Newly Certified Mathematics and Science Teacher Demographics 2013-14 through 2022-23

This study reports the demographic data of candidates who received initial, standard teaching certificates in the certification areas of Mathematics and Science in the ten academic years from 2013-14 through 2022-23. The first table presents the reported gender information for the candidates while the second presents the reported race / ethnic information for the candidates. In several academic years, the sum of each race / ethnicity does not equal the total. This is because a few teachers did not report their race / ethnicity.

Definitions: An initial teaching certificate is a standard teaching certificate issued to a teacher who was not previously issued a standard or lifetime teaching certificate. Standard certificates, as defined in 19 TAC Chapter 230, are certificates offered since September 1, 1999 that are renewed every five years. The academic year is determined by the date of issuance. An academic year is defined as September 1 through August 31 of the following calendar year.

Newly Certified Mathematics and Science Teacher Gender

Certificate Area	Academic Year	Total	Female		Male	
			Number	Percent	Number	Percent
Mathematics	2022-23	1,472	990	67.26%	482	32.74%
	2021-22	1,664	1,056	63.46%	608	36.54%
	2020-21	1,916	1,185	61.85%	731	38.15%
	2019-20	1,477	976	66.08%	501	33.92%
	2018-19	1,689	1,052	62.29%	637	37.71%
	2017-18	1,759	1,130	64.24%	629	35.76%
	2016-17	1,827	1,131	61.90%	696	38.10%
	2015-16	1,794	1,174	65.44%	620	34.56%
	2014-15	1,851	1,198	64.72%	653	35.28%
	2013-14	1,971	1,294	65.65%	677	34.35%
Science	2022-23	1,320	853	64.62%	467	35.38%
	2021-22	1,372	908	66.18%	464	33.82%
	2020-21	1,572	976	62.09%	596	37.91%
	2019-20	1,154	743	64.38%	411	35.62%
	2018-19	1,406	889	63.23%	517	36.77%
	2017-18	1,460	905	61.99%	555	38.01%
	2016-17	1,555	1,000	64.31%	555	35.69%
	2015-16	1,435	907	63.21%	528	36.79%
	2014-15	1,399	908	64.90%	491	35.10%
	2013-14	1,388	932	67.15%	456	32.85%
Both	2022-23	2,792	1,843	66.01%	949	33.99%
	2021-22	3,036	1,964	64.69%	1,072	35.31%
	2020-21	3,488	2,161	61.96%	1,327	38.04%
	2019-20	2,631	1,719	65.34%	912	34.66%
	2018-19	3,095	1,941	62.71%	1,154	37.29%
	2017-18	3,219	2,035	63.22%	1,184	36.78%
	2016-17	3,382	2,131	63.01%	1,251	36.99%
	2015-16	3,229	2,081	64.45%	1,148	35.55%
	2014-15	3,250	2,106	64.80%	1,144	35.20%
	2013-14	3,359	2,226	66.27%	1,133	33.73%

Source: ECOS
Jeremy B. Landa, Ph.D.
September 2023

Newly Certified Mathematics and Science Teacher Race / Ethnicity

Certificate Area	Academic Year	Total	American Indian / Alaska Native		Asian		Black / African American		Hispanic / Latino		Pacific Islander		White		Two or More Races / Ethnicities	
			Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.
Mathe-matics	2022-23	1,472	5	0.34%	133	9.04%	166	11.28%	364	24.73%	3	0.20%	755	51.29%	46	3.13%
	2021-22	1,664	7	0.42%	129	7.75%	189	11.36%	421	25.30%	2	0.12%	880	52.88%	36	2.16%
	2020-21	1,916	6	0.31%	133	6.94%	206	10.75%	482	25.16%	3	0.16%	1,022	53.34%	64	3.34%
	2019-20	1,477	9	0.61%	131	8.87%	157	10.63%	361	24.44%	3	0.20%	781	52.88%	35	2.37%
	2018-19	1,689	8	0.47%	130	7.70%	194	11.49%	417	24.69%	2	0.12%	899	53.23%	39	2.31%
	2017-18	1,759	6	0.34%	116	6.59%	178	10.12%	463	26.32%	1	0.06%	943	53.61%	52	2.96%
	2016-17	1,827	7	0.38%	101	5.53%	199	10.89%	438	23.97%	1	0.05%	1,051	57.53%	30	1.64%
	2015-16	1,794	6	0.33%	138	7.69%	168	9.36%	443	24.69%	1	0.06%	994	55.41%	43	2.40%
	2014-15	1,851	2	0.11%	120	6.48%	165	8.91%	451	24.37%	1	0.05%	1,071	57.86%	40	2.16%
	2013-14	1,971	5	0.25%	125	6.34%	163	8.27%	450	22.83%	2	0.10%	1,196	60.68%	30	1.52%
Science	2022-23	1,320	0	0.00%	113	8.56%	145	10.98%	311	23.56%	3	0.23%	713	54.02%	35	2.65%
	2021-22	1,372	8	0.58%	96	7.00%	152	11.08%	364	26.53%	1	0.07%	721	52.55%	30	2.19%
	2020-21	1,572	3	0.19%	94	5.98%	157	9.99%	362	23.03%	0	0.00%	913	58.08%	43	2.74%
	2019-20	1,154	6	0.52%	100	8.67%	107	9.27%	281	24.35%	2	0.17%	632	54.77%	26	2.25%
	2018-19	1,406	5	0.36%	94	6.69%	146	10.38%	327	23.26%	1	0.07%	789	56.12%	44	3.13%
	2017-18	1,460	2	0.14%	107	7.33%	129	8.84%	372	25.48%	2	0.14%	815	55.82%	33	2.26%
	2016-17	1,555	4	0.26%	107	6.88%	146	9.39%	357	22.96%	0	0.00%	909	58.46%	31	1.99%
	2015-16	1,435	4	0.28%	99	6.90%	132	9.20%	369	25.71%	1	0.07%	807	56.24%	23	1.60%
	2014-15	1,399	11	0.79%	102	7.29%	132	9.44%	306	21.87%	0	0.00%	817	58.40%	30	2.14%
	2013-14	1,388	6	0.43%	74	5.33%	139	10.01%	322	23.20%	2	0.14%	819	59.01%	26	1.87%

Source: ECOS
Jeremy B. Landa, Ph.D.
September 2023

Certificate Area	Academic Year	Total	American Indian / Alaska Native		Asian		Black / African American		Hispanic / Latino		Pacific Islander		White		Two or More Races / Ethnicities	
			Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.	Num.	Pct.
Both	2022-23	2,792	5	0.18%	246	8.81%	311	11.14%	675	24.18%	6	0.21%	1,468	52.58%	81	2.90%
	2021-22	3,036	15	0.49%	225	7.41%	341	11.23%	785	25.86%	3	0.10%	1,601	52.73%	66	2.17%
	2020-21	3,488	9	0.26%	227	6.51%	363	10.41%	844	24.20%	3	0.09%	1,935	55.48%	107	3.07%
	2019-20	2,631	15	0.57%	231	8.78%	264	10.03%	642	24.40%	5	0.19%	1,413	53.71%	61	2.32%
	2018-19	3,095	13	0.42%	224	7.24%	340	10.99%	744	24.04%	3	0.10%	1,688	54.54%	83	2.68%
	2017-18	3,219	8	0.25%	223	6.93%	307	9.54%	835	25.94%	3	0.09%	1,758	54.61%	85	2.64%
	2016-17	3,382	11	0.33%	208	6.15%	345	10.20%	795	23.51%	1	0.03%	1,960	57.95%	61	1.80%
	2015-16	3,229	10	0.31%	237	7.34%	300	9.29%	812	25.15%	2	0.06%	1,801	55.78%	66	2.04%
	2014-15	3,250	13	0.40%	222	6.83%	297	9.14%	757	23.29%	1	0.03%	1,888	58.09%	70	2.15%
	2013-14	3,359	11	0.33%	199	5.92%	302	8.99%	772	22.98%	4	0.12%	2,015	59.99%	56	1.67%

Source: ECOS
Jeremy B. Landa, Ph.D.
September 2023

Methodology: All standard teaching certifications in the areas of Mathematics and Science regardless of grade level that were issued between September 1, 2013 and August 31, 2023 to educators who did not previously hold a standard or lifetime teaching certification were identified in the Educator Certification Online System (ECOS). The initial certificates were categorized into academic years by the certificate issue date and aggregated according to the educator's self-identified gender and race / ethnic information.

Notes: The counts may differ slightly from those reported in previous years. This typically occurs for two reasons: (1) as errors are discovered, they are corrected, or (2) we update our programming to improve the accuracy in capturing the population of interest.

In some instances, the total number of certified teachers does not add up to the total number of individuals across all race / ethnicities. The difference between these two sums is the number of people who do not have a race / ethnicity specified.

The demographic data contained in ECOS may be different than that contained in the employment records in the Public Education Information Management System (PEIMS) database, which relies on data reported to TEA by individual local education agencies annually, and, therefore, may not be fully comparable to Agency reports that rely on the PEIMS demographic data.

Source: ECOS
Jeremy B. Landa, Ph.D.
September 2023