# Results: COVID-19 Impact Analysis of Lost Instructional Time

## State Board of Education - March 2022

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# Evidenced-Based Decision Making

- COVID-19 Lost Instructional Time Impact Analysis (ESSER II)

- Elevating the Student, Teacher, Administrative, Parent Voice through Qualitative Research (ESSER II)

- Studying the long run effects of the COVID-19 pandemic on student, educator, and school outcomes (Spencer Foundation Award)

- Assessing the Long-Term Impacts of School Extension Programs on Student Re-engagement and Learning Recovery (IES Award)

- Assessing the implementation and impact of local interventions to address student mental health and well-being (IES Proposal)

# STUDY OVERVIEW

# Purpose

## Understanding the Impact of the COVID-19 Pandemic on Student Learning

- Compares students' pre-pandemic expected performance with their post-pandemic actual performance in the 2020-21 school year using EOGs and EOCs

- Historical comparison to trends

- "Impact of Lost Instructional Time"

# Findings

## Will be released on March 2, 2022, at the State Board of Education meeting

- On average, students made less progress during the pandemic than they did in previous years.

- Results show that there was a negative impact for all students, for all grades, for almost every subject (except English II), which was anticipated. These negative impacts were especially true for Math (5th-9th grades) and Science (8th grade).

- Students who returned to the classroom for face-to-face learning and where specific and targeted resources and supports were immediately put in place, did better than the students who were purely remote and disengaged from their school community.

# **Use of Findings**

- Establish and baseline and set benchmarks to monitor progress over time.

- Understand the impact of learning recovery and acceleration programs and interventions across the state.

- Target resources and prioritize funding for students who were most affected and for areas of the state that are most in need.

- Identify [promising practices.](#)

# Research Questions

Q1:To what extent did the pandemic impact learning for all students in the 2020-21 school year, and were there variations by student group and contextual factors?

Q2: How those differences compare to a typical school year, which, for the purposes of this analysis, NCDPI defined as the 2017-18 school year?

**Estimates of impact: effect sizes converted into "months of learning loss."**

# Research Methods

- Recent legislation (S.L. 2021-3 HB 196) directed NCDPI to contract with a third-party entity to collect, analyze and report data related to the overall impacts of COVID-19 on public school units, students and families.
- The pre-pandemic expected performance is an expected score based on individual students' prior scores using every standardized assessment (EOG's and EOC's) available for that student.

# State-Level Report Timeline

- **March 15**: Preliminary JLEOC report due -- state-wide summary by student group and school characteristics
  - o Opportunity for input from state and local leaders for next level of analysis and interactions
- **December 15**: Technical JLEOC report due

# Preliminary Report: Analysis of Main Effects

## Student Characteristics

- Race/Ethnicity
- Sex
- Grade
- Instructional Mode
- Academically or Intellectually Gifted
- Chronically Absent
- English Learners
- Students with Disabilities
- Economically Disadvantaged
- Justice-Involved
- Military-Connected
- Students Experiencing Homelessness
- Students in Foster Care

## District/School Contextual Factors

- Average Daily Membership
- SBE Region
- Locale
- ARP Funding Level
- Low Performing
- Majority Race/Ethnicity, EDS, etc.
- Home internet connectivity

# **Upcoming School and District-Level Supports**

- Aggregated data files based on individual LEA and schools

- EVAAS web reports for authorized users (https://ncdpi.sas.com)

- Documentation and supports on how to interpret results

# RESULTS

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# Framing the Results

- We present selected key findings followed by graph of the data.

  - Graphs from 2018 provide a snapshot of "business as usual."

  - Graphs from 2021 provide an estimate of "impact of the pandemic."

  - Vertical 0 line means students in those groups are performing as we would expect – they are on track based on past performance.

- This data is unique to North Carolina as it is individual, student level data (~1.4M students) and not based on sample sizes which means all differences are *statistically* significant.

- This data goes beyond how many students met grade level proficiency and presents the difference between where we expected students to perform and how they actually performed.

# Statewide Summary

- Negative impact for all students, for all grades, for almost every subject (except English II), and especially for Math (5th-9th); Science (Biology).

- Most students continued to progress during the pandemic but at a slower pace than they would have done otherwise.
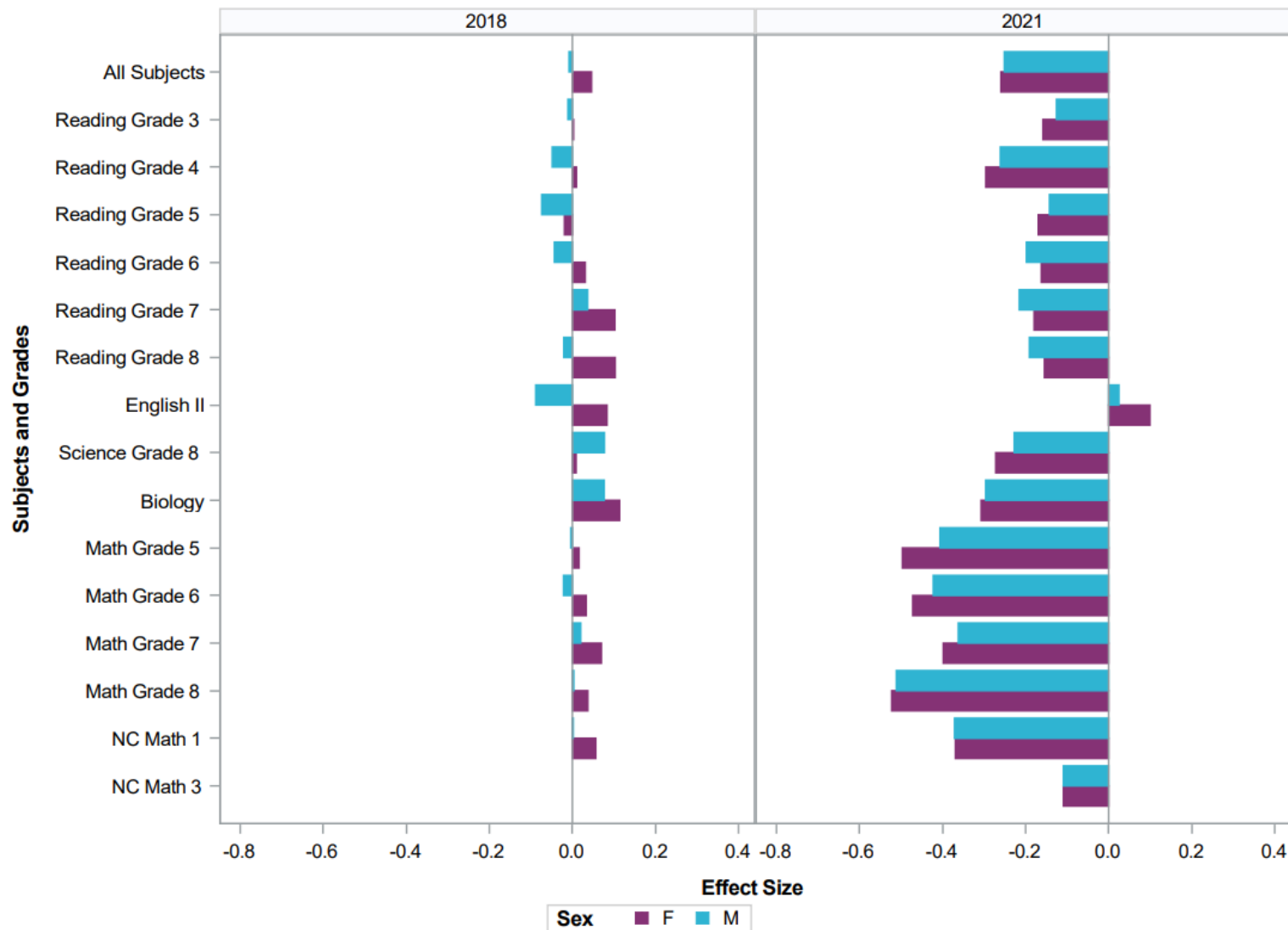
# Statewide Summary
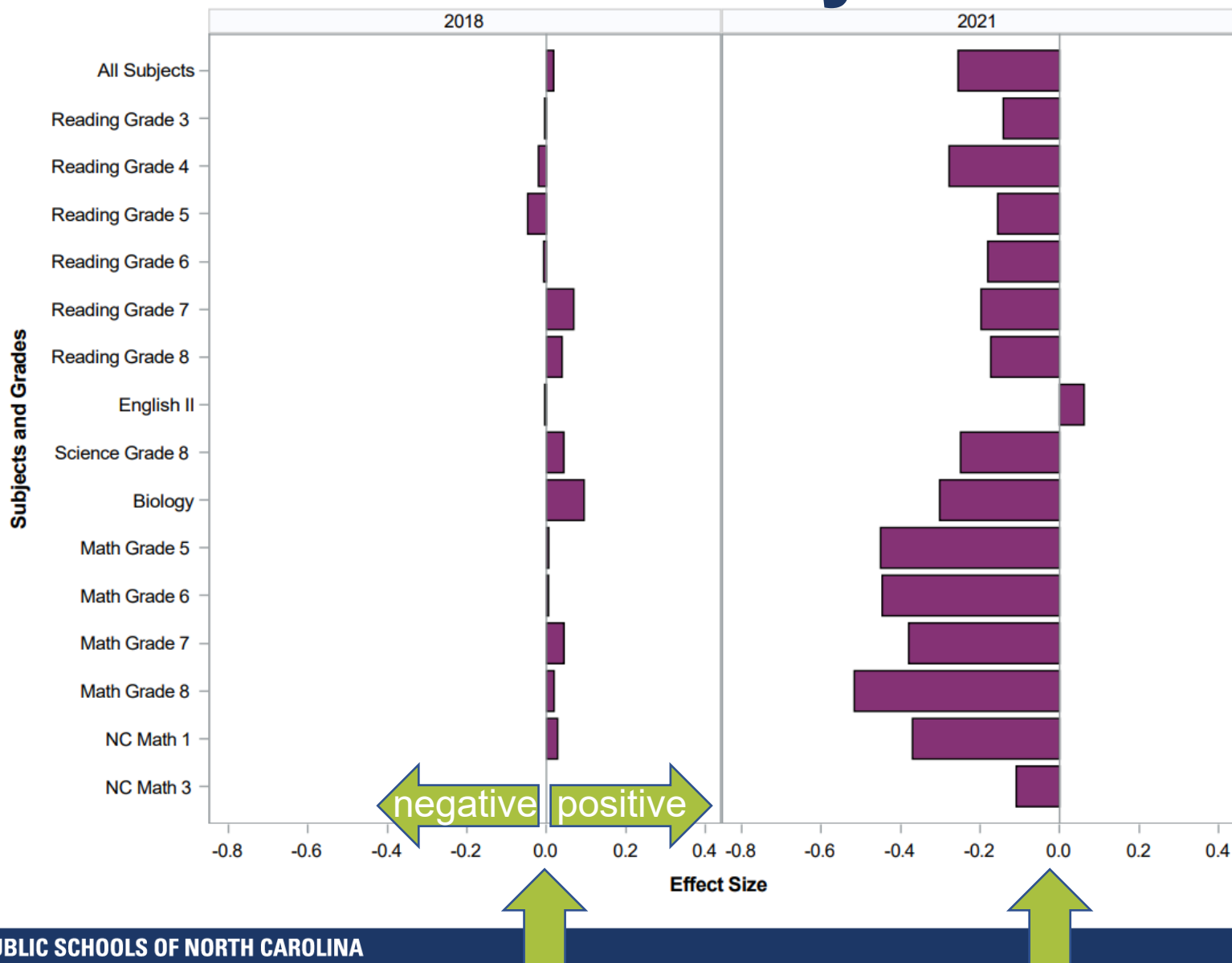
# Female/Male

- Despite early predictions that male students were more negatively impacted than female students, this was not true.

- Because females outperform males in a "typical year," females are further from what we might have expected in the absence of the pandemic.

# Female/Male

# Race/Ethnicity

- Students of all races/ethnicities negatively impacted by the pandemic.
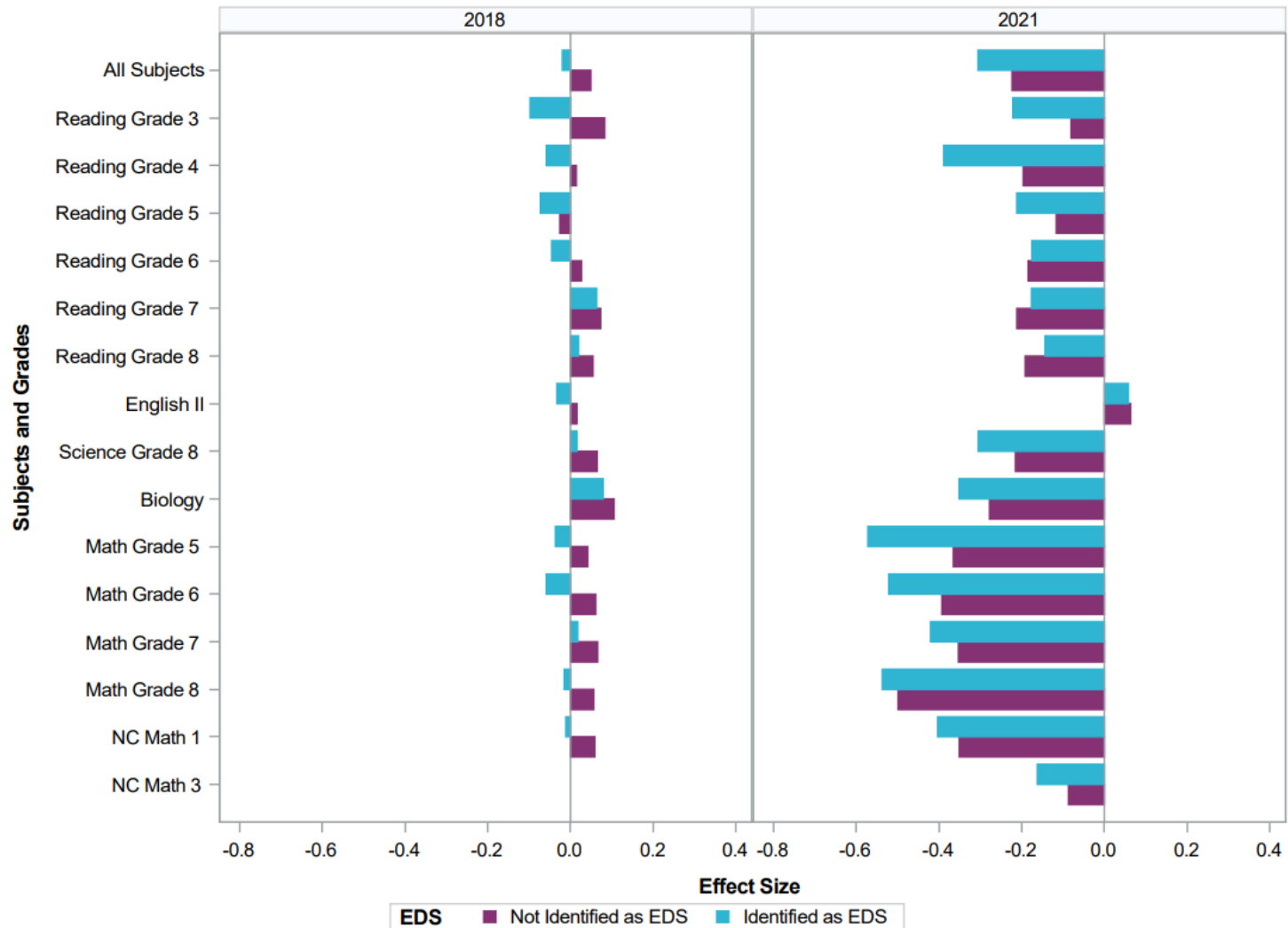- Pre-existing disparities have increased.

# Race/Ethnicity
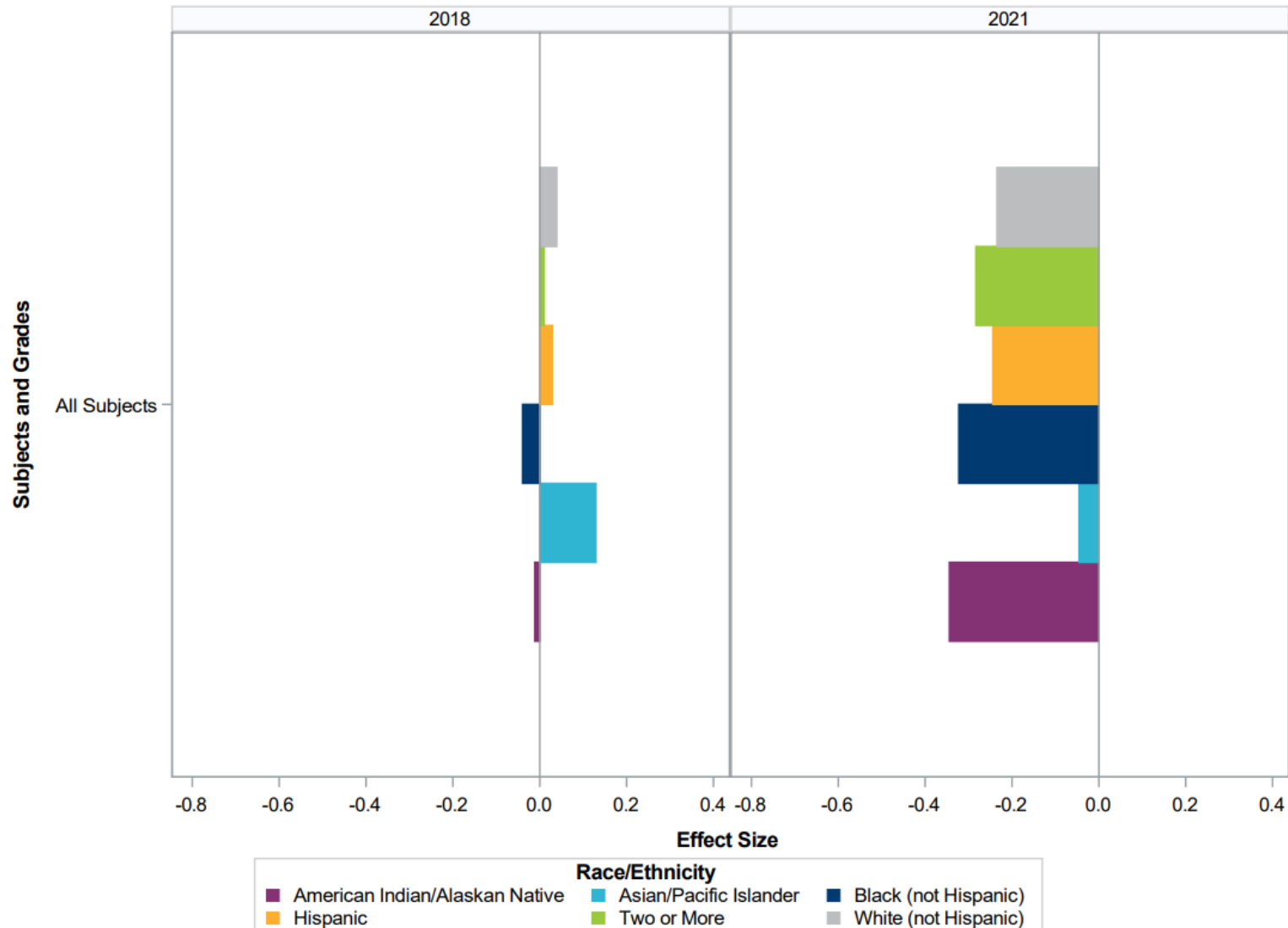
# Race/Ethnicity
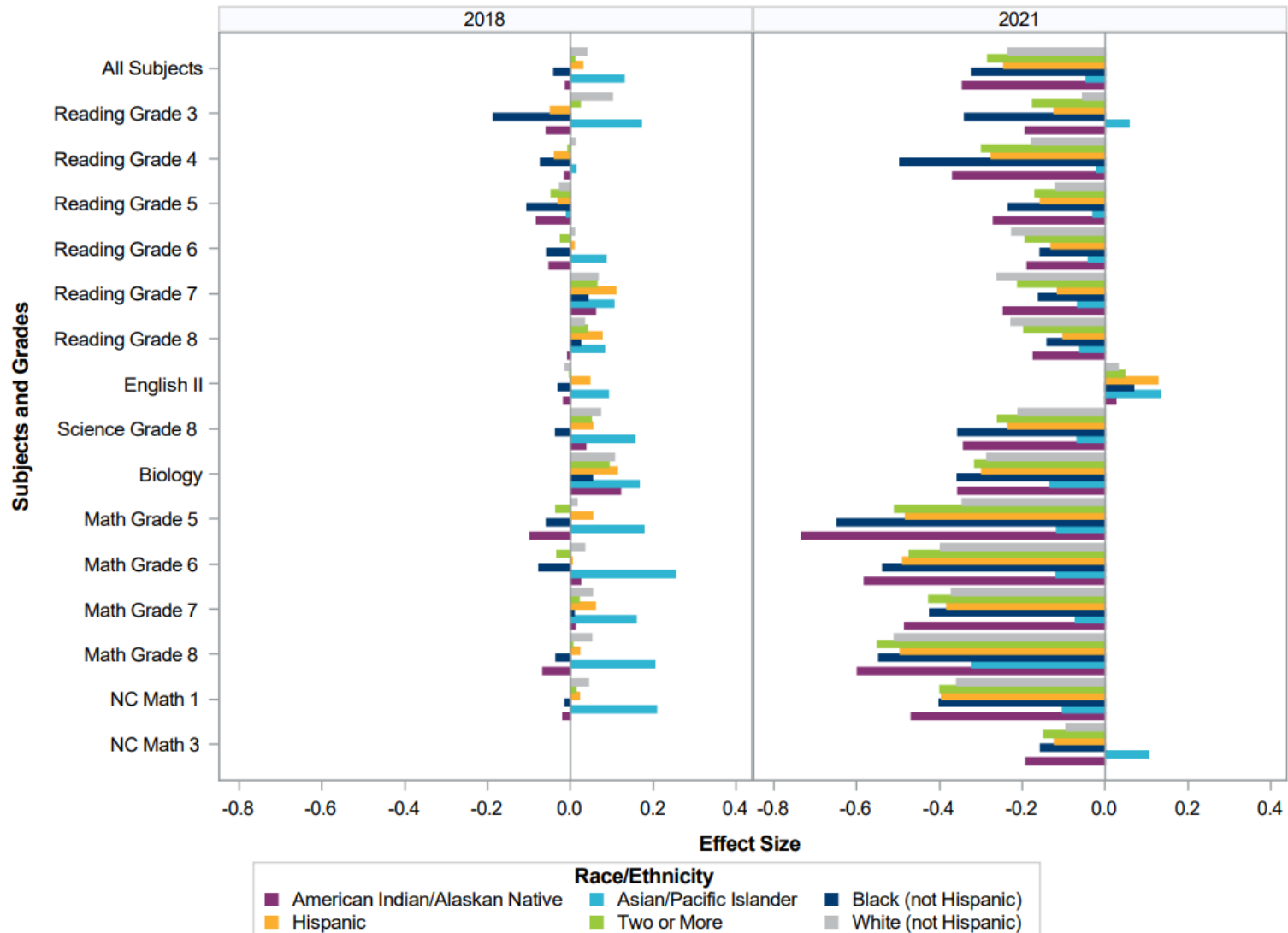
# Economically Disadvantaged Students

- Gaps widened between economically disadvantaged students and all other students, especially in reading in grades 4, 6, 8; and 5th grade math.

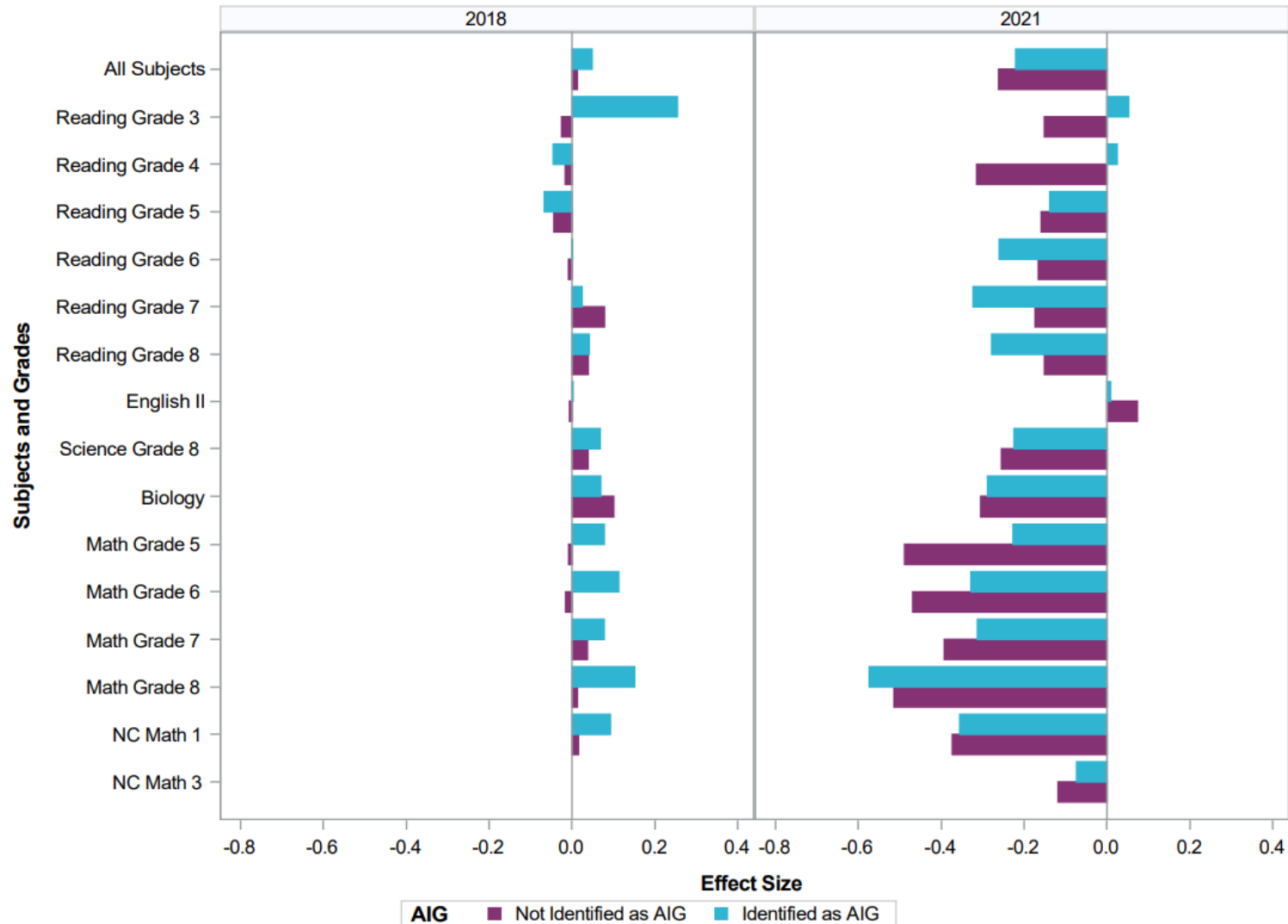# Economically Disadvantaged Students

# Academically and Intellectually Gifted (AIG) Students

- Despite early predictions, AIG students were significantly negatively impacted too, especially for reading in grades 6-8 and math in grade 8.
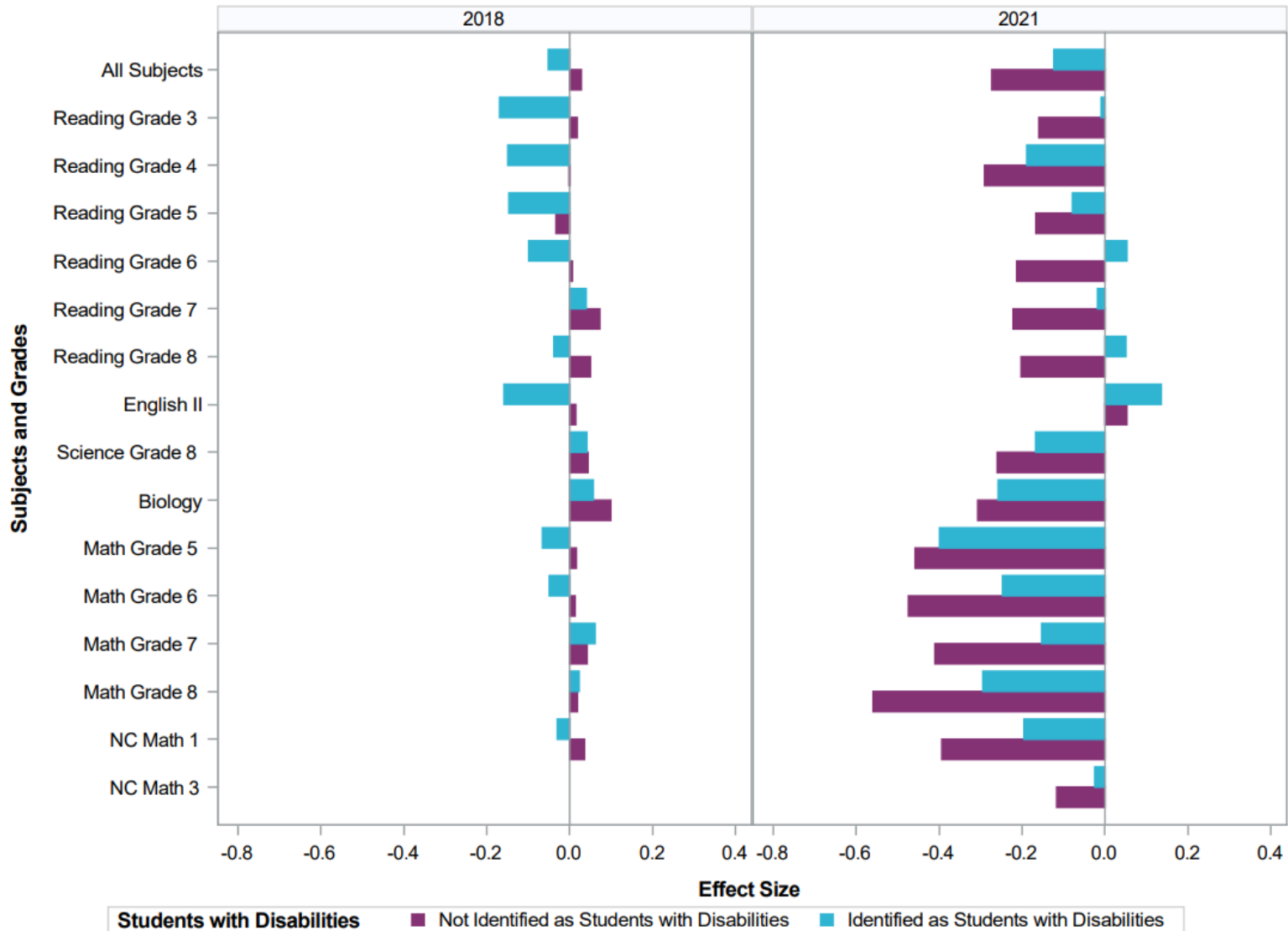
# Academically/Intellectually Gifted

# Students with Disabilities

- Students with Disabilities were closer to their pre-pandemic learning trajectories compared to the general population of students.
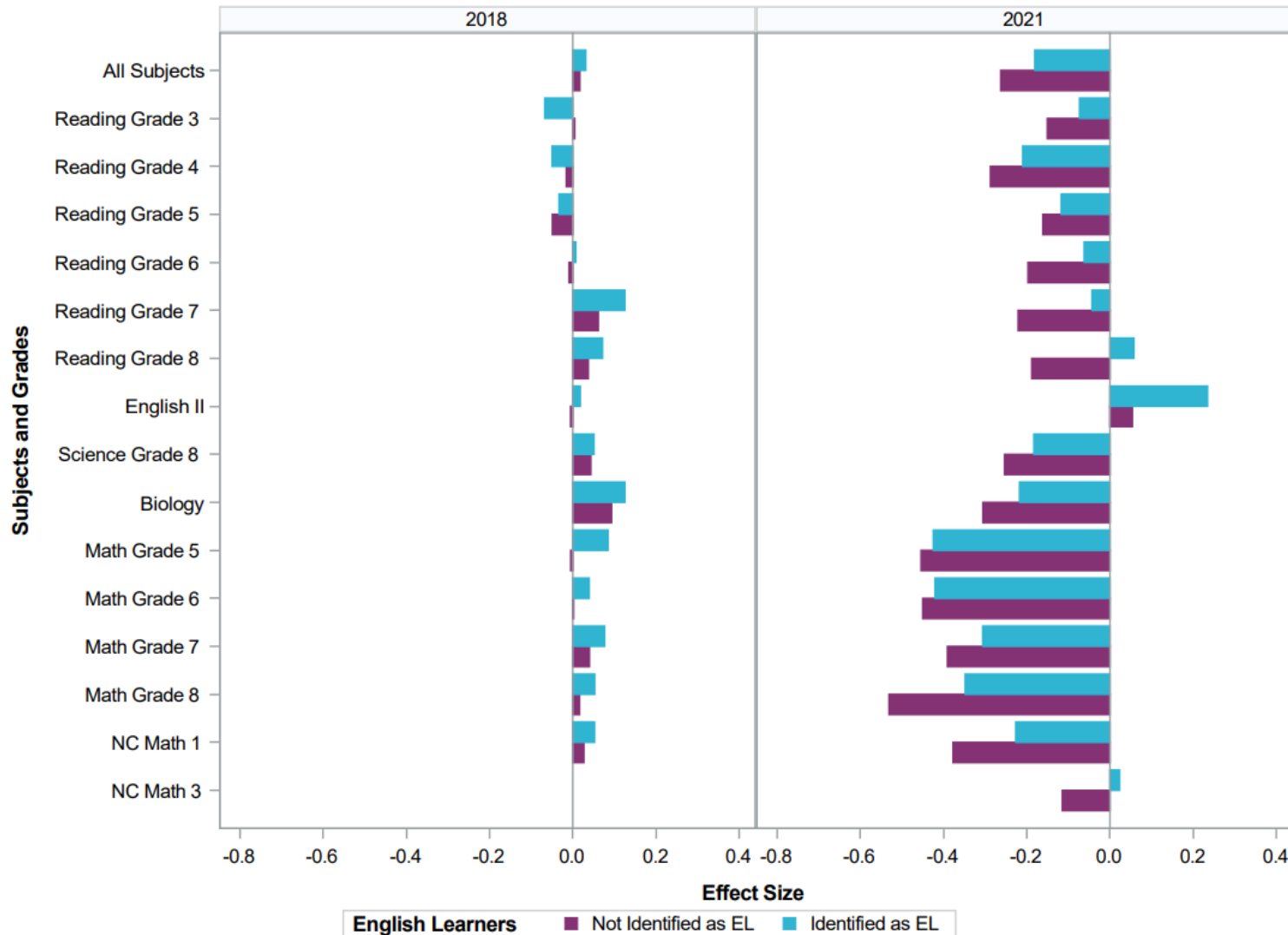
# Students with Disabilities

# English Learners

- English Learners were closer to their pre-pandemic learning trajectories compared to the general population of students.
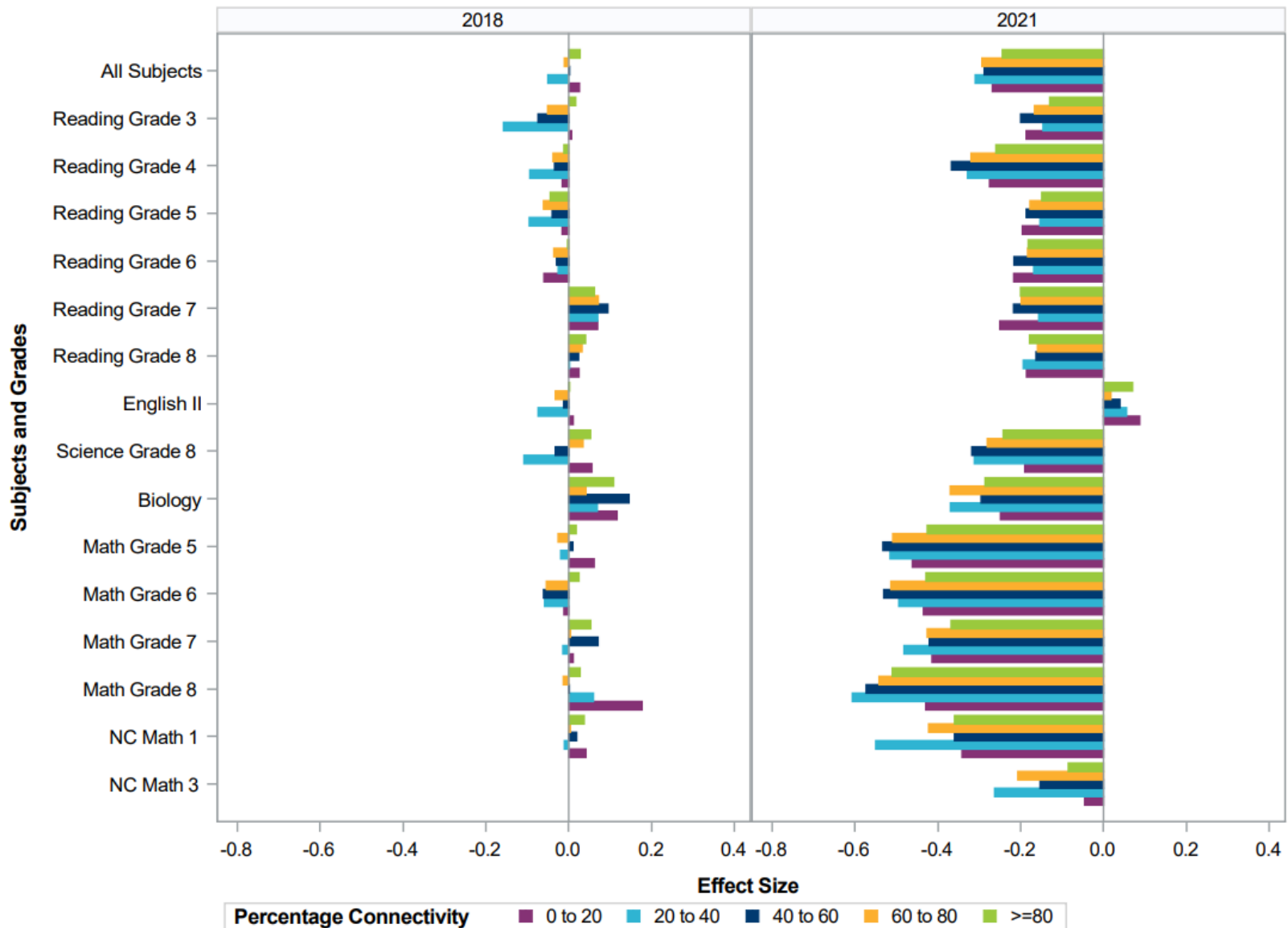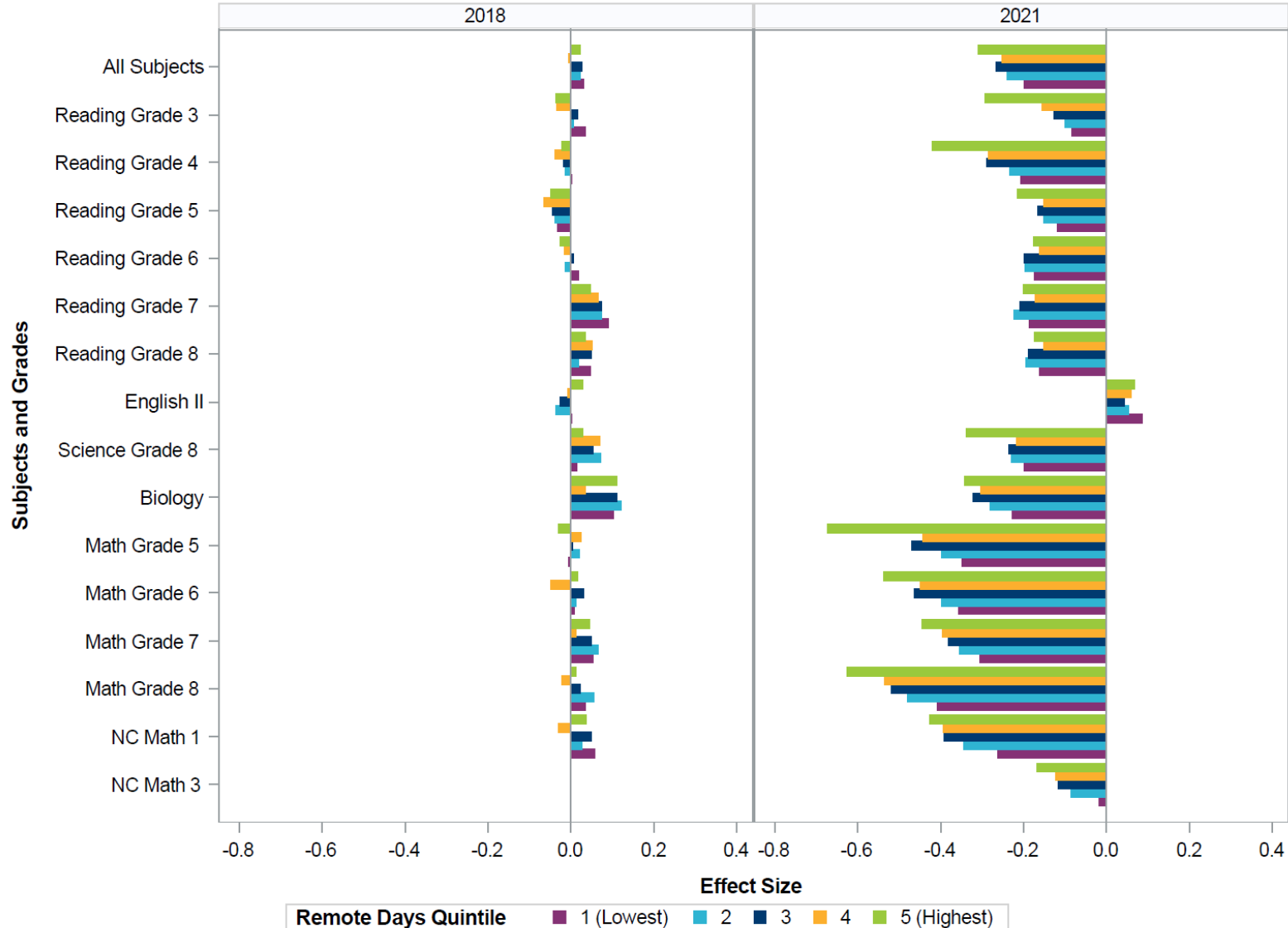
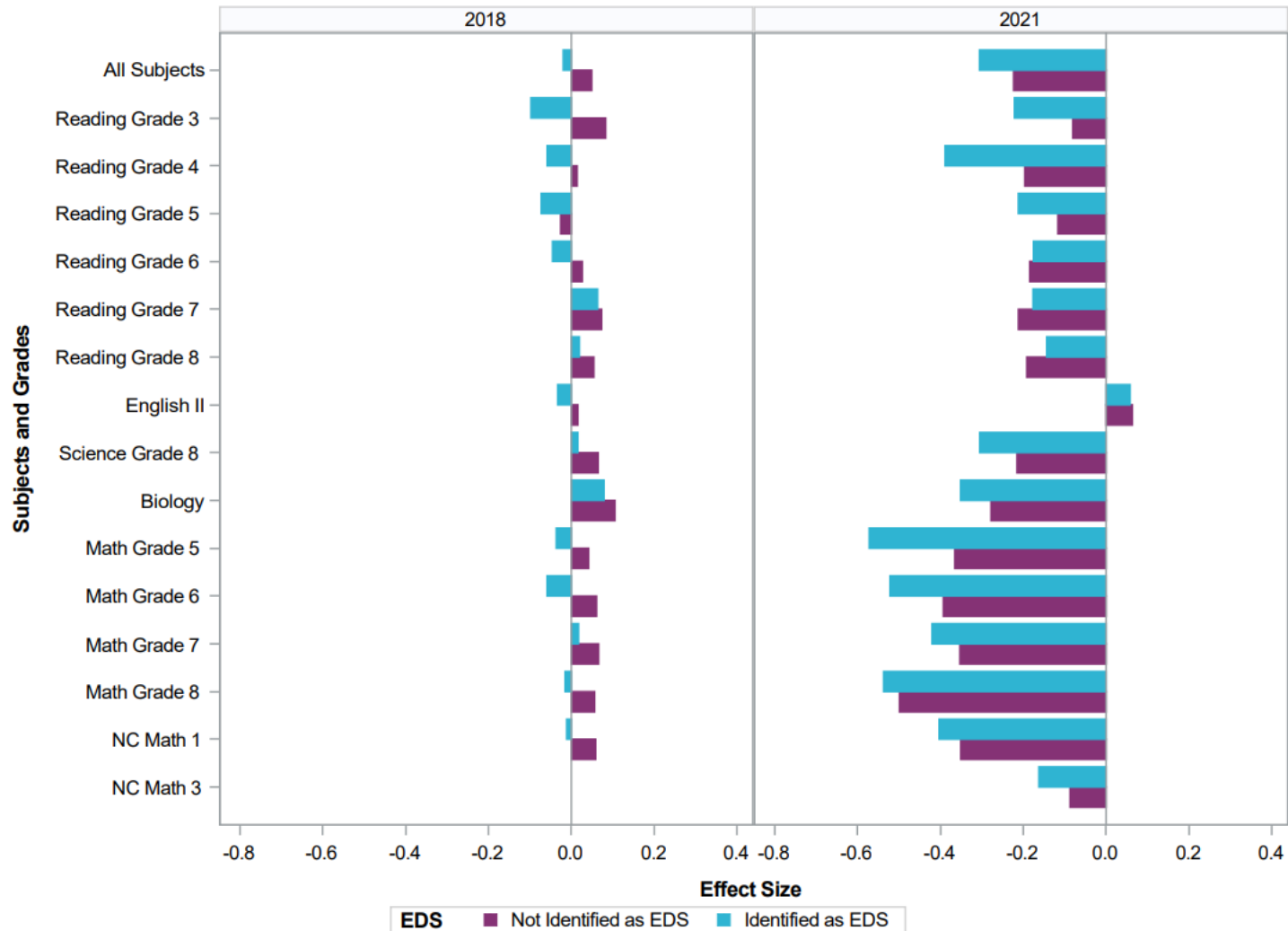# English Learners

# KEY TAKEAWAYS: Eliminate Opportunity Gaps

# Broadband Connectivity

# In-Person Instruction

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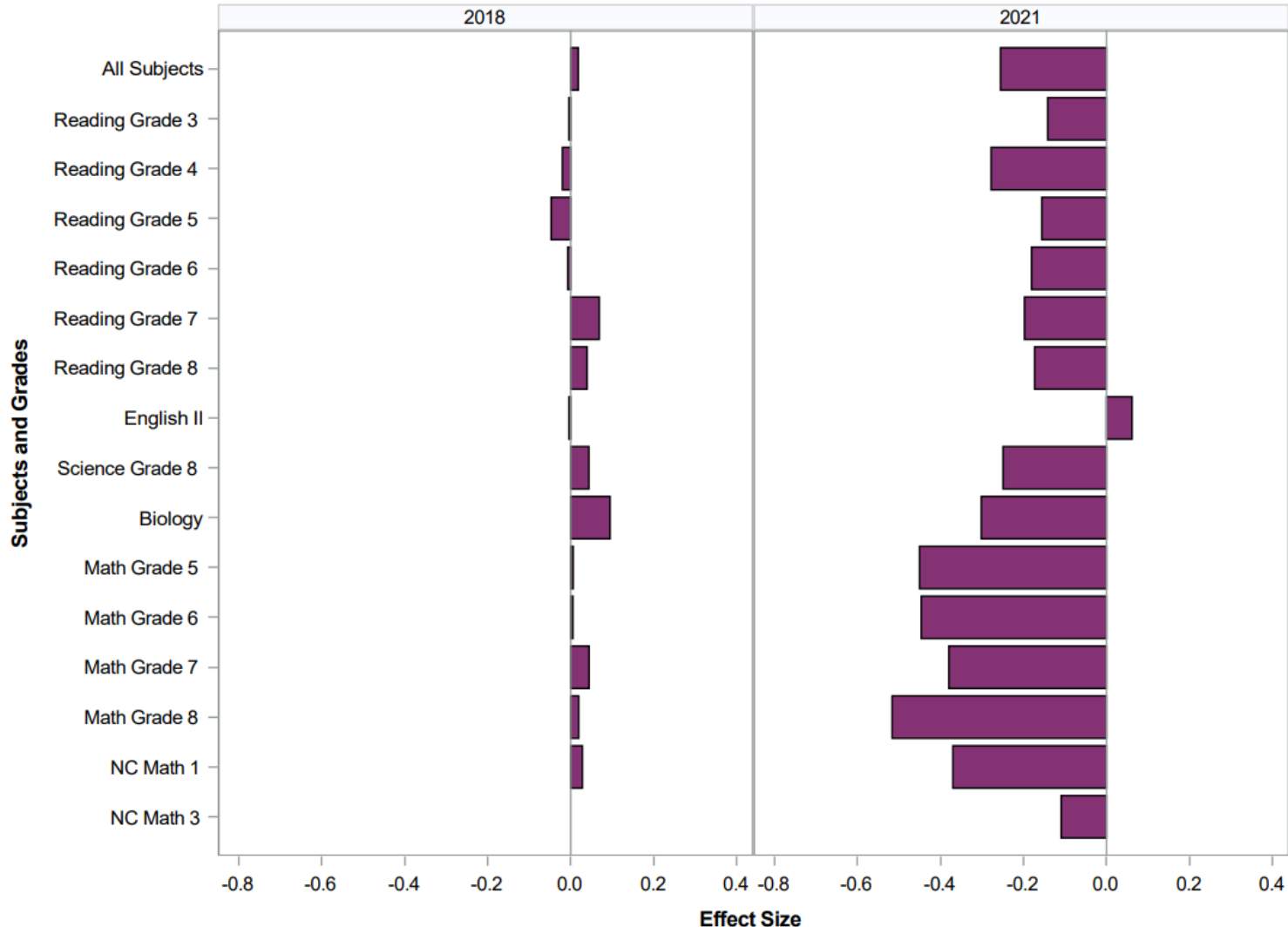State Board of Education | Department of Public Instruction

# Students Disproportionately Impacted by the Pandemic

# Focus on Content Areas of Highest Need

# NEXT STEPS

# Next Steps for 2022

- Submit Preliminary (March 15) and Technical (December 15) Report

- Gather input from state and local leaders for next level of analysis and interactions

- Continue to work with SAS to support enhanced PSU EVAAS web portals and development of resources

- Leverage partners in rigorous research studies to continue to engage in evidenced-based decision making

- Convert effect sizes to months of learning loss estimate