



TABLE 1-26

Chapter summary of U.S. performance on K-12 STEM indicators

(Score, percentile, and gaps between groups)

Data year	Assessment	Scale	Average score or percentage	10th percentile	90th percentile	Point range 10th to 90th	Gaps between										
							High and low SES ^a			White and black and Hispanic ^b				Male and female			
							High	Low	Gap	White	Black	Gap	Hispanic	Gap	Male	Female	Gap
2015	NAEP Mathematics Grade 4	0 to 500	240	202	277	75	253	229	24	248	224	24	230	18	241	239	2
2015	NAEP Mathematics Grade 8	0 to 500	282	235	329	94	296	268	28	292	260	32	270	22	282	282	0
2015	NAEP Mathematics Grade 12	0 to 300	152	107	196	89	160	137	23	160	130	30	139	21	153	150	3
2015	NAEP Science Grade 4	0 to 300	154	108	196	88	169	140	29	166	133	33	139	27	154	154	0
2015	NAEP Science Grade 8	0 to 300	154	109	195	86	167	140	27	166	132	34	140	26	155	152	3
2015	NAEP Science Grade 12	0 to 300	150	103	196	93	160	134	26	160	125	35	136	24	153	148	5
2014	NAEP TEL Grade 8	0 to 300	150	104	193	89	163	135	28	160	128	32	138	22	149	151	2
2014	ECLS-K:2011 Mathematics Grade 3	0 to 135	99	NA	NA	NA	103	93	10	103	90	13	94	9	101	97	4
2014	ECLS-K:2011 Science Grade 3	0 to 87	56	NA	NA	NA	59	51	8	59	50	9	52	7	56	55	1
2015	TIMSS Mathematics Grade 4	0 to 1,000	535	432	640	208	600	499	101	541	462	79	492	49	543	536	7
2015	TIMSS Mathematics Grade 8	0 to 1,000	518	408	624	216	573	477	96	559	495	64	515	44	519	517	2
2015	TIMSS Science Grade 4	0 to 1,000	546	439	644	205	603	502	101	570	501	69	518	52	548	544	4
2015	TIMSS Science Grade 8	0 to 1,000	530	421	631	210	579	489	90	557	469	88	502	55	533	527	6
2015	TIMSS Advanced Mathematics	0 to 1,000	485	352	608	256	534	425	109	495	400	95	440	55	500	470	30



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							High	Low	Gap	White	Black	Gap	Hispanic	Gap	Male	Female	Gap	
2015	TIMSS Advanced Physics	0 to 1,000	437	283	589	306	506	363	143	463	334	129	390	73	455	409	46	
2015	PISA Mathematics (age 15)	0 to 1,000	470	355	585	230	517	431	86	499	419	80	446	53	474	465	9	
2015	PISA Science (age 15)	0 to 1,000	496	368	626	258	546	457	89	531	433	98	470	61	500	493	7	
Highest course enrollment ^c (%)																		
2013	Calculus or higher	na	19	na	na	na	37	9	28	22	9	13	15	7	19	19	0	
2013	AP/ IB or advanced science	na	21	na	na	na	38	11	27	23	14	9	16	7	20	23	3	
Transition to postsecondary (%)																		
2015	On-time high school graduation ^d	na	83	na	na	na	NA	NA	NA	88	75	13	78	10	NA	NA	NA	
2015	Immediate college enrollment ^e	na	69	na	na	na	83	69	14	70	63	7	67	2	66	73	7	
2016	College ready in mathematics ^f	na	41	na	na	na	NA	NA	NA	50	13	37	27	23	NA	NA	NA	
2016	College ready in science	na	36	na	na	na	NA	NA	NA	46	11	35	21	25	NA	NA	NA	

NA = not available; na = not applicable.

AP = Advanced Placement/International Baccalaureate; ECLS-K:2011 = Early Childhood Longitudinal Study, Kindergarten Class of 2010–11 (see Appendix Table 1-14 and Appendix Table 1-15); NAEP = National Assessment of Educational Progress (see Appendix Table 1-1 and Appendix Table 1-3); NAEP TEL = National Assessment of Educational Progress, technology and engineering literacy (see Appendix Table 1-5); PISA = Program for International Student Assessment (see Table 1-11); SES = socioeconomic status; STEM = science, technology, engineering, and mathematics; TIMSS = Trends in International Mathematics and Science Study (see Table 1-6 and Table 1-8).

^a SES is a composite variable derived from parental education level, parental occupation, and family income.

^b Hispanic may be any race. Black and white refer to individuals who are not of Hispanic origin.

^c Highest mathematics and science course enrollment of high school completers from High School Longitudinal Study of 2009. See Appendix Tables 1-23 and 1-25.



^d See Table 1-23.

^e See Appendix Table 1-27.

^f See Figure 1-9.

Note(s)

Scales are different for each assessment and are not comparable across grades or assessments. Please use caution when interpreting results.

Science and Engineering Indicators 2018