

Evidence of Pro-Core Quality

2 pages

Alignment

The state requires approved vendors to have at least 50% of the questions aligned to the content and rigor of Ohio's Learning Standards. **An independent team of educators analyzed the content and rigor of the following 2018–19 Pro-Core Form C assessments and found them to be 98.8% aligned.**

Subject	Number of Questions	Aligned to Ohio Standards for grade/subject	Not Aligned to Ohio Standards for grade/subject
Math Grade 2	26	26 (100%)	0 (0%)
Algebra 2/Integrated Math 3	50	47 (94%)	3 (6%)
ELA/Reading Grade 2	20	20 (100%)	0 (0%)
ELA/Reading Grade 11	37	37 (100%)	0 (0%)
ELA/Reading Grade 12	36	36 (100%)	0 (0%)
Science Grade 2	23	23 (100%)	0 (0%)
Science Grade 3	26	26 (100%)	0 (0%)
Science Grade 4	27	27 (100%)	0 (0%)
Science Grade 6	32	32 (100%)	0 (0%)
Science Grade 7	29	29 (100%)	0 (0%)
Physical Science	44	43 (97.7%)	1 (2.3%)
Chemistry	39	39 (100%)	0 (0%)
Social Studies Grade 2	17	17 (100%)	0 (0%)
Social Studies Grade 3	40	38 (95%)	2 (5%)
Social Studies Grade 4	48	48 (100%)	0 (0%)
Social Studies Grade 5	36	36 (100%)	0 (0%)
Social Studies Grade 6	32	32 (100%)	0 (0%)
Social Studies Grade 7	42	41 (97.6%)	1 (2.4%)
Social Studies Grade 8	50	50 (100%)	0 (0%)
World History	29	28 (96.6%)	1 (3.4%)
Totals	683	675 (98.8%)	8 (1.2%)

Reliability

Reliability is a measure of how reliably and consistently assessments measure student knowledge of a particular subject. The state requires that approved assessments have reliabilities of 0.80 or above.

Pro-Core's 2018–19 tests have been analyzed and found to have an average reliability of 0.85.

Subject	2018–19 Data			
	Reliability	N (# of items)	n (# of scores)	SEM
Math Grade 2	0.85	26	345	1.97
Algebra 2	0.89	50	496	3.01
Integrated Math 3	0.90	50	387	2.94
ELA/Reading Grade 2	0.81	20	346	1.83
ELA/Reading Grade 11	0.80	36	902	2.65
ELA/Reading Grade 12	0.87	36	702	2.61
Science Grade 4	0.80	27	1244	2.22
Science Grade 6	0.85	32	1721	2.43
Science Grade 7	0.86	29	1695	2.25
Physical Science	0.85	44	570	2.81
Chemistry	0.88	39	543	2.49
Social Studies Grade 3	0.85	40	296	2.57
Social Studies Grade 4	0.88	48	1208	3.08
Social Studies Grade 5	0.87	36	1551	2.55
Social Studies Grade 6	0.85	32	1867	2.49
Social Studies Grade 7	0.86	42	1982	2.91
Social Studies Grade 8	0.91	50	1794	3.10
World History	0.80	31	1381	2.37
Average Reliability	0.85			

Validity

Validity is a measure of how well a test measures what it is supposed to measure. The state requires that approved vendors have validities of .70 or above. ***An analysis between student scores on 2017 Pro-Core and AIR tests found an average correlation coefficient of 0.79.***

Subject	2017–18		
	Number of Student Scores	Correlation Coefficient	Standard Error of Correlation
American Government	452	0.75	0.02
American History	579	0.78	0.02
Biology	412	0.83	0.02
Geometry	410	0.85	0.02
Grade 4 ELA/Reading	304	0.80	0.02
Grade 4 Math	349	0.89	0.01
Grade 5 ELA/Reading	312	0.85	0.01
Grade 5 Math	319	0.90	0.01
Grade 5 Science	328	0.81	0.02
Grade 6 ELA/Reading	277	0.85	0.01
Grade 6 Math	301	0.90	0.01
Grade 7 ELA/Reading	123	0.74	0.03
Grade 7 Math	105	0.86	0.02
Grade 8 ELA/Reading	172	0.78	0.02
Grade 8 Math	28	0.83	*
Grade 8 Science	419	0.81	0.02
Grade 9 ELA/Reading	579	0.80	0.01
Grade 10 ELA/Reading	552	0.77	0.02
Integrated Math 1	202	0.70	0.03
Integrated Math 2	174	0.78	0.03
Average (Total)	(6397)	0.81	0.02

*Sample size is too small to calculate.