

Piloting School Funding Equity: How the Enactment of SB 178 Impacted Student Outcomes After Graduation

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Today's Presentation

- Background on SB 178 and the New Nevada Plan Pilot
- Data and treatment
- Analytic strategy
- Results
- Policy implications

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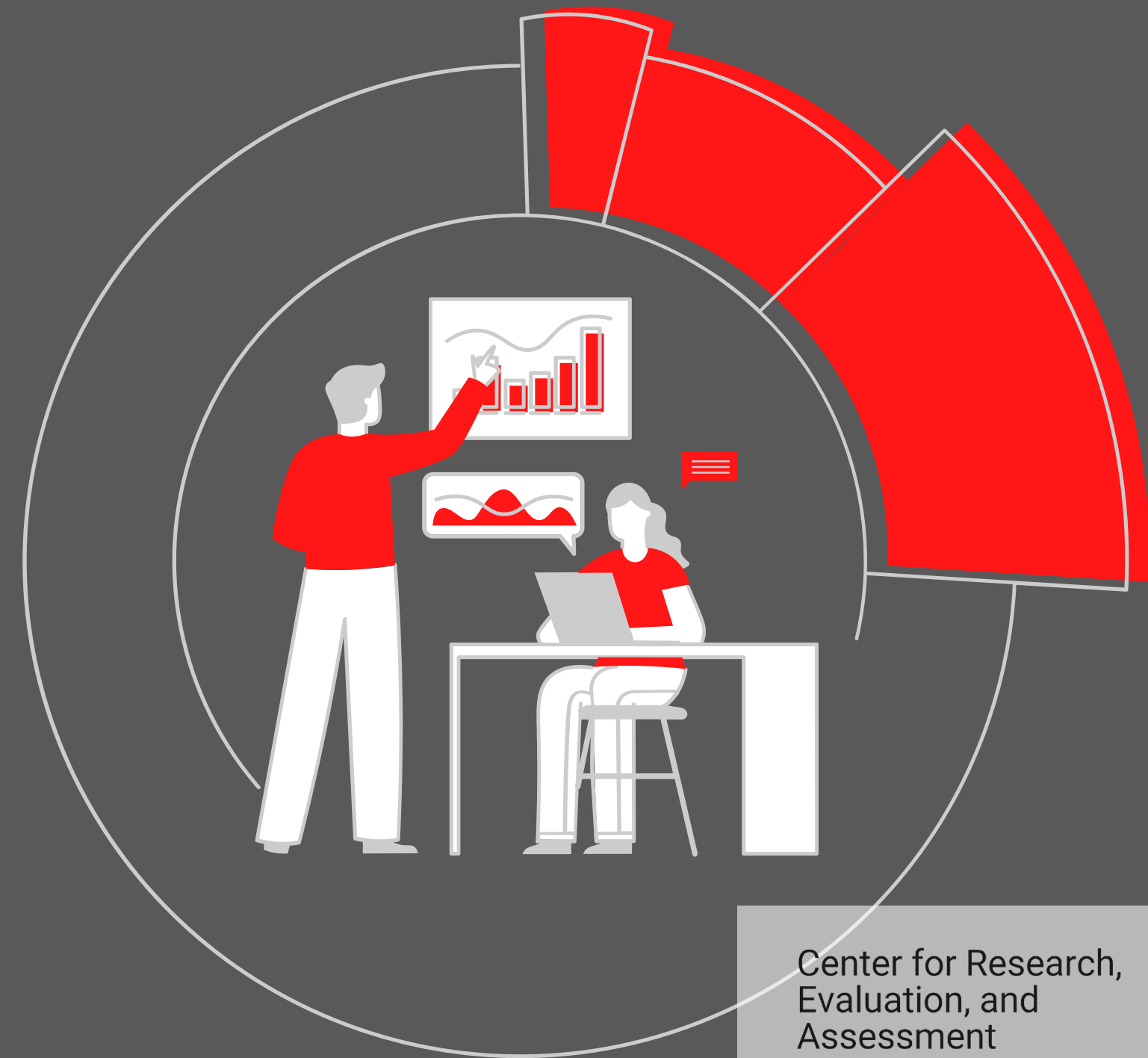
Little research on distribution of school funding

Approximately 30 large school districts have moved to Weighted Student Funding Formulas in recent years (Levin et al.,

2013; Levin et al., 2019; Roza et al., 2020).

Only a few studies have explored whether WSFs improve student outcomes (Lee & Fuller, 2022; Roza et al., 2020; Tuchman et al., 2022).

Even fewer have done so using student-level data and a quasi-experimental design



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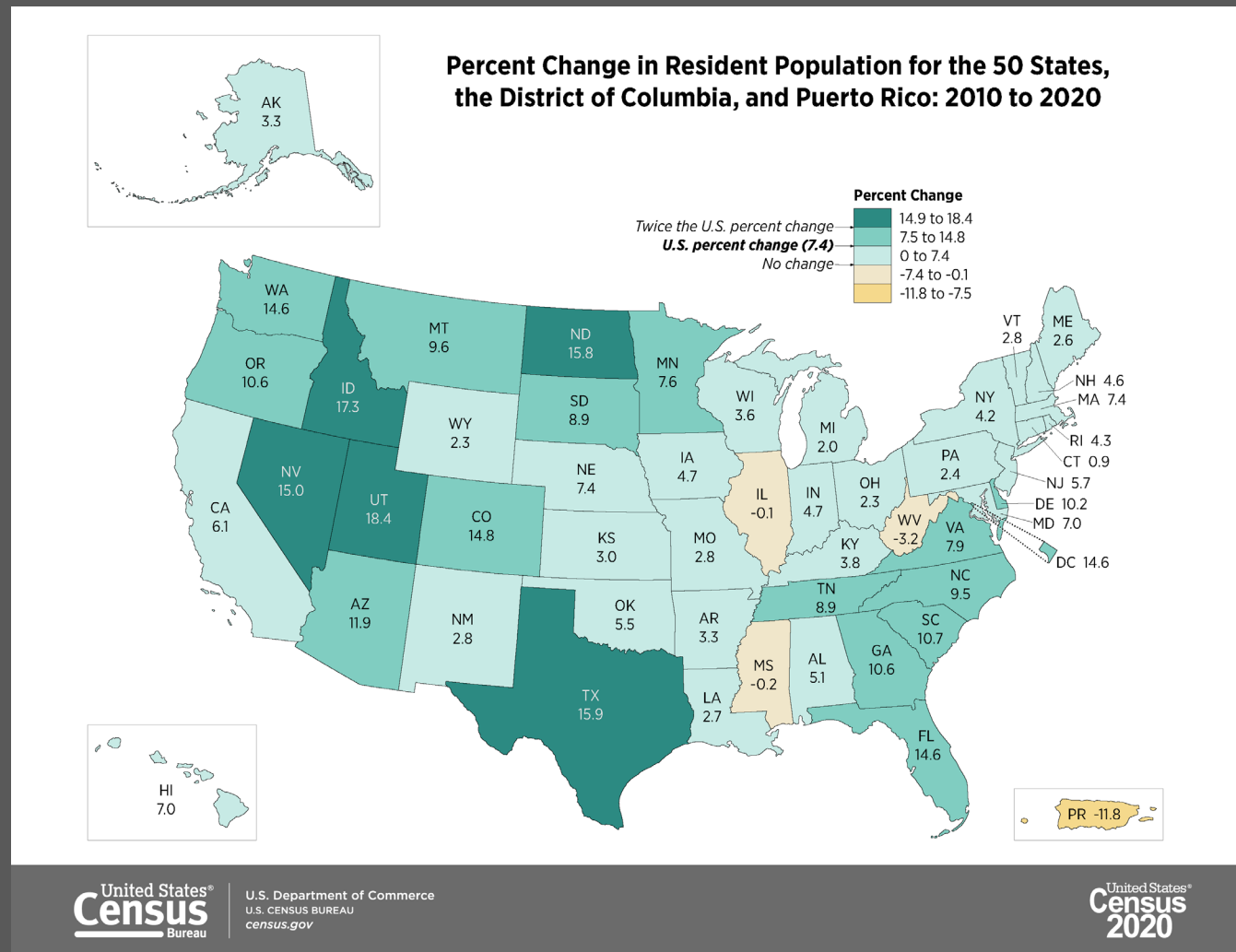
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Senate Bill 178 and the New Nevada Plan Pilot

1967

The Nevada Plan was implemented in 1967 as a minimum foundation program

- Nevada's population has grown by 988% since 1960
- Clark County has grown by 1632% since 1960
- 9% of residents were non-white in 1960 compared to 55% in 2020



2017

SB 178 and the The New Nevada Plan Pilot (NNPP) program was enacted

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Senate Bill 178 and the New Nevada Plan Pilot

Weighted Student Funding Pilot

Provided \$1,200 dollars per pupil above and beyond the basic guarantee for pupils who:

1. are English learners (EL) OR are eligible for a free or reduced price lunch (FRL)
2. scored at or below the 25th percentile on an assessment of proficiency
3. are not enrolled at a Zoom school or Victory school (categorical grant programs for EL and FRL students)
4. do not have an individualized education program

Average revenue: \$100,000 per school per year

Prior CREA study on grade 3-8 outcomes

01

NNFP funding led to small improvements in ELA and math SBAC achievement of treated students

02

Achievement disparities between targeted and non-targeted students grew in size after the NNFP

What about secondary and post-graduate outcomes?

- Student-level data from NPWR NDE assessment and graduate data tables from 2015-16 to 2019-20.
- Student-level data from NPWR NSHE completions, student view, and cohort data tables from 2015-16 to 2021-22

- ✓ Narrowed to just Clark County School District (nearly all SB 178 high schools are in Clark County)
- ✓ Used a combination of ACT assessment location and high school graduation location to determine school of enrollment (because of missing demographic table information)
- ✓ Removed concurrent enrollment students (defined as enrolling in NSHE before high school graduation since data do not include a concurrent enrollment flag)

48,786 treated students

63,354 comparison students

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Sample

Untreated Cohorts

Cohort I (2015-16)

7,364 in SB 178 high schools
11,157 in non-SB 178 high schools

Cohort II (2016-17)

10,329 in SB 178 high schools
13,211 in non-SB 178 high schools

Treated Cohorts

Cohort III (2017-18)

10,590 in SB 178 high schools
13,746 in non-SB 178 high schools

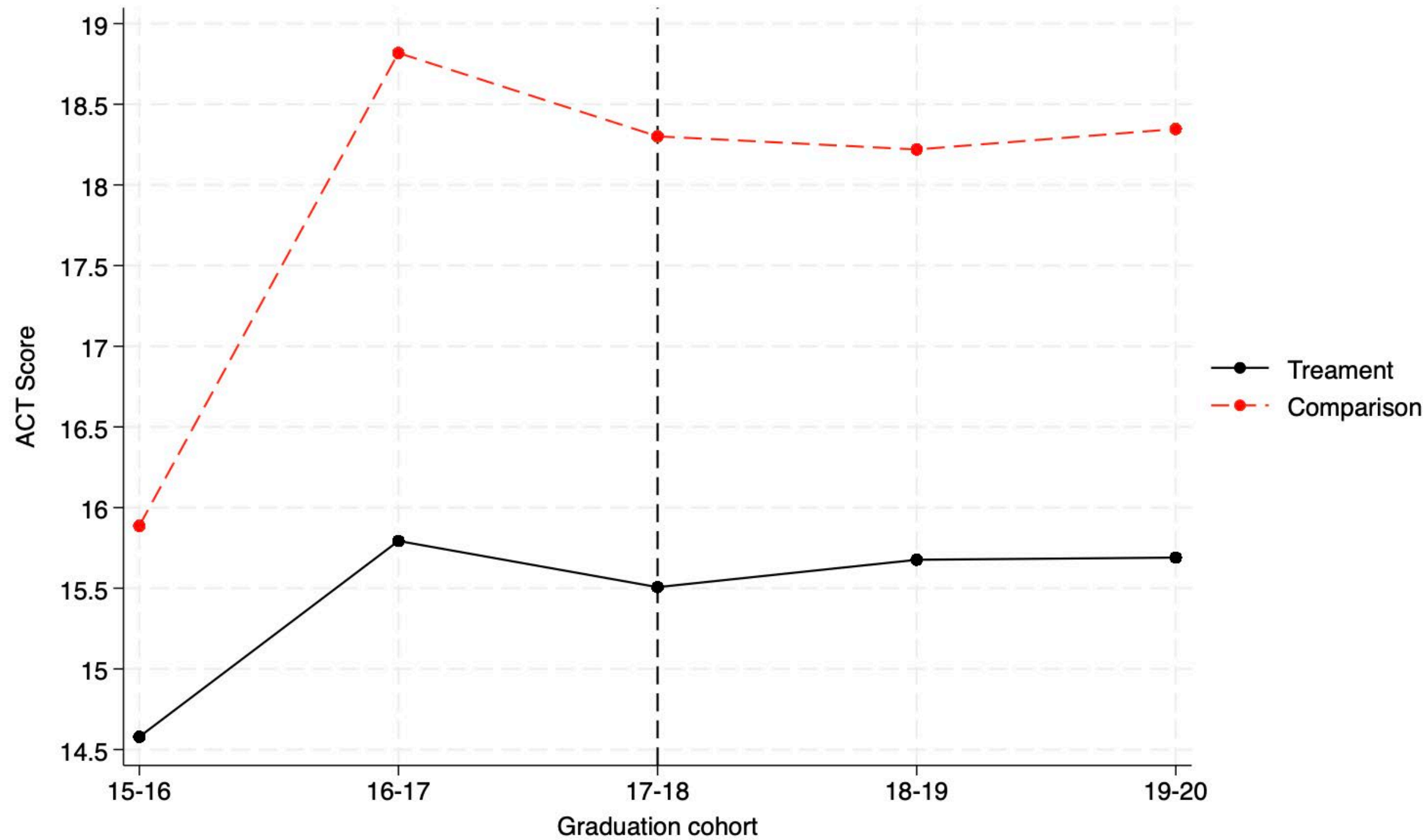
Cohort IV (2018-19)

10,423 in SB 178 high schools
12,741 in non-SB 178 high schools

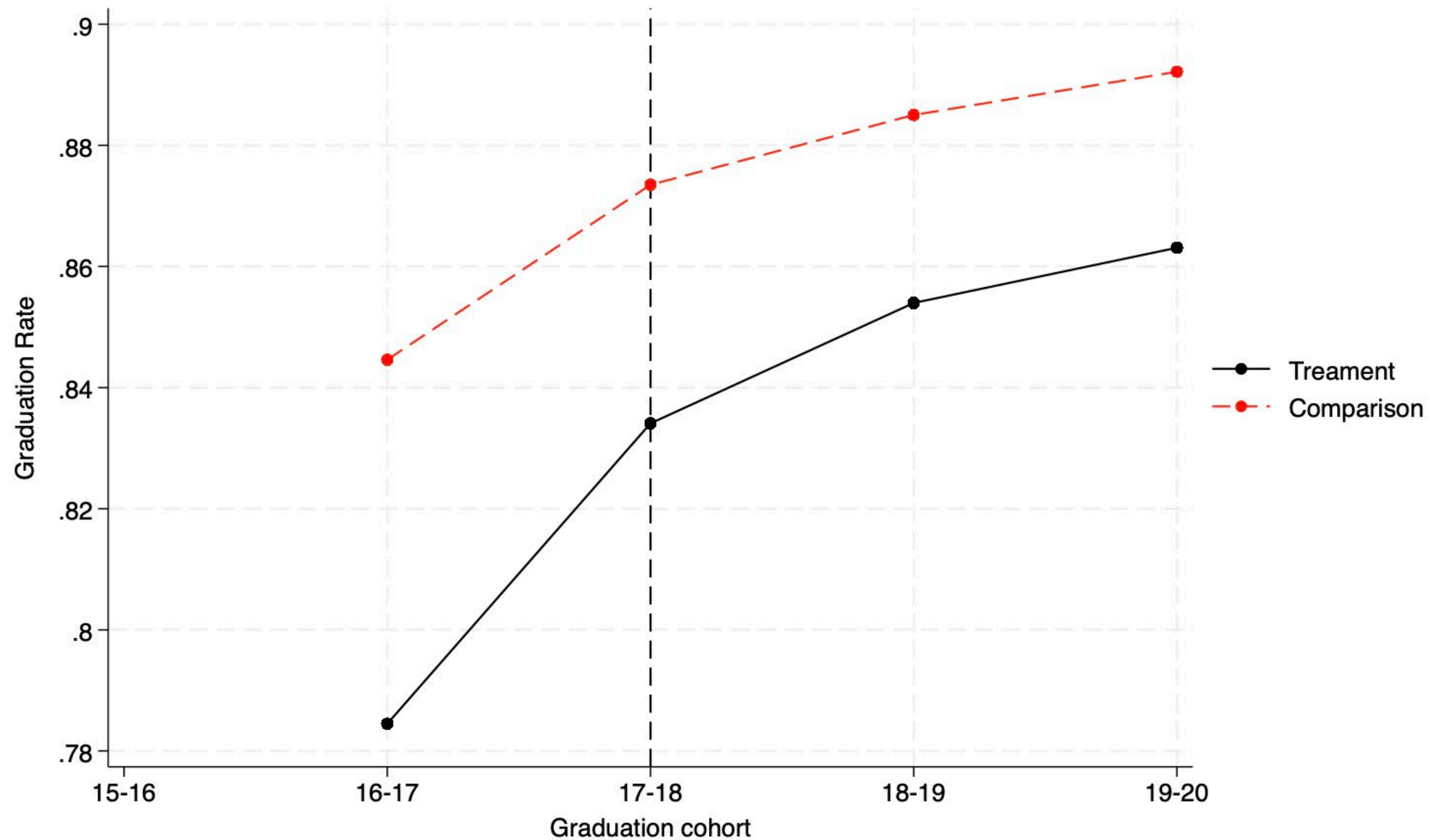
Cohort IV (2019-20)

10,080 in SB 178 high schools
12,499 in non-SB 178 high schools

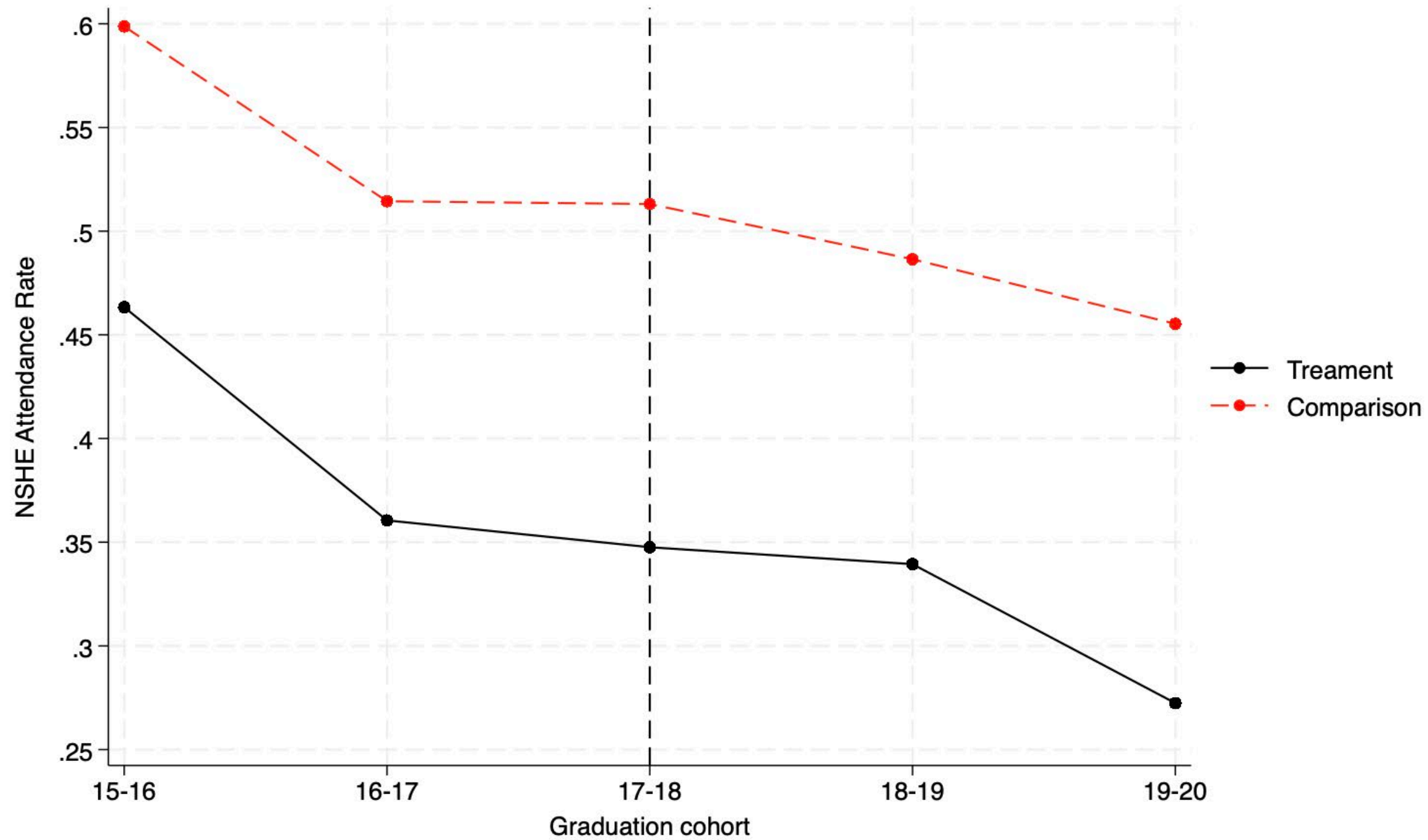
Act Trend



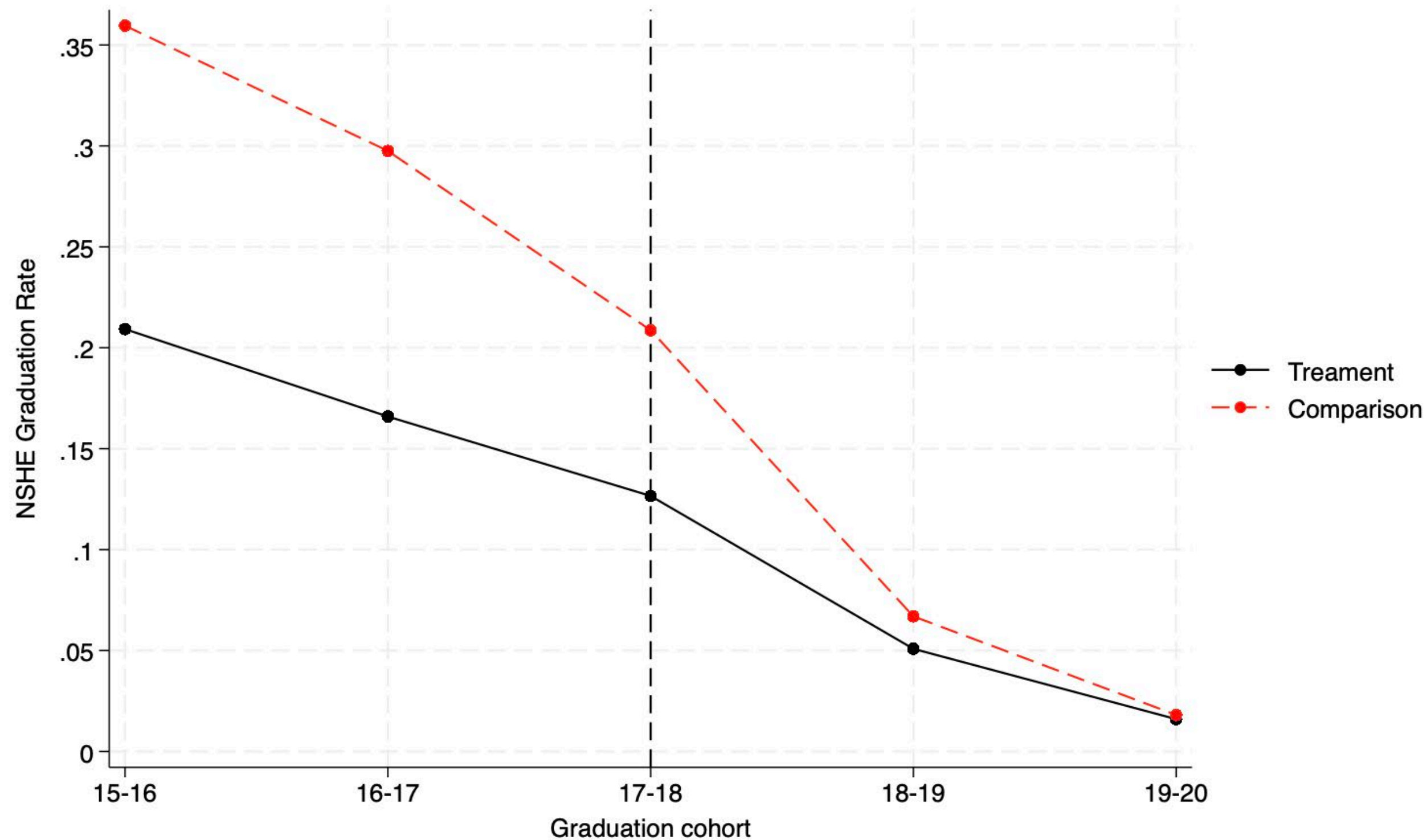
Graduation Trend



NSHE Attendance Trend



NSHE Graduation Trend



Difference-in-Differences Approach

$$Y_{ist} = \alpha + \sum_{j=-2}^{+2} I_{2018+j} + \sum_{j=-2}^{+2} I_{2018+j} * NNFP_{ist} + \phi L_{ist} + \varepsilon_{ist} \quad (1)$$

The model includes cohort fixed effects ranging two years before treatment (15-16, 16-17) to two years after treatment (18-19, 19-20) interacted with whether a student attended an NNFP school.

The model includes a number of other student control variables.

Students at NNFP schools experienced...

ACT score improvement

Students at NNFP funded schools performed 0.44-0.46 points higher relative to comparison students.

Students at NNFP schools experienced...

Higher graduation rates

Students at NNFP funded schools are 3 percentage points more likely to graduate relative to comparison students.

Students at NNFP schools experienced...

No change in NSHE attendance

Students at NNFP funded schools are just as likely to attend an NSHE school relative to comparison students.

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Students at NNFP schools experienced...

Higher NSHE graduation rates

Students at NNFP funded schools are 11-13 percentage points more likely to graduate with an NSHE degree relative to comparison students.

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Weighted student funding, like the NNFP, can have longer term effects on students.

Summary



Improved ACT scores



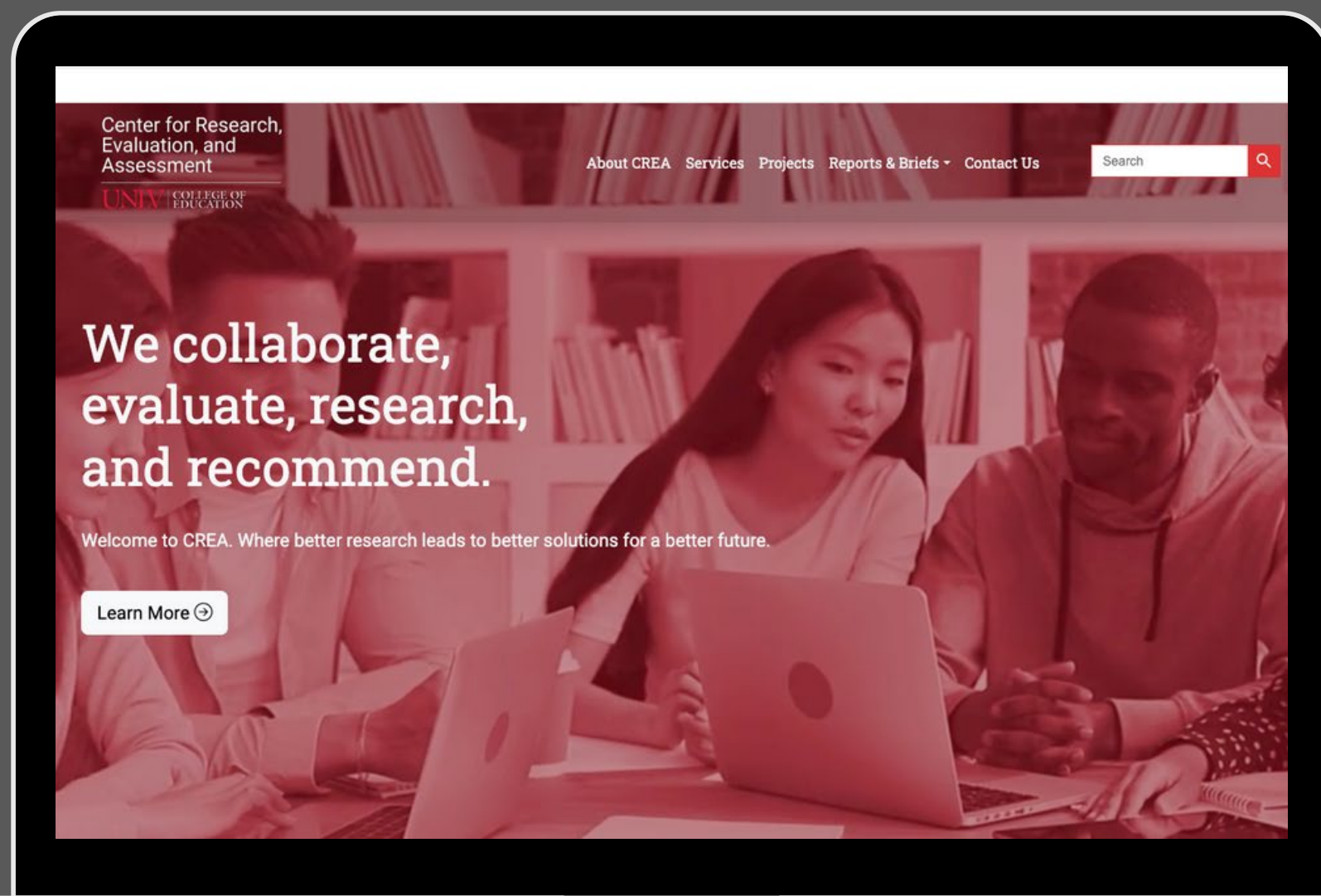
Improved graduation rates



Improved NSHE graduation rates

Thank you

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