

Correlations between Pro-Core and Ohio's State Assessments Biology

The score on any test depends upon many variables: preparation, student buy-in, specific content assessed, or how a student is feeling that day. **Comparing Pro-Core Form C Biology scores to state scores gives a correlation coefficient of 0.83, which is considered very strong***. Correlations between Pro-Core's Form A tests and the state tests are lower, because there is an entire year of study between them.

The following charts show the percentage of students who scored at Limited, Basic, Proficient, Accelerated and Advanced for specific scores on the Pro-Core Form A, B, and C tests. Categories which contain 25% or more students are in **bold, red font**. Most likely score ranges for each performance category are **highlighted in blue**. Students with **Pro-Core scores highlighted in red** have passed the state test at rates of 50% or less. Students with **Pro-Core Scores highlighted in yellow** have passed the state test at rates of 51% to 79%. Students with **Pro-Core Scores highlighted in green** have passed the state test at rates of 80% or more.

Form C Assessment

Pro-Core Score Range**	Percent of Students by State Performance Category					
	Limited	Basic	Proficient	Accelerated	Advanced	Passing***
0 - 9%	38%	18%	29%	9%	6%	44%
10 - 14%	31%	43%	24%	0%	2%	26%
15 - 19%	25%	30%	43%	0%	2%	45%
20 - 24%	14%	15%	59%	6%	5%	70%
25 - 29%	4%	18%	59%	10%	8%	77%
30 - 34%	3%	5%	53%	17%	22%	92%
35 - 39%	0%	4%	45%	18%	33%	96%
40 - 44%	0%	2%	31%	26%	41%	98%
45 - 49%	0%	0%	13%	23%	65%	100%
50 - 54%	0%	0%	3%	14%	83%	100%
55 - 64%	0%	0%	6%	6%	89%	100%
65 - 100%	0%	0%	6%	0%	94%	100%

Form B Assessment

Pro-Core Score Range**	Percent of Students by State Performance Category					
	Limited	Basic	Proficient	Accelerated	Advanced	Passing***
0 - 9%	30%	22%	22%	22%	4%	48%
10 - 14%	30%	20%	43%	3%	5%	51%
15 - 19%	25%	22%	36%	10%	8%	54%
20 - 24%	13%	25%	48%	6%	8%	62%
25 - 29%	7%	16%	42%	10%	25%	77%
30 - 34%	3%	10%	38%	18%	30%	87%
35 - 39%	0%	3%	38%	15%	44%	97%
40 - 44%	3%	0%	25%	7%	48%	97%
45 - 49%	0%	0%	9%	9%	82%	100%
50 - 100%	0%	0%	0%	2%	98%	100%

Form A Assessment

Pro-Core Score Range**	Percent of Students by State Performance Category					
	Limited	Basic	Proficient	Accelerated	Advanced	Passing***
0 - 9%	7%	14%	41%	19%	19%	79%
10 - 14%	13%	13%	41%	14%	20%	74%
15 - 19%	12%	14%	40%	10%	25%	74%
20 - 24%	7%	15%	28%	10%	41%	78%
25 - 29%	6%	4%	27%	20%	44%	90%
30 - 34%	0%	0%	27%	20%	53%	100%
35 - 39%	3%	0%	18%	10%	69%	97%
40 - 49%	0%	0%	6%	10%	84%	100%
50 - 100%	0%	0%	0%	0%	100%	100%

*From <https://benbaab.com/salkind/correlations.html>

r value	Strength
0-.2	very weak
.2-.4	weak
.4-.6	moderate
.6-.8	strong
.8-1	very strong

**Ranges were determined, in part, by sample size (5% or 10 scores, whichever was higher).

***Percentages may not add up due to rounding.

Only about 20% of schools report their state scores to Pro-Core. Without their cooperation and participation, this report would not be possible. The predictions will become more accurate with increased reporting. If you find value in this report, please consider submitting your state scores to Pro-Core when they become available.

Here are some interesting statistics about Ohio's Biology Test from the *Statistical Summaries*, which can be found at <http://education.ohio.gov/Topics/Testing/Statistical-Summaries-and-Item-Analysis-Reports>.

Average Scaled Score:	715.75		
Average Raw Score:	26.74 of 56 = 47.8%		
Percent of Students at			
Limited:	18%	Scaled Score Range:	617 - 684
Basic:	13%	Scaled Score Range:	685 - 699
Proficient:	31%	Scaled Score Range:	700 - 724
Accelerated:	12%	Scaled Score Range:	725 - 734
Advanced:	28%	Scaled Score Range:	735 - 823
Passing***:	70%	Scaled Score Range:	700 - 823