



# Increasing the Numbers of Certified Teachers in Areas of Shortage – metrics review

*State Board of Education  
November 10, 2020*



# Goals

- Expand early childhood learning opportunities
- Improve early literacy achievement
- Improve the health, safety, and wellness of all learners
- Expand secondary learning opportunities for all students
- Increase the percentage of all students who graduate from high school
- Increase the percentage of adults with a post-secondary credential
- Increase the numbers of certified teachers in areas of shortage
- Provide adequate and equitable school funding



# Metrics

Goal	Metrics
Increase the numbers of certified teachers in areas of shortage	Number of endorsements in critical shortage areas
	Number of positions filled by appropriately certified educators assigned to subject areas listed within the critical shortage list**
	Retention rate of appropriately certified educators assigned to subject areas listed within the critical shortage list
	Number of positions on the critical shortage list that are reported as vacant**
	Percent of teachers by ethnicity compared to percent of students by ethnicity

\*\*These data are currently undergoing a shift in reporting standards, which may result in a change of trends.

# Number of endorsements by critical shortage areas

An examination of change over the last 5 years



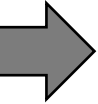
# Number of Endorsements by Critical Shortage Areas - Historical

- Career & technical education
- English as a second language
- Mathematics
- Sciences
- Special education
- World languages


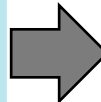


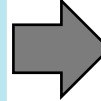



# Number of Endorsements by Critical Shortage Areas – Historical Part 1

Discipline Areas	School Year					
	2016	2017	2018	2019	2020	4-year difference
Career and Technical Education (CTE): Other	2,521	2,502	2,503	2,611	2,667	146
CTE: Computer Science	1,023	995	964	939	905	-118
CTE: Family & Consumer Sciences	4,907	4,850	4,806	4,788	4,752	-155
CTE: Industrial & Technology Education	3,340	3,336	3,321	3,334	3,303	-37



# Number of Endorsements by Critical Shortage Areas – Historical Part 2

Discipline Areas	School Year						
	2016	2017	2018	2019	2020	4-year difference	
English as a Second Language (ESL)	2,582	2,792	2,986	3,151	3,269	687	
ESL: Bilingual Education	1,066	1,049	1,035	1,026	1,024	-42	
Mathematics	24,676	24,594	24,456	24,296	24,208	-468	
Sciences	39,441	39,058	38,735	38,476	38,106	-1,335	
Special Education	44,037	44,098	44,101	44,057	44,002	-35	
World Languages	9,967	9,911	9,843	9,829	9,813	-154	

# Number of Endorsements by Critical Shortage Areas - Recent

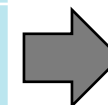
- Art & music education
- Elementary education
- Guidance & counseling
- Health & physical fitness
- Instructional library media
- Language arts
- Psychology
- Social studies





# Number of Endorsements by Critical Shortage Areas – Recent Part 1

Discipline Areas	School Year					
	2016	2017	2018	2019	2020	4-year difference
Art and Music Education: Visual, Music & Dance	5,823	5,990	6,090	6,229	6,326	503
Elementary Education	159,108	158,293	157,634	157,150	156,934	-2,174
Guidance & Counseling	5,205	5,171	5,136	5,094	5,048	-157
Health & Physical Fitness: Health	4,545	4,526	4,511	4,491	4,469	-76
Health & Physical Fitness: Physical Education	10,565	10,487	10,426	10,336	10,297	-268
Instructional Library Media	2,066	2,042	2,021	1,989	1,964	-102



# Number of Endorsements by Critical Shortage Areas – Recent Part 2

Discipline Areas	School Year						
	2016	2017	2018	2019	2020	4-year difference	
Language Arts: All Reading & Literacy	63,297	62,863	62,358	61,921	61,657	-1,640	↓
Language Arts: Communications	5,577	5,509	5,433	5,335	5,279	-298	↓
Psychology	6,354	6,259	6,194	6,104	6,035	-319	↓
Social Studies	32,782	32,329	31,752	31,296	30,867	-1,915	↓
Social Studies: Sociology	3,004	2,965	2,921	2,878	2,837	-167	↓

# Number of positions filled by appropriately certified educators assigned to subject areas listed within the critical shortage list

An examination of change over the last 5 years



# Overview of Positions Reported in Critical Shortage Areas

Permanently Assigned & Certified to Teach the Position	83,211 (94.6%)	82,358 (94.4%)	82,835 (91.5%)	84,615 (91.8%)	86,705 (92.0%)	3,494 -2.60 p.p.
Temporarily Assigned or Not Appropriately Credentialed	4,591 (5.2%)	4,801 (5.5%)	7,653 (8.5%)	7,404 (8.0%)	7,412 (7.9%)	2,821 2.70 p.p.
Vacant Positions	115 (0.1%)	105 (0.1%)	80 (0.1%)	124 (0.1%)	134 (0.1%)	19 0.00 p.p.

# Number of positions on the critical shortage list that are reported as vacant

An examination of change over the last 5 years



# Overview of Positions Reported in Critical Shortage Areas



						4-year difference and percentage point (p.p.) change



# Retention rate of appropriately certified educators assigned to subject areas listed within the critical shortage list\*

\*Data pending



# Percent of teachers by ethnicity compared to percent of students by ethnicity

An examination of change over the last 5 years





# Percent FTE for Teachers & Student by School Year & Race/Ethnicity

Asian						
	2016	2017	2018	2019	2020	4-year percentage point (p.p.) change
Teacher	0.79	0.71	0.73	0.78	0.78	-0.01 p.p.
Student	3.17	3.28	3.38	3.44	3.50	0.33 p.p.
Black or African American						
	2016	2017	2018	2019	2020	4-year percentage point (p.p.) change
Teacher	6.08	5.96	6.29	6.68	6.91	0.83 p.p.
Student	17.93	17.73	17.70	17.62	17.63	-0.30 p.p.

# Percent FTE for Teachers & Student by School Year & Race/Ethnicity

Hispanic or Latino						
	2016	2017	2018	2019	2020	4-year percentage point (p.p.) change
Teacher	1.18	1.20	1.20	1.18	1.21	0.03 p.p.
Student	7.31	7.60	7.78	7.99	8.16	1.29 p.p.
Native American or Alaska Native						
	2016	2017	2018	2019	2020	4-year percentage point (p.p.) change
Teacher	0.21	0.24	0.27	0.26	0.26	0.05 p.p.
Student	0.67	0.65	0.62	0.62	0.61	-0.06 p.p.

# Percent FTE for Teachers & Student by School Year & Race/Ethnicity

	Native Hawaiian or Other Pacific Islander					
	2016	2017	2018	2019	2020	4-year percentage point (p.p.) change
Teacher	0.11	0.10	0.13	0.12	0.11	0.00 p.p.
Student	0.09	0.09	0.09	0.08	0.08	-0.01 p.p.

# Percent FTE for Teachers & Student by School Year & Race/Ethnicity

Two or More Races						
	2016	2017	2018	2019	2020	4-year percentage point (p.p.) change
Teacher	0.27	0.27	0.28	0.30	0.31	0.04 p.p.
Student	3.36	3.67	3.89	4.14	4.38	1.02 p.p.
White						
	2016	2017	2018	2019	2020	4-year percentage point (p.p.) change
Teacher	91.36	91.52	91.10	90.69	90.42	-0.94 p.p.
Student	67.48	66.98	66.53	66.10	65.64	-1.84 p.p.

# Teachers & Students by School Year & Race/Ethnicity - Ratio Comparison

Number of Students Per Teacher			
	2016	2020	4-year difference
Asian	70.9:1	76.0:1	5.1:1
Black or African American	52.1:1	43.4:1	-8.7:1
Hispanic or Latino	109.3:1	114.4:1	5.1:1
Native American or Alaska Native	55.7:1	40.4:1	-15.3:1
Native Hawaiian or Other Pacific Islander	13.8:1	12.2:1	-1.6:1
Two or More Races	219.9:1	238.0:1	18.1:1
White	13.0:1	12.3:1	-0.7:1
<b>All</b>	<b>17.7:1</b>	<b>17.0:1</b>	<b>-0.7:1</b>



# Efforts to Increase the Numbers of Certified Teachers in Areas of Shortage

- Virtual job fairs
- Prioritizing funding for recruitment initiatives
  - #growingMeducators = high school students, career changers, paraprofessionals...
  - #proudMeducator
- Encouraging/facilitating K-12 and higher education partnerships



# Additional Efforts to Increase the Numbers of Certified Teachers in Areas of Shortage

- Integrating hiring and retention data into MICIP and providing data-based strategies to LEAs
- Sharing data with EPPs to inform teacher candidates about areas of need (both in content area and region)



# Additional Efforts to Increase the Numbers of Certified Teachers in Areas of Shortage

- Focusing on the recruitment and retention of a diverse workforce
- Deploying many strategies to better prepare our teachers which will lead to increased retention
- Developing and communicating many pathways in to the profession





# Thank You!

*Sheila Alles, Chief Deputy Superintendent*

*Leah Breen, Director*  
Office of Educator Excellence

