



Research on Start Times

Jefferson County Board of Education
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Research on School Start Times



“The American Academy of Pediatrics recognizes insufficient sleep in adolescents as a public health issue, endorses the scientific rationale for later school start times, and acknowledges the potential benefits to students with regard to physical and mental health, safety and academic achievement.

A substantial body of research has now demonstrated that delaying school start times is an effective countermeasure to chronic sleep loss and has a wide range of potential benefits to students with regard to physical and mental health, safety, and academic achievement”

– *The American Academy of Pediatrics*

Research on School Start Times

"The AMA calls on] school districts across the United States to implement middle and high school start times no earlier than 8:30 a.m."

- American Medical Association



"Schools that have a start time of 8:30 a.m. or later allow adolescent students the opportunity to get the recommended amount of sleep on school nights: about 8.5 to 9.5 hours. Insufficient sleep is common among high school students and is associated with several health risks such as being overweight, drinking alcohol, smoking tobacco, and using drugs – as well as poor academic performance. "

- Center

for Disease Control and Prevention

Summary of Later Start Times Advocacy

Sleep researchers and other health professionals report that it's not just the number of hours of sleep, but also the timing of sleep that is required for optimal health. Sleep deprivation impacts include:

- Weight gain and eating disorders and increased risk of obesity
- Cardiovascular problems, diabetes, and reduced immunity
- Depression, anxiety, mood swings
- Substance abuse
- Behavior problems
- Suicidal ideation
- Potential impacts on brain development

-Start School Later, Inc.





Research on School Start Times: Impact

Review of 38 studies found majority of evidence supports:

- Delaying start times generally leads to more sleep for adolescents, approximately 1 minute of sleep for every 2 minutes in delay
- Associated with improved attendance, less tardiness, less drowsiness in class, and better grades
- However, not a silver bullet to improve achievement; mixed evidence on impact on student achievement



National Context: Other Large Districts

- 59 of the 74 CGCS districts post their start times online
- 44% of large districts start high school students at 8 a.m. or later
- 31% start high school students at 8:30 a.m. or later
 - Includes Atlanta, Dallas, Austin, Washington DC, Seattle, Cincinnati, Tulsa
- 10% have a mixed model with different start times for different schools but includes a later start time option for high school students




California

In 2019, California became the first state to mandate later school times for adolescents with middle school students starting no earlier than 8:00 a.m. and high school students starting no earlier than 8:30 a.m. (starting in 2022-2023).



Impact on Students Case Study: Seattle

- In 2015, board approved moving high school start times to after 8:30 a.m.
- Currently, middle and high schools begin between 8:45 a.m. and 8:55 a.m.
- University of Washington [study](#) found:
 - Increases of sleep duration
 - Increases in grades
 - Improvement in attendance



Impact on Students Case Study: Minneapolis

In 1997, seven high schools changed from a 7:15 a.m. to an 8:40 a.m. start

University of Minnesota [study](#) found:

- improved attendance and enrollment rates,
- less sleeping in class, and
- less student-reported depression



Kentucky

Of the Top 10 Largest Districts in Kentucky:

5 districts have a *later start time* for high school students than younger students:

- Fayette, Hardin, Oldham, Madison, Daviess

5 districts have an *earlier start time* for high school students:

- Jefferson, Boone, Warren, Kenton, Bullitt

Middle school varies with 7 districts starting at 8 a.m. or later

- Fayette, Boone, Hardin, Bullitt, Oldham, Madison, and Daviess



JCPS Context

- 2018-2019: 22,554 students were chronically absent (missed 10% or more of school year)
- Current earliest bus stop time: 5:39 a.m.
- 19,133 students have a bus stop time before 6:45 a.m.



Ensuring Racial Equity

- Families with fixed work schedules or lacking transportation aren't able to help their kids if they miss the bus, putting their children at risk of tardiness or absence.
- Children from disadvantaged backgrounds not only risk higher rates of tardiness and truancy, but also higher rates of dropping out of school
- When school start times are moved later, rates of tardiness, truancy, absenteeism, and dropping-out decline, and improvements in academic achievement are nearly twice as high in students from economically disadvantaged homes



Equity Considerations

- Youth of color are more at-risk for sleep deprivation
- Evidence of positive impact of delayed start times on behavior and grades for more at-risk populations
- Evidence of more impact on sleep for boys in urban settings



Implementation Considerations

Phasing Approach

- Cincinnati started Healthy Start Times for High schools in 2019 and fully expanded in 2021-2022

Pilot Approach

- New Jersey is piloting delayed start times in 5 high schools to examine impact on student outcomes

Importance of Sleep Education

- Changing start times does not always lead to more sleep ([study](#))

A decorative graphic on the left side of the slide. It consists of a blue parallelogram and a light green parallelogram, both tilted at an angle. The blue shape is in the foreground, and the green shape is partially behind it. They are set against a dark blue background with faint, lighter blue diagonal stripes.

Questions and Feedback