

NC's Road to Recovery through Evidence-based Policymaking

January 29, 2024

**House Select Committee on Education Reform
Jeni Corn, Ph.D., Director of Research and Evaluation, NC
Department of Public Instruction**

NC Emerges as a National Leader in Recovery

Superintendent Truitt created the Office of Learning Recovery and Acceleration (OLR) in March 2021 to facilitate

- **Transparency:** Prioritizing providing the research needed to make evidence-based decisions at state and local levels to aid in recovery and accelerate learning for all students.
- **Partnership:** Partnering with PSUs to bring needed solutions to long-standing challenges facing NC public education.
- **Coordination:** Serving as the central point of contact for internal and external coordination of resources, collaboration, and communications.

[Main OLR Webpage](#) and [Research & Recovery Roundup Blog](#)

OLR Accomplishments

- Built a team of experts in the areas of educational programming, research, evaluation, and policy
- Designed and supported four state-wide ESSER-funded programs (PRC 176, 177, 188, 189);
- Reviewed and monitored PSU plans for ARP 20% set aside
- Designed summer academic and workforce-aligned programs for PSUs based on data from ongoing research studies
- Hosted a series of ARP regional convenings focused on the use of data to drive local decisions about evidence-based interventions funded by ESSER
- Developed a clearinghouse of [Promising Practices](#) and an ROI calculator to connect funding to outcomes and interventions that work
- Submitted four JLEOC recovery-focused reports as required by the General Assembly
- Responded promptly to emerging data collection and analysis requests
- Coordinated \$10M in recovery-focused research



“Recovery in NC” Research Studies

- Virtual Academy Study (SB654) [Link to report](#)
- Elevating the Voices of NC Students, Teachers, Administrators, and Parents Regional Qualitative Studies (ESSER II) [Link to report](#)
- COVID-19 Lost Instructional Time Impact Analysis - EVAAS Team at SAS (ESSER II, ESSER III, NCGA) [Link to report](#); [Link to district recovery dashboard](#)
- Studying the long-run effects of the COVID-19 pandemic on student, educator, and school outcomes (Spencer Foundation Award) [Link to whitepaper](#)
- Assessing the Long-Term Impacts of School Extension Programs on Student Re-engagement and Learning Recovery (IES Award) [Link to report](#)
- NC Recovery Research Network to study impact of COVID-19 on Student Learning in North Carolina (ARPA Funds) [Link to press release](#)
- NC Recovery Practitioners Network to build district internal research capacity and cultivate district-faculty relationships (ESSER III) [Link to press release](#)

S.L.2023-134 § 7.52.(b).

Of the funds appropriated to the Department of Public Instruction by this act, the sum of five hundred fifty thousand dollars **(\$550,000) in nonrecurring funds for each year of the 2023-2025 fiscal biennium** shall be used to continue to partner with SAS to fund **learning recovery analysis, student projections to pre-pandemic expected performance, and web reporting on year-over-year modeling for learning recovery.**

New Year-Over-Year (YoY) Analysis

NCDPI worked with the EVAAS Team at SAS to develop a rigorous and empirical way to answer these *persistent policy questions*:

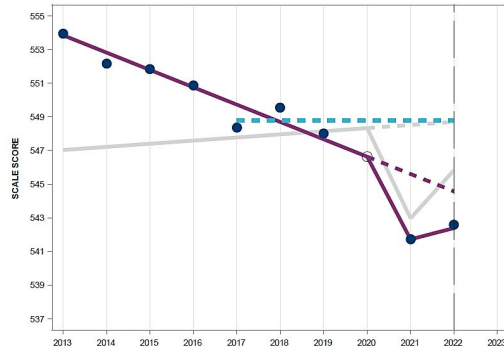
- How will we know when the state/district/schools have “recovered” in NC?
- Can we quantify “recovery”?
- How can we account for local context in terms of progress towards “recovery”?

Reports for 2022, 2023, 2024

TWO Different Recovery Analyses

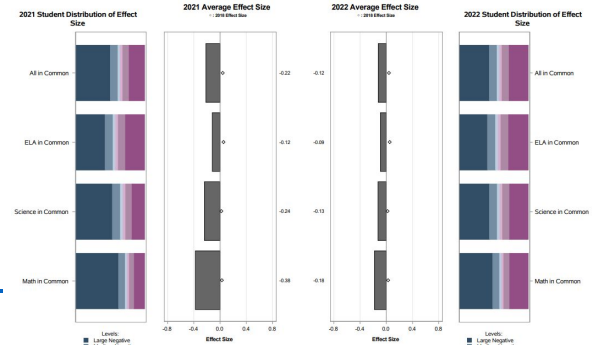
“Cohort” Model →
*Impact of Lost Instructional Time in
2022 & Recovery Analysis in 2023*

[Link to report](#), [Link to district recovery dashboard](#)



← “Year-Over-Year” Model
Year-Over-Year Trends and Impacts from
the Pandemic ***NEW***

[Press Release](#) – [January 2024 Presentation to the NC State Board of Education](#) – [Full Report](#)



Upcoming Activities

- Facilitate regional convenings to assist districts and charters in understanding local data and planning for ESSER fiscal cliff
- Disseminate findings on impacts of ESSER-funded programs through partnership with NC Collaboratory
- Submit proposals to federal RFPs (e.g. IES, USED) and state and national foundations (e.g. Golden LEAF, Belk Foundation) and with external research partners aligned to NCDPI and NCGA policy priorities

Year-Over-Year Model

Introduction



Measures the impact of the pandemic and the extent of recovery.



Uses state/LEA average achievement, leveraging trends that existed prior to the pandemic.



Evaluates trends in average results for specific assessments over time rather than creating pre-pandemic expectations for individual students.

Year-Over-Year Model

Overview

The model provides insight into three time periods:

1. **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 district and the state.
2. **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 had continued to 2021.
3. **Distance to a Full Recovery** represents the extent to which actual achievement in 2022 and in 2023 diverged from a full recovery according to the threshold. There are two ways to consider recovery: a continuation of the pre-pandemic trend based on the 2013-2019 timeframe or a three-year threshold representing the more immediate time frame of 2017-2019.

This is a more robust way to measure trends than simple pre/post comparison of district averages. The model considers trends in achievement prior to the pandemic.

Year-Over-Year Trends and Impacts from the Pandemic: State Level Results

Statewide Pre-Pandemic Trend, Pandemic Impact, and Distance to Recovery Thresholds by Assessment

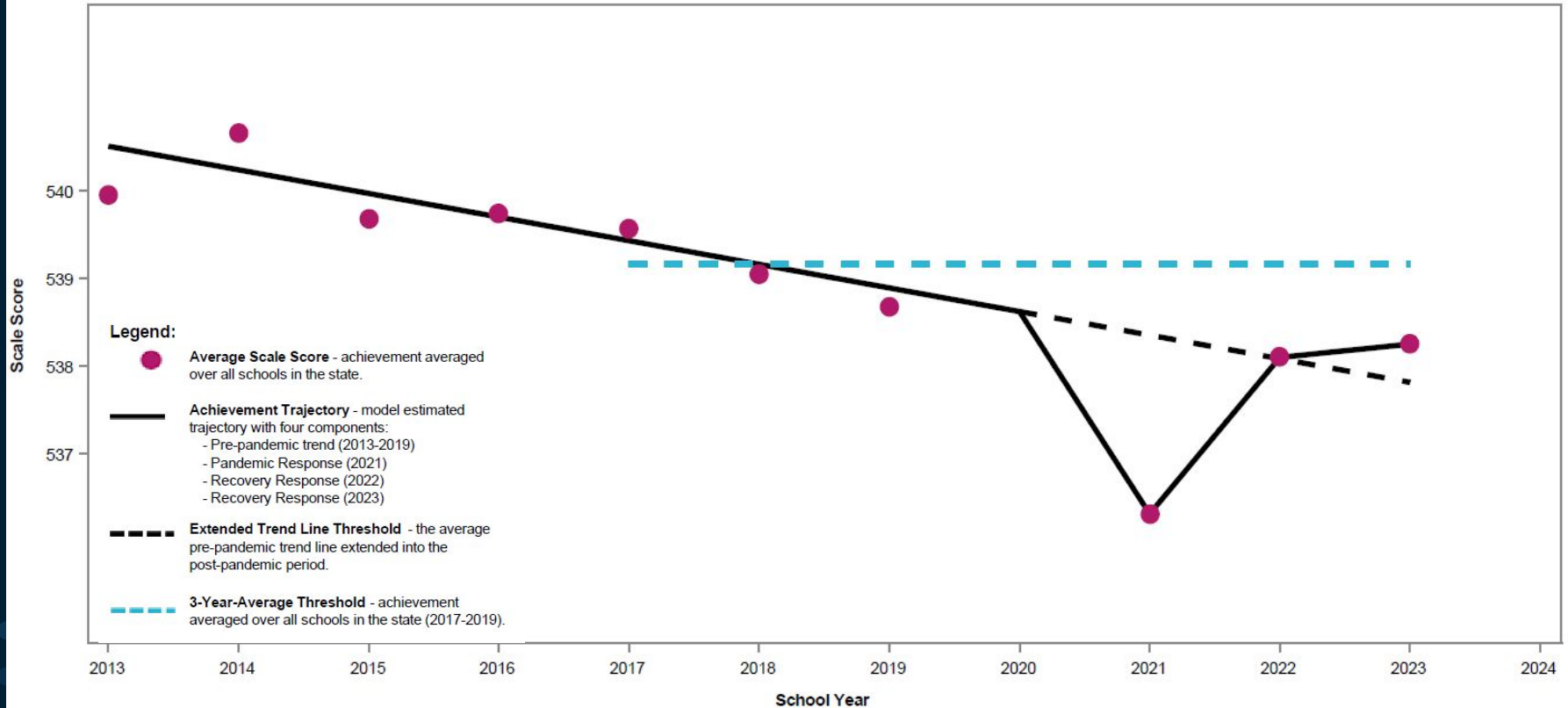
Assessment		Pre-Pandemic Trend	Pandemic Impact	Recovery: Extended Trend Threshold		Recovery: 3-Year Average Threshold	
Subject	Grade-Level	2013-2019	2021	2022	2023	2022	2023
Math	EOG Math 3	+0.01	-0.54	-0.26	-0.19	-0.21	-0.13
	EOG Math 4	+0.00	-0.50	-0.23	-0.15	-0.23	-0.14
	EOG Math 5	+0.00	-0.49	-0.27	-0.18	-0.24	-0.14
	EOG Math 6	+0.01	-0.47	-0.27	-0.24	-0.22	-0.18
	EOG Math 7	+0.00	-0.40	-0.27	-0.24	-0.24	-0.20
	EOG Math 8	-0.01	-0.48	-0.19	-0.16	-0.25	-0.23
	EOC Math 1	+0.05	-0.48	-0.31	-0.29	-0.10	-0.04
Reading	EOG Reading 3	-0.02	-0.18	-0.00	+0.03	-0.10	-0.08
	EOG Reading 4	-0.01	-0.24	-0.15	-0.07	-0.22	-0.17
	EOG Reading 5	-0.01	-0.15	-0.12	-0.07	-0.18	-0.16
	EOG Reading 6	-0.00	-0.17	-0.15	-0.12	-0.18	-0.16
	EOG Reading 7	-0.01	-0.16	-0.14	-0.12	-0.21	-0.21
	EOG Reading 8	-0.01	-0.11	-0.06	-0.04	-0.13	-0.13
	EOC English 2	-0.01	+0.10	+0.14	+0.14	+0.06	+0.04
Science	EOG Science 5	+0.03	-0.55	-0.36	-0.35	-0.20	-0.16
	EOG Science 8	+0.03	-0.32	-0.23	-0.33	-0.09	-0.15
	EOC Biology	+0.01	-0.33	-0.21	-0.16	-0.15	-0.09

Color	Effect Size
Dark Blue	Large Negative
Medium Blue	Medium Negative
Light Blue	Small Negative
Light Pink	Small Positive
Medium Pink	Medium Positive
Dark Pink	Large Positive

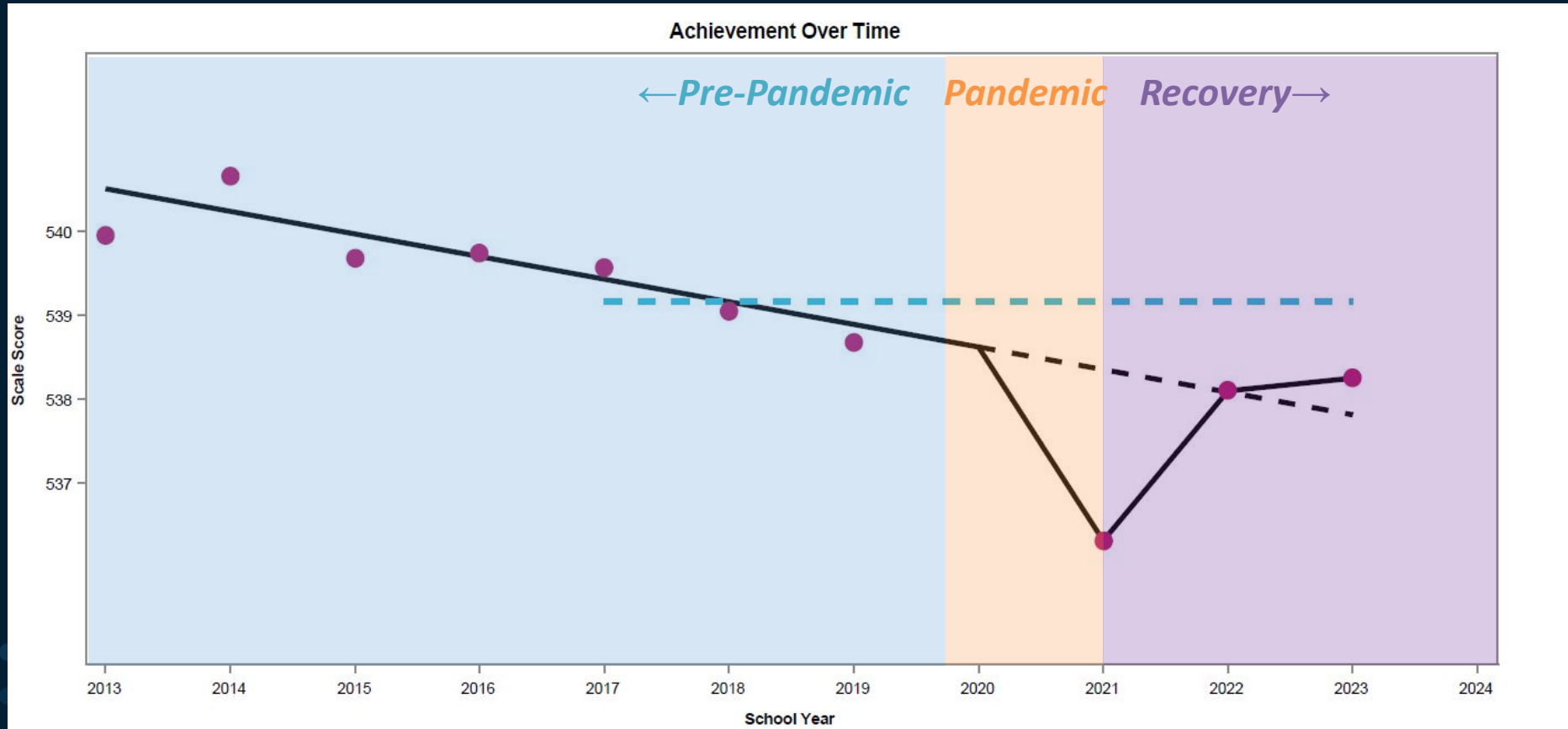
**Where did this information come from?
Let's take a look at the explanatory graphs...**

EOG Reading Grade 3

Achievement Over Time



EOG Reading Grade 3



EOG Reading Grade 3 - Sample Size and % Proficient

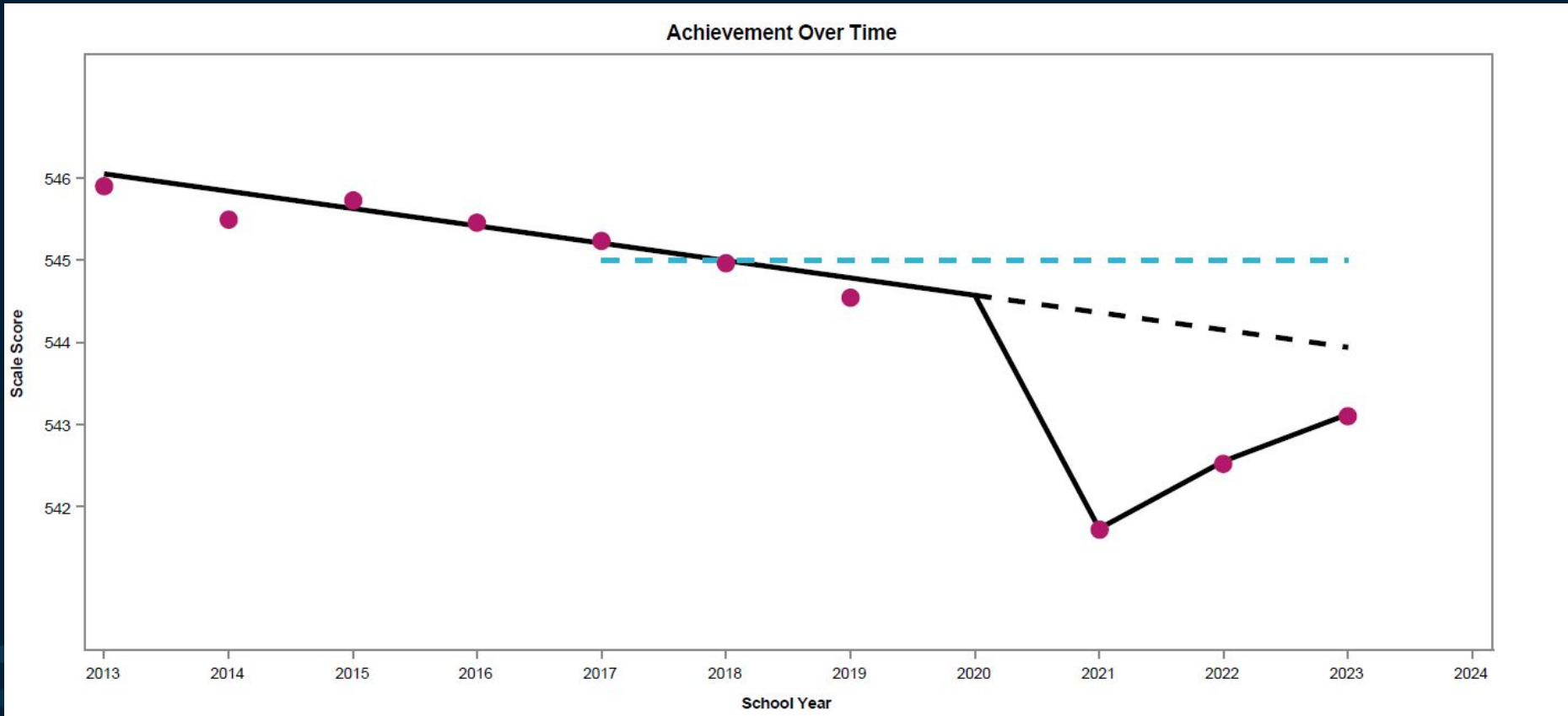
	Year										
Statistic	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
# Schools	1,334	1,352	1,372	1,391	1,407	1,419	1,421	.	1,421	1,421	1,409
# Students	93,292	100,010	104,902	108,788	109,672	113,128	109,292	.	96,014	101,419	102,032
% Proficient	48.3%	63.8%	60.2%	58.5%	58.5%	56.4%	57.2%	.	45.1%	46.5%	48.0%

Pre-Pandemic

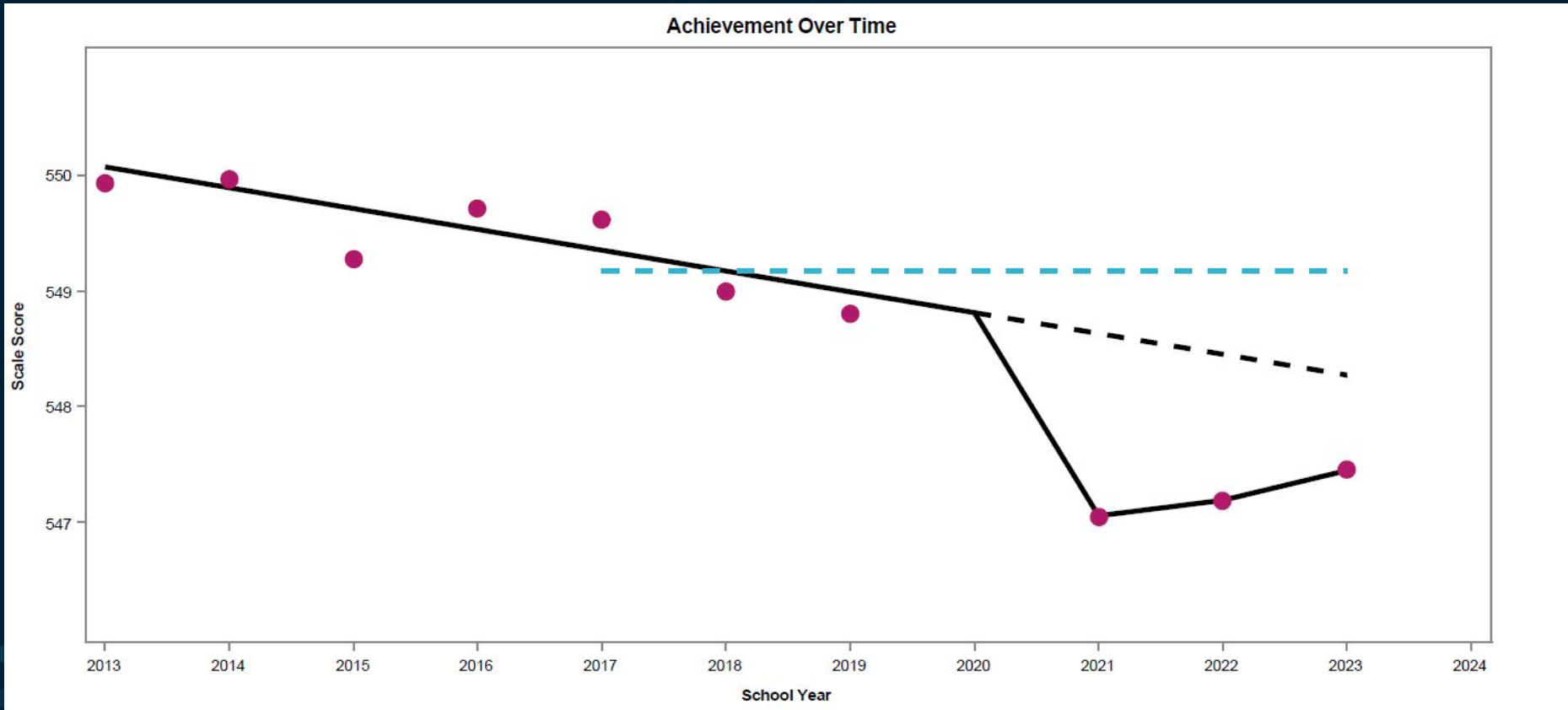
Pandemic

Recovery

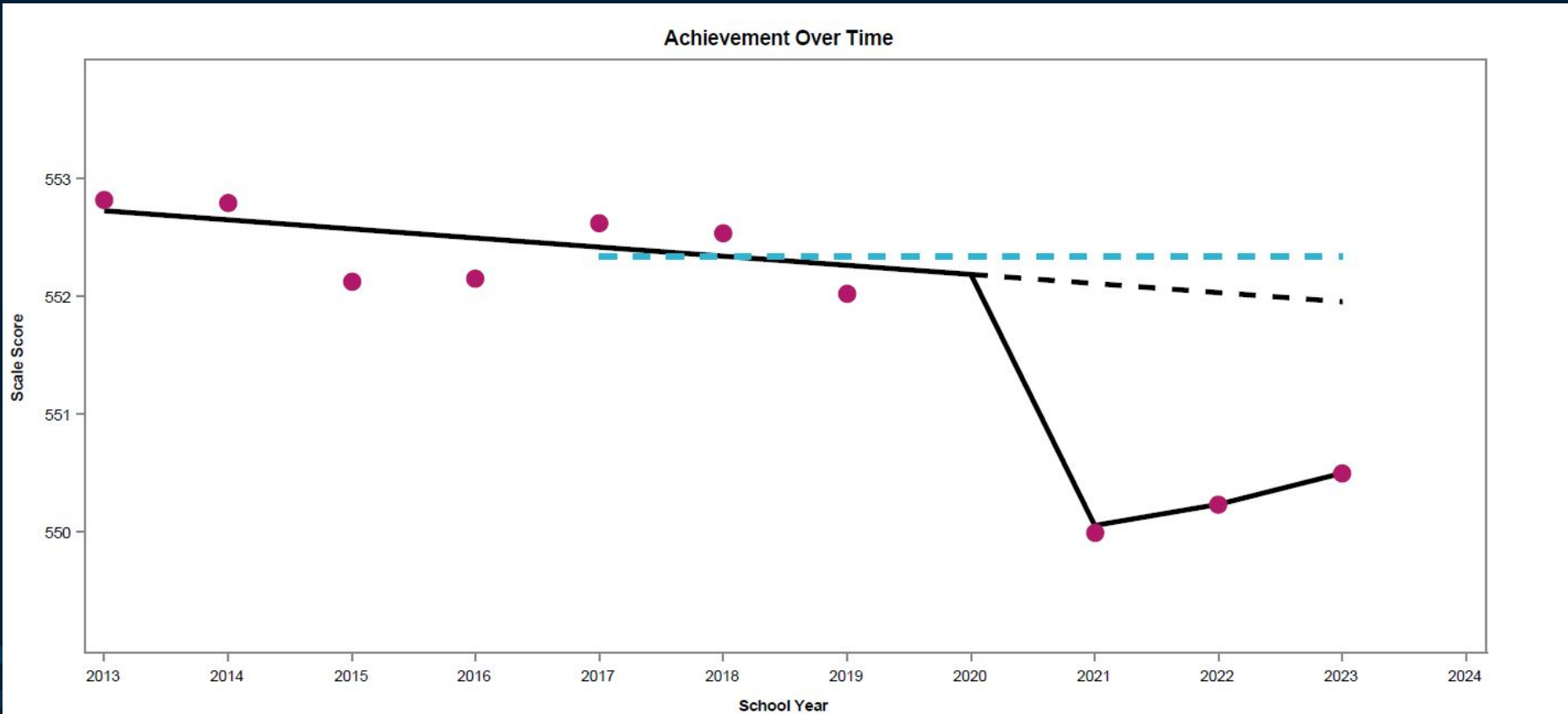
EOG Reading Grade 4



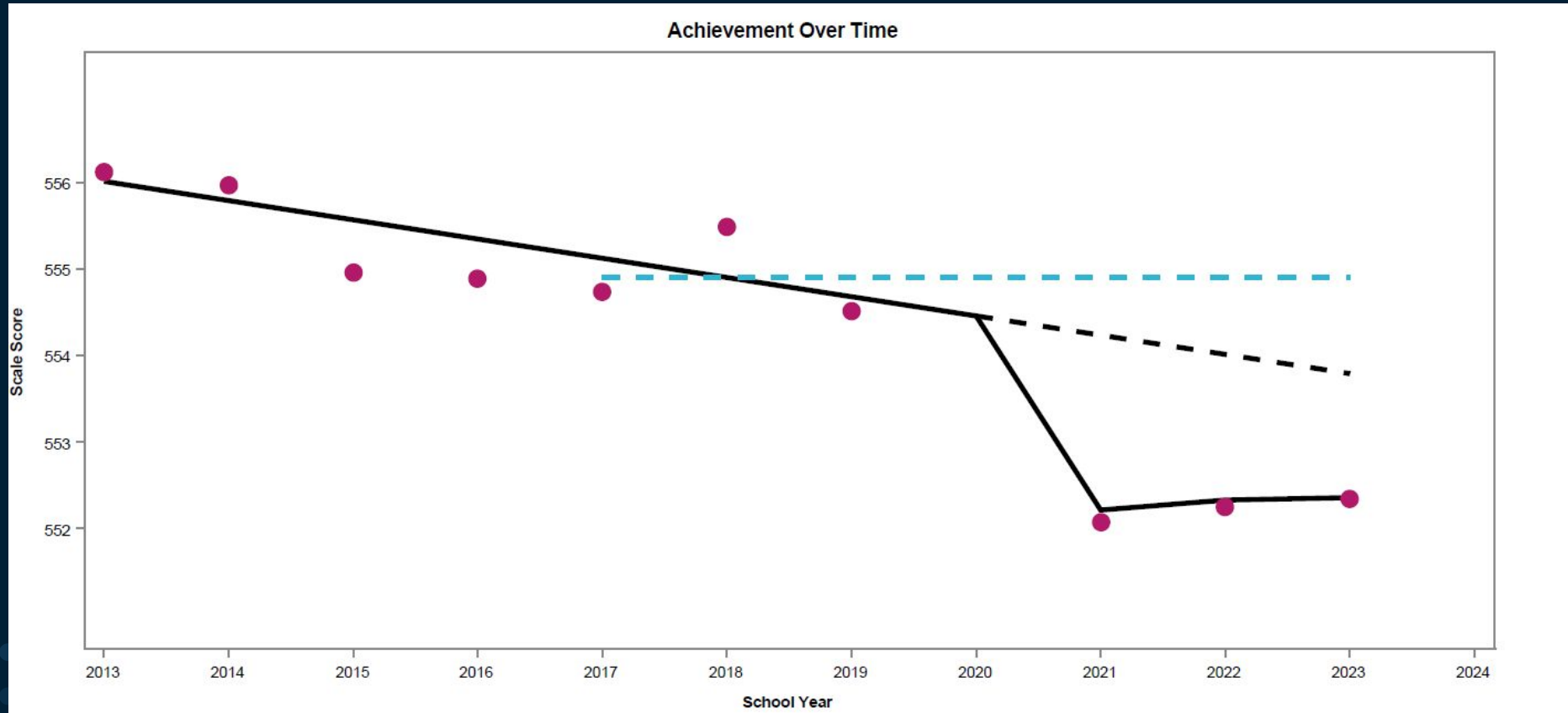
EOG Reading Grade 5



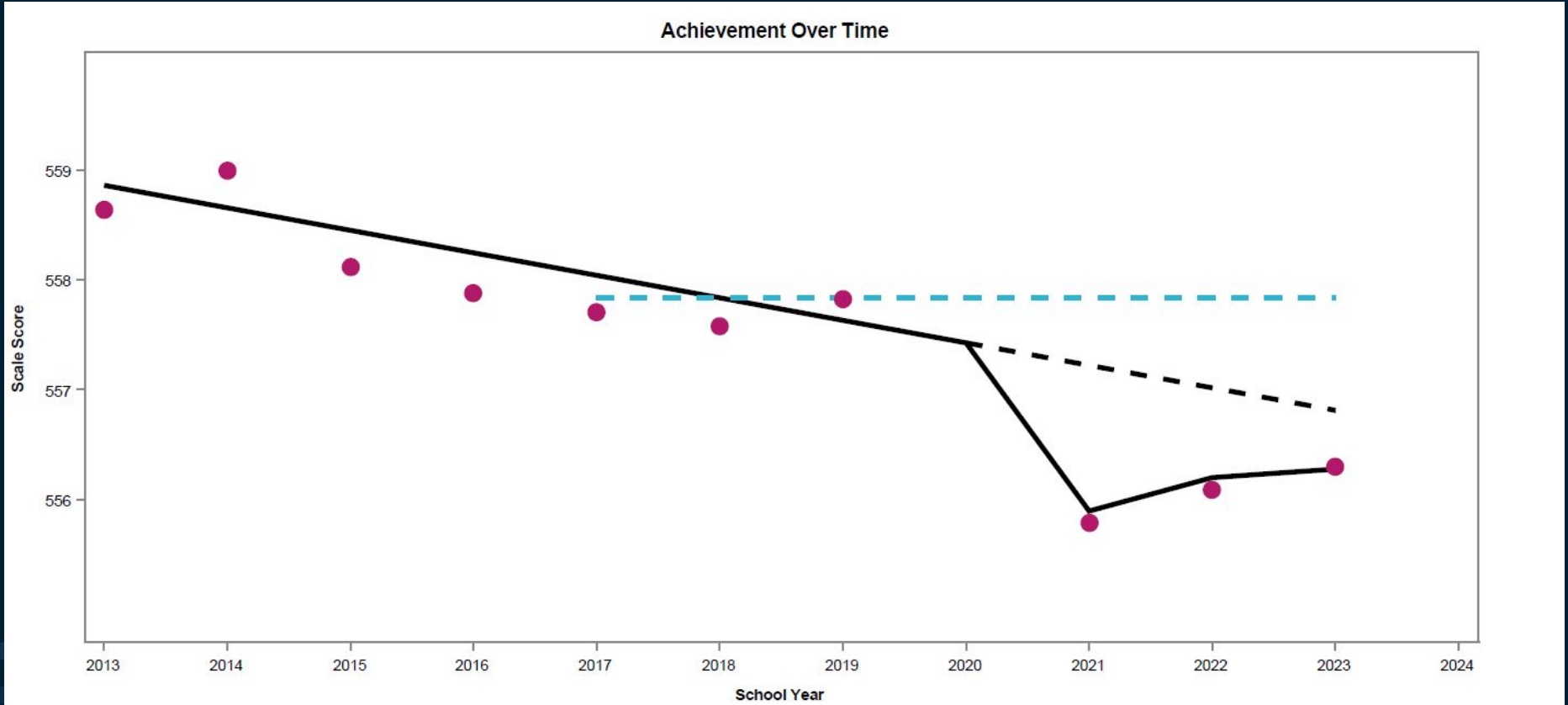
EOG Reading Grade 6



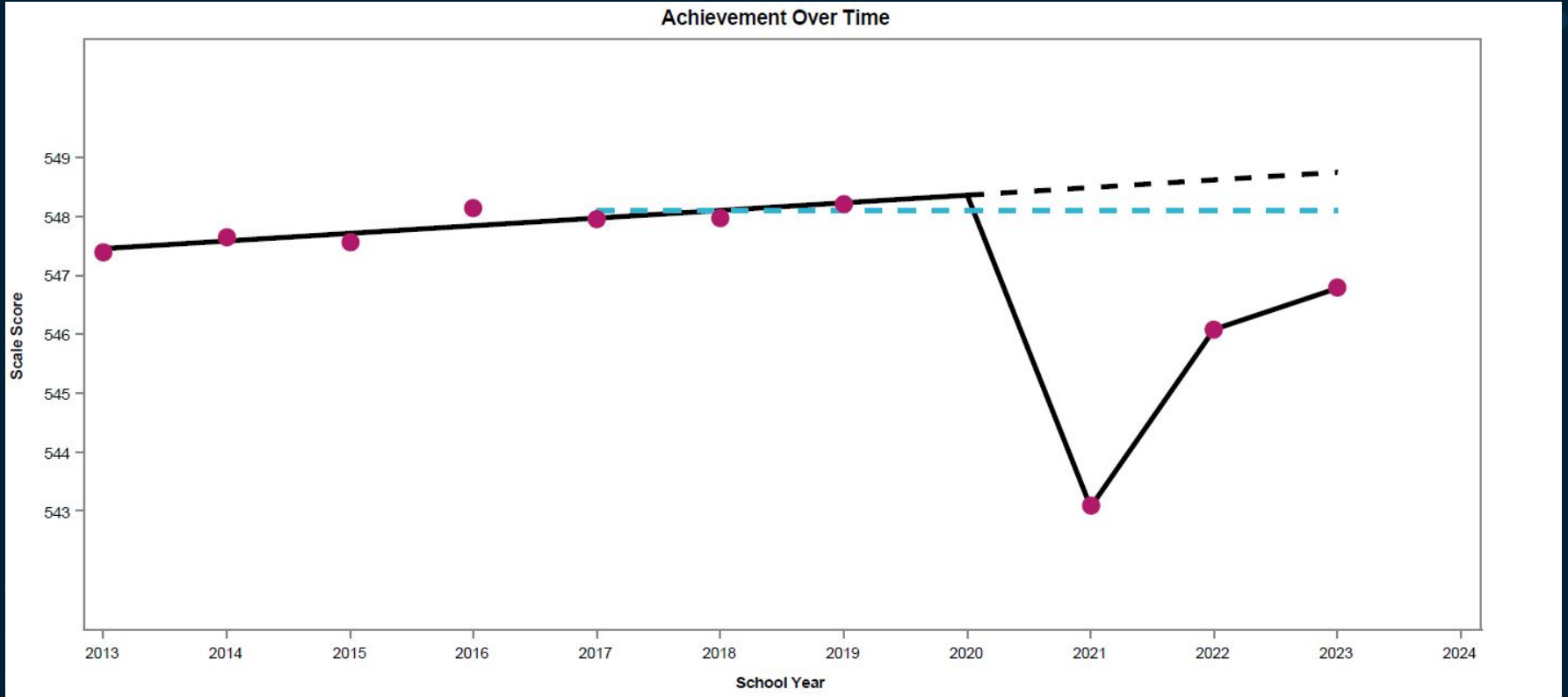
EOG Reading Grade 7



EOG Reading Grade 8



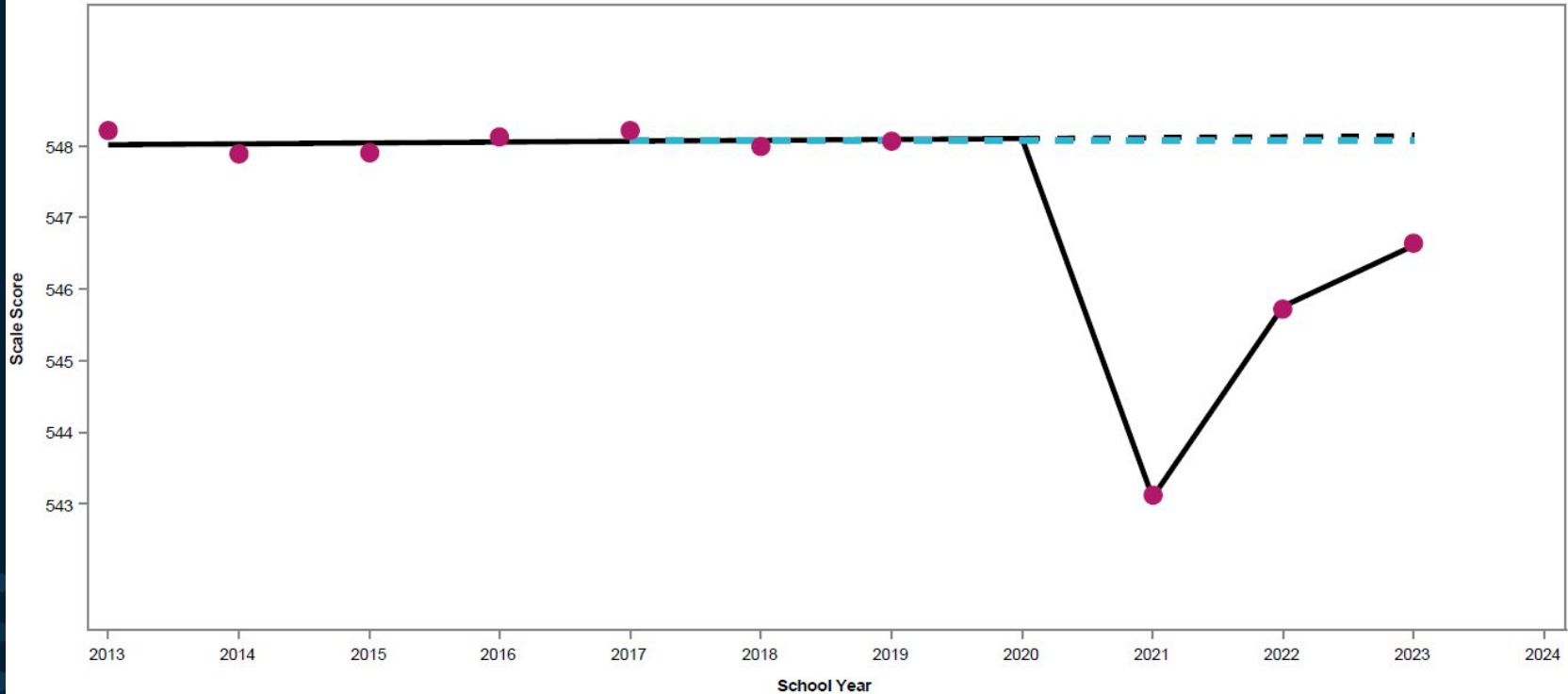
EOG Math Grade 3



Note: The math scale changed in 2019.

EOG Math Grade 4

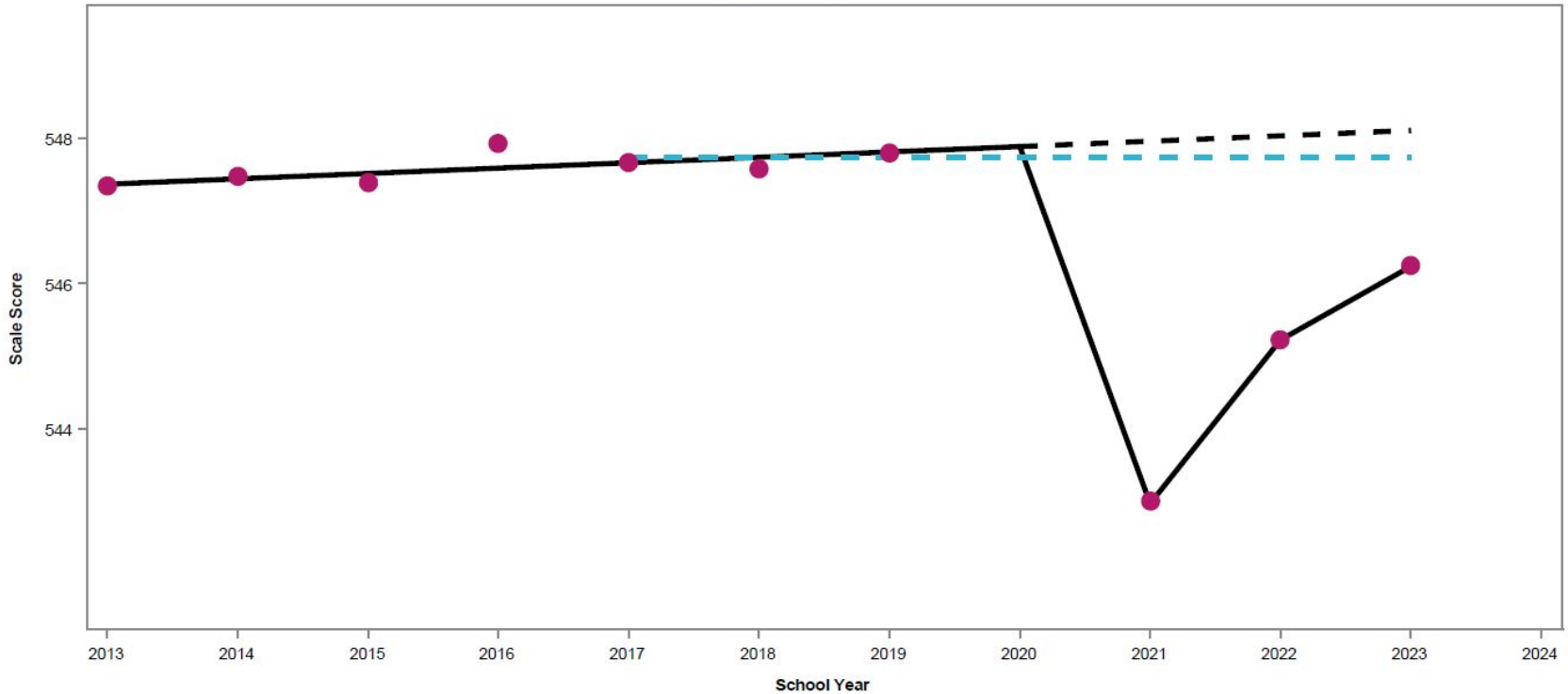
Achievement Over Time



Note: The math scale changed in 2019.

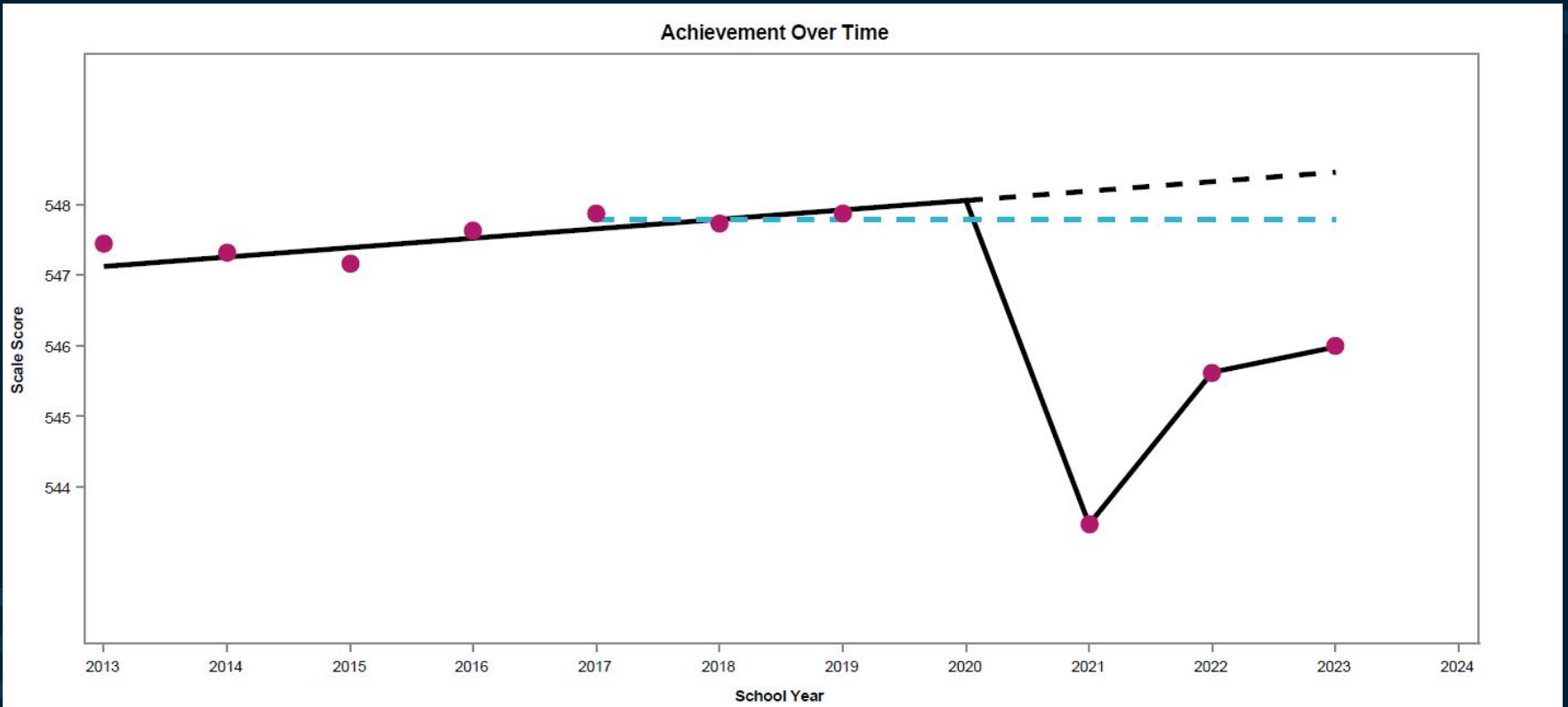
EOG Math Grade 5

Achievement Over Time



Note: The math scale changed in 2019.

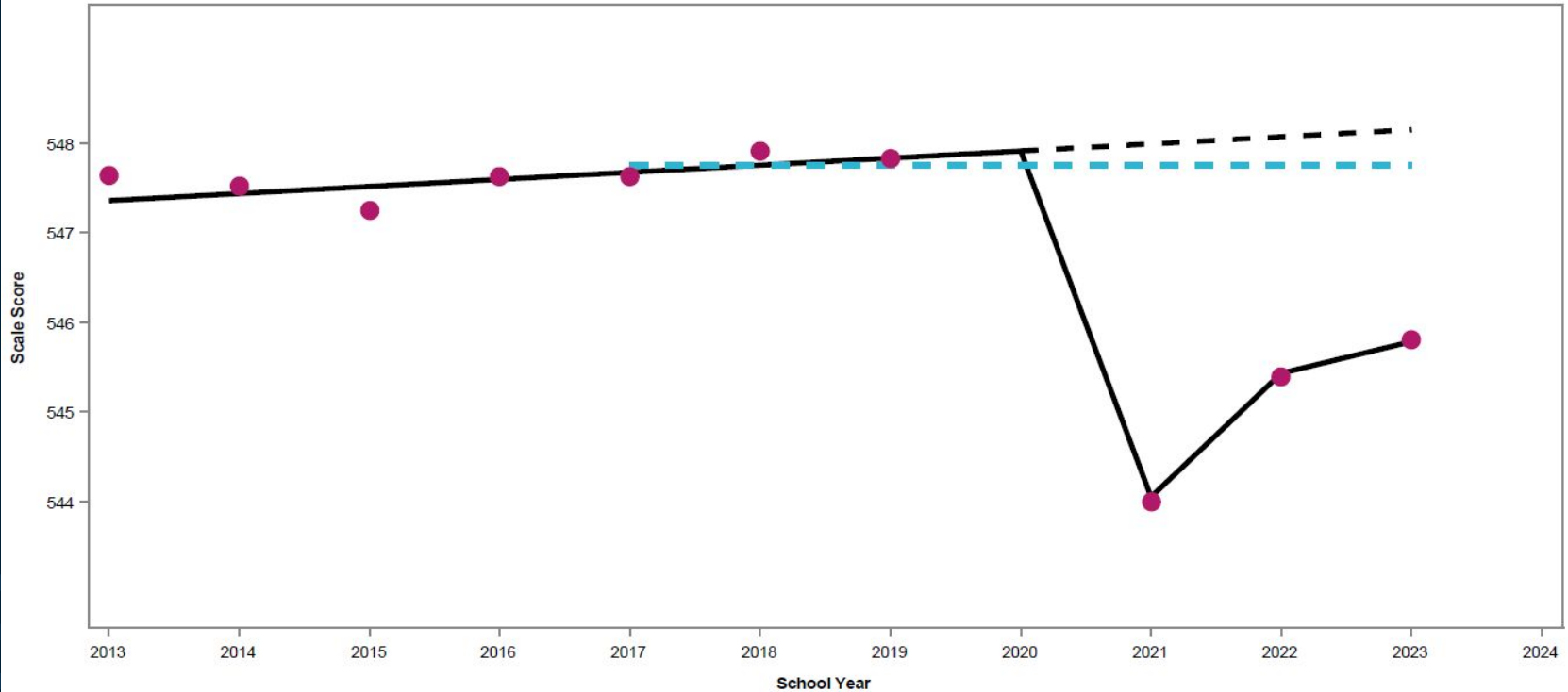
EOG Math Grade 6



Note: The math scale changed in 2019.

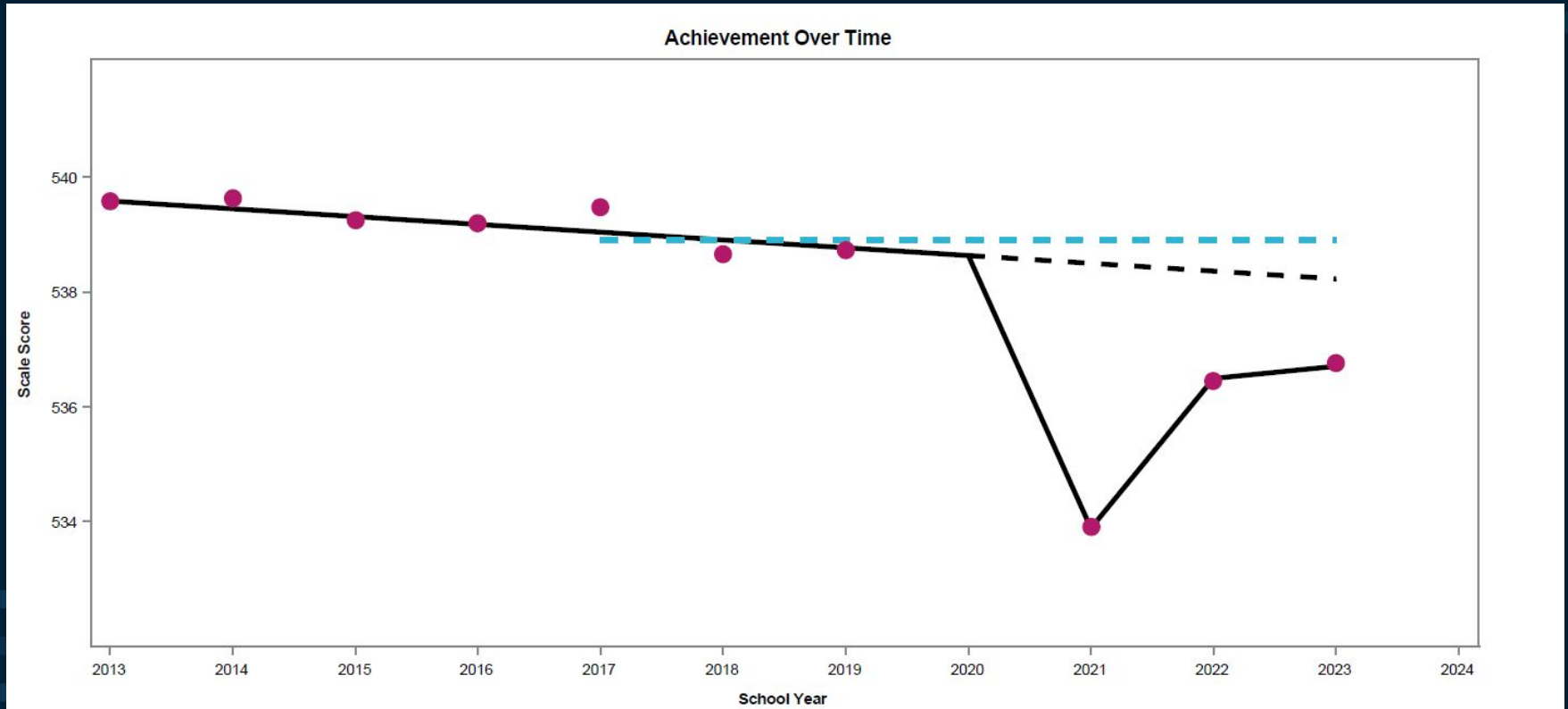
EOG Math Grade 7

Achievement Over Time



Note: The math scale changed in 2019.

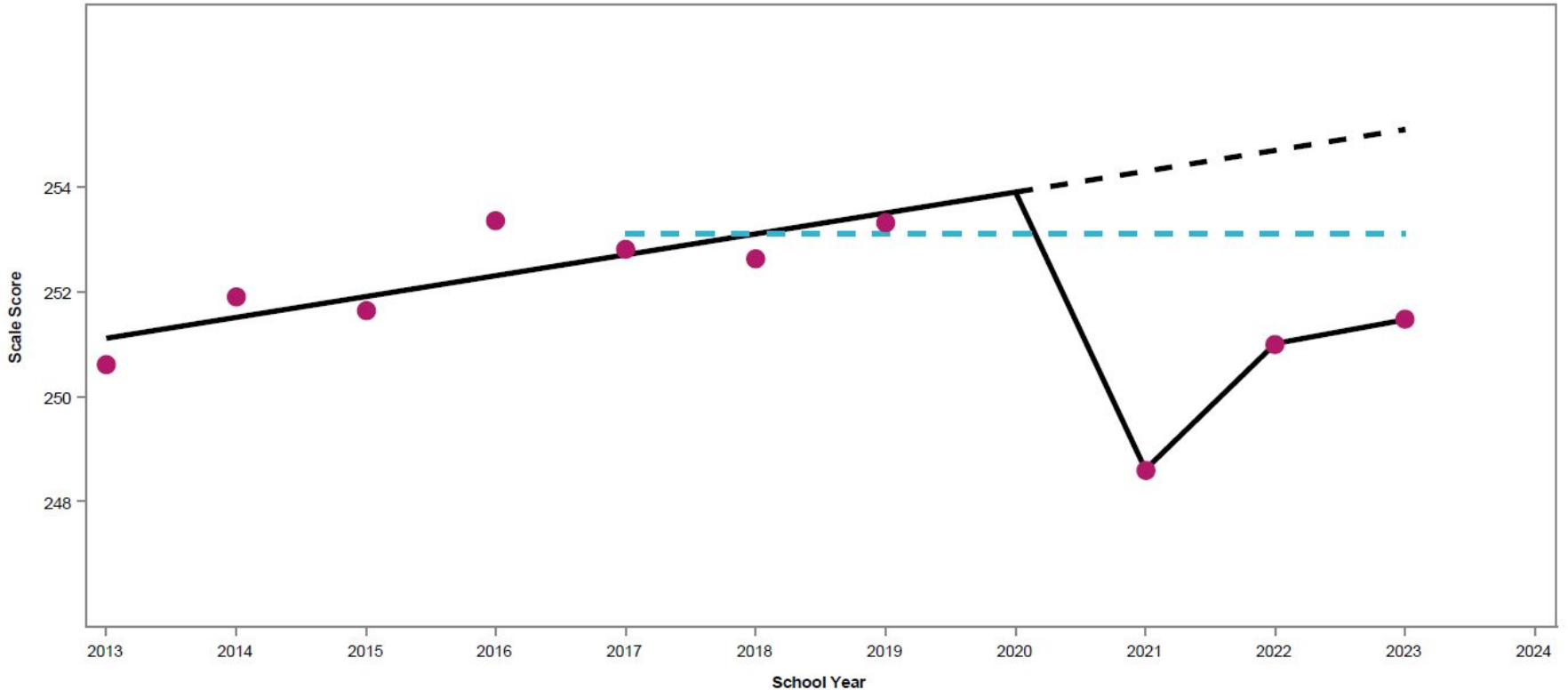
EOG Math Grade 8



Note: The math scale changed in 2019.

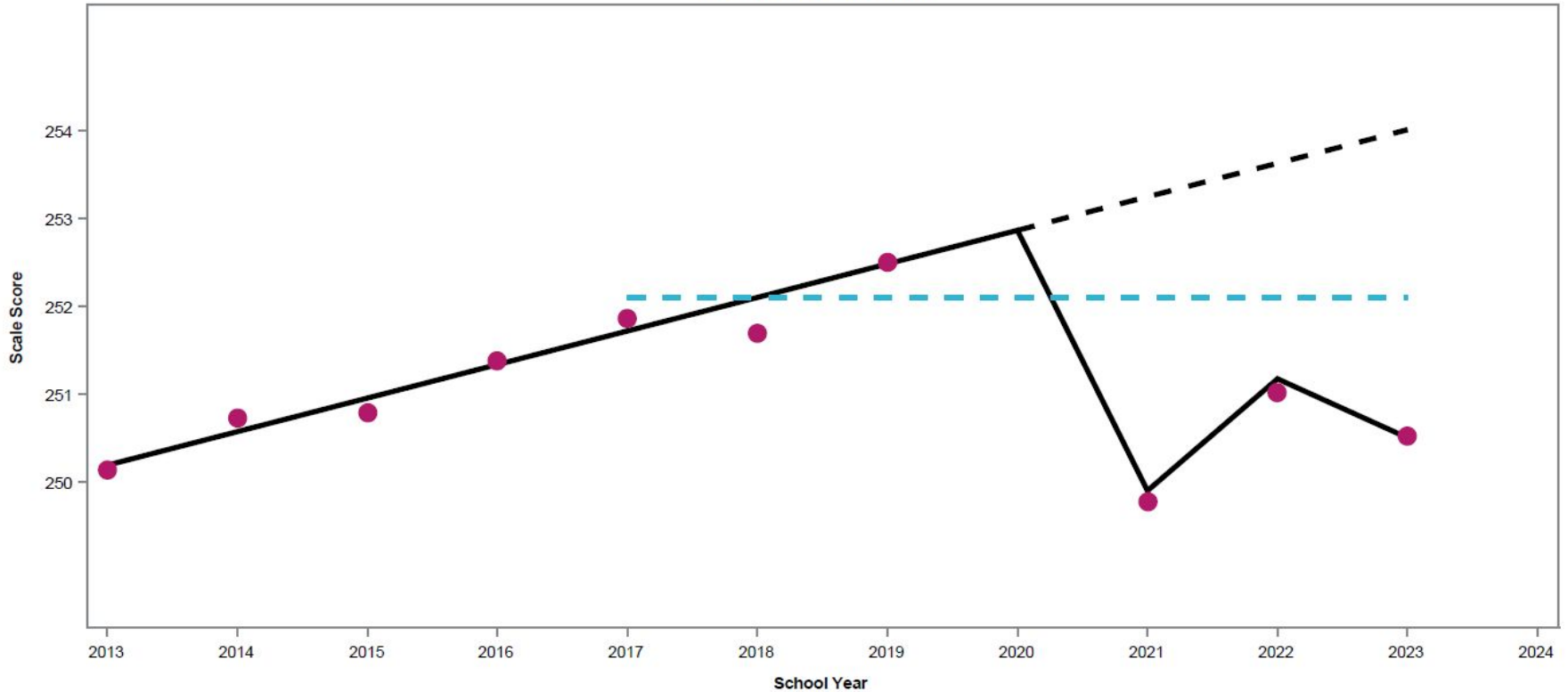
EOG Science Grade 5

Achievement Over Time



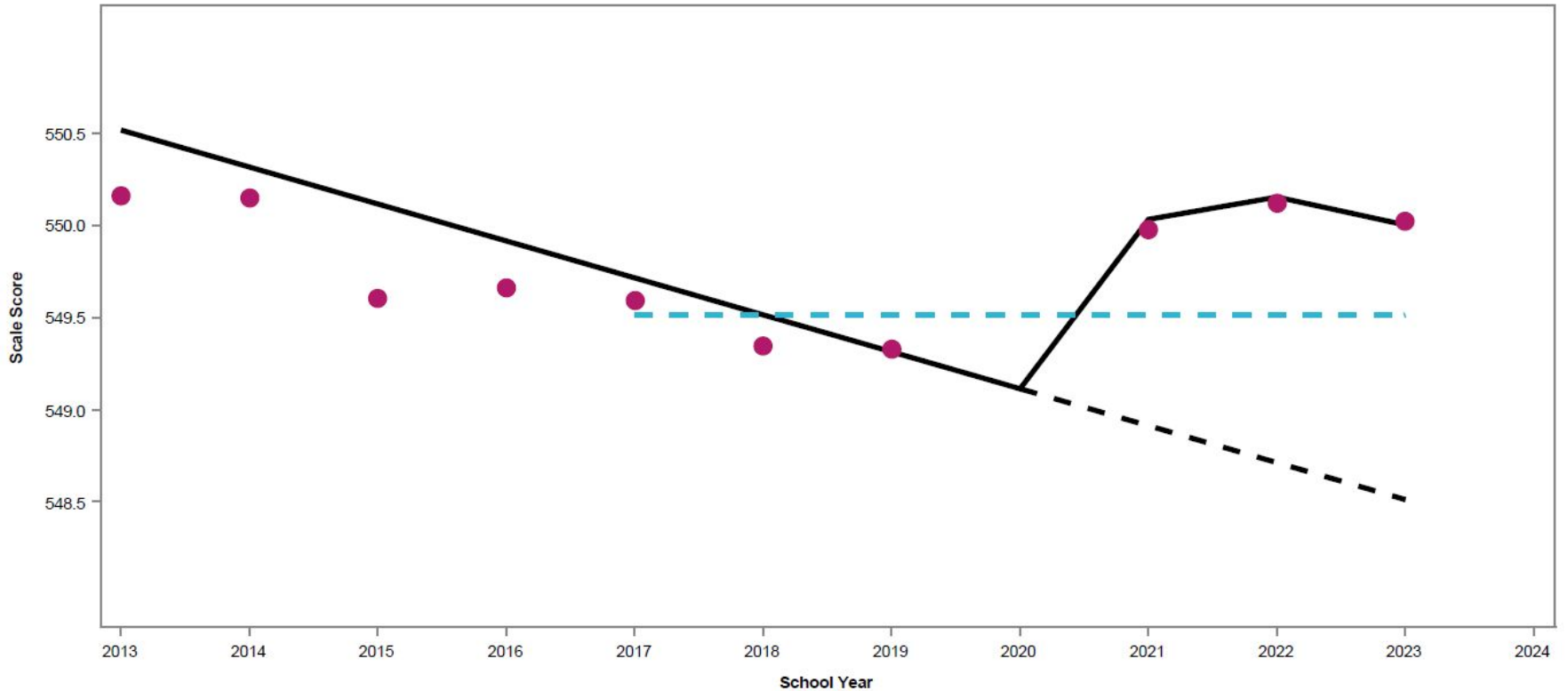
EOG Science Grade 8

Achievement Over Time

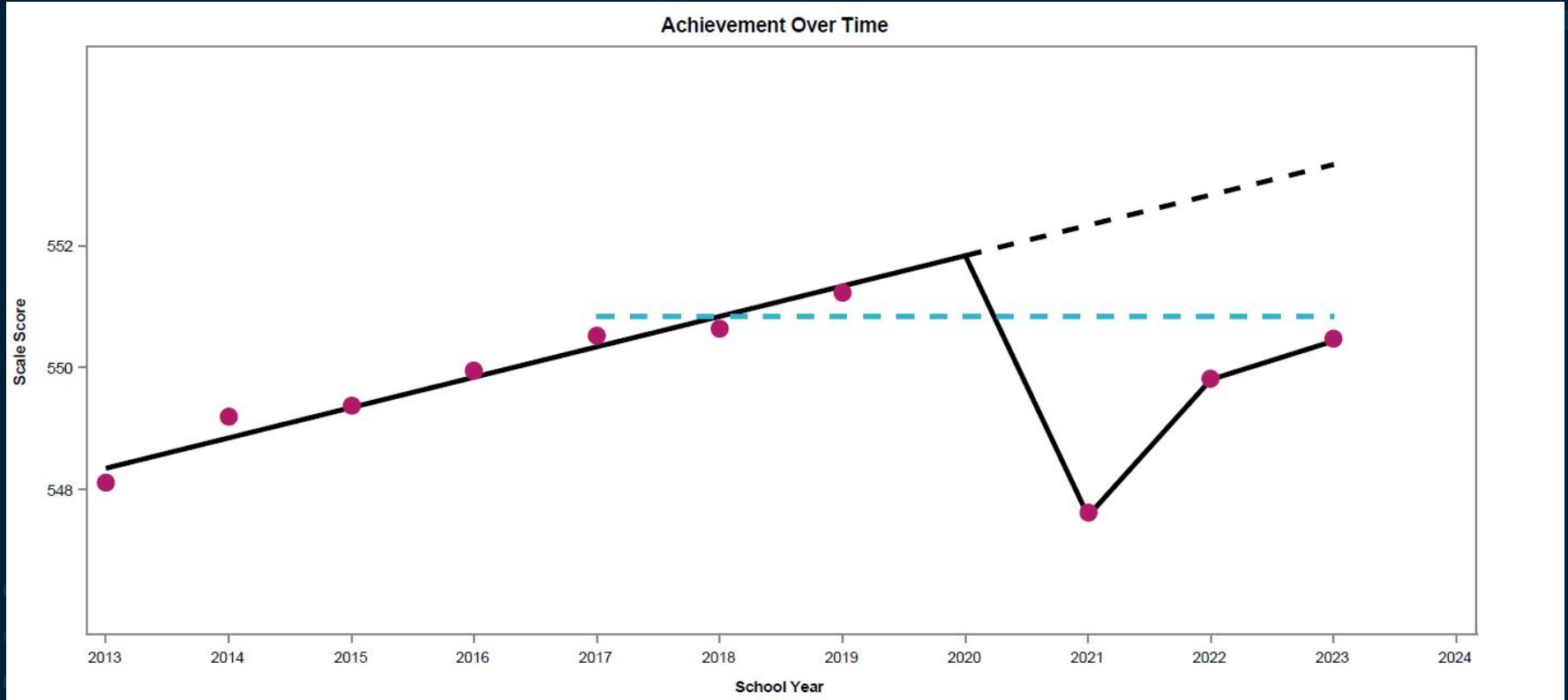


EOC English II

Achievement Over Time

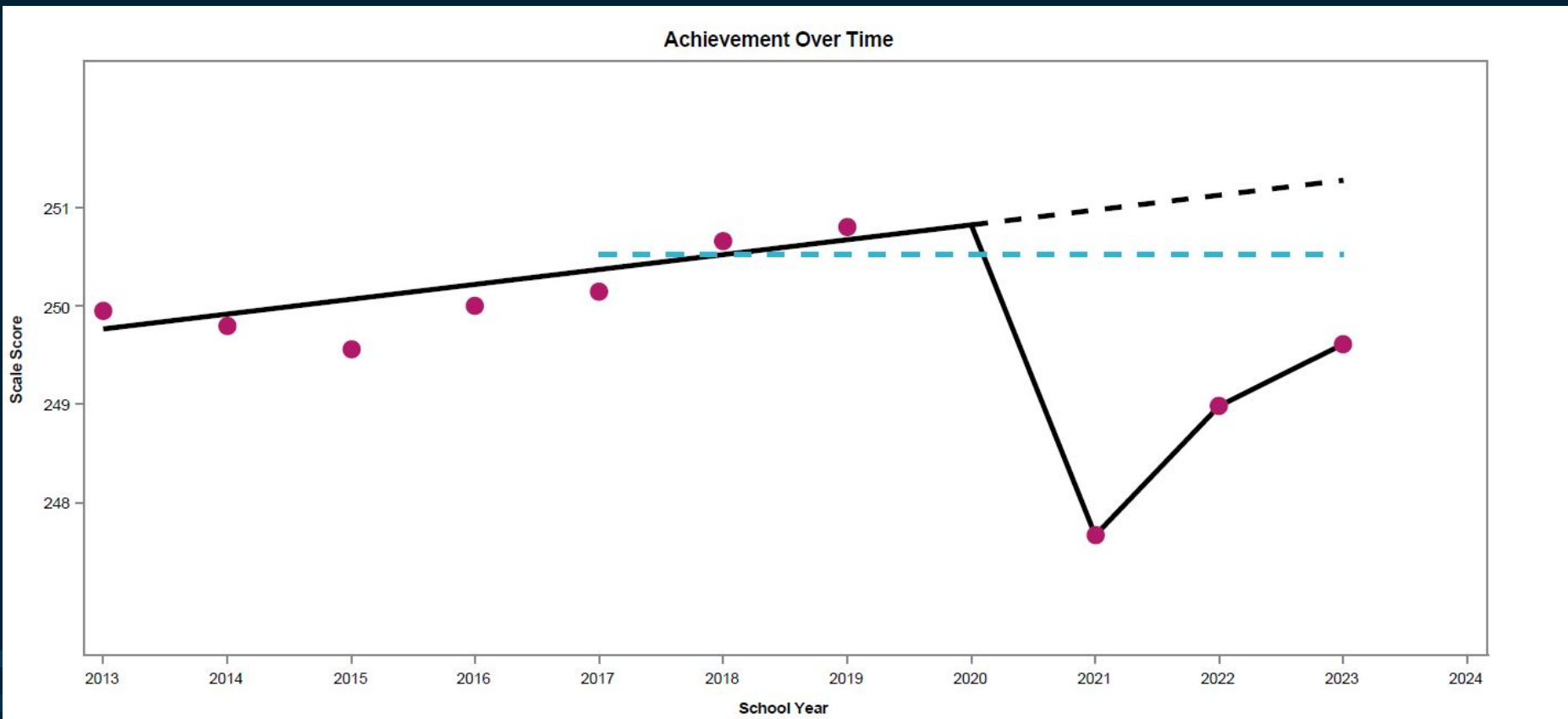


EOC Math 1



Note: The math scale changed in 2019.

EOC Biology



Percentage of Schools with Overall Improvement From 2021 to 2023 by Assessment

Assessment		Overall Improvement
Subject	Grade-Level	2021 to 2023
Math	EOG Math 3	94.82%
	EOG Math 4	96.23%
	EOG Math 5	96.52%
	EOG Math 6	96.12%
	EOG Math 7	89.38%
	EOG Math 8	91.02%
	EOC Math 1	89.71%
Reading	EOG Reading 3	95.39%
	EOG Reading 4	91.33%
	EOG Reading 5	67.32%
	EOG Reading 6	73.74%
	EOG Reading 7	58.70%
	EOG Reading 8	65.22%
	EOC English II	46.31%
Science	EOG Science 5	90.51%
	EOG Science 8	64.17%
	EOC Biology	85.12%

Invest in Priorities Emerging from these Results

- Build on early grades literacy and math progress
- Focus on targeted and evidence-based middle grades reading and math interventions
- Explore promising STEM initiatives aligned to workforce priorities
- Renewed commitment to internal NCDPI research team to study and identify evidenced-based interventions and collaborate with external research partners