

Year-Over-Year Trends in Achievement: Before, During and After the Pandemic

Top Takeaways & FAQ

Disclaimer: This briefing document is meant to serve as a quick snapshot, only highlighting the key findings from the full report as compiled by the Office of Learning Recovery and Acceleration. The full report can be found [here](#).

Please email communications@dpi.nc.gov if you need assistance.

Top Takeaways

1. Prior to the pandemic (2013-2019), achievement was relatively stable for most assessments with small positive or negative effect sizes. General statewide trends show that reading achievement was on a decline, math achievement was flat, and science achievement was improving.
2. The pandemic negatively impacted performance in all tested subjects, except English II, during the 2020-2021 school year. Effects varied but were substantial.
3. Student performance partially recovered during the 2021-2022 school year.
4. The percentage of schools that improved and met recovery thresholds in 2022 varied by subject and grade with the most schools meeting the three-year average recovery threshold in EOG Math 3, EOC Math 1, EOG Reading 3, EOC English 2, and EOG Science 8.
5. EOG Reading 3 is the only assessment that meets the extended trend recovery threshold at the **state-level** by the 2021-22 school year.
6. Assuming constant recovery, average test scores will return to pre-pandemic levels by the end of the 2023-2024 school year in Math and by 2024-2025 school year in Science. Recovery times in ELA vary but are generally longer.

FAQs

Q. What is the purpose of this latest analysis?

- The purpose of this analysis is to help understand both the initial and remaining impact of the pandemic on student achievement in North Carolina.
- This analysis illustrates progress towards post-pandemic recovery, as measured through average scale scores on state standardized assessments (2013-2022).

Q. How does it differ from and expand upon the previous [Learning Loss Impact Analysis](#) and [Recovery Analysis Report](#)?

- The “[Lost Instructional Time Impact Analysis](#)” and “[Recovery Analysis](#)” presented average differences between students’ expected and actual performance during 2021 and 2022, respectively, and defines recovery as progress back towards those expectations.
- This analysis presents yearly average scale scores between 2013 and 2022. Trends in these scores are used to create two additional benchmarks for recovery: a return to pre-pandemic performance (as measured by average achievement between 2017-2019) or a return to where the pre-pandemic trend (as measured between 2013-2019) predicted 2022’s achievement.

- As part of understanding students' recovery in North Carolina, the analysis produces three key metrics:
 - The **Pre-Pandemic Trend** represents the overall trend in achievement for an assessment between 2013 and 2019. This line smooths out the year-to-year variation in the observed achievement for the state.
 - The **Pandemic Impact** represents the extent to which actual achievement in 2021 diverged from the pre-pandemic trend, had it continued to 2021. This line represents a counterfactual, or an estimate of what achievement might have been if the pre-pandemic trend were not disrupted by the pandemic.
 - The **Distance to a Full Recovery** represents the extent to which actual achievement in 2022 diverged from a full recovery according to two different thresholds. There are two ways to consider recovery: a continuation of the pre-pandemic trend threshold based on the 2013-2019 timeframe and a three-year average threshold representing the more immediate timeframe of 2017-2019.
- See here for additional information: [EVAAS-NC-YearOverYearAnalysisThroughSY2122.pdf](#)

Q. Are there any cautions to consider when reviewing the report and subsequent findings?

- This analysis tells us whether students who tested in a given subject during a given year had different average scores than students who tested in the same subject during another year. Therefore, it should not be used to determine whether students' scores are improving as they transition between grades. For example, this analysis does not tell us whether 4th graders improved upon their own 3rd grade scores.

Q. How is this analysis actionable?

- This analysis highlights differences between pre- and post-pandemic performance for all tested subjects. In doing so, it identifies tested subjects that have experienced greater recovery while identifying others that may need additional support.