

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 a 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
 - 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

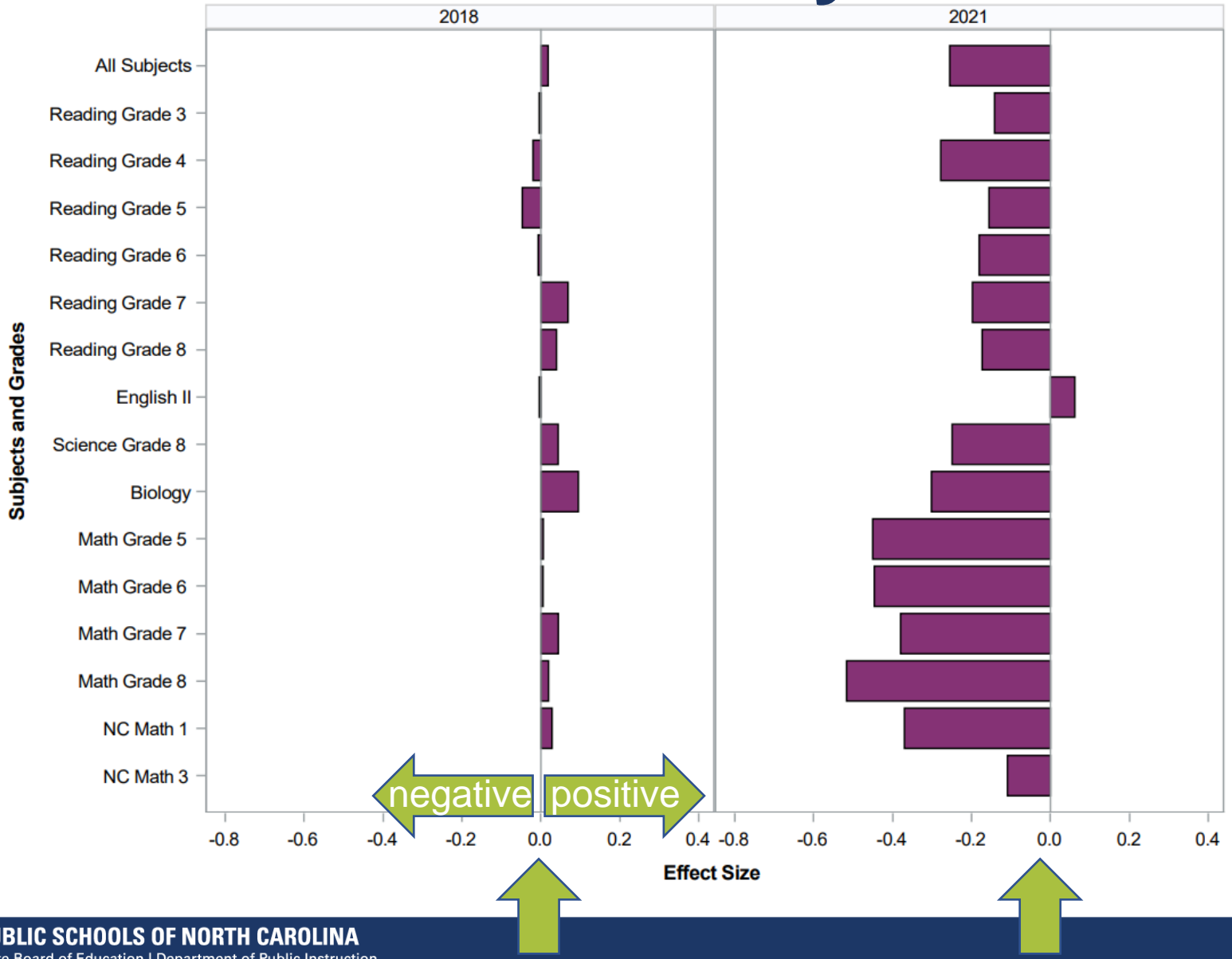
Framing the Results

- 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.

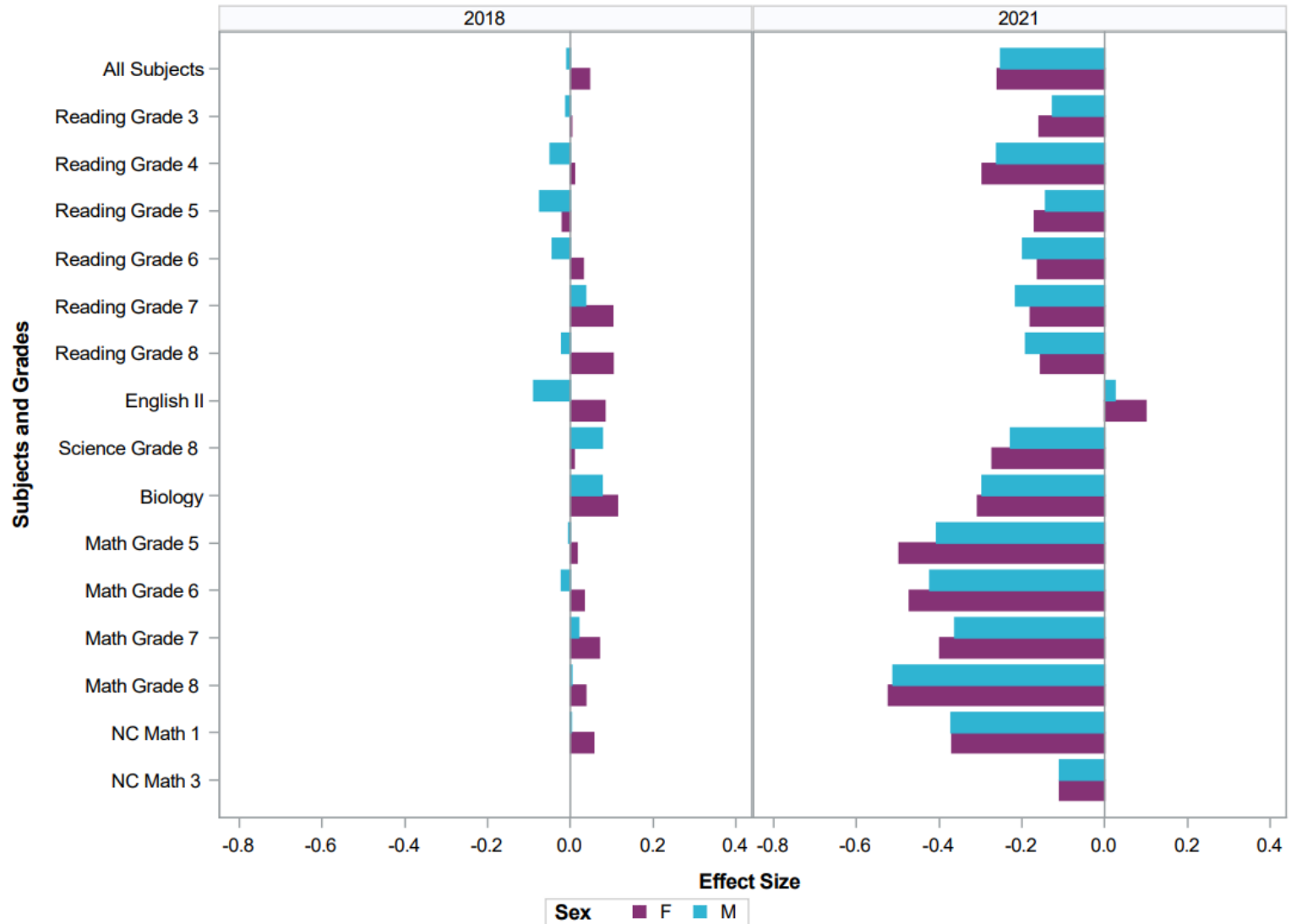
Statewide Summary



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.

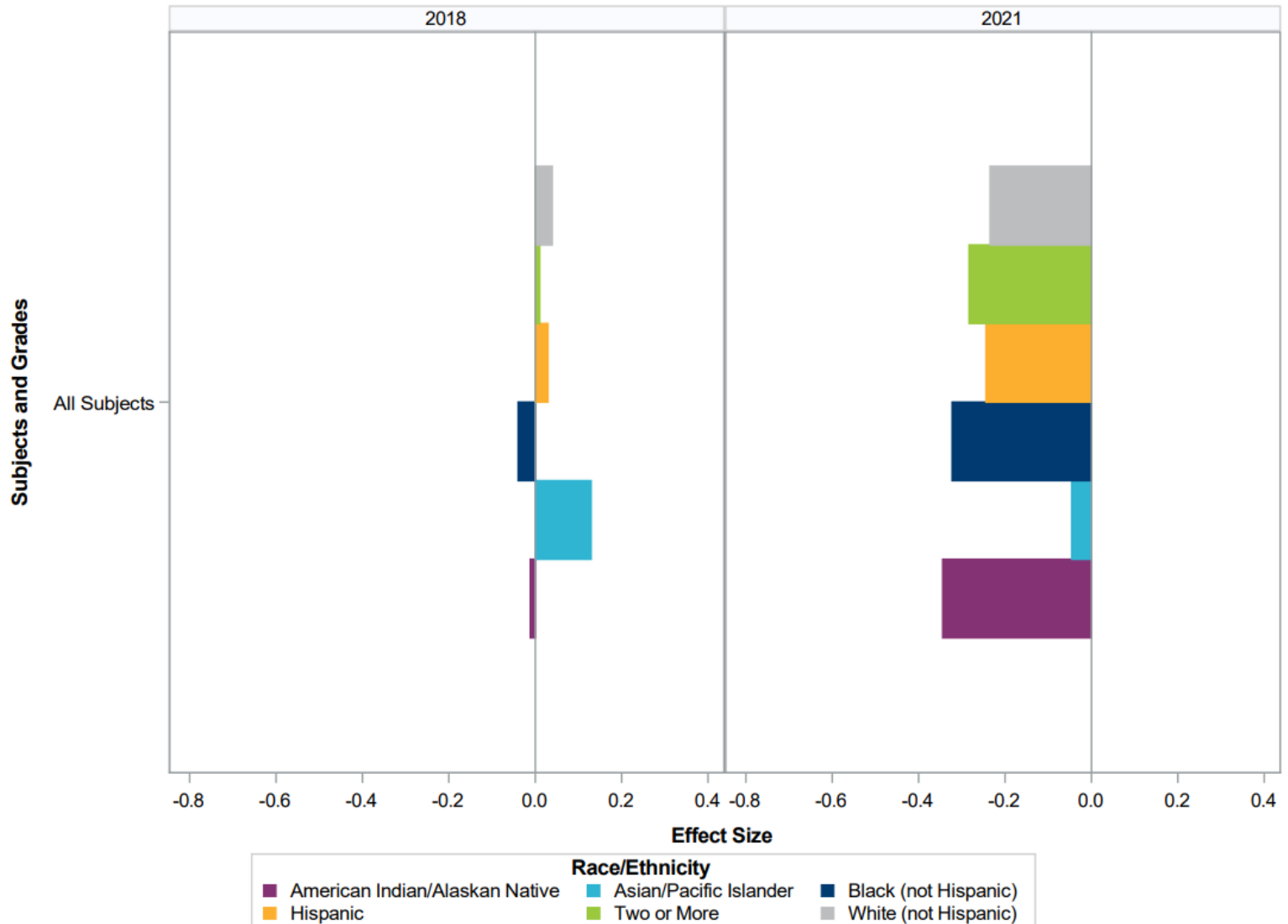
Female/Male



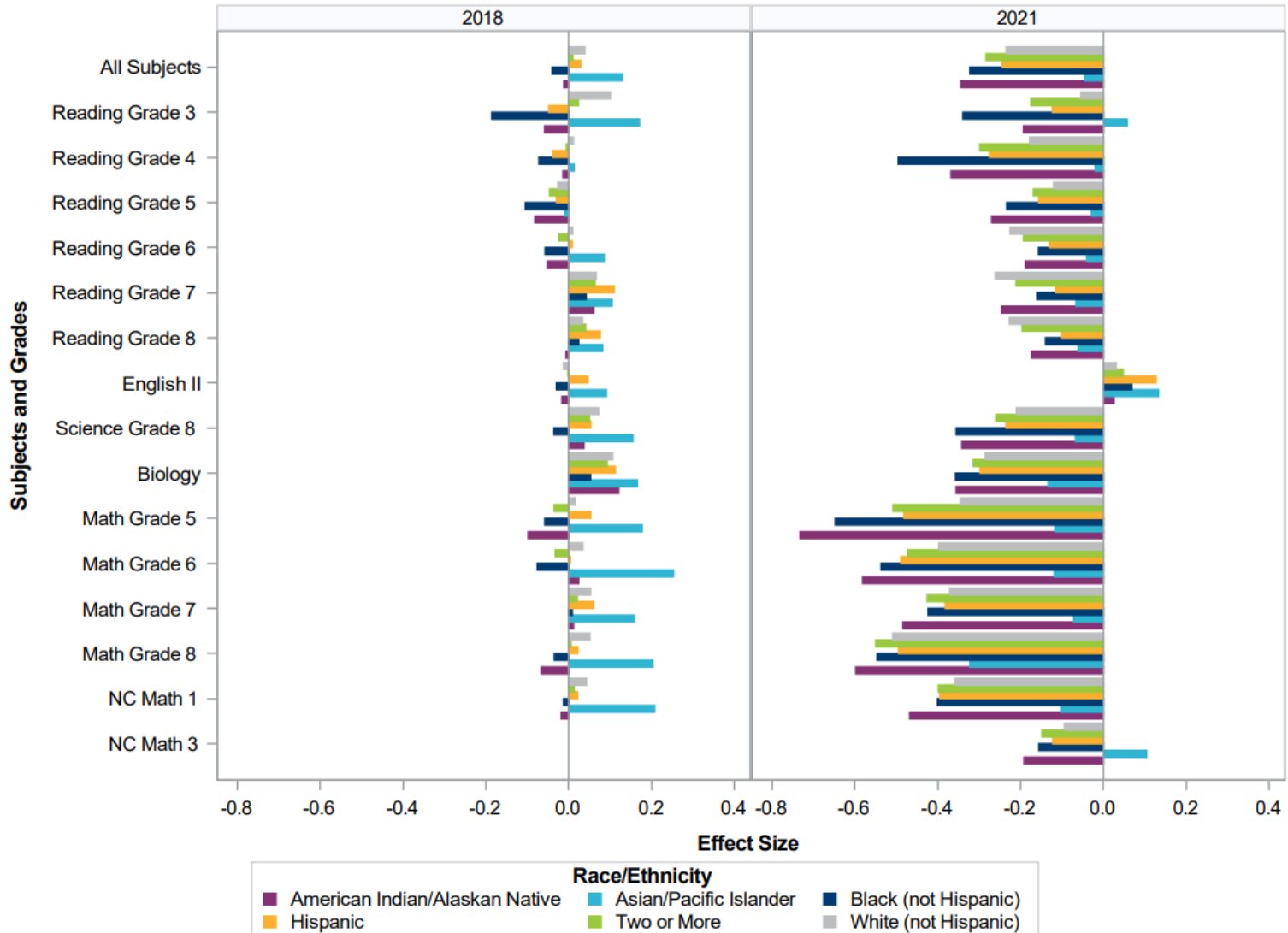
Race/Ethnicity

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

Race/Ethnicity



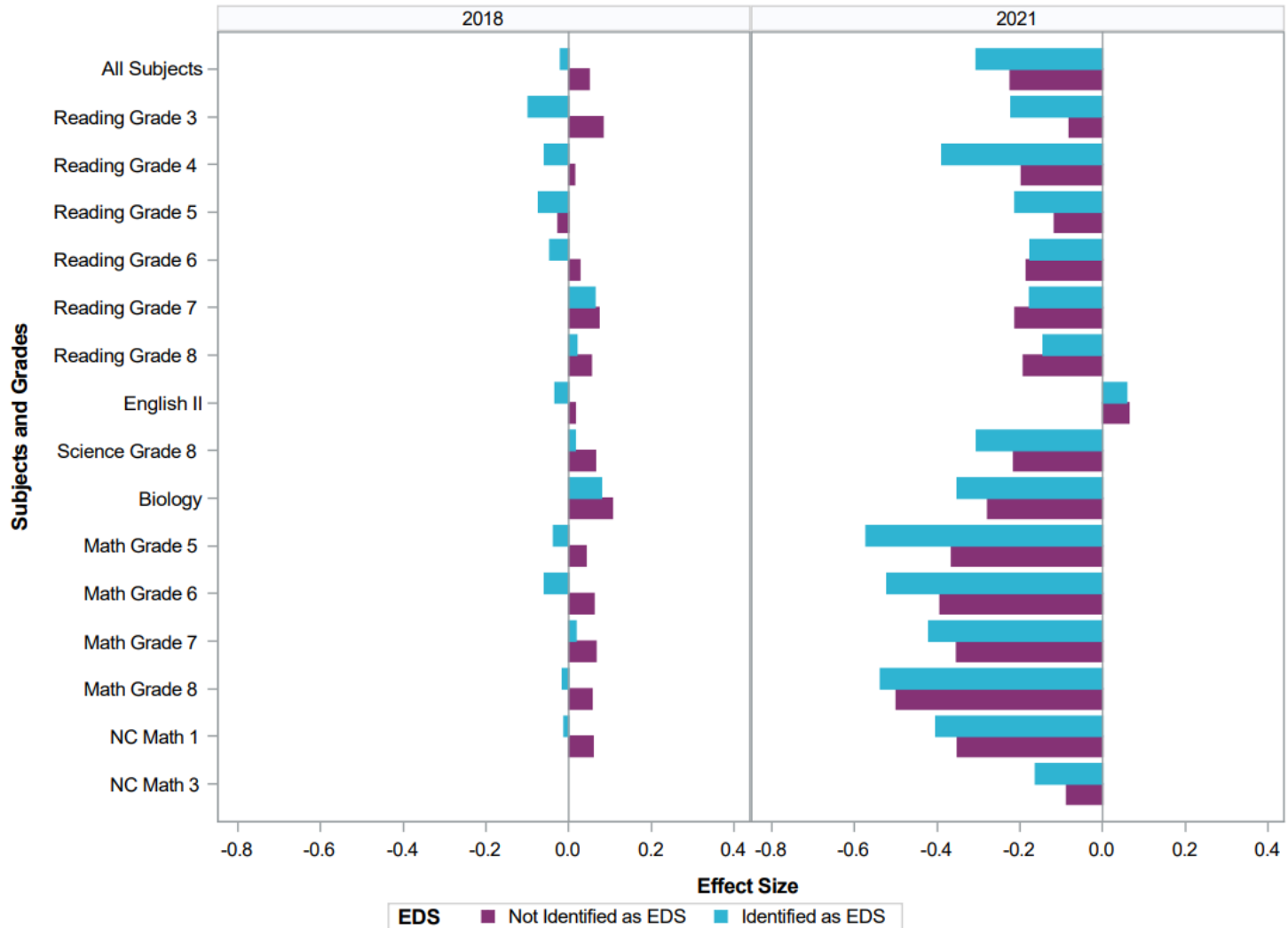
Race/Ethnicity



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.

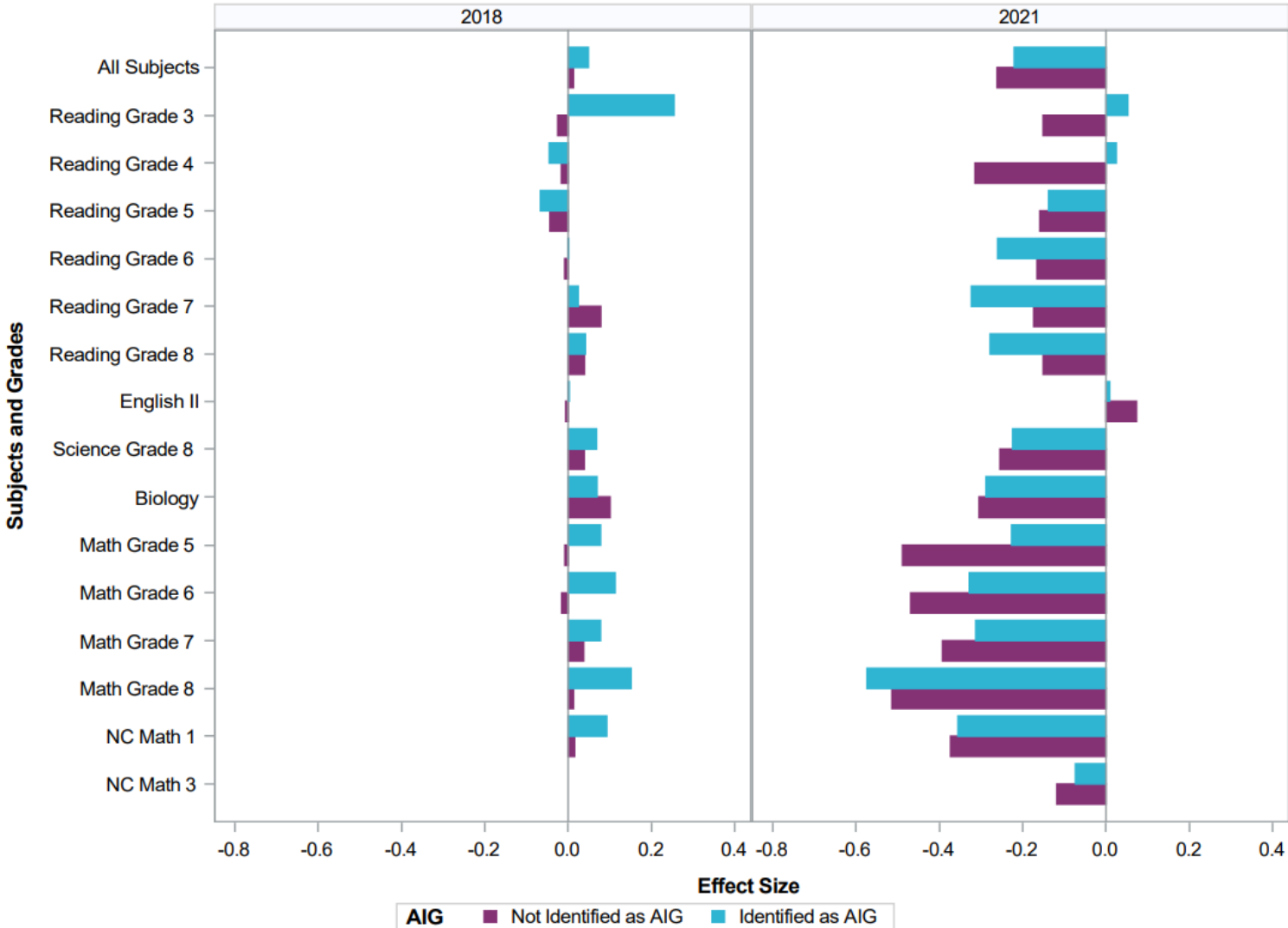
Economically Disadvantaged Students



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.

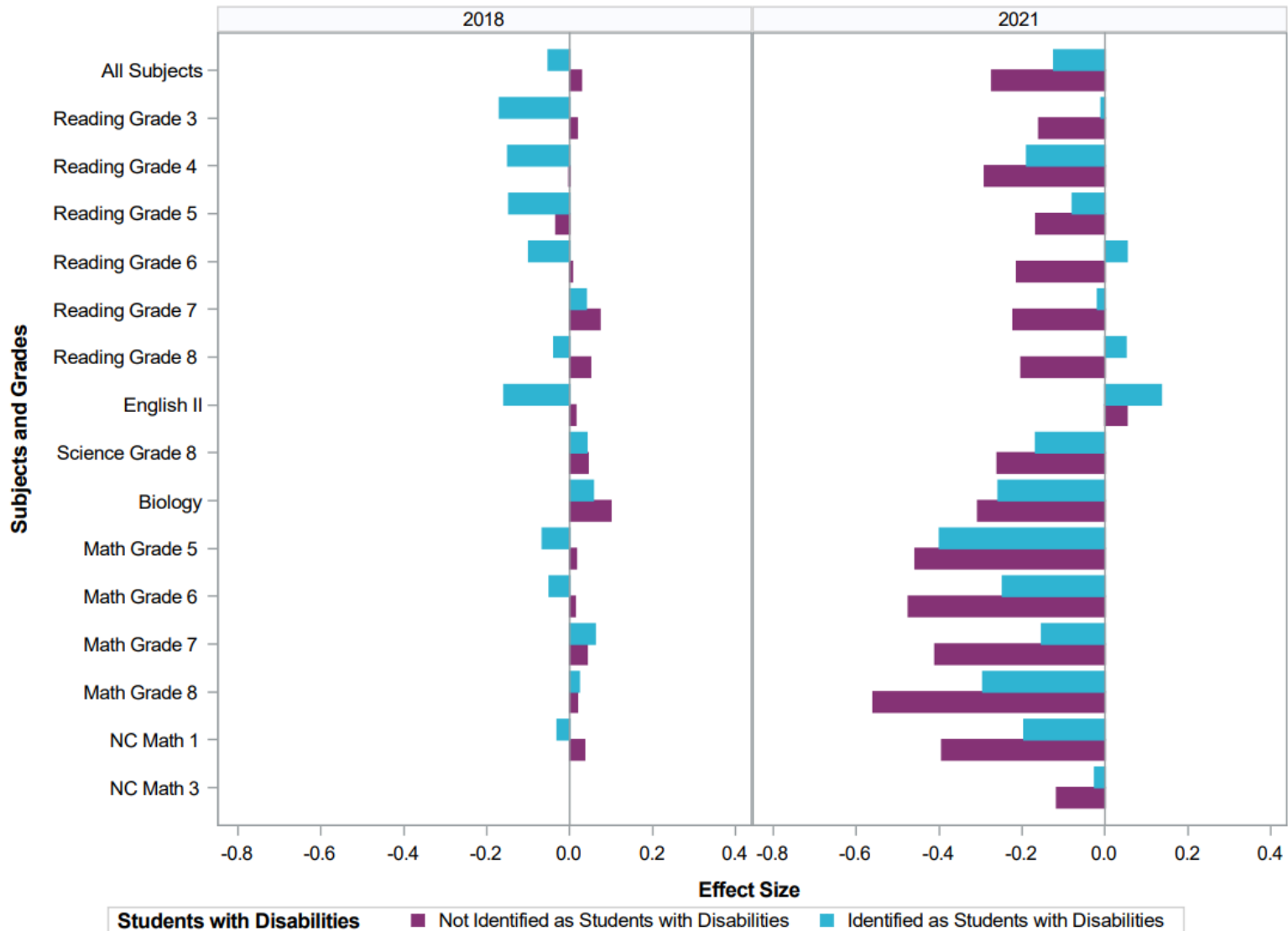
Academically/Intellectually Gifted



Students with Disabilities

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

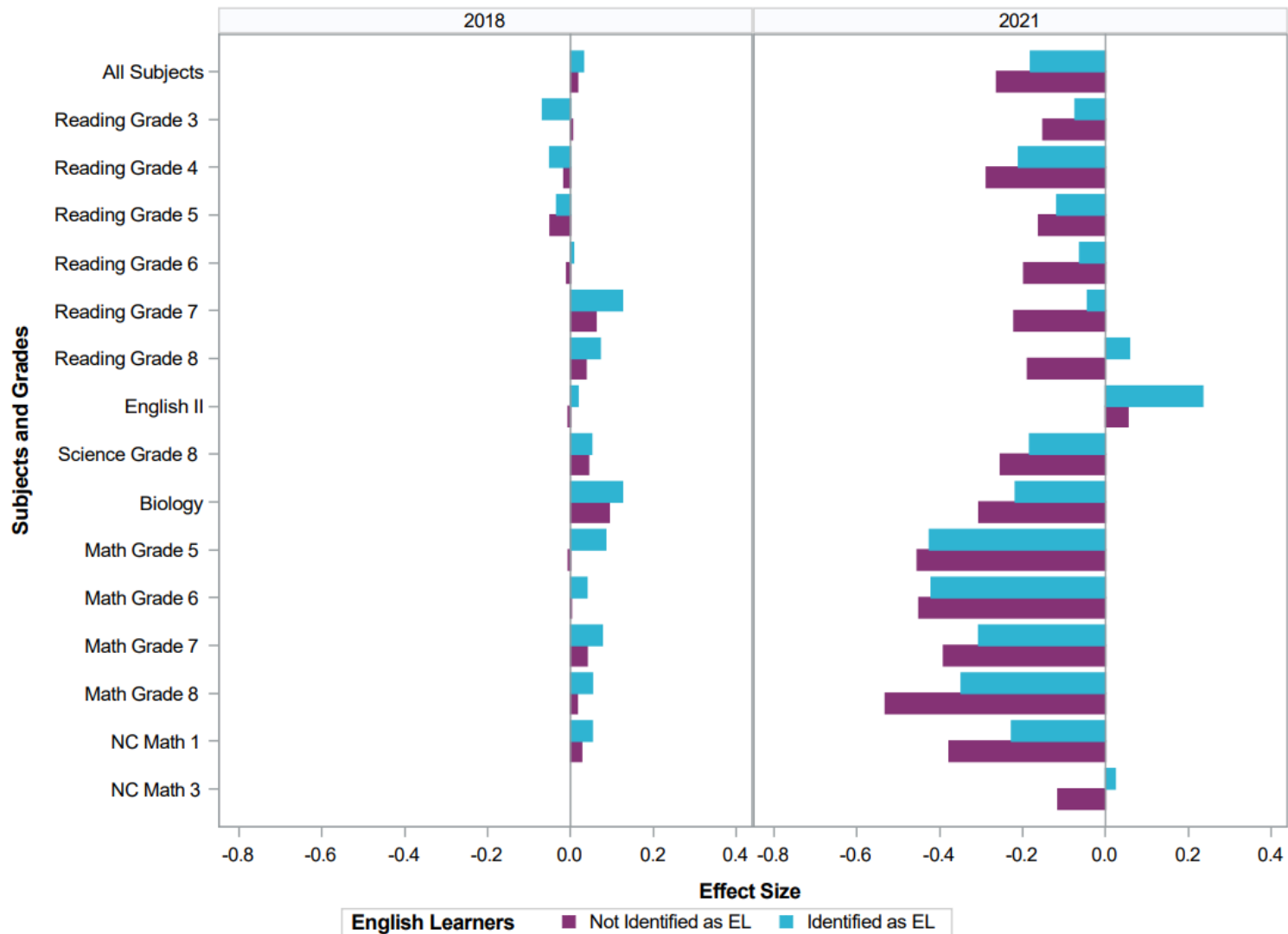
Students with Disabilities



English Learners

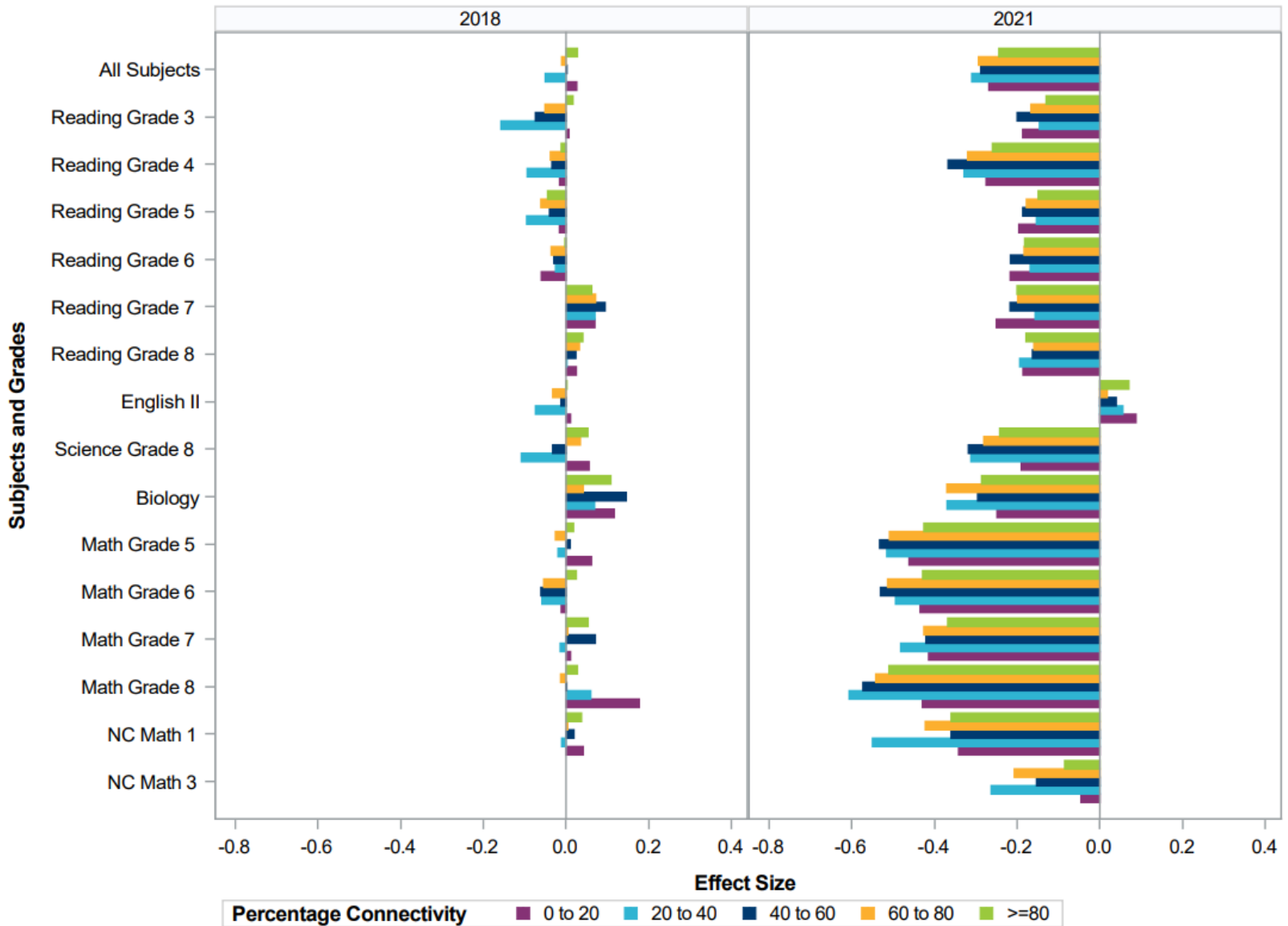
- English Learners were closer to their pre-pandemic learning trajectories compared to the general population of students.

English Learners

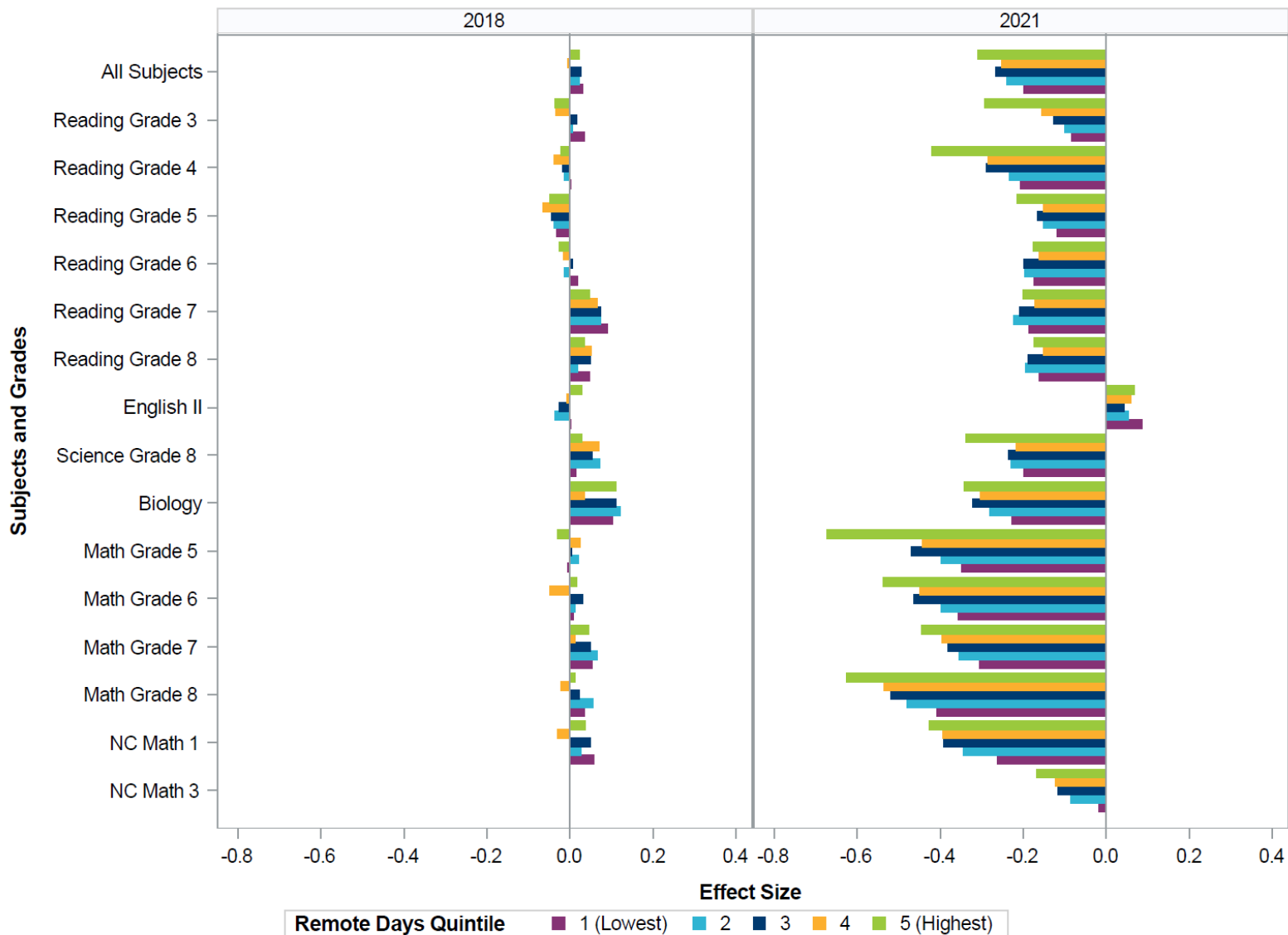


KEY TAKEAWAYS: Eliminate Opportunity Gaps

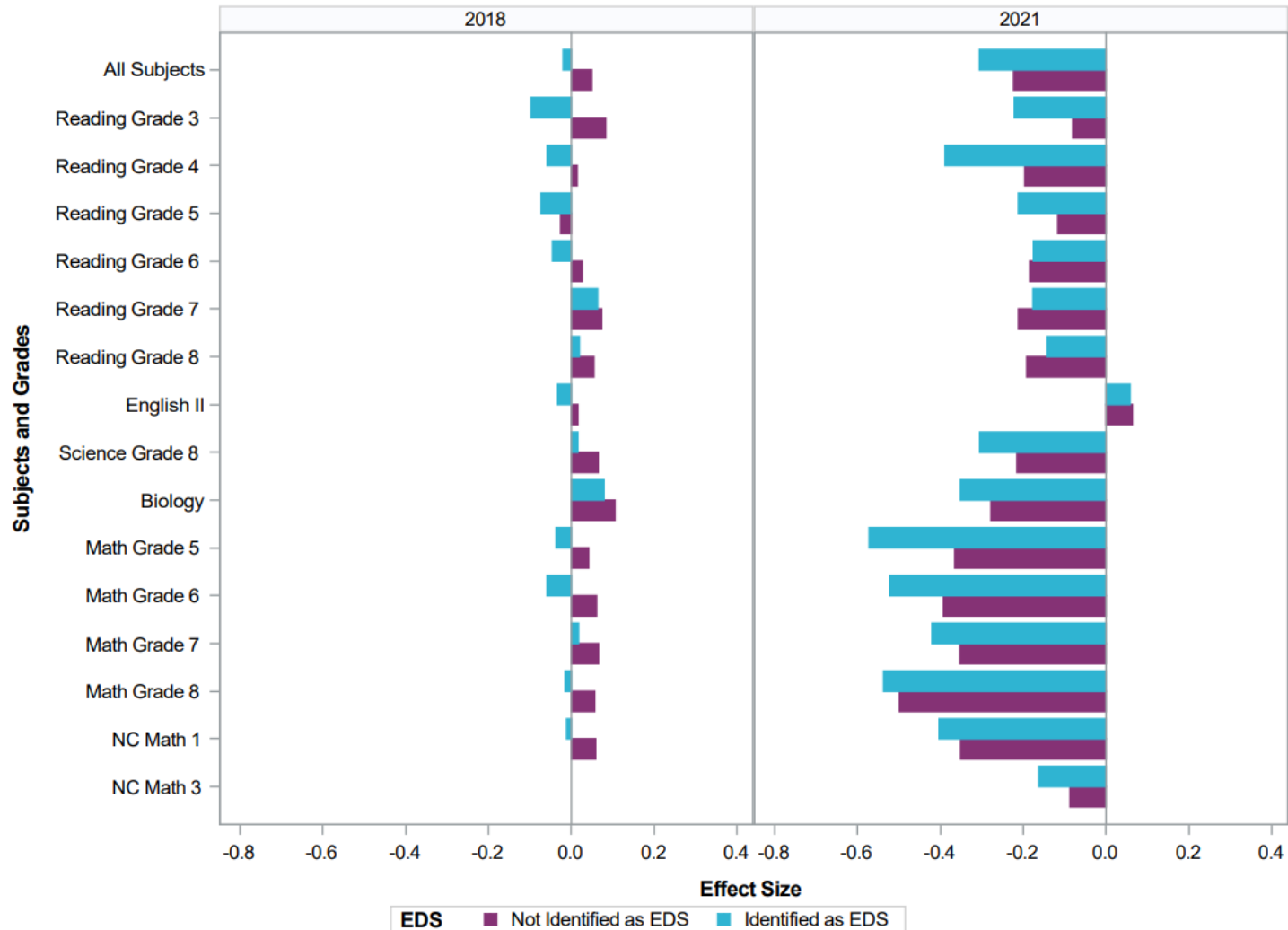
Broadband Connectivity



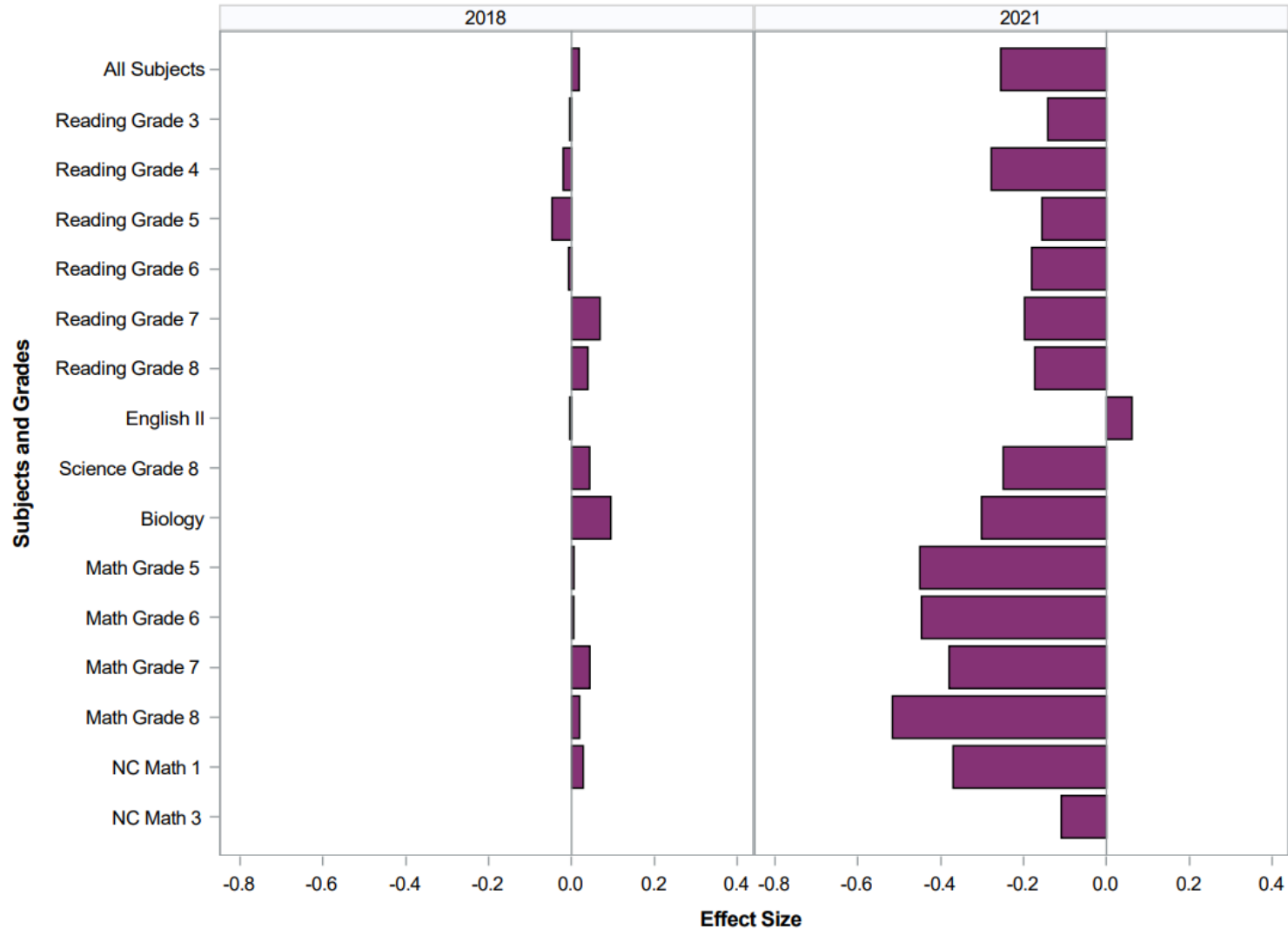
In-Person Instruction



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