

Later Bell, Better Evidence

Trace how evidence and counterclaims shape a school policy recommendation.

12.R.1.D "Synthesize multiple streams of evidence to support claims and acknowledge counterclaims."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline each piece of evidence, circle the source or type of evidence it comes from, and number the three evidence streams that most strongly support a later-start pilot. Put a box around each sentence that limits the claim or raises a counterclaim.

Should High Schools Start Later?

- ① In 2016, Seattle Public Schools shifted most high school start times from 7:50 a.m. to 8:45 a.m. Researchers studying different groups of biology students at two Seattle high schools used wrist monitors and sleep diaries before and after the change. Students' median sleep on school nights increased by 34 minutes, from 6 hours 50 minutes to 7 hours 24 minutes. Median biology grades rose from 77.5 percent to 82 percent, a 4.5-percentage-point difference. This local study does not prove that later bells alone caused better grades: the groups were measured in different years, and there was no control group to rule out other changes.
- ② The Seattle findings fit two broader streams of evidence. The American Academy of Pediatrics says middle and high schools should begin at 8:30 a.m. or later, noting that adolescents' sleep cycles shift later during puberty. National Youth Risk Behavior Survey data also show that many teenagers sleep too little. In the 2015 survey, reported by the CDC in 2018, 72.7 percent of U.S. high school students reported sleeping less than eight hours on an average school night. Together, the biological explanation, national survey, and Seattle measurements strengthen the claim that early schedules can limit teen sleep.

- ③ Still, later start times have costs and trade-offs. District leaders must arrange buses, athletics, and after-school jobs, and some families rely on older students to care for younger children after school. A district considering a change should not dismiss those concerns. It could compare transportation costs, survey families and employers, and track attendance, sleep, and grades during a pilot. The evidence supports testing later starts, but it does not require every district to adopt the same schedule. A sound decision weighs student health against practical effects on the community.

2 ANSWER WITH EVIDENCE _____ Use the passage

- ① How do the Seattle study and the national sleep survey work together to support a claim about high school schedules?
- _____
- _____
- _____
- _____
- ② What evidence in the passage prevents a reader from claiming that later start times definitely caused higher grades in Seattle?
- _____
- _____
- _____
- _____
- ③ Identify one counterclaim about later start times. What evidence does the passage suggest collecting to evaluate that concern?
- _____
- _____
- _____
- _____
- ④ What is the passage's most qualified recommendation for a district considering later high school start times? Use at least two details from the passage in your answer.
- _____
- _____
- _____
- _____

3 YOUR TURN

Your own words

Write 120 to 150 words advising a district whether to test later high school start times. State a claim, synthesize at least three evidence streams from the passage, acknowledge one counterclaim, and propose one way to study the change.

Synthesize and advise

Write 120-150 words. Explain how the three evidence streams work together, address a counterclaim and propose an evaluation method.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

PART 1 • READ AND MARK

Underline each piece of evidence, circle the source or type of evidence it comes from, and number the three evidence streams that most strongly support a later-start pilot. Put a box around each sentence that limits the claim or raises a counterclaim. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	How do the Seattle study and the national sleep survey work together to support a claim about high school schedules?	The Seattle study found increased median school-night sleep at two schools after a later start. The national survey shows insufficient sleep was widespread. Together, these different evidence streams support investigating schedules as one possible contributor; they do not show that schedule alone explains the national problem.
2	What evidence in the passage prevents a reader from claiming that later start times definitely caused higher grades in Seattle?	The researchers compared different groups in different years and lacked a control group. Other changes could therefore contribute to the grade difference; later bells alone are not proven to be its cause.
3	Identify one counterclaim about later start times. What evidence does the passage suggest collecting to evaluate that concern?	Later starts may disrupt buses, athletics, jobs, or family caregiving. A district could compare transportation costs and survey families and employers.
4	What is the passage's most qualified recommendation for a district considering later high school start times? Use at least two details from the passage in your answer.	The district should test later starts through a pilot and track attendance, sleep, grades, transportation costs, and community effects. The evidence supports testing, but not requiring every district to use the same schedule.

PART 3 · YOUR TURN (SAMPLE ANSWER)

I recommend that the district test an 8:30 a.m. or later high-school start time through a one-year pilot. Seattle's before-and-after study found that students had 34 more minutes of median school-night sleep after a later bell, while median biology grades rose 4.5 percentage points. That local result aligns with two broader sources: the American Academy of Pediatrics connects later starts to adolescent sleep biology, and the 2015 national survey found that 72.7 percent of high school students slept under eight hours on school nights. These sources do not guarantee the same outcome here, but they justify a trial. Bus routes, athletics, jobs, and family caregiving are real concerns. During the pilot, the district should compare transportation costs and survey affected families while tracking attendance, sleep, and grades.

Accept claims for or against a pilot when students accurately synthesize at least three evidence streams and acknowledge a relevant trade-off. Students may identify different practical concerns, as long as their proposed evaluation method fits the concern and is supported by the passage. The three streams are local Seattle measurements, the AAP biological explanation/recommendation and the CDC national survey. The 72.7 percent figure belongs to 2015 survey data, published in 2018, not 2019. Seattle's 34 minutes describes the median school-night difference, not an increase for every student or every night. Use the reported 6 hours 50 minutes and 7 hours 24 minutes as medians. Grade differences are associations; acknowledge competing explanations. Sources:
<https://www.cdc.gov/mmwr/volumes/67/wr/mm6703a1.htm> ;
<https://publications.aap.org/pediatrics/article/134/3/642/74175/School-Start-Times-for-Adolescents> ;
<https://pubmed.ncbi.nlm.nih.gov/30547089/> . Biology-grade medians were 77.5 percent and 82 percent: a 4.5-percentage-point difference. The samples were different cohorts, and there was no control group. This precision comes from the paper's Results and Discussion, beyond the abstract's shorthand 4.5 percent description.