Math and Science Teacher Demographics 2005-2014

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

Definitions. An initial teaching certificate is a standard or lifetime teaching certificate issued in a particular academic year to a teacher who was not issued a standard or lifetime teaching certificate in any previous academic 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 offered before 1998-99 that did not require renewal.

Results for Mathematics

Mathematics teachers remained predominantly female and white in academic year 2013-14, despite substantial changes over time:

- The percentage of male Mathematics teachers increased until academic year fiscal year 2010-11, when it began to decline.
- The percentage of white Mathematics teachers declined over time, although it was relatively high in academic years 2011-12 and 2012-13.
- Results for Hispanic/Latino teachers increased somewhat over the academic years shown.
- In academic year 2013-14, about 6% of Mathematics teachers were Asian.

				Black/Af	rican						Am. Indian/		Native		Two or More						
		Female		Male	e Ameri		ican White		e	Hispanic/Latino		Asian		Alaska Nat.		Hawiian		Ethnicities		Oth	ier
Year	Total	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.
2013-14	1,964	1,286	65.5	678	34.5	161	8.2	1,201	61.2	447	22.8	121	6.2	5	0.3	2	0.1	27	1.4	0	0.0
2012-13	1,878	1,249	66.5	629	33.5	147	7.8	1,211	64.5	385	20.5	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	2,320	1,421	61.3	899	38.8	206	8.9	1,477	63.7	426	18.4	164	7.1	7	0.3	2	0.1	19	0.8	19	0.8
2008-09	1,950	1,231	63.1	719	36.9	162	8.3	1,243	63.7	390	20.0	125	6.4	6	0.3	2	0.1	10	0.5	12	0.6
2007-08	1,955	1,258	64.3	697	35.7	158	8.1	1,251	64.0	412	21.1	105	5.4	4	0.2	3	0.2	15	0.8	7	0.4
2006-07	1,930	1,284	66.5	646	33.5	175	9.1	1,263	65.4	344	17.8	115	6.0	9	0.5	0	0.0	16	0.8	7	0.4
2005-06	1,915	1,287	67.2	628	32.8	164	8.6	1,263	66.0	330	17.2	116	6.1	13	0.7	1	0.1	18	0.9	10	0.5
2004-05	1,801	1,205	66.9	596	33.1	144	8.0	1,266	70.3	270	15.0	94	5.2	5	0.3	2	0.1	9	0.5	11	0.6

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Source: SBEC Online data Michael C. Ramsay, Ph.D. Research Specialist May 2015

Results for Science

Like Mathematics teachers, Science teachers remained largely female and white in academic year 2013-14, in spite of changes over time:

- The percentage of white Science teachers declined over time, although it was relatively high in academic years 2009-10 through 2012-13.
- Conversely, results for Hispanic/Latino teachers increased over the academic years shown.
- Results for black/African American teachers reached a peak in about academic years 2006-07 and 2007-08, and increased again in academic year 2013-14.
- In the last three academic years, just under 6% of Science teachers were Asian.

						Black/African							Am. Ind	Native		Two or More					
		Female		Male	e America		can	an 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.
2013-14	1,384	923	66.7	461	33.3	141	10.2	819	59.2	311	22.5	80	5.8	5	0.4	2	0.1	25	1.8	0	0.0
2012-13	1,268	848	66.9	420	33.1	95	7.5	814	64.2	263	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	1,702	1,105	64.9	597	35.1	136	8.0	1,089	64.0	324	19.0	112	6.6	9	0.5	6	0.4	20	1.2	6	0.4
2009-10	1,759	1,140	64.8	619	35.2	140	8.0	1,127	64.1	331	18.8	108	6.1	7	0.4	2	0.1	22	1.3	22	1.3
2008-09	1,741	1,188	68.2	553	31.8	169	9.7	1,088	62.5	343	19.7	88	5.1	15	0.9	0	0.0	26	1.5	12	0.7
2007-08	1,860	1,259	67.7	601	32.3	198	10.6	1,165	62.6	367	19.7	87	4.7	8	0.4	3	0.2	23	1.2	9	0.5
2006-07	1,565	1,079	68.9	486	31.1	161	10.3	1,030	65.8	261	16.7	74	4.7	7	0.4	2	0.1	18	1.2	11	0.7
2005-06	1,464	997	68.1	467	31.9	124	8.5	970	66.3	255	17.4	73	5.0	11	0.8	1	0.1	21	1.4	9	0.6
2004-05	1,316	900	68.4	416	31.6	84	6.4	911	69.2	220	16.7	75	5.7	8	0.6	0	0.0	7	0.5	11	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 academic years 2004-05 through 2013-14. For each academic 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 2015