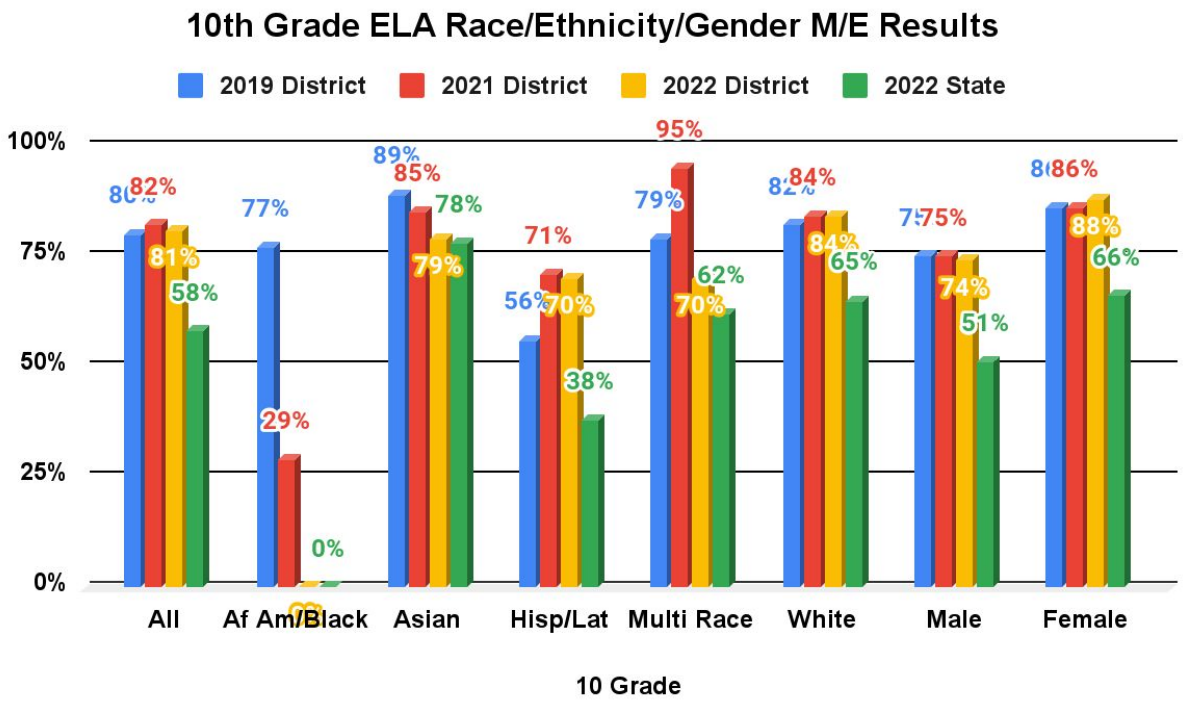


Grades 3-8 ELA Change in Achievement Levels for Race/Ethnicity/Gender 2019 to 2022						Average Scaled Score		
	NM	PM	M/E Trends	Meeting	Exceeding	2019	2022	Diff
All	+2%	+1%	-2%	+3%	-5%	512	508	-4
Af Am/Black	+2%	+8%	-10%	-11%	+1%	492	488	-4
Asian	+1%	+3%	-4%	+2%	-6%	514	510	-4
Hisp/Latino	+7%	–2%	-5%	-2%	-3%	504	499	-5
Multi Race	+4%	-1%	-3%	+9%	-11%	515	508	-7
White	0	+1%	-1%	+5%	-6%	513	509	-4
Male	+1%	+1%	+2%	+2%	-4%	507	504	-3
Female	+1%	+1%	-1%	+4%	-6%	516	512	-4

Grades 3-8 ELA Econ Dis, SWD, EL, High Needs, and Former EL M/E Results

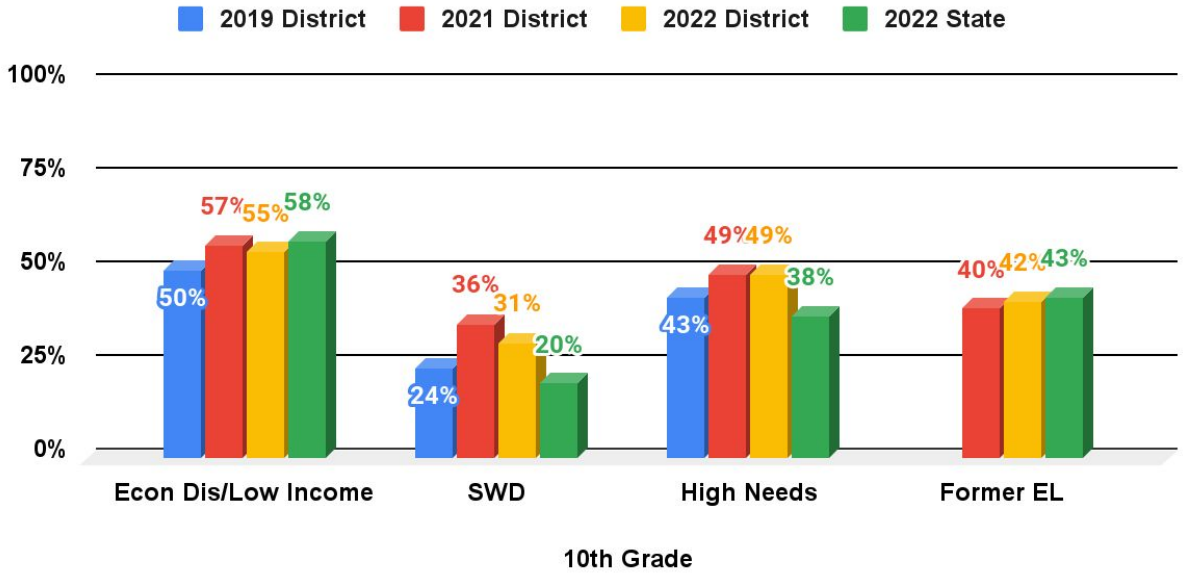


Grades 3-8 ELA Change in Achievement Levels for Econ Dis, SWD, EL, High Needs and Former EL 2019 to 2022						Average Scaled Score		
	NM	PM	M&E Trends	Meeting	Exceeding	2019	2022	Diff
Econ Dis/Low Income	+7%	+3%	-10%	-8%	-3%	495	488	-7
SWD	+5%	-5%	0	-1%	-1%	492	489	-3
EL	+13%	-5%	-8%	-7%	-1%	486	480	-6
High Needs	+5%	-2%	-3%	0	-2%	496	492	-4
Former EL	+3%	+1%	-4%	0	-4%	505	499	-6


10th Grade ELA Race/Ethnicity/Gender M/E Results
2019 District
2021 District
2022 District
2022 State
100%
75%
50%
25%
0%
82%
81%
58%
77%
29%
0%
89%
85%
78%
79%
71%
56%
70%
38%
79%
95%
70%
62%
84%
84%
65%
75%
74%
51%
86%
88%
66%
All
Af Am/Black
Asian
Hisp/Lat
Multi Race
White
Male
Female
10 Grade

10th Grade ELA Change in Achievement Levels for Race/Ethnicity/Gender 2019 to 2022						Average Scaled Score		
	NM	PM	M/E Trends	Meeting	Exceeding	2019	2022	Diff
All	-1%	-1%	-1%	+4%	-3%	517	515	-2
Af Am/Black	-	-	-	-	-	-	-	-
Asian	-10%	+13%	-10%	+6%	-17%	520	511	-9
Hisp/Latino	+14%	-18%	+14%	0%	+14%	501	509	+8
Multi Race	-9%	+9%	-9%	-5%	-4%	514	513	-1
White	+2%	-2%	+2%	+5%	-3%	518	516	-2
Male	-1%	-2%	-1%	+8%	-9%	514	511	-3
Female	+2%	-2%	+2%	0%	+2%	519	518	-1

10th Grade ELA Econ Dis, SWD, High Needs, and M/E Results



10th Grade ELA Change in Achievement Levels for Econ Dis, SWD, EL, High Needs and Former EL 2019 to 2022						Average Scaled Score		
	NM	PM	M/E Trends	Meeting	Exceeding	2019	2022	Diff
Econ Dis/Low Income	+9%	+4%	-13%	-15%	+2%	507	504	-3
SWD	+11%	+2%	-13%	-11%	-1%	499	495	-4
EL	-	-	-	-	-	-	-	-
High Needs	+6%	+1%	-8%	-7%	0%	503	500	-3
Former EL	-	-	-	-	-	-	494	-

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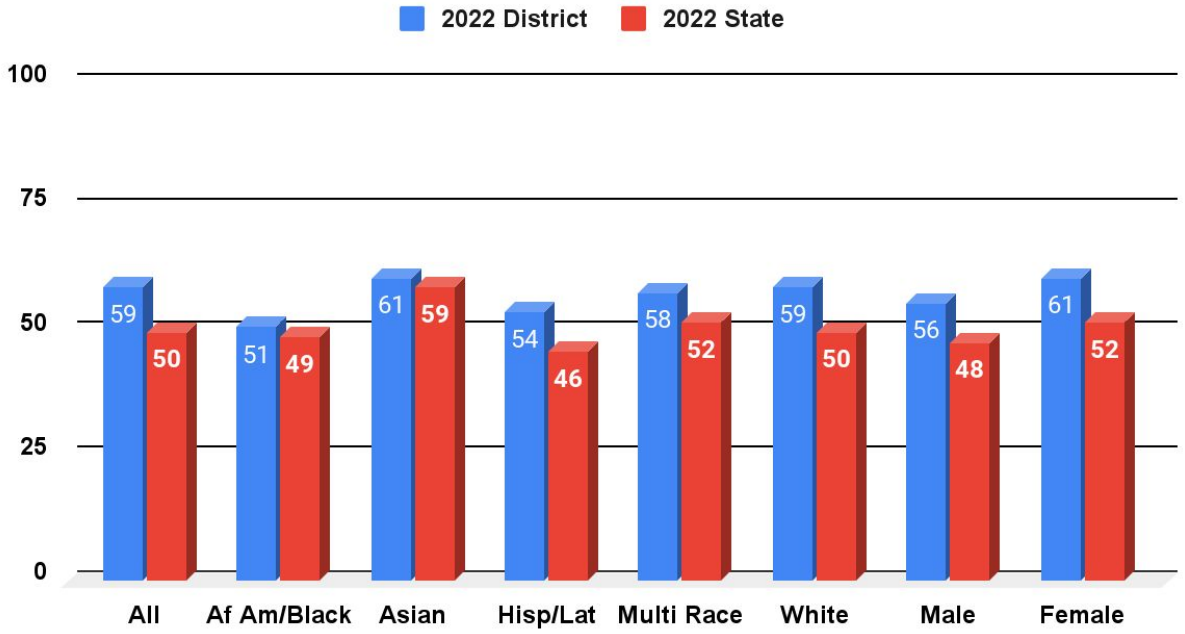
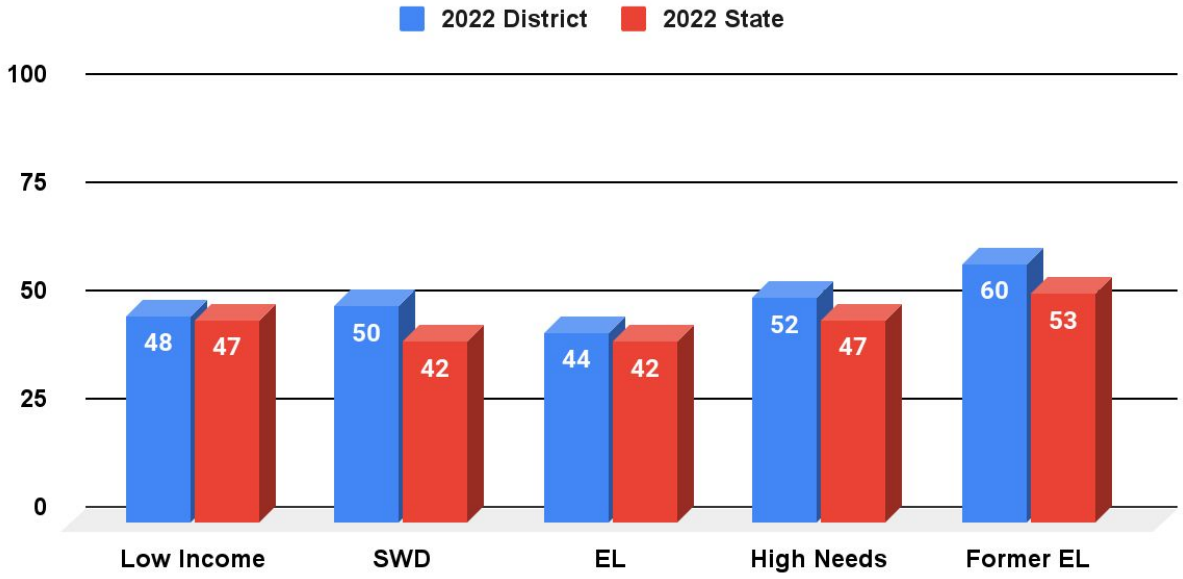
District ELA SGP Data

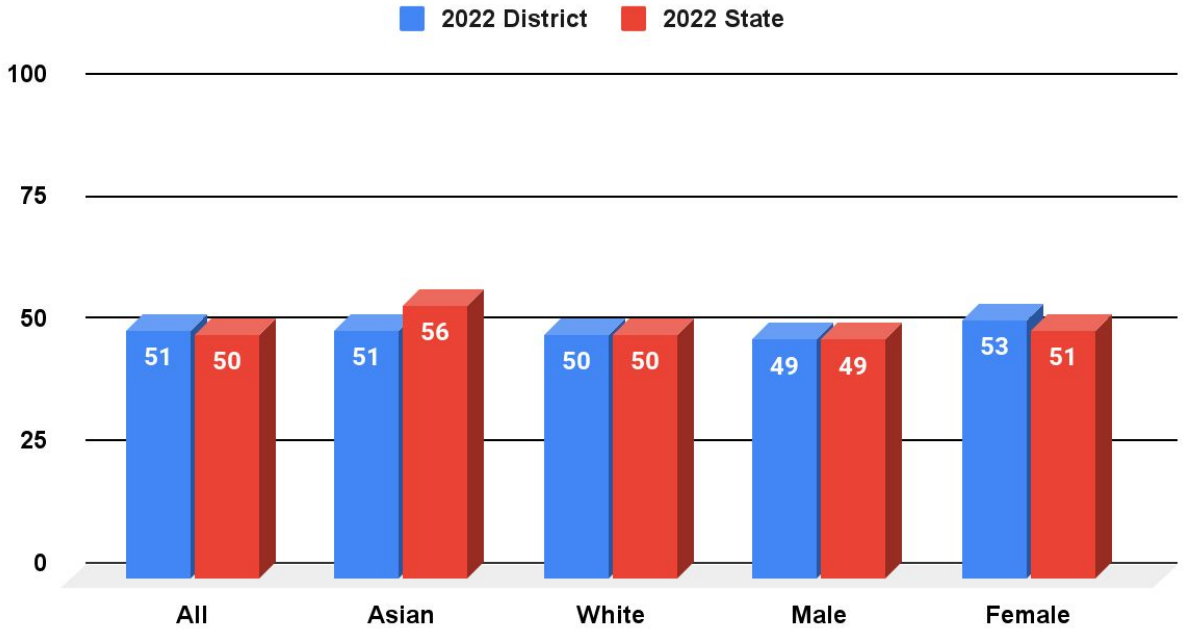
Grades 3-8 ELA Race/Ethnicity/Gender SGP Data



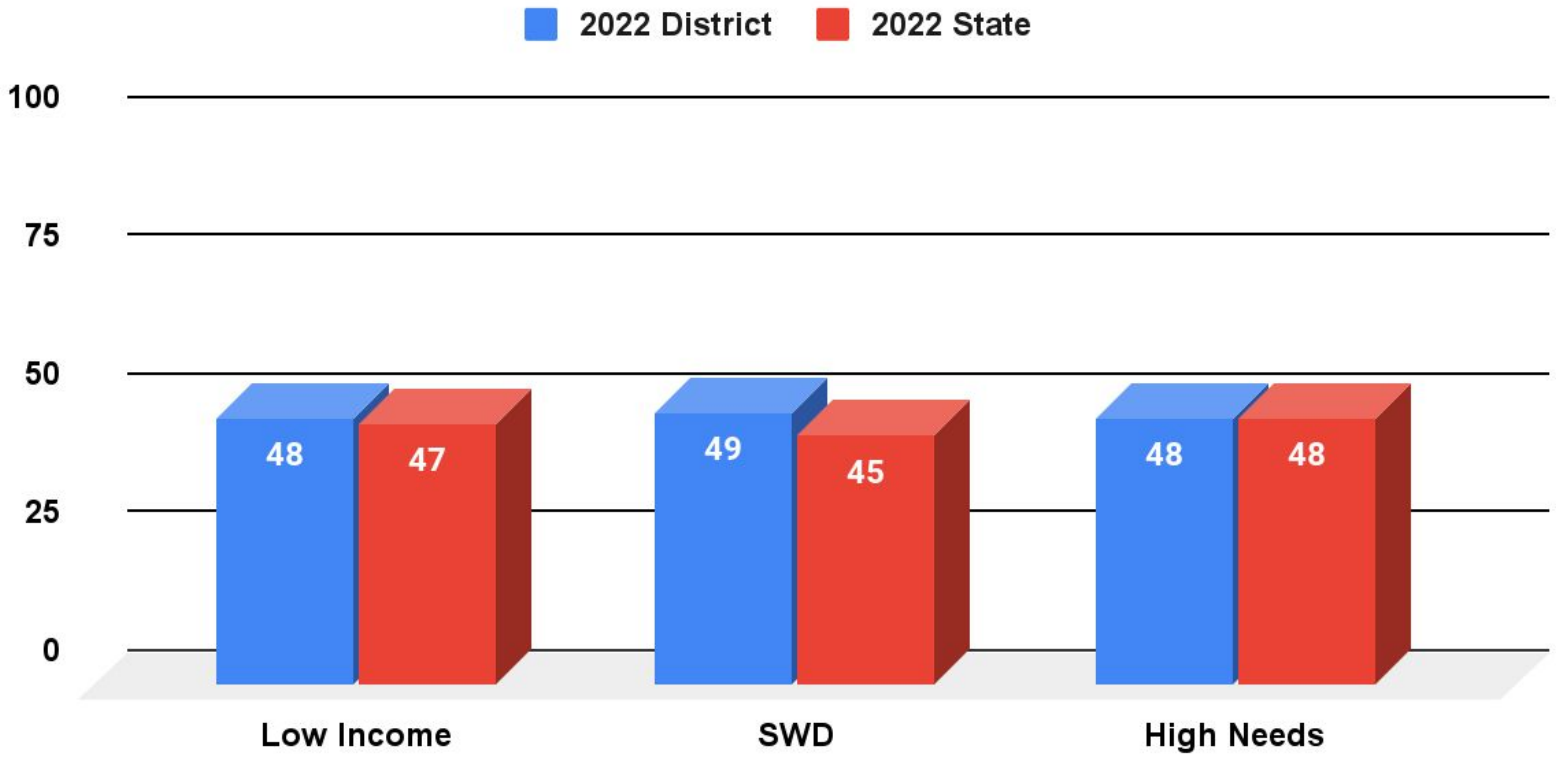
Grades 3-8 ELA Econ Dis, SWD, EL, High Needs, and Former EL SGP Data



10th Grade ELA Race/Ethnicity/Gender SGP Data



10th Grade ELA Econ Dis, SWD, HIgh Needs, Former EL SGP Results



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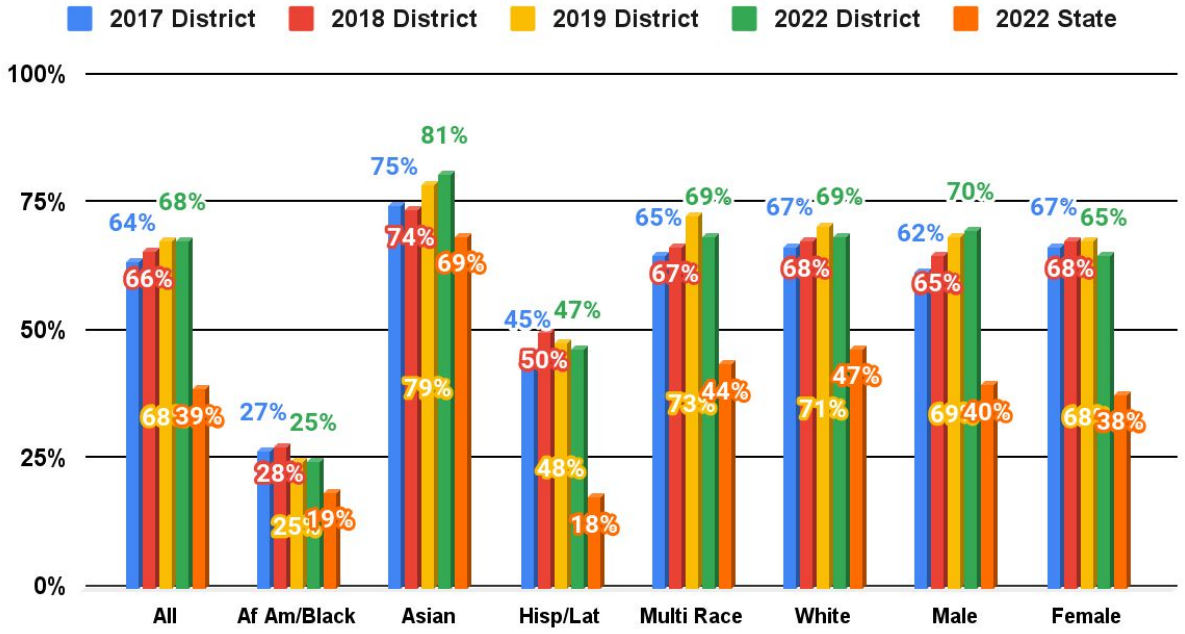
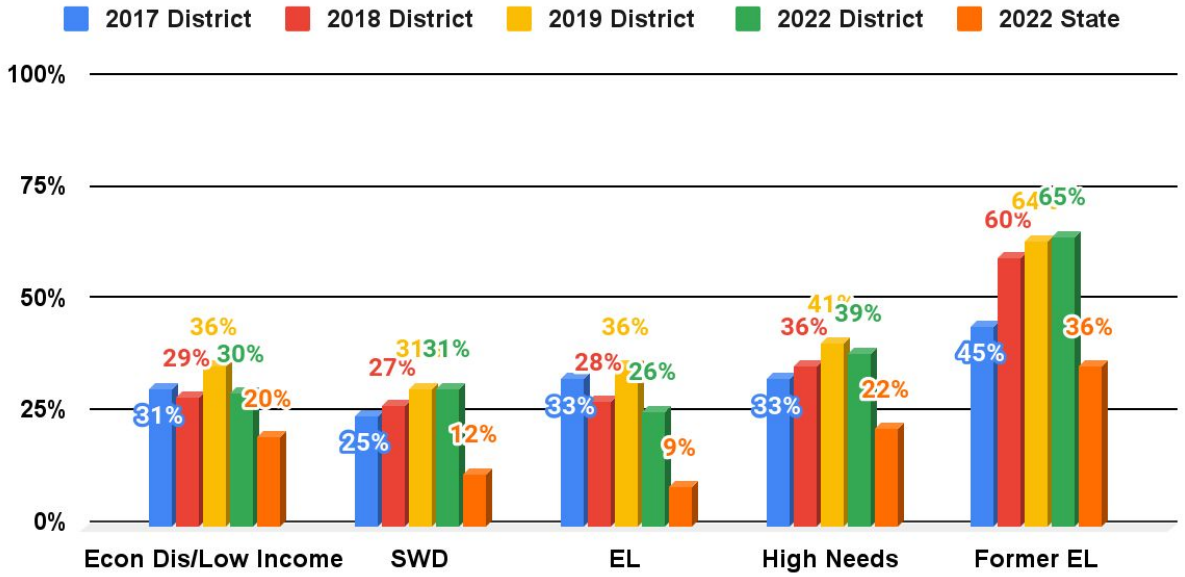
District Math Achievement Results

Grades 3-8 Math Race/Ethnicity/Gender M/E Results



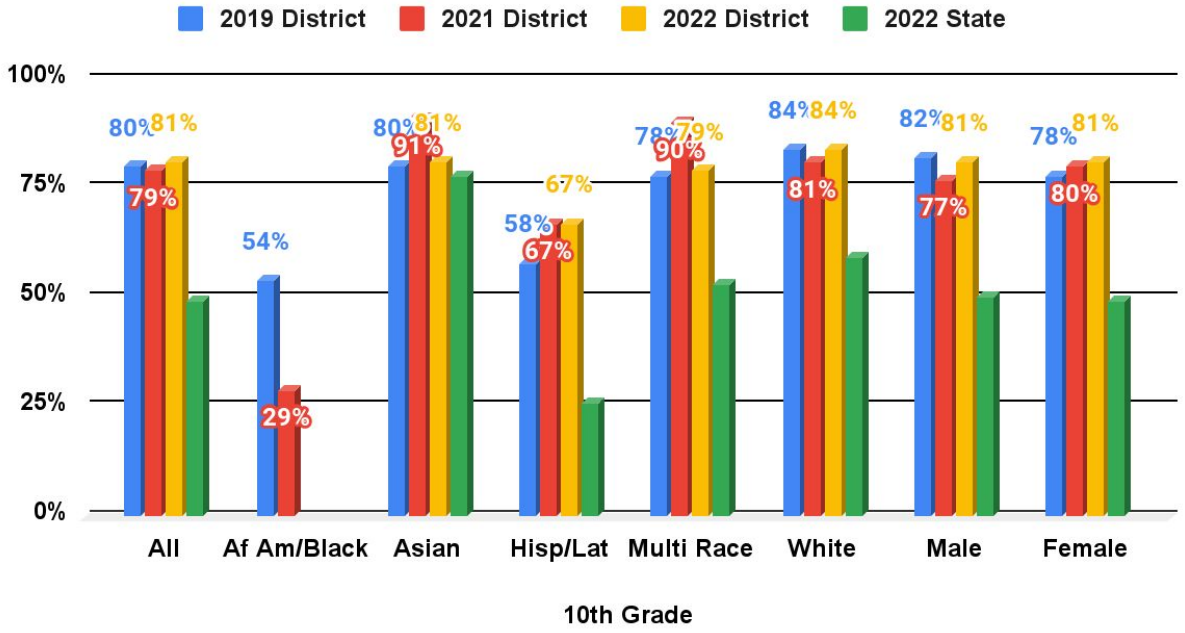
Grades 3-8 Math Change in Achievement Levels for Race/Ethnicity/Gender 2019 to 2022						Average Scaled Score		
	NM	PM	M/E Trends	Meeting	Exceeding	2019	2022	Diff
All	-1%	0%	-1%	0%	0%	510	509	-1
Af Am/Black	+10%	-9%	-0%	0%	0%	488	483	-5
Asian	-1%	-3%	+2%	-3%	+5%	517	519	+2
Hisp/Latino	+1%	0%	-2%	-1%	0%	502	498	-4
Multi Race	+5%	0%	-4%	0%	-4%	513	510	-3
White	-1%	0%	-2%	0%	-2%	511	510	-1
Male	-2%	-2%	-1%	0%	0%	510	510	0
Female	+1%	+2%	-3%	-1%	-1%	510	508	-2

Grades 3-8 Math Econ Dis, SWD, EL, High Needs, and Former EL M/E Results



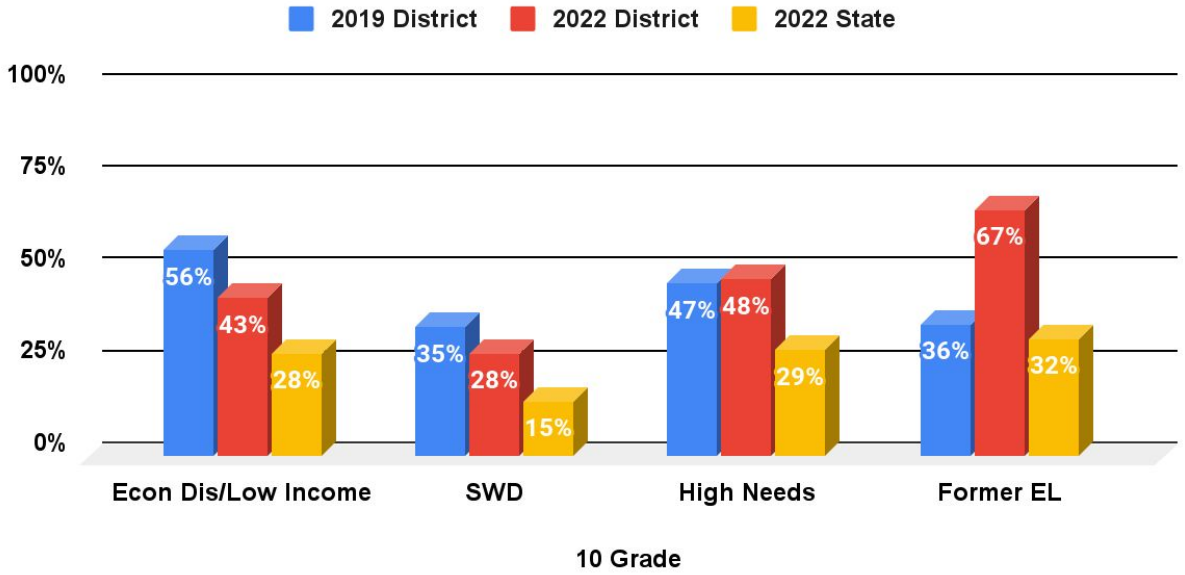
Grades 3-8 Math Change in Achievement Levels for Econ Dis/Low Income SWD, EL, High Needs and Former EL 2019 to 2022						Average Scaled Score		
	NM	PM	M&E Trends	Meeting	Exceeding	2019	2022	Diff
Econ Dis/Low Income	+9%	-2%	-7%	-6%	0%	492	488	-4
SWD	+3%	-3%	0%	-2%	-2%	491	489	-2
EL	+4%	+6%	-10%	-7%	-2%	493	487	-6
High Needs	+3%	-1%	-3%	-1%	-2%	496	494	-2
Former EL	0%	-1%	+1%	+3%	-2%	506	506	0

10 Grade Math Race/Ethnicity/Gender M/E Results



10th Grade Math Change in Achievement Levels for Race/Ethnicity/Gender 2019 to 2022						Average Scaled Score		
	NM	PM	M/E Trends	Meeting	Exceeding	2019	2022	Diff
All	-1%	0%	+1%	-6%	+8%	517	521	+4
Af Am/Black	-	-	-	-	-	-	-	-
Asian	-3%	+2%	0%	+1%	0%	522	521	-1
Hisp/Latino	-7%	-1%	+9%	-6%	+15%	499	505	+6
Multi Race	-2%	+2%	0%	-4%	+5%	516	518	+2
White	-2%	+2%	0%	-8%	+8%	518	523	-5
Male	-2%	+3%	-1%	-13%	+12%	516	522	+6
Female	0%	-3%	+3%	0%	+3%	518	520	+2

10th Grade Math Econ Dis, SWD, High Needs, and Former EL M/E Results



10th Grade Math Change in Achievement Levels for Econ Dis, SWD, EL, High Needs, and Former EL 2019 to 2022						Average Scaled Score		
	NM	PM	M&E Trends	Meeting	Exceeding	2019	2022	Diff
Econ Dis/Low Income	-5%	+18%	-13%	-17%	+4%	499	502	+3
SWD	-6%	+13%	-8%	-10%	+4%	493	498	+5
EL	-	-	-	-	-	-	-	-
High Needs	-6%	+5%	0%	-5%	+7%	499	505	+6
Former EL	-	-	-	-	-	-	522	-

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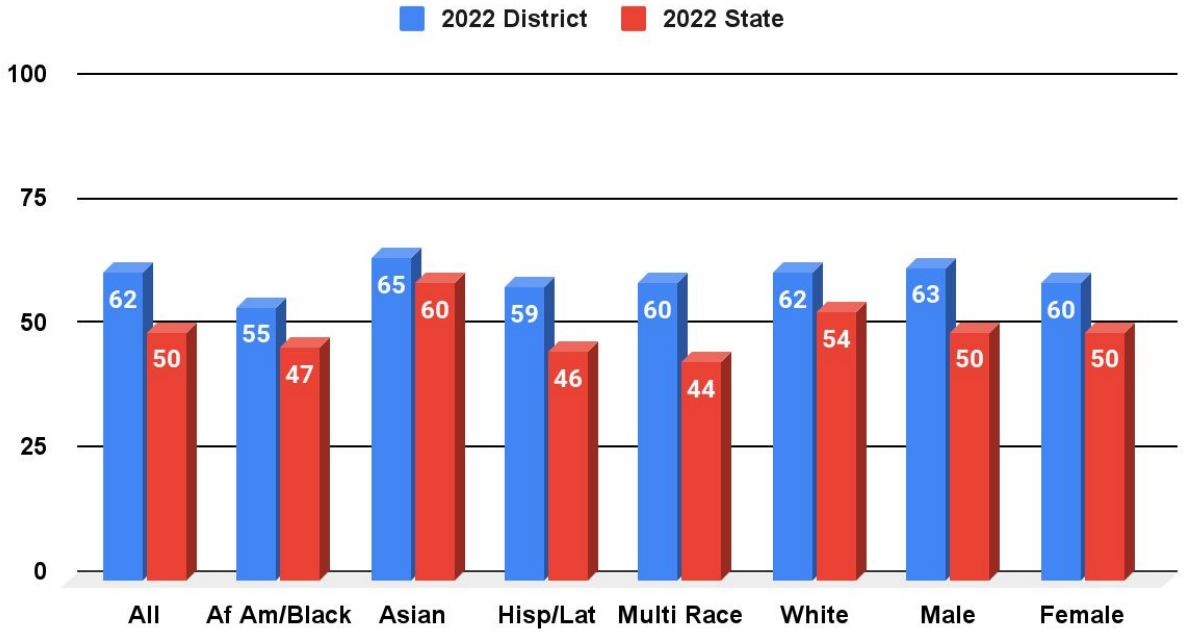
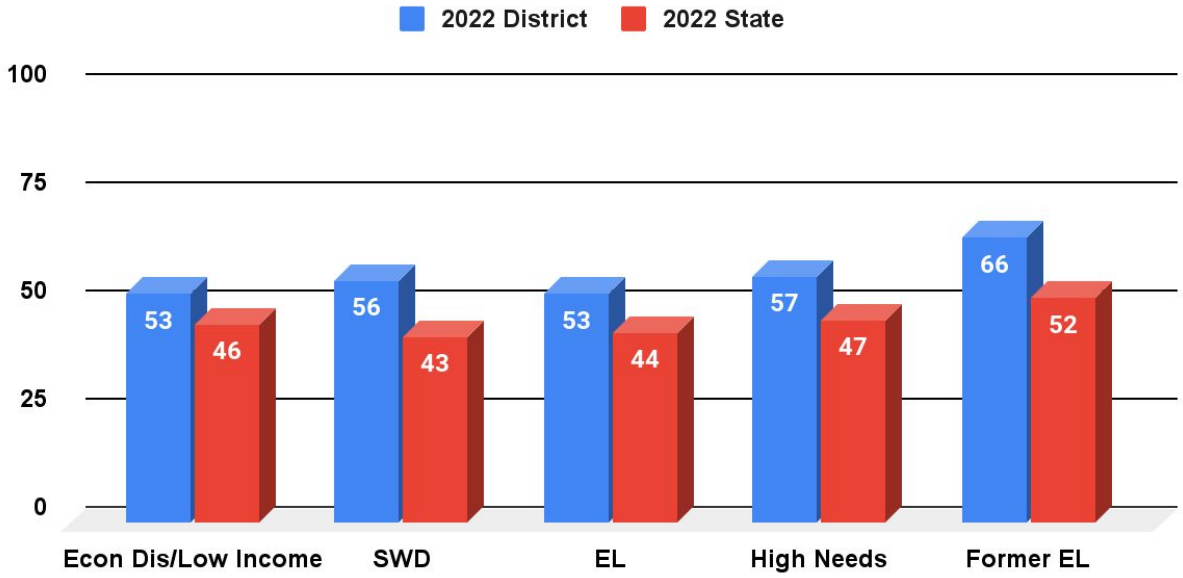
District Math SGP Data

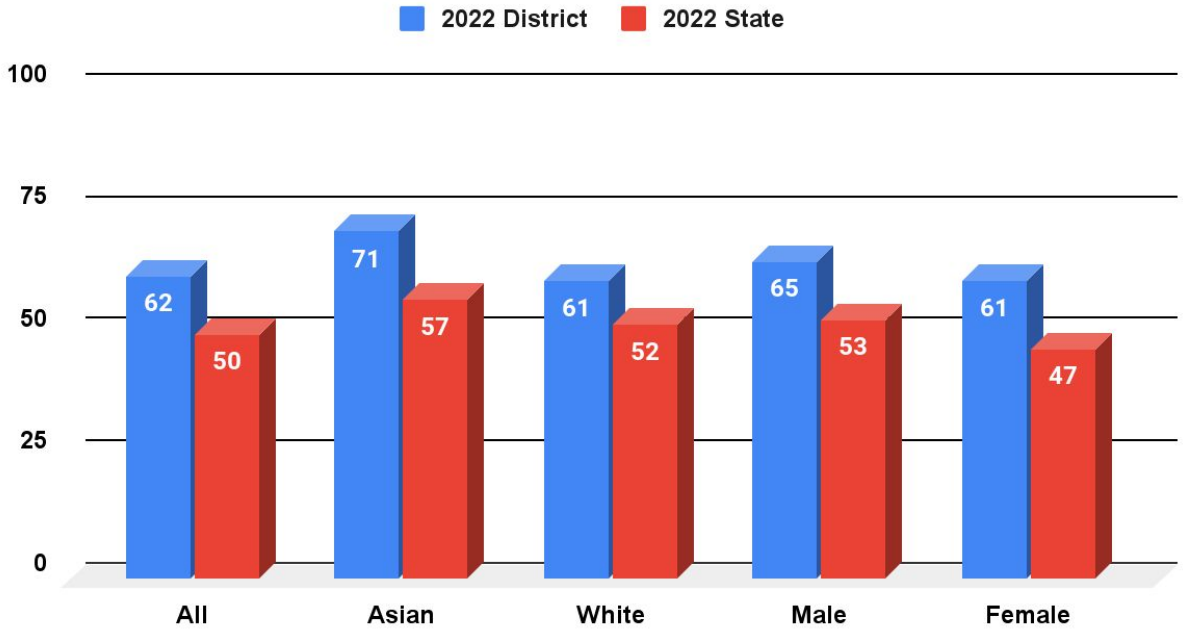
Grades 3-8 Math Race/Ethnicity/Gender SGP Data



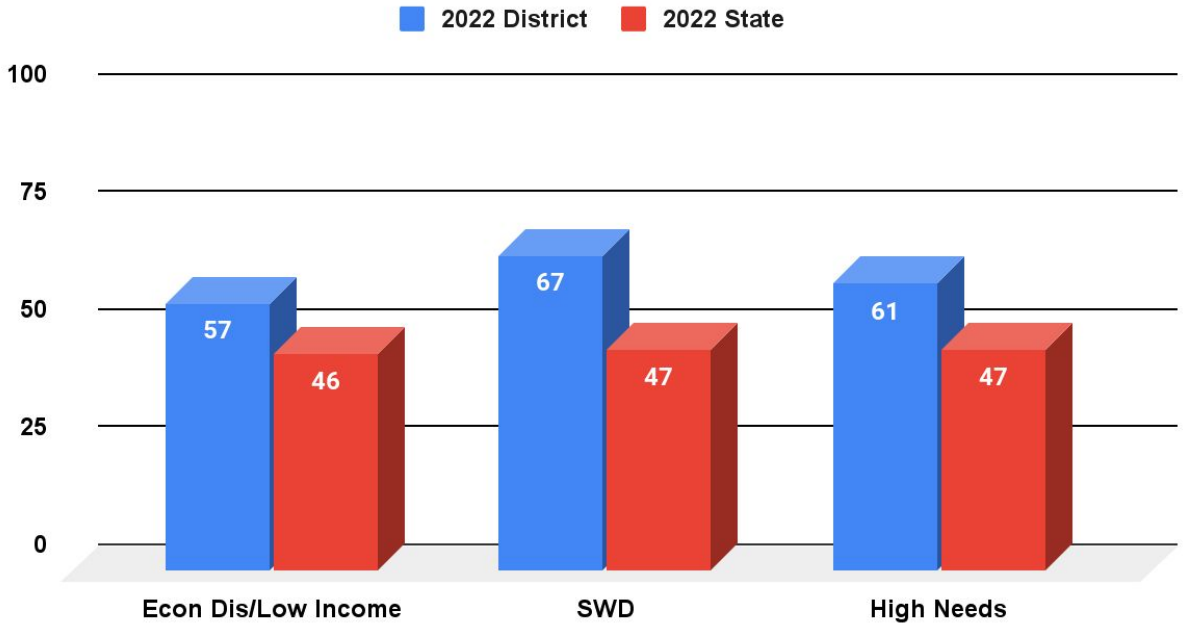
Grades 3-8 Math Econ Dis, SWD, EL, High Needs, and Former EL SGP Data



10th Grade Math Race/Ethnicity/Gender SGP Data



10th Grade Math Econ Dis, SWD, and High Needs SGP Data



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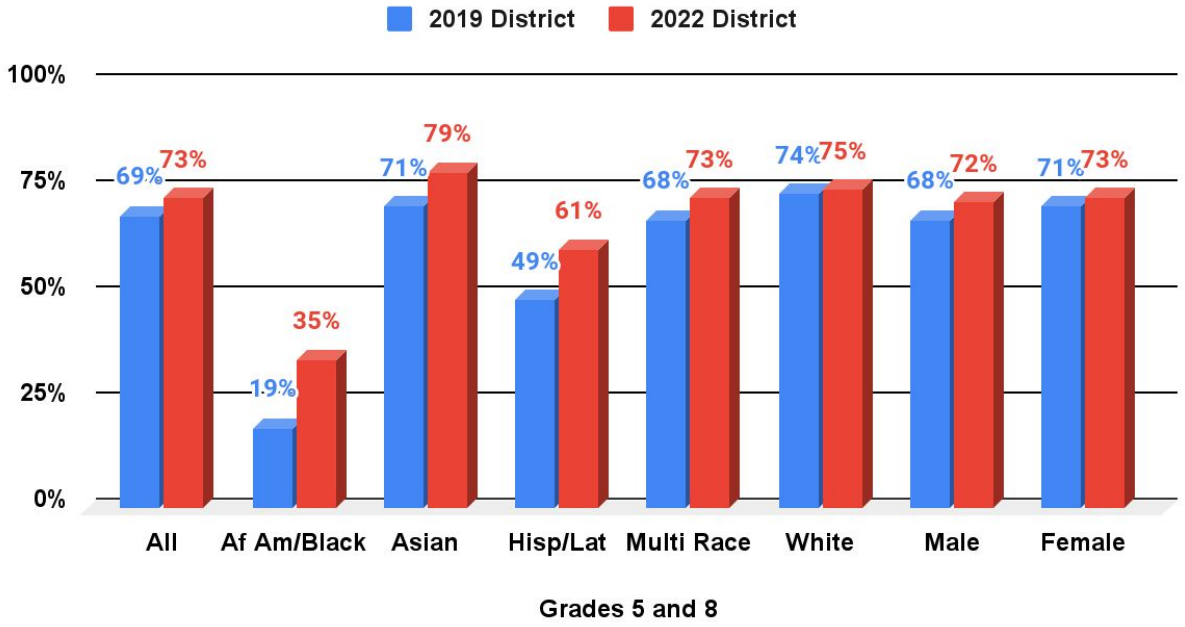
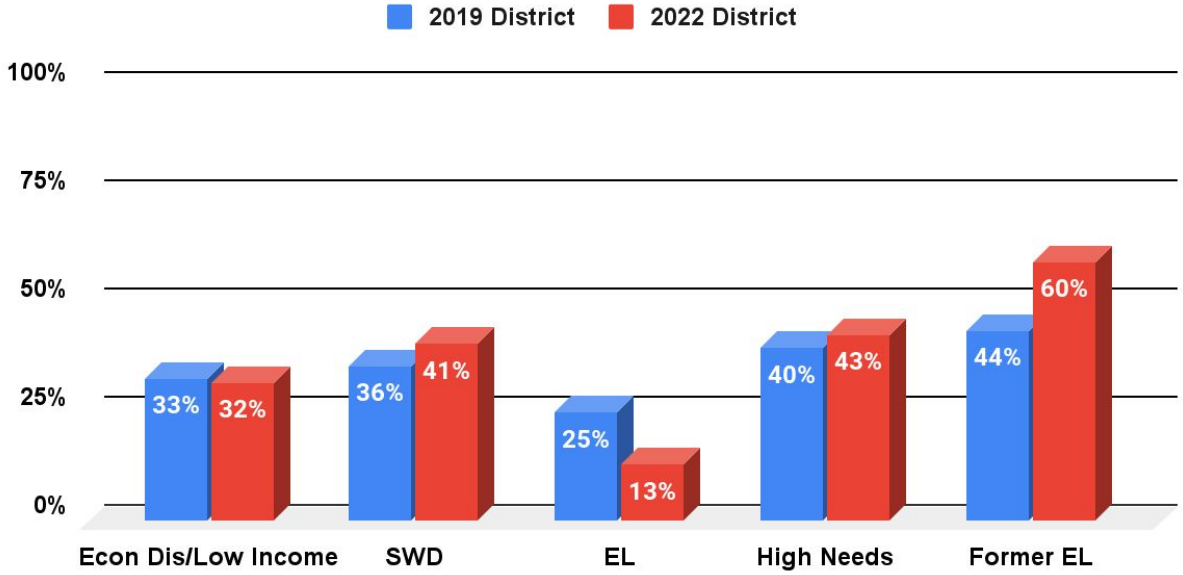
District Science,Technology/Engineering Achievement Results

Grades 5 and 8 STE Race/Ethnicity/Gender M/E Results



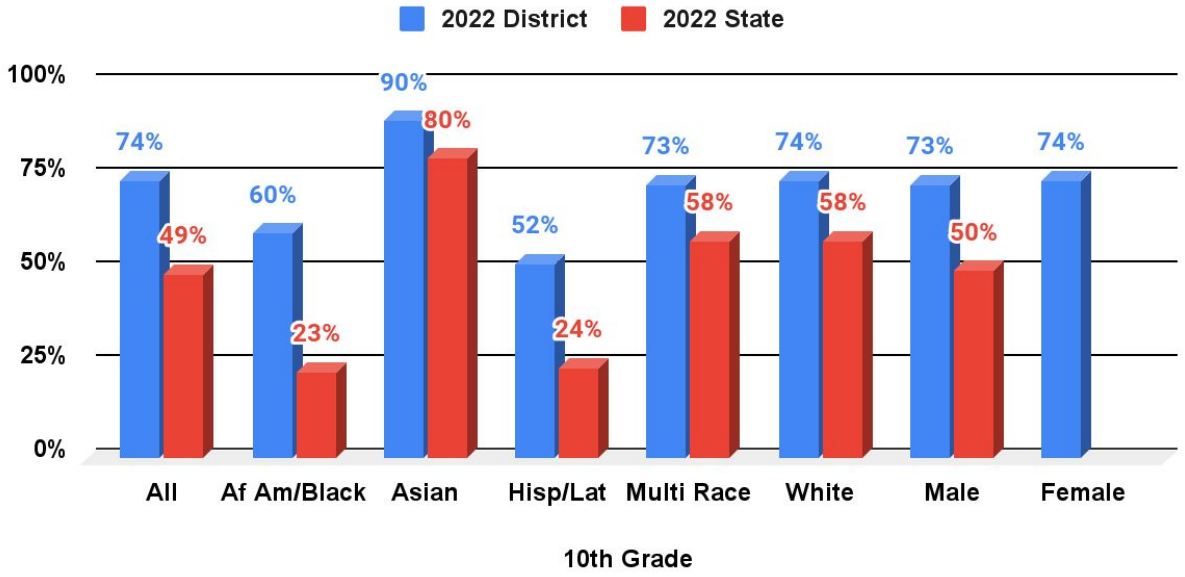
Grades 5 and 8 STE Change in Achievement Levels for Race/Ethnicity/Gender 2019 to 2022						Average Scaled Score		
	NM	PM	M/E Trends	Meeting	Exceeding	2019	2022	Diff
All	+0%	-4%	+4%	+8%	-5%	513	512	-1
Af Am/Black	+6%	-22%	+16%	+18%	-2%	486	488	+2
Asian	-1%	-8%	+8%	+2%	+6%	514	518	+4
Hisp/Latino	+2%	-14%	+12%	+6%	-6%	504	505	+1
Multi Race	+1%	-7%	+5%	+15%	-9%	515	511	-4
White	0%	0%	+1%	+9%	-8%	515	513	-2
Male	+1%	-5%	+4%	+11%	-7%	513	511	-2
Female	0%	-2%	+2%	+7%	-4%	513	512	-1

Grades 5 and 8 STE Econ Dis, SWD, EL, High Needs, and Former EL M/E Results

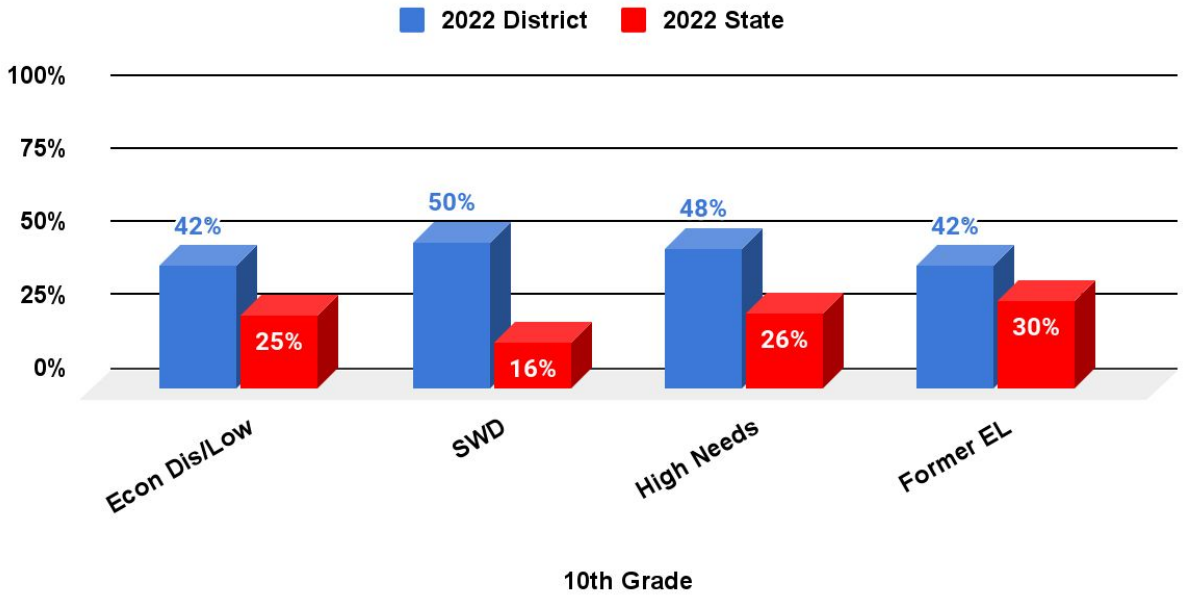


Grades 5 and 8 STE Change in Achievement Levels for Econ Dis, SWD, EL, High Needs, and Former EL 2019 to 2022						Average Scaled Score		
	NM	PM	M&E Trends	Meeting	Exceeding	2019	2022	Diff
Econ Dis/Low Income	+4%	-4%	-1%	-2%	+1%	493	490	-3
SWD	+1%	-5%	+5%	+4%	0%	494	493	-1
EL	+4%	+8%	-12%	-12%	0%	485	481	-4
High Needs	+1%	-4%	+3%	+2%	+1%	495	496	+1
Former EL	-2%	-15%	+16%	+21%	-4%	502	506	+4

9th and 10th Grade Introductory Physics Race/Ethnicity/Gender Results



9th,10th Grade Science/Technology/Engineering Econ Dis, SWD, High Needs, and Former EL Results



Next Steps...

ARLINGTON PUBLIC SCHOOLS

- Triangulate MCAS results with other data sources (student work, local assessments, instructional rounds, etc…)
- Disaggregate data during ACE block meetings, dept meetings, common planning time
- Conduct an item analysis
- Use data to assist with creating goals for strategic planning, school improvement plans, individual teacher student learning and professional practice goals
- Incorporate findings from recent district-wide equity audit
- The district is reviewing and selecting a new K-5 core literacy curriculum that will address the achievement gap and raise overall student literacy achievement