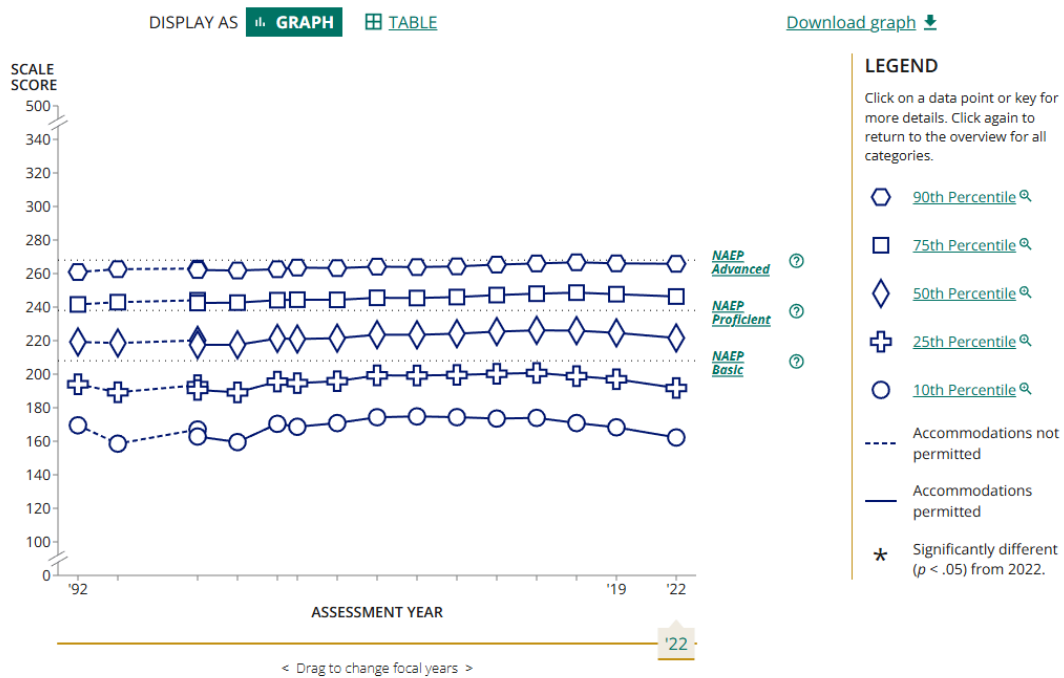


## Is there a Reading Crisis?

Is there a reading crisis in America? Since the Science of Reading movement has gained traction, I have noticed a significant amount of debate on this topic. Many cite the NAEP (2022) scores, which indicate that only 32% of students meet the proficient benchmark. This statistic sounds alarming; however, as unlikely as it may seem, I must agree with Dr. Paul Thomas (2019) on this matter: that interpretation would be a misrepresentation. The proficient benchmark does not actually represent "grade-level" standards and, according to the NAEP, is intended to be aspirational. Historically, the proficient benchmark has been slightly above the 50th percentile, as demonstrated in the image below from the NAEP website.



## What Does Grade Level Mean?

Grade level is ultimately an arbitrary philosophical concept. It should be noted that, in peer-reviewed research, the 30th percentile has typically represented the standard for grade level, as demonstrated in literature reviews by Denton and Mathes (2002) and Torgesen (2009). Percentiles are generally a more accurate way of determining benchmarks because they measure the percentage of a population that typically achieves a certain level. For example, if a student reaches the 30th percentile, they are scoring above 29% of the population and below 70%. Conversely, criterion-based grade level references are determined by a specific set of knowledge or abilities. While this approach may sound simpler, it is inevitably developed independently of student samples, often resulting in arbitrary or inconsistent standards.

Parents and educators sometimes struggle to conceptualize this because 30% can sound like a poor grade; after all, a 40% is typically considered a D- letter grade. However, in a norm-referenced sample, there will always be a distribution of scores. Therefore, it is both mathematically and philosophically unrealistic to expect all students to achieve above the

50th percentile. Moreover, as shown in the above graph and noted by Dr. Paul Thomas, there is little evidence of any significant decline in literacy scores over the past 30 years.

### **Are students Reaching Grade Level?**

However, where I disagree with Paul Thomas is in interpreting this data to mean there is no problem. As previously discussed, the 30th percentile is typically used as the benchmark for grade level, and the NAEP “Basic” benchmark roughly correlates with this standard. In 2022, 39% of students in the United States fell below the Basic benchmark, suggesting that 9% more students than expected failed to meet grade-level expectations. While scores have been worse in the past—for instance, in 1998, 42% of students fell below Basic—there has been a decline in performance compared to pre-COVID levels, when 35% of students fell below Basic.

Another way to view this data is to recognize that we expect approximately 70% of students to achieve grade-level status. However, in the most recent round of national testing in the United States, only 61% of students met this standard. Similarly, even before COVID, only 65% of students were achieving grade-level expectations.

### **What Percentage of Students Can Achieve Grade Level?**

Another way to approach this question is not only to consider what we typically expect but also what we could achieve under ideal educational circumstances. In literature reviews by Mathes and Denton (2002) and Torgesen (2009), the authors identified several studies in which 82% or more of a school’s students were reading at grade level in grade 1 before any reading intervention occurred. This suggests that 82% of students could potentially reach grade-level expectations through core instruction alone. Furthermore, the authors found that more than 95% of students could achieve grade-level expectations if 80 hours of Tier 3 (groups of three or fewer students) reading intervention was provided to struggling readers. I interpret these findings to mean that 21% more students could potentially reach grade-level reading achievement with better core instruction alone and that 34% more students could do so with substantial increases in Tier 3 intervention instruction.

### **Is 80 Hours of Intervention Feasible?**

Providing 80 hours of intensive reading intervention may seem unrealistic in many school environments. However, it is achievable when considering that in the studies where 95% or more of students reached grade level, the intervention was limited to grade 1. Grade 1 is a logical focus for intervention, as reading assessments before this grade may be less reflective of actual potential, and interventions after grade 1 have been shown to be less effective, as demonstrated by Hall and colleagues (2022). Moreover, providing 80 hours of intensive intervention per year for 30% of grade 1 students equates to needing just one teacher for every 100 grade 1 students. It ultimately comes down to resource allocation. For instance, if four schools each had 25 grade 1 students, they could theoretically share one resource teacher and still provide the required 80 hours of intervention.

### **What About Socio-Economic Factors?**

I frequently hear suggestions that socio-economic factors, such as poverty or institutional racism, have a greater impact on achievement than pedagogy. However, research indicates that pedagogy (teachers) has a far stronger influence than socio-economic factors. For example, a 2017 meta-analysis of 45 studies by Michael Harwell, Yukiko Maeda, Kyoungwon Maeda, Aolin Bishop, and Aolin Xie on the relationship between socio-economic factors and academic achievement found an effect size of only 0.22. In comparison, meta-analyses on interventions focused on phonics, fluency, vocabulary, morphology, and comprehension have consistently found much larger effect sizes. While it may not be feasible for 82% of students to reach grade-level reading across all schools through core instruction alone, it seems reasonable to believe that most schools can exceed the current benchmark of 70% of students reading at grade level.

### **Concluding Thoughts:**

1. NAEP proficient benchmarks do not represent grade-level standards.
2. There is little evidence of a significant modern decline in literacy scores.
3. Peer-reviewed research suggests that significantly more students could reach grade-level expectations than are currently doing so.
4. Achieving ideal literacy rates requires providing 80 hours of intensive instruction annually to struggling grade 1 students.
5. Pedagogy likely has a greater impact on student achievement than socio-economic factors.

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