



U.S. Immigrant Performance on International Tests

By Jason Richwine

When the results of international achievement tests periodically hit the news in the United States, the country-by-country rankings receive most of the attention. However, the scores of demographic subgroups within the United States should be just as interesting, since achievement is hardly uniform throughout the nation. In fact, if treated as separate “countries” for the sake of analysis, various U.S. subgroups would span the international rankings from top to bottom.

This report examines how immigrants in the United States perform on international tests, with comparisons both to native-born Americans and to the broader Organization for Economic Cooperation and Development (OECD). The results indicate that the United States has failed to bring the achievement level of low-skill immigrants and their children up to parity with other Americans. Continued low-skill immigration is likely to exacerbate the challenges already faced by the U.S. school system.

In this report, “first-generation” refers to people who are foreign-born; “second generation” means U.S.-born with at least one foreign-born parent; and “third-plus generation” means U.S.-born with two U.S.-born parents.

- First-generation immigrants score consistently lower than the native-born in the United States. For example, on the PISA science test, Americans who are foreign-born would rank 33rd among the 36 participating OECD countries, while native-born Americans would rank 16th.
- Second-generation immigrants score generally around the same level as the native-born as a whole. However, the average hides a disparity between immigrant groups. The scores of Asian Americans (a rough proxy for higher-skill immigrants and their children) are usually among the best in the OECD, but the scores of second-generation Hispanics (a rough proxy for the children of lower-skill immigrants) still lag behind.
- To illustrate that disparity, the United States as a whole ranks eighth among 27 participating OECD countries on the TIMSS math test for fourth-graders. But U.S. Asians would have the second-highest score in the OECD, while the children of Hispanic immigrants would rank 17th.
- Hispanic-Americans who are in the third-plus generation continue to score below average. For example, they would rank 22nd among OECD countries on the PIAAC literacy test — essentially the same score as second-generation Hispanics, and 15 places below the U.S.-born as a whole.
- These results are a reminder that skills differ among immigrants, and that the differences persist to some degree over multiple generations. Continuing our current immigration policy, which accepts a large share of adults with low levels of education, is likely to further strain the U.S. school system and add to the challenge of educating children from disadvantaged backgrounds.

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Understanding the Tables

This report shows how U.S. subgroups perform on international test batteries known as PIRLS, TIMSS, PISA, and PIAAC. Two tables are provided for each test. The “A” table intersperses the scores of U.S. subgroups on a ranked list of OECD countries. For example, Table 1A shows that second-generation immigrants in the United States score between Austria (18th overall) and Germany (19th overall) on the PIRLS. The “B” table is a consolidated version of the “A” table. It shows only U.S. subgroups and gives each an OECD rank as if it were its own country. For example, Table 1B shows that the foreign-born population in the United States would rank 26th in the OECD if treated as a separate country when taking the PIRLS.

The subgroup ranks in the “B” table are calculated as if each subgroup were added to the country list *by itself*, not together with other subgroups. For example, Table 1B shows that both Asian-Americans and white Americans would rank first among OECD countries on the PIRLS. This means that if Asian-Americans are the only subgroup that counts as its own OECD country, they would rank first. If instead white Americans were the only subgroup treated as a country, they would also rank first.

The “B” table adds additional information about score differences in the *d* column, which will be of interest primarily to researchers with some background in educational measurement. It refers to the difference in standard deviations between each subgroup score and the overall U.S. score.¹

U.S. subgroups are identified to the extent that the sample size allows. Hispanic-Americans are a large enough group that their scores can be separated by generation on most of the tests. Asian-Americans, however, are not numerous enough to separate by nativity. In fact, in the case of the PISA tests, scores for Asians are not reported at all due to low precision — in this case, a standard error above 10.

All scores are sourced from the National Center for Education Statistics, using the most recent test administrations for which full data is available.² The tests were administered in English in the United States and translated as needed in foreign countries. Finally, although some non-OECD countries participated in each test, this report is limited to OECD countries to ensure quality in test administration and greater consistency in the rankings.³

Discussion

As the tables below indicate, U.S. performance varies depending on the subject matter and the age of the test-takers. Generally speaking, U.S. students tend to perform better in reading than in math, and their scores slip relative to the rest of the OECD as they age. Despite the variance across tests, however, a clear pattern emerges in the performance of immigrants vs. the native-born: Immigrants as a group always score lower. For example, on the PISA reading test, Americans who are native-born would rank 14th among the 36 participating OECD countries, while foreign-born Americans would rank 33rd.

Due to learning English and attending U.S. schools from a young age, second-generation immigrants generally catch up to the rest of the native-born. However, the catch-up disguises a score gap between immigrant groups. Asian-Americans (mostly higher-skill immigrants and their children) score well above U.S. natives as a whole. In contrast, second-generation Hispanics (the children of mostly lower-skill immigrants) continue to score below average, as do third-plus generation Hispanics.⁴

Immigrants and native-born Americans clearly do not have identical skill sets, and they do not become identical simply by virtue of acculturation. The U.S. educational system has struggled with persistent achievement gaps among subgroups, and continuing to accept a large share of adults with low levels of education is likely to make that challenge even more difficult. If the United States wants to improve the achievement level of future immigrants and their children, it should implement a selection system that better emphasizes skills.

PIRLS

The Progress in International Reading Literacy Study (PIRLS) was administered to fourth-graders in 2016.

Table 1A. PIRLS (Reading), Grade 4, OECD Countries and U.S. Subgroups

Country Rank	Country / U.S. Subgroup	Score	Std. Error
	U.S. Asian	591	8.6
	U.S. White	571	3.0
1	Ireland	567	2.5
2	Finland	566	1.8
	U.S. 3rd+ Gen.	565	2.4
3	Poland	565	2.1
4	Norway	559	2.3
5	England	559	1.9
6	Latvia	558	1.7
7	Sweden	555	2.4
8	Hungary	554	2.9
	U.S. Native-Born (2nd+ Gen.)	552	2.8
9	United States	549	3.1
10	Lithuania	548	2.6
11	Italy	548	2.2
12	Denmark	547	2.1
13	Netherlands	545	1.7
14	Australia	544	2.5
15	Czech Republic	543	2.1
16	Canada	543	1.8
17	Slovenia	542	2.0
	U.S. Hispanic 3rd+ Gen.	542	5.5
18	Austria	541	2.4
	U.S. 2nd Gen.	539	4.9
19	Germany	537	3.2
20	Slovak Republic	535	3.1
21	Israel	530	2.5
22	Portugal	528	2.3
23	Spain	528	1.7
	U.S. Hispanic 2nd Gen.	526	5.9
24	Belgium (Flanders only)	525	1.9
25	New Zealand	523	2.2
	U.S. Black	518	4.6
	U.S. Foreign-Born	518	9.1
26	France	511	2.2
27	Chile	494	2.5

Source: National Center for Education Statistics.
The U.S. Hispanic foreign-born sample was not large enough to produce meaningful results.

Table 1B. PIRLS (Reading), Grade 4, U.S. Subgroups Only

Rank*	U.S. Subgroup	Score	Std. Error	<i>d</i>
1	Asian	591	8.6	0.54
1	White	571	3.0	0.27
3	3rd+ Gen.	565	2.4	0.20
9	Native-Born (2nd+ Gen.)	552	2.8	0.04
9	Overall U.S.	549	3.1	
18	Hispanic 3rd+ Gen.	542	5.5	-0.09
19	2nd Gen.	539	4.9	-0.13
24	Hispanic 2nd Gen.	526	5.9	-0.31
26	Black	518	4.6	-0.41
26	Foreign-Born	518	9.1	-0.41

* If the U.S. subgroup is counted as a separate OECD country.
d = The difference in standard deviations between each subgroup score and the overall U.S. score.

TIMSS

The Trends in International Mathematics and Science Study (TIMSS) was administered to fourth- and eighth-graders in 2015.

Table 2A. TIMSS Math, Grade 4, OECD Countries and U.S. Subgroups

Country Rank	Country / U.S. Subgroup	Score	Std. Error
1	South Korea	608	2.2
	U.S. Asian	605	8.6
2	Japan	593	2.0
	U.S. White	559	2.1
	U.S. 3rd+ Gen.	552	2.1
3	Norway	549	2.5
4	Ireland	547	2.1
5	England	546	2.8
	U.S. 2nd Gen.	546	4.2
6	Belgium (Flanders only)	546	2.1
	U.S. Native-Born (2nd+ Gen.)	542	2.2
7	Portugal	541	2.2
8	United States	539	2.3
9	Denmark	539	2.7
10	Lithuania	535	2.5
11	Finland	535	2.0
12	Poland	535	2.1
	U.S. Hispanic 3rd+ Gen.	531	4.3
13	Netherlands	530	1.7
14	Hungary	529	3.2
15	Czech Republic	528	2.2
16	Germany	522	2.0
	U.S. Hispanic 2nd Gen.	521	3.5
17	Slovenia	520	1.9
18	Sweden	519	2.8
19	Australia	517	3.1
20	Canada	511	2.3
21	Italy	507	2.6
22	Spain	505	2.5
	U.S. Foreign-Born	502	4.8
23	Slovak Republic	498	2.5
	U.S. Black	495	3.6
24	New Zealand	491	2.3
25	France	488	2.9
	U.S. Hispanic Foreign-Born	485	5.4
26	Turkey	483	3.1
27	Chile	459	2.4

Source: National Center for Education Statistics.

Table 2B. TIMSS Math, Grade 4, U.S. Subgroups Only

Rank*	U.S. Subgroup	Score	Std. Error	<i>d</i>
2	Asian	605	8.6	0.81
3	White	559	2.1	0.24
3	3rd+ Gen.	552	2.1	0.16
6	2nd Gen.	546	4.2	0.08
7	Native-Born (2nd+ Gen.)	542	2.2	0.03
8	Overall U.S.	539	2.3	
13	Hispanic 3rd+ Gen.	531	4.3	-0.10
17	Hispanic 2nd Gen.	521	3.5	-0.23
23	Foreign-Born	502	4.8	-0.45
24	Black	495	3.6	-0.54
26	Hispanic Foreign-Born	485	5.4	-0.67

* If the U.S. subgroup is counted as a separate OECD country.
d = The difference in standard deviations between each subgroup score and the overall U.S. score.

Table 3A. TIMSS Science, Grade 4, OECD Countries and U.S. Subgroups

Country Rank	Country / U.S. Subgroup	Score	Std. Error
	U.S. Asian	598	8.1
1	South Korea	589	2.0
	U.S. White	570	2.0
2	Japan	569	1.8
	U.S. 3rd+ Gen.	563	2.1
3	Finland	554	2.3
	U.S. Native-Born (2nd+ Gen.)	549	2.1
4	Poland	547	2.4
5	United States	546	2.2
	U.S. 2nd Gen.	546	4.0
6	Slovenia	543	2.4
7	Hungary	542	3.3
8	Sweden	540	3.6
	U.S. Hispanic 3rd+ Gen.	539	4.3
9	Norway	538	2.6
10	England	536	2.4
11	Czech Republic	534	2.4
12	Ireland	529	2.4
13	Germany	528	2.4
14	Lithuania	528	2.5
15	Denmark	527	2.1
16	Canada	525	2.6
17	Australia	524	2.9
	U.S. Hispanic 2nd Gen.	521	3.3
18	Slovak Republic	520	2.6
19	Spain	518	2.6
20	Netherlands	517	2.7
21	Italy	516	2.6
22	Belgium (Flanders only)	512	2.3
23	Portugal	508	2.2
24	New Zealand	506	2.7
	U.S. Foreign-Born	504	5.2
	U.S. Black	501	3.5
25	France	487	2.7
	U.S. Hispanic Foreign-Born	486	5.1
26	Turkey	483	3.3
27	Chile	478	2.7

Source: National Center for Education Statistics.

Table 3B. TIMSS Science, Grade 4, U.S. Subgroups Only

Rank*	U.S. Subgroup	Score	Std. Error	<i>d</i>
1	Asian	598	8.1	0.65
2	White	570	2.0	0.30
3	3rd+ Gen.	563	2.1	0.21
4	Native-Born (2nd+ Gen.)	549	2.1	0.04
5	Overall U.S.	546	2.2	
6	2nd Gen.	546	4.0	0.00
9	Hispanic 3rd+ Gen.	539	4.3	-0.08
18	Hispanic 2nd Gen.	521	3.3	-0.31
25	Foreign-Born	504	5.2	-0.52
25	Black	501	3.5	-0.56
26	Hispanic Foreign-Born	486	5.1	-0.74

* If the U.S. subgroup is counted as a separate OECD country.
d = The difference in standard deviations between each subgroup score and the overall U.S. score.

Table 4A. TIMSS Math, Grade 8, OECD Countries and U.S. Subgroups

Country Rank	Country / U.S. Subgroup	Score	Std. Error
1	South Korea	606	2.6
2	Japan	586	2.3
	U.S. Asian	585	8.5
	U.S. White	541	3.0
3	Canada	527	2.2
	U.S. 2nd Gen.	524	5.7
4	Ireland	523	2.7
	U.S. 3rd+ Gen.	522	2.8
	U.S. Native-Born (2nd+ Gen.)	519	3.1
5	United States	518	3.1
6	England	518	4.2
7	Slovenia	516	2.1
8	Hungary	514	3.8
9	Norway	512	2.3
10	Lithuania	511	2.8
11	Israel	511	4.1
	U.S. Foreign-Born	507	6.1
12	Australia	505	3.1
	U.S. Hispanic 2nd Gen.	501	4.4
13	Sweden	501	2.8
14	Italy	494	2.5
15	New Zealand	493	3.4
	U.S. Hispanic 3rd+ Gen.	492	4.6
	U.S. Hispanic Foreign-Born	478	5.5
	U.S. Black	462	4.9
16	Turkey	458	4.7
17	Chile	427	3.2

Source: National Center for Education Statistics.

Table 4B. TIMSS Math, Grade 8, U.S. Subgroups Only

Rank*	U.S. Subgroup	Score	Std. Error	<i>d</i>
3	Asian	585	8.5	0.81
3	White	541	3.0	0.28
4	2nd Gen.	524	5.7	0.07
5	3rd+ Gen.	522	2.8	0.05
5	Native-Born (2nd+ Gen.)	519	3.1	0.01
5	Overall U.S.	518	3.1	
12	Foreign-Born	507	6.1	-0.13
13	Hispanic 2nd Gen.	501	4.4	-0.21
16	Hispanic 3rd+ Gen.	492	4.6	-0.31
16	Hispanic Foreign-Born	478	5.5	-0.48
16	Black	462	4.9	-0.67

* If the U.S. subgroup is counted as a separate OECD country.
d = The difference in standard deviations between each subgroup score and the overall U.S. score.

Table 5A. TIMSS Science, Grade 8, OECD Countries and U.S. Subgroups

Country Rank	Country / U.S. Subgroup	Score	Std. Error
	U.S. Asian	573	7.4
1	Japan	571	1.8
	U.S. White	557	2.5
2	South Korea	556	2.2
3	Slovenia	551	2.4
	U.S. 3rd+ Gen.	537	2.6
4	England	537	3.8
	U.S. Native-Born (2nd+ Gen.)	532	2.8
5	Ireland	530	2.8
6	United States	530	2.8
	U.S. 2nd Gen.	528	5.0
7	Hungary	527	3.4
8	Canada	526	2.2
9	Sweden	522	3.4
10	Lithuania	519	2.8
11	New Zealand	513	3.1
12	Australia	512	2.7
13	Norway	509	2.8
	U.S. Hispanic 3rd+ Gen.	508	4.2
	U.S. Foreign-Born	508	5.9
14	Israel	507	3.9
	U.S. Hispanic 2nd Gen.	507	4.1
15	Italy	499	2.4
16	Turkey	493	4.0
	U.S. Hispanic Foreign-Born	483	6.2
	U.S. Black	469	4.7
17	Chile	454	3.1

Source: National Center for Education Statistics.

Table 5B. TIMSS Science, Grade 8, U.S. Subgroups Only

Rank*	U.S. Subgroup	Score	Std. Error	<i>d</i>
1	Asian	573	7.4	0.53
2	White	557	2.5	0.33
4	3rd+ Gen.	537	2.6	0.08
5	Native-Born (2nd+ Gen.)	532	2.8	0.02
6	Overall U.S.	530	2.8	
7	2nd Gen.	528	5.0	-0.03
14	Hispanic 3rd+ Gen.	508	4.2	-0.27
14	Foreign-Born	508	5.9	-0.28
15	Hispanic 2nd Gen.	507	4.1	-0.29
17	Hispanic Foreign-Born	483	6.2	-0.58
17	Black	469	4.7	-0.74

* If the U.S. subgroup is counted as a separate OECD country.

d = The difference in standard deviations between each subgroup score and the overall U.S. score.

PISA

The Program for International Student Assessment (PISA) tested 15-year-olds on reading, math, and science in 2015.

Table 6A. PISA Reading, Age 15, OECD Countries and U.S. Subgroups

Country Rank	Country / U.S. Subgroup	Score	Std. Error
1	Canada	527	2.3
2	Finland	526	2.5
	U.S. White	526	3.3
3	Ireland	521	2.5
4	Estonia	519	2.2
5	South Korea	517	3.5
6	Japan	516	3.2
7	Norway	513	2.5
8	New Zealand	509	2.4
9	Germany	509	3.0
10	Poland	506	2.5
	U.S. 3rd+ Gen.	506	3.5
11	Slovenia	505	1.5
12	Netherlands	503	2.4
13	Australia	503	1.7
	U.S. Native-Born (2nd+ Gen.)	502	3.2
14	Sweden	500	3.5
15	Denmark	500	2.5
16	France	499	2.5
17	Belgium	499	2.4
18	Portugal	498	2.7
19	United Kingdom	498	2.8
20	United States	497	3.4
21	Spain	496	2.4
	U.S. 2nd Gen.	495	5.7
22	Switzerland	492	3.0
	U.S. Hispanic 3rd+ Gen.	488	8.1
23	Latvia	488	1.8
24	Czech Republic	487	2.6
25	Austria	485	2.8
26	Italy	485	2.7
	U.S. Hispanic 2nd Gen.	482	7.2
27	Iceland	482	2.0
28	Luxembourg	481	1.4
29	Israel	479	3.8
30	Lithuania	472	2.7
31	Hungary	470	2.7
32	Greece	467	4.3
	U.S. Foreign-Born	462	7.6
33	Chile	459	2.6
	U.S. Hispanic Foreign-Born	456	9.1
34	Slovak Republic	453	2.8
	U.S. Black	443	5.4
35	Turkey	428	4.0
36	Mexico	423	2.6

Source: National Center for Education Statistics.
The Asian-American sample was not large enough to produce meaningful results.

Table 6B. PISA Reading, Age 15, U.S. Subgroups Only

Rank*	U.S. Subgroup	Score	Std. Error	<i>d</i>
3	White	526	3.3	0.29
11	3rd+ Gen.	506	3.5	0.09
14	Native-Born (2nd+ Gen.)	502	3.2	0.05
20	Overall U.S.	497	3.4	
22	2nd Gen.	495	5.7	-0.02
23	Hispanic 3rd+ Gen.	488	8.1	-0.09
27	Hispanic 2nd Gen.	482	7.2	-0.15
33	Foreign-Born	462	7.6	-0.35
34	Hispanic Foreign-Born	456	9.1	-0.41
35	Black	443	5.4	-0.54

* If the U.S. subgroup is counted as a separate OECD country.
d = The difference in standard deviations between each subgroup score and the overall U.S. score.

Table 7A. PISA Math, Age 15, OECD Countries and U.S. Subgroups

Country Rank	Country / U.S. Subgroup	Score	Std. Error
1	Japan	532	3.0
2	South Korea	524	3.7
3	Switzerland	521	2.9
4	Estonia	520	2.0
5	Canada	516	2.3
6	Netherlands	512	2.2
7	Denmark	511	2.2
8	Finland	511	2.3
9	Slovenia	510	1.3
10	Belgium	507	2.4
11	Germany	506	2.9
12	Ireland	504	2.1
13	Poland	504	2.4
14	Norway	502	2.2
	U.S. White	499	2.8
15	Austria	497	2.9
16	New Zealand	495	2.3
17	Australia	494	1.6
18	Sweden	494	3.2
19	France	493	2.1
20	Czech Republic	492	2.4
21	Portugal	492	2.5
22	United Kingdom	492	2.5
23	Italy	490	2.8
24	Iceland	488	2.0
25	Luxembourg	486	1.3
26	Spain	486	2.2
27	Latvia	482	1.9
	U.S. 3rd+ Gen.	479	3.1
28	Lithuania	478	2.3
29	Hungary	477	2.5
30	Slovak Republic	475	2.7
	U.S. Native-Born (2nd+ Gen.)	474	3.1
31	Israel	470	3.6
32	United States	470	3.2
	U.S. 2nd Gen.	464	5.1
	U.S. Hispanic 3rd+ Gen.	459	7.3
33	Greece	454	3.8
	U.S. Hispanic 2nd Gen.	448	6.0
	U.S. Foreign-Born	440	6.9
	U.S. Hispanic Foreign-Born	429	9.0
34	Chile	423	2.5
35	Turkey	420	4.1
	U.S. Black	419	4.7
36	Mexico	408	2.2

Source: National Center for Education Statistics.
The Asian-American sample was not large enough to produce meaningful results.

Table 7B. PISA Math, Age 15, U.S. Subgroups Only

Rank*	U.S. Subgroup	Score	Std. Error	<i>d</i>
15	White	499	2.8	0.34
28	3rd+ Gen.	479	3.1	0.11
31	Native-Born (2nd+ Gen.)	474	3.1	0.05
32	Overall U.S.	470	3.2	
33	2nd Gen.	464	5.1	-0.07
33	Hispanic 3rd+ Gen.	459	7.3	-0.12
34	Hispanic 2nd Gen.	448	6.0	-0.24
34	Foreign-Born	440	6.9	-0.33
34	Hispanic Foreign-Born	429	9.0	-0.46
36	Black	419	4.7	-0.58

* If the U.S. subgroup is counted as a separate OECD country.
d = The difference in standard deviations between each subgroup score and the overall U.S. score.

Table 8A. PISA Science, Age 15, OECD Countries and U.S. Subgroups

Country Rank	Country / U.S. Subgroup	Score	Std. Error
1	Japan	538	3.0
2	Estonia	534	2.1
	U.S. White	531	2.8
3	Finland	531	2.4
4	Canada	528	2.1
5	South Korea	516	3.1
6	New Zealand	513	2.4
7	Slovenia	513	1.3
8	Australia	510	1.5
9	United Kingdom	509	2.6
10	Germany	509	2.7
11	Netherlands	509	2.3
	U.S. 3rd+ Gen.	508	3.3
12	Switzerland	506	2.9
13	Ireland	503	2.4
14	Belgium	502	2.3
15	Denmark	502	2.4
	U.S. Native-Born (2nd+ Gen.)	502	3.1
16	Poland	501	2.5
17	Portugal	501	2.4
18	Norway	498	2.3
19	United States	496	3.2
20	Austria	495	2.4
21	France	495	2.1
22	Sweden	493	3.6
23	Czech Republic	493	2.3
24	Spain	493	2.1
25	Latvia	490	1.6
	U.S. 2nd Gen.	489	5.0
	U.S. Hispanic 3rd+ Gen.	483	7.2
26	Luxembourg	483	1.1
27	Italy	481	2.5
28	Hungary	477	2.4
29	Lithuania	475	2.7
30	Iceland	473	1.7
	U.S. Hispanic 2nd Gen.	473	6.0
31	Israel	467	3.4
32	Slovak Republic	461	2.6
	U.S. Foreign-Born	459	6.3
33	Greece	455	3.9
	U.S. Hispanic Foreign-Born	448	7.9
34	Chile	447	2.4
	U.S. Black	433	4.9
35	Turkey	425	3.9
36	Mexico	416	2.1

Source: National Center for Education Statistics.
The Asian-American sample was not large enough to produce meaningful results.

Table 8B. PISA Science, Age 15, U.S. Subgroups Only

Rank*	U.S. Subgroup	Score	Std. Error	<i>d</i>
3	White	531	2.8	0.36
12	3rd+ Gen.	508	3.3	0.11
16	Native-Born (2nd+ Gen.)	502	3.1	0.06
19	Overall U.S.	496	3.2	
26	2nd Gen.	489	5.0	-0.08
26	Hispanic 3rd+ Gen.	483	7.2	-0.13
31	Hispanic 2nd Gen.	473	6.0	-0.24
33	Foreign-Born	459	6.3	-0.38
34	Hispanic Foreign-Born	448	7.9	-0.49
35	Black	433	4.9	-0.64

* If the U.S. subgroup is counted as a separate OECD country.
d = The difference in standard deviations between each subgroup score and the overall U.S. score.

PIAAC

The Program for the International Assessment of Adult Competencies (PIAAC) tested people ages 16 to 65 on literacy and numeracy in 2012, with supplemental U.S. testing in 2014.

Table 9A. PIAAC Literacy, Ages 16-65, OECD Countries & U.S. Subgroups

Country Rank	Country / U.S. Subgroup	Score	Std. Error
1	Japan	296	0.7
2	Finland	288	0.7
	U.S. White	285	1.1
3	Netherlands	284	0.7
4	New Zealand	281	0.8
5	Sweden	279	0.7
6	Norway	278	0.6
	U.S. 2nd Gen.	278	2.8
	U.S. 3rd+ Gen.	277	1.0
	U.S. Native-Born (2nd+ Gen.)	277	0.9
7	Estonia	276	0.7
8	Belgium (Flanders only)	275	0.8
9	Czech Republic	274	1.0
10	Slovak Republic	274	0.6
11	Canada	273	0.6
12	South Korea	273	0.6
13	England and N. Ireland	272	1.0
14	United States	272	1.0
	U.S. Asian	271	4.0
15	Denmark	271	0.6
16	Germany	270	0.9
17	Austria	269	0.7
18	Poland	267	0.6
19	Lithuania	267	1.0
20	Ireland	267	0.9
21	France	262	0.6
	U.S. Hispanic 3rd+ Gen.	260	4.0
	U.S. Hispanic 2nd Gen.	260	4.0
22	Slovenia	256	0.8
23	Israel	255	0.7
24	Greece	254	1.1
25	Spain	252	0.7
26	Italy	250	1.1
	U.S. Black	246	2.1
	U.S. Foreign-Born	239	2.9
27	Turkey	227	1.1
28	Chile	220	2.4
	U.S. Hispanic Foreign-Born	208	4.5

Source: National Center for Education Statistics.

Table 9B. PIAAC Literacy, Ages 16-65, U.S. Subgroups Only

Rank*	U.S. Subgroup	Score	Std. Error	<i>d</i>
3	White	285	1.1	0.26
7	2nd Gen.	278	2.8	0.12
7	3rd+ Gen.	277	1.0	0.11
7	Native-Born (2nd+ Gen.)	277	0.9	0.11
14	Overall U.S.	272	1.0	
15	Asian	271	4.0	-0.01
22	Hispanic 3rd+ Gen.	260	4.0	-0.23
22	Hispanic 2nd Gen.	260	4.0	-0.23
27	Black	246	2.1	-0.51
27	Foreign-Born	239	2.9	-0.64
29	Hispanic Foreign-Born	208	4.5	-1.26

* If the U.S. subgroup is counted as a separate OECD country.
d = The difference in standard deviations between each subgroup score and the overall U.S. score.

Table 10A. PIAAC Numeracy, Ages 16-65, OECD Countries & U.S. Subgroups

Country Rank	Country / U.S. Subgroup	Score	Std. Error
1	Japan	288	0.7
2	Finland	282	0.7
3	Belgium (Flanders only)	280	0.8
4	Netherlands	280	0.7
5	Sweden	279	0.8
6	Norway	278	0.8
7	Denmark	278	0.7
8	Slovak Republic	276	0.8
9	Czech Republic	276	0.9
10	Austria	275	0.9
11	Estonia	273	0.5
	U.S. White	273	1.3
12	Germany	272	1.0
13	New Zealand	271	1.0
14	Lithuania	267	1.0
15	Canada	265	0.7
	U.S. Asian	265	4.7
16	South Korea	263	0.7
	U.S. 3rd+ Gen.	262	1.2
17	England and N. Ireland	262	1.1
	U.S. Native-Born (2nd+ Gen.)	261	1.1
18	Poland	260	0.8
	U.S. 2nd Gen.	260	3.4
19	Slovenia	258	1.0
20	United States	257	1.1
21	Ireland	256	1.0
22	France	254	0.6
23	Greece	252	1.0
24	Israel	251	0.8
25	Italy	247	1.1
	U.S. Hispanic 3rd+ Gen.	246	4.6
26	Spain	246	0.6
	U.S. Hispanic 2nd Gen.	239	4.3
	U.S. Foreign-Born	232	3.4
27	Turkey	219	1.4
	U.S. Black	217	2.7
28	Chile	206	3.1
	U.S. Hispanic Foreign-Born	200	5.2

Source: National Center for Education Statistics.

Table 10B. PIAAC Numeracy, Ages 16-65, U.S. Subgroups Only

Rank*	U.S. Subgroup	Score	Std. Error	<i>d</i>
12	White	273	1.3	0.28
16	Asian	265	4.7	0.14
17	3rd+ Gen.	262	1.2	0.09
18	Native-Born (2nd+ Gen.)	261	1.1	0.08
19	2nd Gen.	260	3.4	0.04
20	Overall U.S.	257	1.1	
26	Hispanic 3rd+ Gen.	246	4.6	-0.20
27	Hispanic 2nd Gen.	239	4.3	-0.33
27	Foreign-Born	232	3.4	-0.45
28	Black	217	2.7	-0.72
29	Hispanic Foreign-Born	200	5.2	-1.03

* If the U.S. subgroup is counted as a separate OECD country.
d = The difference in standard deviations between each subgroup score and the overall U.S. score.

End Notes

¹ Briefly, the standard deviation (SD) is a measure of spread. For example, on a test with a mean score of 100 and a standard deviation of 15, a score of 103 would be $(103 - 100)/15 = 0.2$ SDs above the mean. On a different test that has a mean score of 2,000 and a standard deviation of 100, a score of 2,020 would be $(2,020 - 2000)/100 = 0.2$ SDs above the mean. By using the standard deviation to adjust for the spread of each distribution, we see that different-looking scores on different tests actually have the same effect size.

In this report, the effect size is the difference between the subgroup and overall U.S. scores divided by the standard deviation of the overall U.S. distribution, not by a pooled standard deviation. This effect size calculation is sometimes referred to as Glass's delta, and it is useful when the population standard deviations of the two groups appear to be substantially different.

² The [International Data Explorer](#) maintained by NCES provides most of the relevant scores for countries and U.S. subgroups. Public-use microdata (available at the NCES site) supplemented the analysis.

³ The OECD keeps a list of its member countries on its [website](#).

⁴ Because the surveys do not contain information on grandparents' countries of birth, defining the Hispanic third-plus generation relies on respondents volunteering their Hispanic ethnicity. If the most assimilated third-generation Hispanic-Americans no longer identify as Hispanic, the people designated as the third-plus generation may actually be a lower-achieving subset of the real third generation. However, other datasets that do contain grandparent birthplace information also show the third-generation lagging behind. See Jason Richwine, "[Grandchildren of Low-Skill Immigrants Have Lagging Education and Earnings](#)," Center for Immigration Studies, November 13, 2018.