Math and Science Teacher Demographics 2004-2013

The tables below present the number and percentage of candidates who received initial Mathematics and Science certifications over ten fiscal years, broken down by gender and by race or ethnicity. Only candidates obtaining standard and lifetime certifications are included.

Definitions. An initial teaching certificate is a standard or lifetime teaching certificate issued in a particular fiscal year to a teacher who was not issued a standard or lifetime teaching certificate in any previous fiscal year. A standard certificate is a certificate offered since 1998-99 that is renewed every five years. A lifetime certificate is a certificate offered since 1998-99 that is renewed every five years. A lifetime renewal.

Results for Mathematics

Mathematics teachers remained predominantly female and white in fiscal year 2012-13, despite substantial changes over time:

- The percentage of male Mathematics teachers increased until fiscal year fiscal year 2010-11, when it began to decline.
- The percentage of white Mathematics teachers declined until fiscal year 2008-09, when it leveled off and began to increase somewhat.
- Results for Hispanic/Latino teachers increased somewhat over the years examined.
- In fiscal year 2012-13, about 5% of Mathematics teachers were Asian.

					Black/African							Am. Indian/			Native		Two or More				
		Female		Male		American		White		Hispanic/Latino		Asian		Alaska Nat.		Hawiian		Ethnicities		Other	
Year	Total	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.
2012-13	1,871	1,246	66.6	625	33.4	147	7.9	1,207	64.5	382	20.4	96	5.1	6	0.3	1	0.1	31	1.7	1	0.1
2011-12	1,729	1,126	65.1	603	34.9	111	6.4	1,124	65.0	382	22.1	73	4.2	4	0.2	2	0.1	33	1.9	0	0.0
2010-11	2,210	1,394	63.1	816	36.9	175	7.9	1,417	64.1	427	19.3	141	6.4	9	0.4	2	0.1	25	1.1	14	0.6
2009-10	2,319	1,419	61.2	900	38.8	203	8.8	1,474	63.6	427	18.4	165	7.1	7	0.3	1	0.0	17	0.7	25	1.1
2008-09	1,950	1,234	63.3	716	36.7	160	8.2	1,239	63.5	393	20.2	127	6.5	6	0.3	1	0.1	8	0.4	16	0.8
2007-08	1,955	1,258	64.3	697	35.7	158	8.1	1,251	64.0	413	21.1	106	5.4	4	0.2	3	0.2	12	0.6	8	0.4
2006-07	1,930	1,287	66.7	643	33.3	175	9.1	1,264	65.5	344	17.8	115	6.0	9	0.5	0	0.0	16	0.8	7	0.4
2005-06	1,915	1,288	67.3	627	32.7	165	8.6	1,263	66.0	329	17.2	116	6.1	13	0.7	1	0.1	18	0.9	10	0.5
2004-05	1,801	1,206	67.0	595	33.0	145	8.1	1,266	70.3	270	15.0	94	5.2	5	0.3	2	0.1	8	0.4	11	0.6
2003-04	1,742	1,143	65.6	599	34.4	149	8.6	1,110	63.7	306	17.6	140	8.0	18	1.0	0	0.0	6	0.3	13	0.7

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Source: SBEC Online data Michael C. Ramsay, Ph.D. Research Specialist May 2014

Results for Science

Like Mathematics teachers, Science teachers remained largely female and white in fiscal year 2012-13, in spite of changes over time:

- The percentage of white Science teachers declined through fiscal year 2008-09, and then appeared to increase somewhat.
- Conversely, results for Hispanic/Latino teachers increased over the years examined.
- Results for black/African American teachers reached a peak in about fiscal years 2006-07 and 2007-08, after which they appeared to decline.
- In fiscal year 2012-13, just under 6% of Science teachers were Asian.

						Black/African							Am. Indian/		Native		Two or More				
		Female		Male		American		White		Hispanic/Latino		Asian		Alaska Nat.		Hawiian		Ethnicities		Other	
Year	Total	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.
2012-13	1,266	850	67.1	416	32.9	94	7.4	814	64.3	262	20.7	73	5.8	3	0.2	1	0.1	19	1.5	0	0.0
2011-12	1,253	856	68.3	397	31.7	86	6.9	829	66.2	237	18.9	74	5.9	6	0.5	1	0.1	20	1.6	0	0.0
2010-11	1,700	1,105	65.0	595	35.0	135	7.9	1,087	63.9	324	19.1	112	6.6	9	0.5	6	0.4	20	1.2	7	0.4
2009-10	1,759	1,142	64.9	617	35.1	142	8.1	1,128	64.1	328	18.6	107	6.1	7	0.4	2	0.1	18	1.0	27	1.5
2008-09	1,741	1,194	68.6	547	31.4	168	9.6	1,089	62.6	338	19.4	87	5.0	17	1.0	0	0.0	19	1.1	23	1.3
2007-08	1,860	1,265	68.0	595	32.0	199	10.7	1,164	62.6	366	19.7	85	4.6	9	0.5	3	0.2	22	1.2	12	0.6
2006-07	1,564	1,080	69.1	484	30.9	161	10.3	1,030	65.9	261	16.7	74	4.7	7	0.4	2	0.1	18	1.2	11	0.7
2005-06	1,464	998	68.2	466	31.8	125	8.5	970	66.3	255	17.4	73	5.0	11	0.8	1	0.1	20	1.4	9	0.6
2004-05	1,316	901	68.5	415	31.5	84	6.4	911	69.2	219	16.6	74	5.6	9	0.7	0	0.0	6	0.5	13	1.0
2003-04	1,326	858	64.7	468	35.3	103	7.8	913	68.9	180	13.6	102	7.7	13	1.0	0	0.0	5	0.4	10	0.8

Summary of methodology. Ten tables were extracted containing identification numbers, genders, and races or ethnicities of all individuals obtaining an initial standard or lifetime Mathematics teaching certificate for fiscal years 2003-04 through 2012-13. For each fiscal year, the total number of teachers was obtained, together with a sum for each gender and race or ethnicity. Each sum was taken as a percentage of the total, and all sums and percentages were combined into one table. Finally, this process was repeated to obtain the Science results.

Source: SBEC Online data Michael C. Ramsay, Ph.D. Research Specialist May 2014