

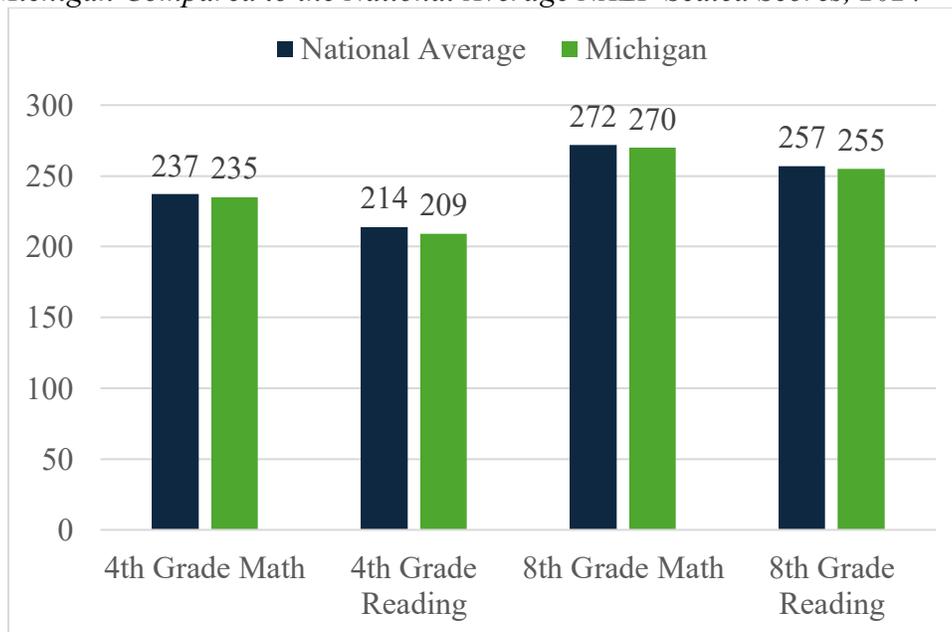


### Michigan's NAEP Performance

Recently, there have been sensational headlines and talking points surrounding Michigan's performance on the National Assessment of Educational Progress (NAEP), known as the Nation's Report Card. In some cases, policymakers and the media have insinuated that Michigan's students literally cannot read. Despite these claims, the state's performance on the NAEP is neither surprising, nor an outlier nationally. While NAEP scores are an important metric in education, to foster good policy, leaders need to understand what can and cannot be learned from these metrics.

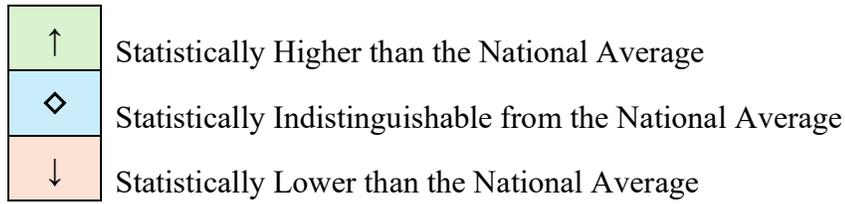
In all tested subjects but 4<sup>th</sup> grade reading, Michigan's NAEP scores from 2024 were statistically indistinguishable from the national average. Additionally, Michigan's change in NAEP scores between 2022 and 2024 were also indistinguishable from the national average. *Figure 1* shows Michigan's NAEP scores compared to the nation across 4<sup>th</sup> and 8<sup>th</sup> grade reading and math. For 4<sup>th</sup> grade math, 8<sup>th</sup> grade math, and 8<sup>th</sup> grade reading, Michigan's scores were approximately 2 points below the national average (a statistically insignificant difference). In contrast, 4<sup>th</sup> grade reading scores were 5 points below the national average (a statistically significant difference).

*Figure 1. Michigan Compared to the National Average NAEP Scaled Scores, 2024*



*Figure 2* tracks whether reading and math NAEP scores for 4<sup>th</sup> and 8<sup>th</sup> grades were below, at, or above the national average for each year tested since 2000. While Michigan's 4<sup>th</sup> grade reading scores fell from the national average before the pandemic to below in 2022 and 2024, the 4<sup>th</sup> grade math scores had the opposite trend. In fact, 2022 was the first time since 2007, where Michigan's 4<sup>th</sup> graders achieved at national levels in math. Michigan's 8<sup>th</sup> graders have achieved at the national average across reading and math since 2017.

Figure 2. Michigan's NAEP Scores Compared to the National Average



**Average Scaled Scores**

Subject	Grade	2000	2002	2003	2005	2007	2009	2011	2013	2015	2017	2019	2022	2024
Math	4	↑		◇	◇	◇	↓	↓	↓	↓	↓	↓	◇	◇
Reading	4		◇	◇	◇	◇	◇	◇	↓	↓	◇	◇	↓	↓
Math	8	↑		◇	◇	↓	↓	◇	↓	↓	◇	◇	◇	◇
Reading	8		◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇

**At or Above Basic**

Subject	Grade	2000	2002	2003	2005	2007	2009	2011	2013	2015	2017	2019	2022	2024
Math	4	↑		◇	◇	◇	↓	↓	↓	↓	↓	↓	◇	◇
Reading	4		◇	◇	◇	◇	◇	◇	↓	↓	◇	◇	◇	↓
Math	8	↑		◇	◇	↓	↓	◇	↓	↓	◇	◇	◇	◇
Reading	8		◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇

**At or Above Proficient**

Subject	Grade	2000	2002	2003	2005	2007	2009	2011	2013	2015	2017	2019	2022	2024
Math	4	↑		◇	◇	◇	↓	↓	↓	↓	↓	↓	◇	◇
Reading	4		◇	◇	◇	◇	◇	◇	↓	↓	◇	◇	◇	↓
Math	8	↑		◇	◇	↓	↓	◇	↓	↓	◇	◇	◇	◇
Reading	8		◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇

Early reading skills are foundational for student learning. Consequently, the decline in Michigan’s 4<sup>th</sup> grade reading scores from the national average to below should concern policymakers. It is important, however, to understand what those scores mean and what they do not.

NAEP scores can be easily misunderstood because state proficiency levels do not neatly map on to NAEP achievement levels. For example, failing to achieve at the “Basic” level on the 4<sup>th</sup> grade NAEP does not mean that student cannot read. Similarly, failing to achieve “Proficient” does not mean a student is not at grade level. In fact, the NAEP “Basic” level tends to align closely with state set proficiency standards.<sup>1</sup> Rather, the “Basic,” “Proficient,” and “Advanced” achievement-level descriptions have specific learning targets as determined by the National Assessment Governing Board.

Simply put, the learning targets set by NAEP are ambitious compared to state standards across the nation and there is no indication from NAEP data that Michigan’s students “cannot read.” Table 1 compares elements of the 4<sup>th</sup> grade [NAEP achievement levels](#) to Michigan’s 4<sup>th</sup> grade [English Language Arts standards](#). While there are certainly similarities between NAEP achievement levels and Michigan’s 4<sup>th</sup> grade standards, they are not the same.

*Table 1. Comparison of 4<sup>th</sup> grade NAEP Basic, NAEP Proficient, and Michigan standards*

<b>NAEP Basic</b>	<b>NAEP Proficient</b>	<b>Michigan 4th Grade</b>
Determine the relevant meaning of familiar words using context from a single section of the text.	Determine the relevant meaning of words with multiple meanings.	Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean).
Locate a specific detail from the text and make simple inferences from one section of the text.	Use a specific detail from the text to make inferences or provide a description or an explanation about text features.	Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
Provide a description of a text feature or author’s craft using a general reference to the text.	Describe, explain, or draw conclusions about text structures (e.g., compare and contrast, cause and effect, sequence and order).	Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
Restate a problem or solution presented in a single section of the text.	Restate a problem or solution presented in a single section of the text.	
Provide an opinion using a general reference to the text.	Provide an opinion with relevant support from the text.	Write opinion pieces on topics or texts, supporting a point of view with reasons and information.
	Integrate ideas across a text to determine purpose and main idea.	Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.

<sup>1</sup> Ji, C.S., Rahman, T., and Yee, D.S. (2021). *Mapping State Proficiency Standards Onto the NAEP Scales: Results From the 2019 NAEP Reading and Mathematics Assessments* (NCES 2021-036). U.S. Department of Education. Washington, DC: Institute of Education Sciences, National Center for Education Statistics. Retrieved from <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2021036>.

Public policy discourse often focuses on rankings between states, including state rankings of NAEP scores. While state NAEP rankings may be useful to spark a dialogue, if not understood carefully, they can be misleading. Specifically, [standard errors](#) and a tight distribution of average scaled scores present challenges to interpreting state rankings of the NAEP.

State NAEP scores are produced by [sampling](#) a representative group of students. The resulting estimates produced are measured with standard errors. While the individual point estimates can be ranked, statistically, many states are indistinguishable from one another. For example, in 2024 Michigan ranked 31st in 8<sup>th</sup> grade math scores. Statistically, however, Michigan's score couldn't be distinguished from New York's score, ranked 27<sup>th</sup>, nor Oregon ranked 40<sup>th</sup>. NAEP provides [guidance on statistical significance](#) stating that "results should not be compared without considering statistical significance."

Another reason state achievement rankings are insufficient is that they cover up the distribution of scores. NAEP scores are tightly distributed; in other words, NAEP scores across states are relatively similar. For example, Michigan's average 8<sup>th</sup> grade reading score was 255.06 earning a rank of 33. If Michigan scored a mere 2% better it would jump 20 places to 13<sup>th</sup> in the country, above Minnesota. A 2% decline would put Michigan at 44<sup>th</sup> in the country, right below Florida. This is not to say that a 2% change in scaled scores is trivial in terms of student performance – only that the difference between top and bottom ranks is not very wide.

While Michigan's policymakers absolutely should learn from NAEP scores, they should also clearly understand what information they can and cannot convey. It is also important to realize that NAEP scores represent a narrow measure of education. Policymakers should take a wider view by looking at a broad set of measures.

For outcomes, graduation rates, state test scores, youth unemployment, college-going rates, and more should be considered. Inputs to education should also be evaluated such as current funding compared to adequate funding, staff ratios compared to recommended levels, as well as programmatic offerings including career and technical education. Moreover, the relationship between inputs and outputs should be understood within the reality of changing student demographics and a tumultuous policy context.

Without a clear understanding of the issues, Michigan's policymakers risk repeating hyperbolic claims denigrating our schools or worse: repeating policies that have failed to make meaningful improvement.