

A Critical Analysis Indiana Student Performance

How are Indiana public school students performing in reading and math? As a state, Indiana is ranked 17th by the US News and World Report. This is not a bad rank, but this gives no gratification if the national system is weak. The new book, *US Education Is in Trouble, Let's Fix It! 22 Reform Proposals*¹ goes to great lengths to establish that US public schools are not performing well.

This report will focus on how many students fail the reading and math exams. If these numbers are high, then we know the averages are not as high as they should be.

Most assessment exams report results that are grouped in defined classifications. These are: Advanced, Proficient, Basic, and Below Basic. This report will define a Below Basic score as a failing score. The state of Indiana has adopted a twist to the test results classifications. They use a different scheme. Here is with my assumed conversion to the usual naming:

Below Proficiency = Below Basic
Approaching Proficiency = Basic
At Proficiency = Proficient
Above Proficiency = Advanced

In this analysis a Below Proficiency score is defined to be a failing grade.

Reading Issues

Social promotion is the phrase used to describe the movement of a student into the 4th grade when they cannot pass the reading exam. In 2022, **37%** of Indiana fourth graders failed the National Assessment of Educational Progress (NAEP) reading exam. (Here are earlier scores showing how pre Covid scores weren't much different - 32% in 2002 and 33% in 2019.) This exam was given in the winter of the student's 4th grade; their failure is a clear case of social promotion – they carried their low reading ability into the 4th grade.

By the time the students are in the 8th grade, **30%** failed the 2022 NAEP reading exam. (23% in 2002 and 25% in 2019) This illustrates the terrible disservice that is done to a student who moves forward and cannot read. As will be shown below, most students do not catch up.

Adult Competency Tests Show 25% of US High School Grads Cannot Read

¹ Garrett, Richard W, published by Rowman and Littlefield, released August of 2024.

The most damning evidence of the inability to read comes from the assessment of adult competencies. The Program for the International Assessment of Adult Competencies, PIAAC, is a cyclical, large-scale study developed under the auspices of the Organization for Economic Cooperation and Development (OECD). It is a well-established measurement system used across the globe in 38 countries. In the most recent 2017/2018 study, they assessed a sample of the U.S. pool of 16 to 74-year-old high school graduates.

In literacy, **25%** (52 million) have the reading skills of a 10-year-old, placing America 12th among 29 nations measured. This dismal level of verbal competence worsened from 20% in the program’s previous 2012 study.

Indiana ILEARN, NAEP and SAT Assessment Exams Results for 2022-2023

Indiana utilizes three different testing systems to assess student progress from grades 3 to grade 11. The first is IREAD, given to 3rd graders to test their reading skills. The next is ILEARN, used to test reading and math in grades 3 to 8. Lastly a suite of SAT (Scholastic Aptitude Test) exams is used for grades 10 and 11.

Table 1. How Many Indiana Students Are Failing Various Exam at Various Grades

Row Number	Subject	Exam	Percent Fail	Number of Students: 1 Year	Comments
1	Reading	IREAD	18	14,800	Only Grade 3
2	Reading	ILEARN	37	30,154	Only Grade 4
3	Reading	NAEP	37	29,767	Only Grade 4
4	Reading	ILEARN	36	174,812	Grades 3-8 485,000 tested
5	Math	ILEARN	37	181569	Grades 3-8 485,000 tested
6	Math	ILEARN	45	37,242	Grade 8
7	Math	NAEP	34	28,396	Grade 8
8	Reading	SAT	39	30,135	Grade 11
9	Math	SAT	45	35,343	Grade 11

Discussion

This table reveals many disappointing results associated with Indiana 3-12 education. The IREAD exam shown in row 1 is only for third grade readers. The 18% failure rate is considerable below other assessments of reading success. Row 2 gives a ILEARN failure rate of 37% as does the NAEP score on line 3. The results from the IREAD exams should not be considered since they are out of line with two other exams. Looking at row 4 shows the reading average failure rate for all grades from 3 to grade 8 of 36% - this also discredits the IREAD score.

Row 4, the 174,81 is the sum of all failing students for all the grades combined for the single school year 2022-2023; answer is the same for row 5.

Row 5 shows the ILEARN math failure rate of 37% - this is the average for all grades 3 to 8. This result is a stand-alone result since there is no similar NAEP multigrade number for comparison. Rows 6 and 7 show comparable math scores for the 8th grade. There is no explanation for the big differences between these scores.

Lines 8 and 9 are a bit different from all other lines. They show the percent of students that fail to meet the SAT benchmark that will make them successful in future studies.

CCR - College and Career Ready²

One thing a school system prides itself on is the percentage of their graduates that are prepared to move on to a collage/university or a vocational skill. The CCR for a state (or school) is the percentage of graduates who are qualified to advance their education after high school. Indiana defines any student who tests at either “At proficiency” or “Above proficiency” a CCR success.

Table 1 uses data for the state’s current assessment exam, ILEARN, to estimate the CCR for 7th and 8th graders. It shows the percentage of students who scored at either “At proficiency” or “Above proficient”. Since the use of the ILEARN exam stops at the 8th grade this data shows the trajectory of the students as they get closer to graduation.

Table 2 CCR Estimates ILEARN Exam 2023			
	Eng. Lang. Arts	Math	Both
Grade 8	44%	31%	26.7
Grade 7	39%	33%	26.0

² College covers the range of educational options beyond a high school diploma including credentials of less than one year up through a 4-year bachelor’s degree. https://www.in.gov/che/files/2023_College_Readiness_10_13_23e.pdf

Testing students in grades after the 8th grade is accomplished using either the SAT exam or the PreSAT test. The results of both of the SAT exams are keyed to a student meeting Benchmarks established by The College Board, the company that designs and administers the SAT exams.

Table 3 CCR Estimate Using PreSAT Exam Table shows the Percentage of 2023 Test Takers Who Met or Exceeded the Benchmark				
	% Tested	ERW	Math	Both
Grade 10	80%	53%	33%	29%
Grade 11	66%	55%	32%	30%

The last test of college readiness is the full SAT exam. Table 3 shows the percent of Indiana students (they all took the exam) who, from a test score point of view, can move on with their education. This differs from the formal CCR definition used in Indiana (see comments associated with Table 1).

Table 4 CCR -SAT results, 2023 Data Here are the results: (77,846 graduates)			
	Reading	Math	Both
	51%	32%	30 %
Students Capable of Moving On	39,687	24,920	23,353
Students Not Meeting the Proper Score	38,159	52,926	23,353

What Is Indiana’s CCR Percentage?

Looking at the different estimates presented in Tables 1,2, and 3. we need a simple estimate that does not require too many additional words. If we define the number to represent the percentage of students who meet the criteria for both reading and math, we get a number in the 30% range. If we choose reading or math, we get around 52% for reading and 35% for math. Using the 30% number for both reading and math seems

too demanding – students can go onto to additional training relying on their strong suit, be it math or reading.

Indiana is a bit unusual but in a good way. Their reading (English language skills) for the SAT suite of tests is considerably higher than the score for math. We do not want to deal with the complexity of two different numbers; let's average the reading and math and end up with one number, **44%**. In the grand scheme of things this is a pretty good number. A similar analysis for the state of Wisconsin gives 35%. When the Maryland commission began their work in 2016 their number was 40%.

Indiana College and Career Readiness Number, CCR,

However, it is distressing to think that only 44% of Indiana's high school grads leave school prepared to undertake additional training. Considering there are about 78,000 graduates, this leaves 43,680 students with an uncertain future.

There is no gatekeeper who tells a student who does not meet the above test scores that they cannot advance their education by attending some type of college or vocational school. In fact, in the last few years 53% of our public-school grads have taken advanced training – that's 32,976³. Of these college attenders, about 45% graduate in 4 years and 66% in 6.⁴

Conclusion

These results leave much to be desired in the way of student success. Indiana has many serious issues to resolve as they educate their population. Any time 180,000 students a year in grades 3-8 fail reading or math there is something seriously wrong with our system. What should the goal be for Indiana high school graduates? The state of Maryland set a CCR goal of 80%; indeed, this would be a very excellent school system. It too, should be the goal for Indiana.

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³ This includes all the different ways a student can obtain additional training, college, university, or trade school.

⁴ Indiana College Completion Report 2022, Indiana Commission for Higher Education, 2022, page 1
https://www.in.gov/che/files/2022_College_Completion_Report_10_03_2022.pdf

