



Healthy Start Times Committee

Recommendation to
Brookfield Board of Education
June 3, 2020

Goal/Mission of the Committee

Study available research

Communicate research

Survey stakeholders

Analyze impact of potential change

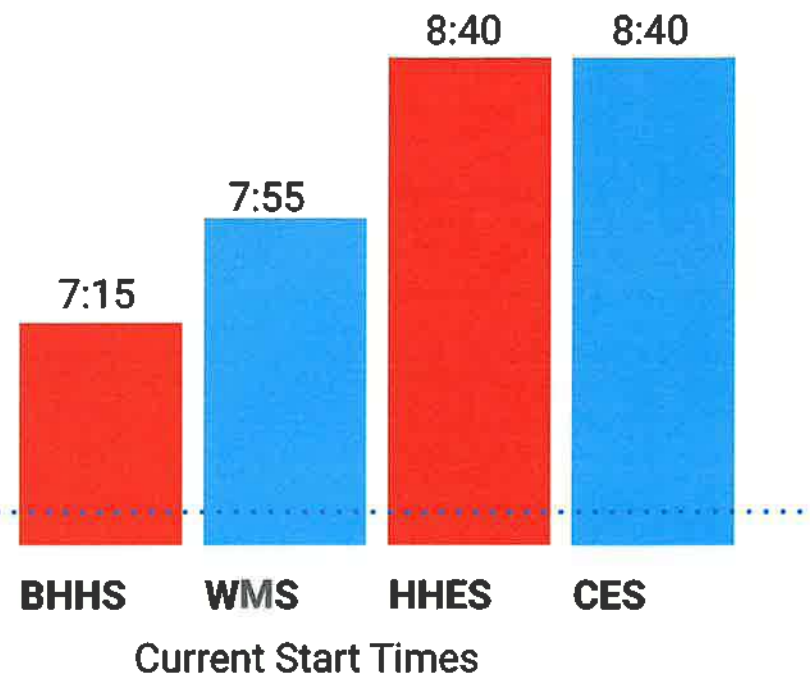
Recommend to the BOE



Why Examine Healthy Start Times?

Research suggests significant health, safety, and performance benefits for adolescents waking at 7am or later.

Many communities in Connecticut and the U.S. have taken measures to research and implement healthy start times.





Our Recommendation

Revise School Start Times for the 2022-2023 School Year:

WMS/BHS - 8am to 2:45 pm

CES/HHES - 8:50 to 3:35 pm

High School students gain 45 minutes of sleep and other schools have minor adjustments.

Minimal disruptions to after school activities and athletics.

Two year lead time will coincide with new school opening and gives time to plan and adapt to change

The Committee

Dr. John Barile	Superintendent	Rosa Fernandes	BOE Chair
Jen Laden	BOE	Amy Foster	BOE
Steve Baldwin	Athletic Director	Laurie Moses	BHS Teacher
Lisa Whalen	WMS Staff Member/ Community Member/Parent	Lou Quinn	Greenwich High School Counselor/ Community Member/Parent
Joy Squitieri	John Read Middle School Counselor, Redding/ Community Member/Parent	Colette Sturm	Former BOE Chair

Actions of the Committee

Spring 2019

Establish Committee
Membership

Fall/Winter 2019

Met with other districts that
have examined/ changed
start times.

Spring 2020

Examined potential impact
on schools, transportation
and costs associated.
Present recommendations

May

June

Sept

Oct

Nov

Dec

Jan

Feb

Mar

April

May

June

Fall 2019

Read and discussed
research

Winter 2019/ Spring 2020

Developed, conducted,
analyzed survey of key
stakeholders

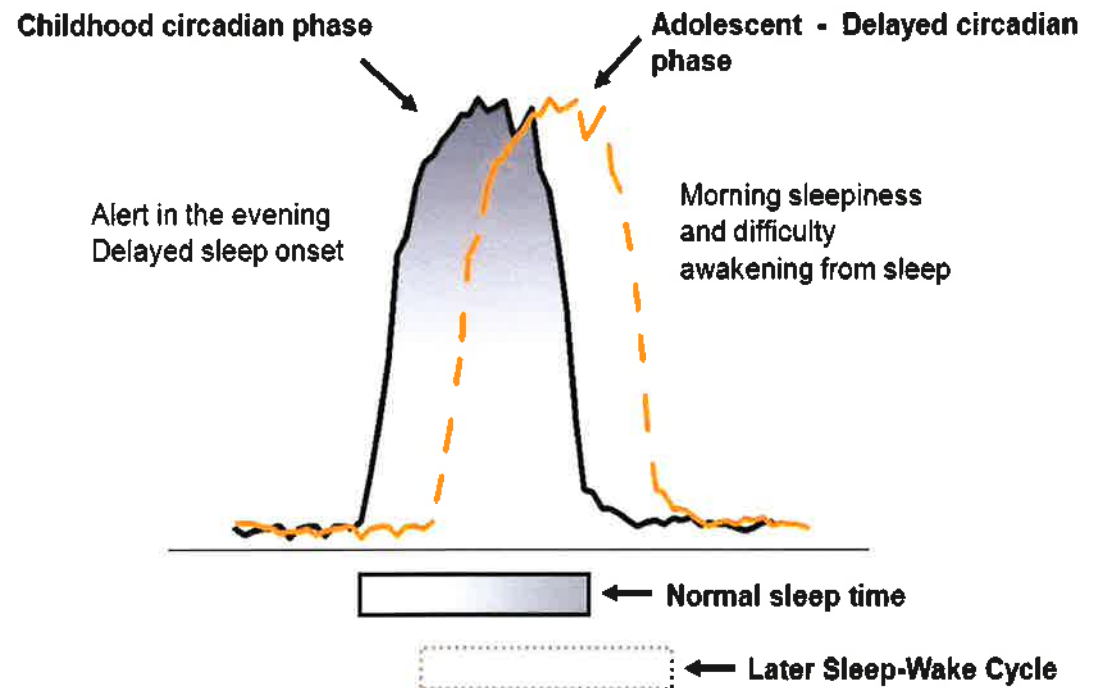
Key Research Findings


American Academy of Sleep Medicine recommends that teenagers aged 13 to 18 should sleep 8 to 10 hours per day for good health.



During puberty, adolescents become sleepy later at night and need to sleep later in the morning as a result in shifts in biological rhythms.

Adolescent Sleep-Wake Cycle

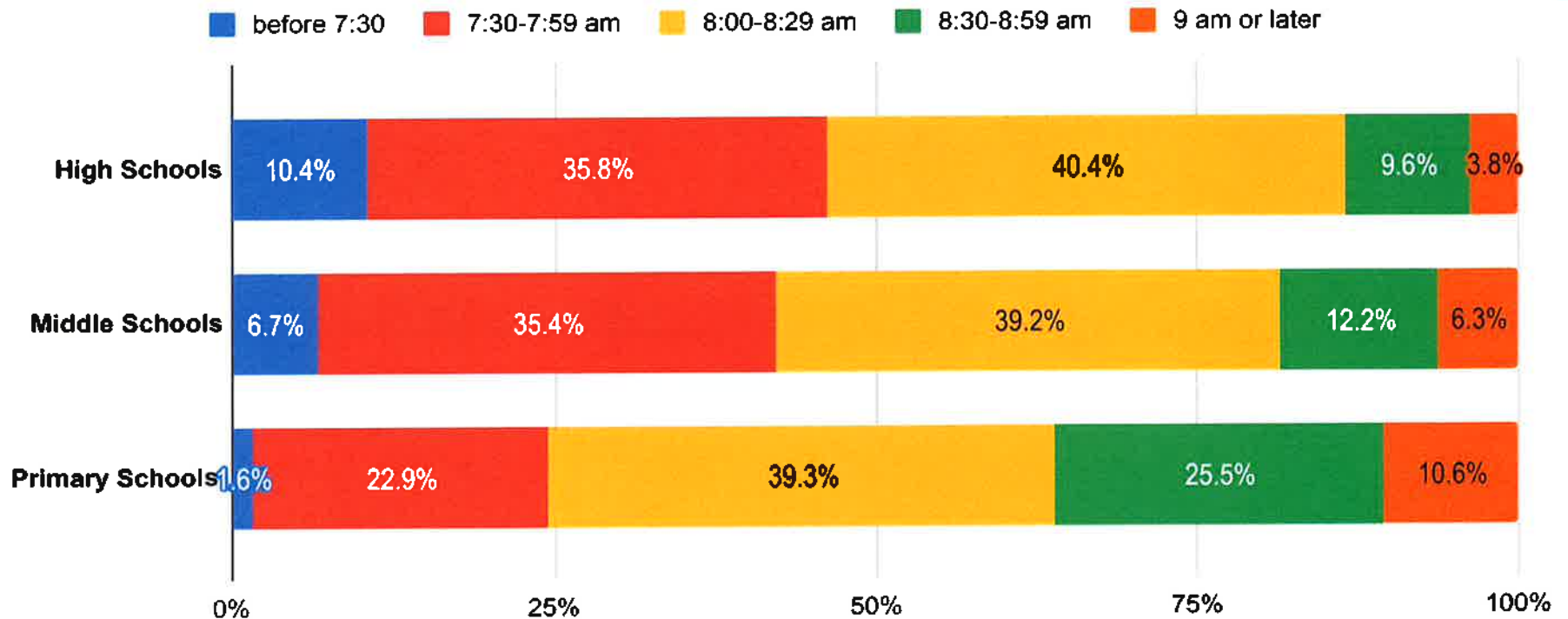


A young man with dark hair and a beard is lying in bed, resting his head on a white pillow. He is wearing a white t-shirt. His right hand is resting on a black smartphone on the bed. The background is a plain, light-colored wall.

These biological changes are often combined with poor sleep habits (including irregular bedtimes).

During the school week, school start times dictate when students wake up.

National School Start Times



The combination of late bedtimes and early school start times results in most adolescents not getting enough sleep.

Center for Disease Control and Prevention
MMWR | **Zzzzzz.... SLEEPY KIDS**
MOST STUDENTS NEED MORE SLEEP

The infographic is divided into three vertical panels. The left panel shows a girl at a desk with a school building and a bed in thought bubbles. The middle panel shows a person sleeping in bed with a moon and sheep. The right panel features a clock and 'Zzz' text.

6 OUT OF 10
MIDDLE SCHOOLERS
DON'T GET ENOUGH SLEEP

7 OUT OF 10
HIGH SCHOOLERS
DON'T GET ENOUGH SLEEP

**KIDS 6–12 YEARS
NEED
9 TO 12
HOURS**

**TEENS 13–18 YEARS
NEED
8 TO 10
HOURS**

MIDDLE SCHOOLERS: 2015 DATA FROM 9 STATES
HIGH SCHOOLERS: 2015 NATIONWIDE DATA
Wassenaar et al. MMWR
Jan 2018 (pp. 0100-0105)

U.S. Department of Health and Human Services
Center for Disease Control and Prevention

Most U.S. middle and high schools start the school day too early



5 out of 6 U.S. middle and high schools start the school day before **8:30 AM**

The American Academy of Pediatrics has recommended that middle and high schools should aim to start no earlier than 8:30 AM to enable students to get adequate sleep.



Teens need at least **8** hours of sleep per night.



Younger students need at least **9** hours.



2 out of **3** U.S. high school students sleep less than **8 hours** on school nights

Adolescents who do not get enough sleep are more likely to



be overweight



not get enough physical activity



suffer from depressive symptoms



engage in unhealthy risk behaviors such as drinking alcohol, smoking tobacco, and using illicit drugs



perform poorly in school

For more information: www.cdc.gov

Effects of Lack of Sleep on Teenagers

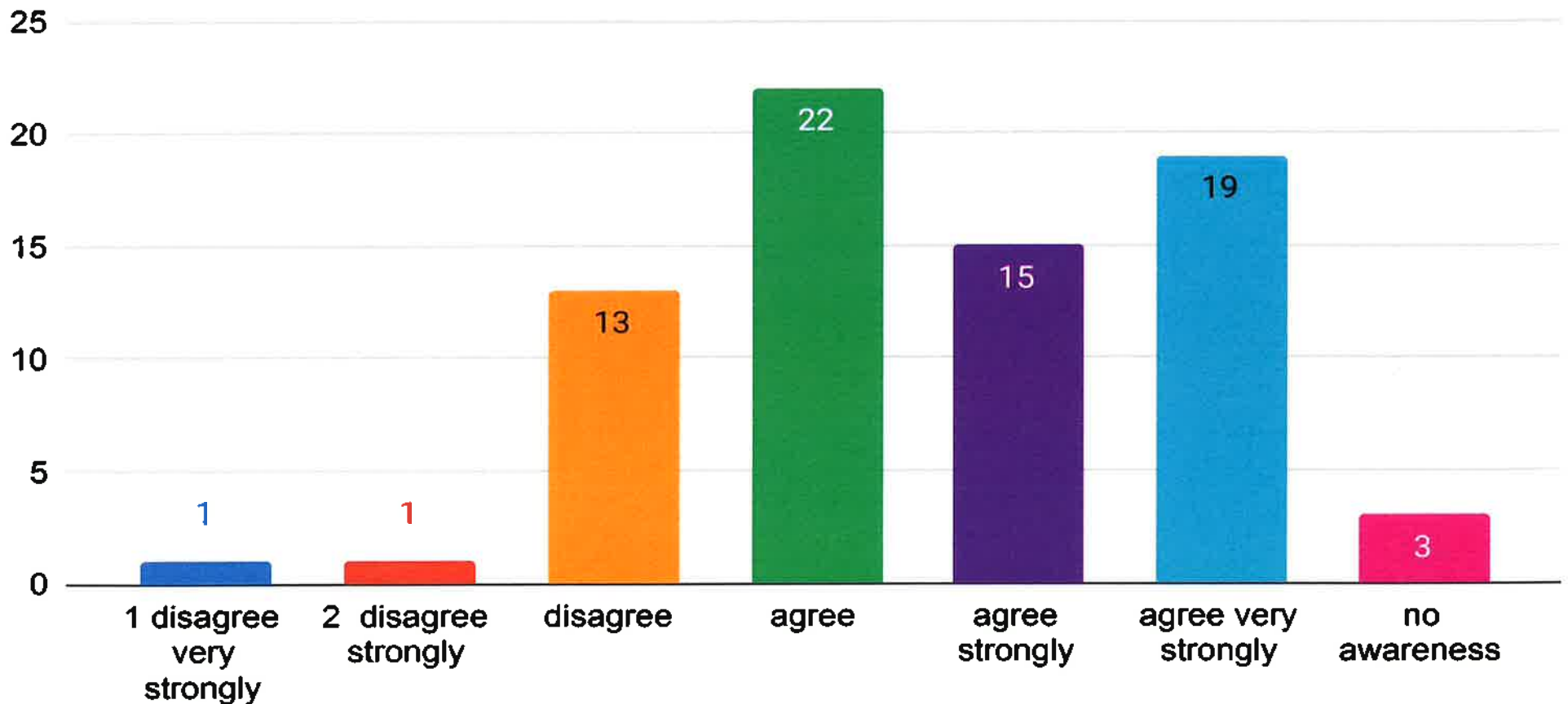
Key Findings from Survey Data

Stakeholders Surveyed

Parents: 1,052	Students: 902	Faculty/Staff: 278
BHS: 333 WMS: 331 HHES: 221 CES: 177	BHS WMS	BHS: 88 WMS: 79 HHES: 55 CES: 47 TSO: 7

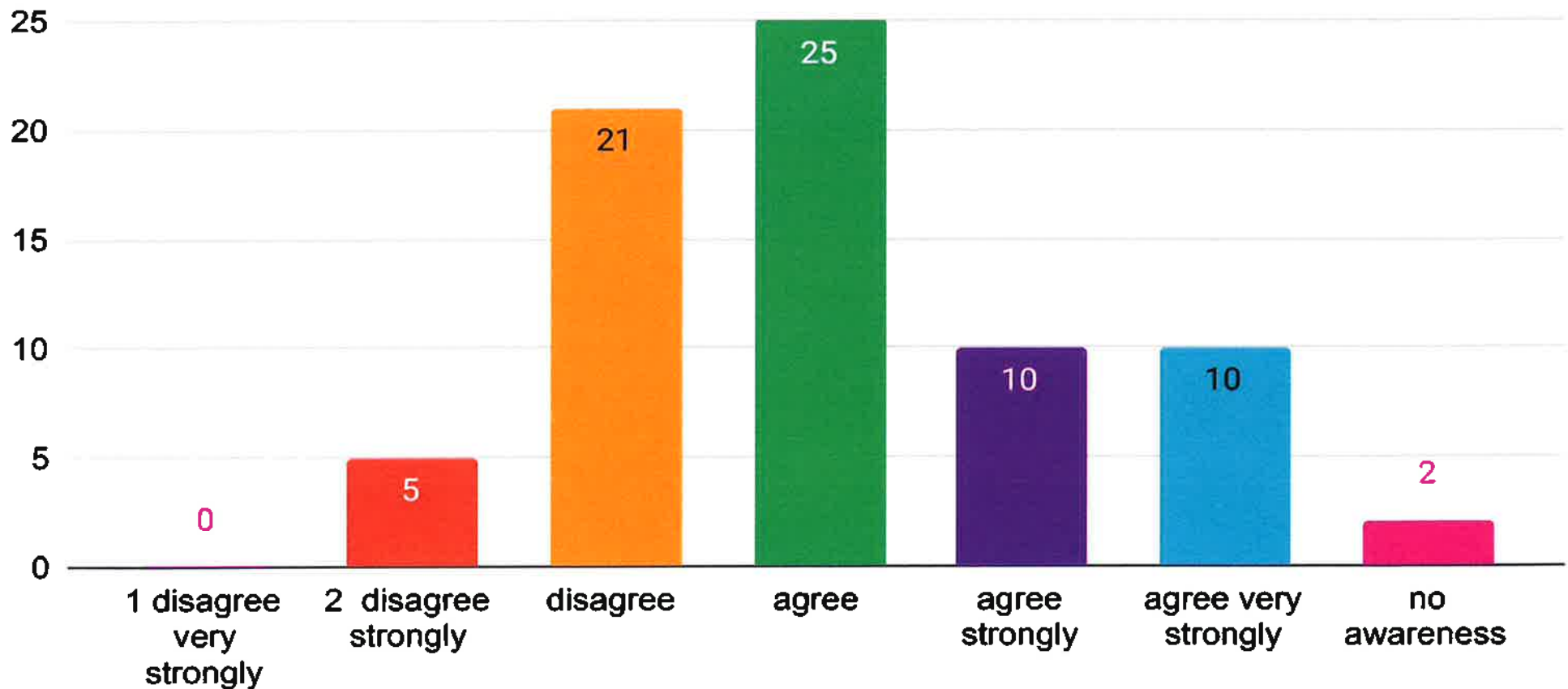
BHS Teachers: Students are most tired during their first class

Over 75 percent of teachers agree to very strongly agree



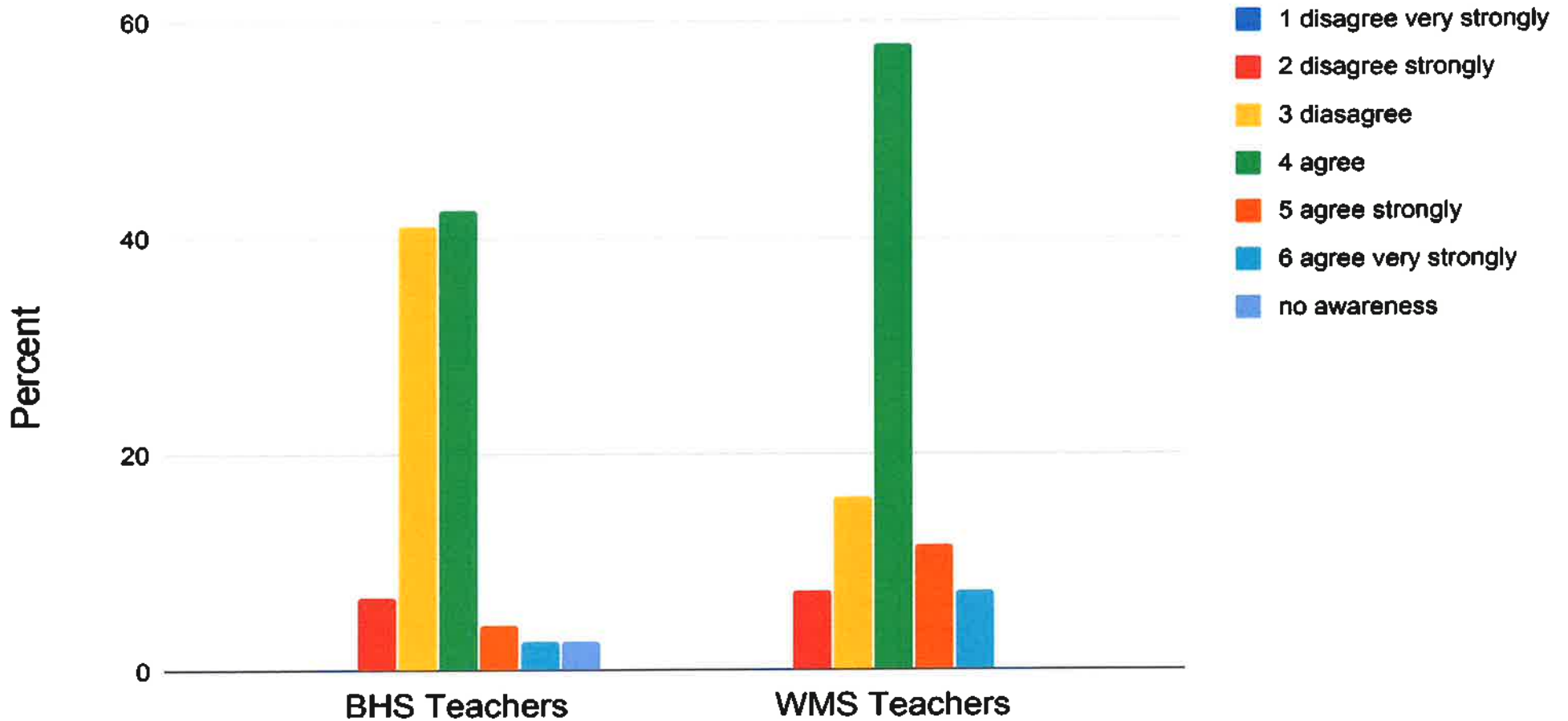
BHS Teachers: Students struggle to stay awake in class

Over 60 percent of teachers agree to very strongly agree



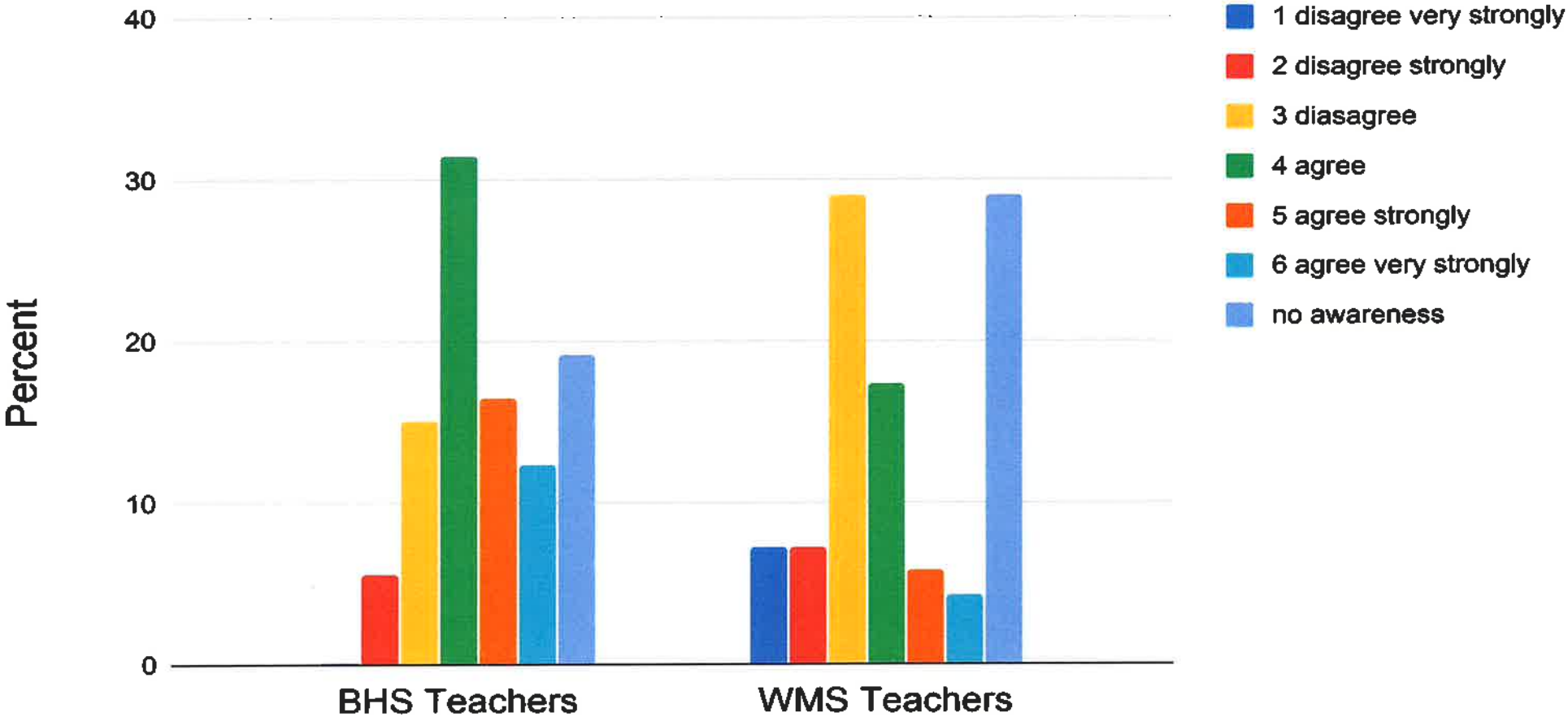
Teachers: Students are adequately ready to learn each day

48% of BHS teachers disagree/strongly disagree, compared to 23% of WMS teachers



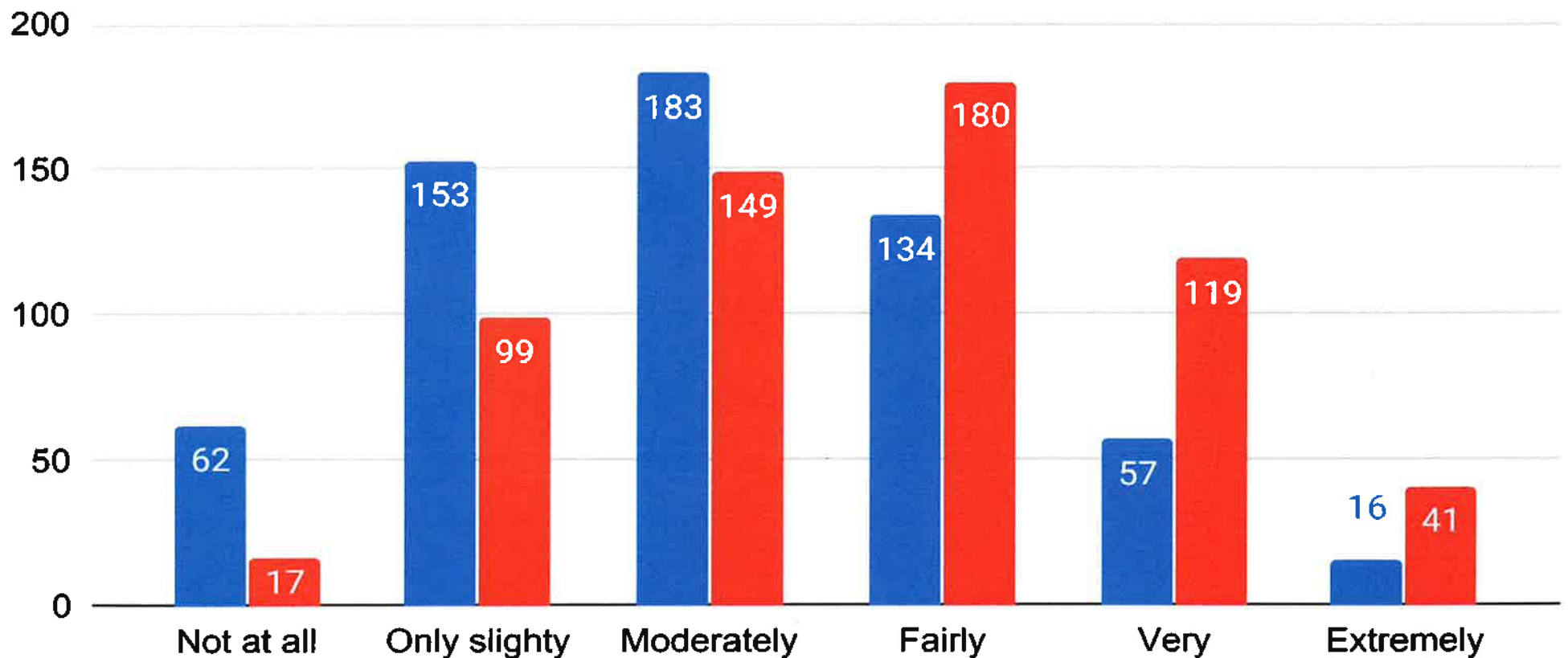
Teachers: Students arrive late to school because they oversleep

60% of BHS teachers agree to very strongly agree, compared to 28% of WMS teachers



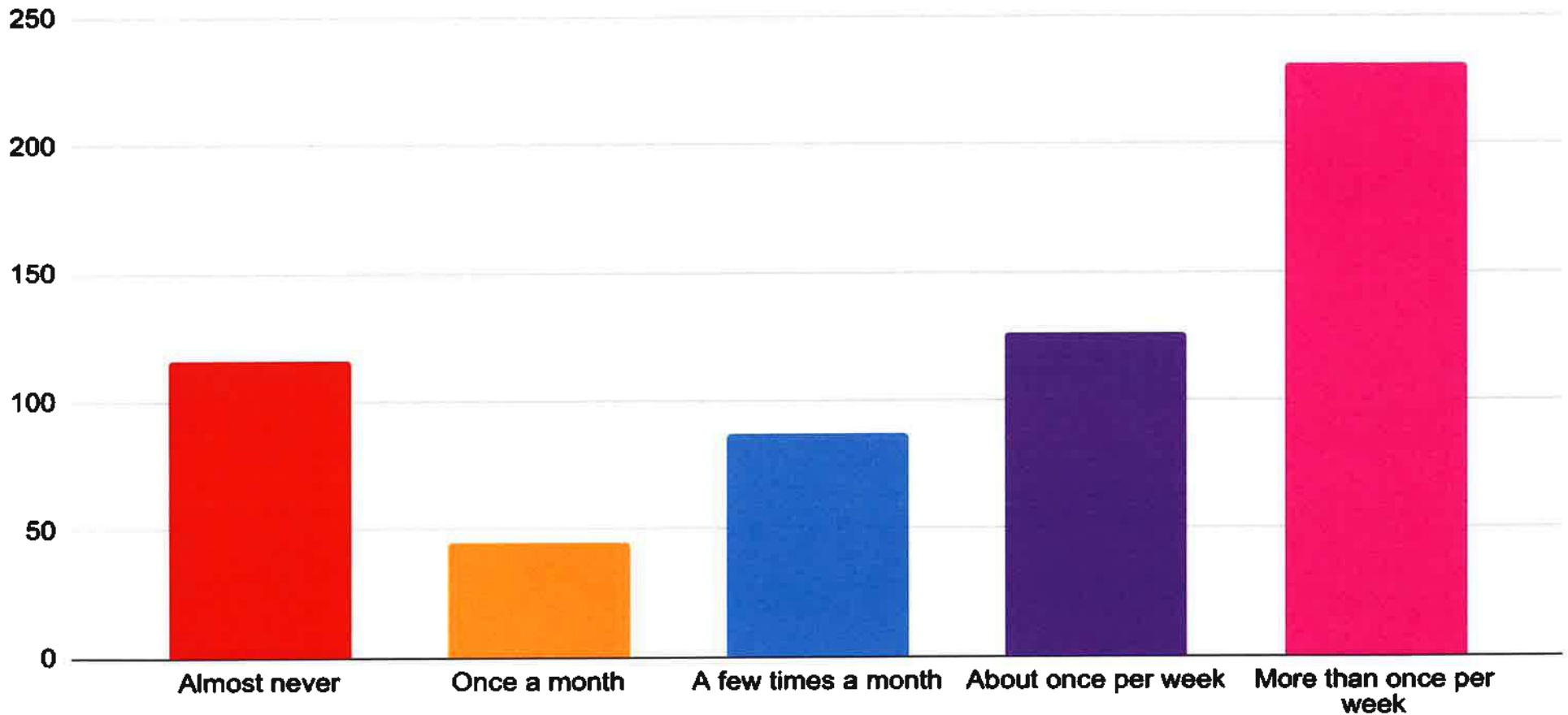
Students: How alert are you?

■ First class of the day ■ Second class of the day



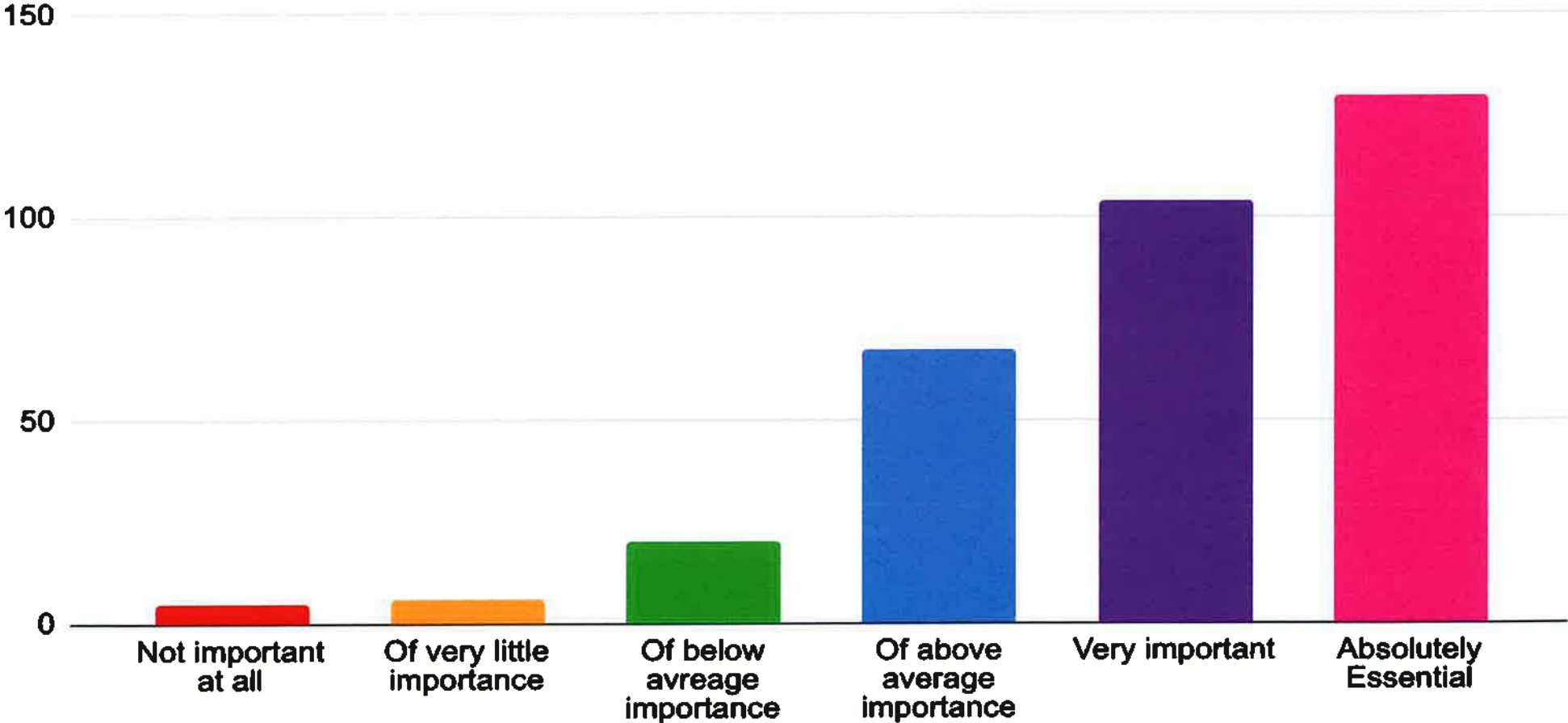
BHS and WMS Students: How often do you get less than 6 hours of sleep?

59% get less than 6 hours of sleep at least once per week



BHS Parents: Importance of allowing students to get more sleep

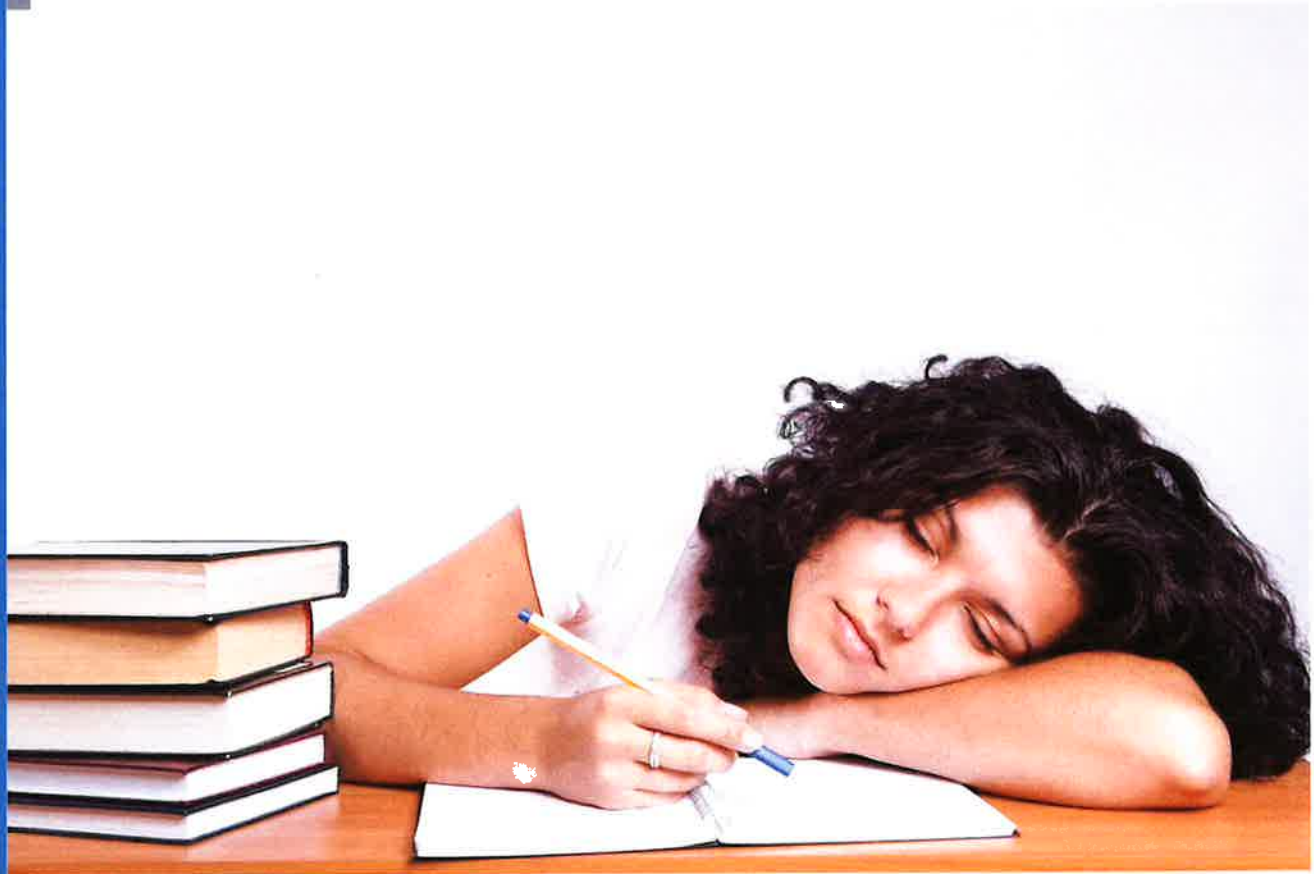
90% believe allowing students to get more sleep is at least above average importance



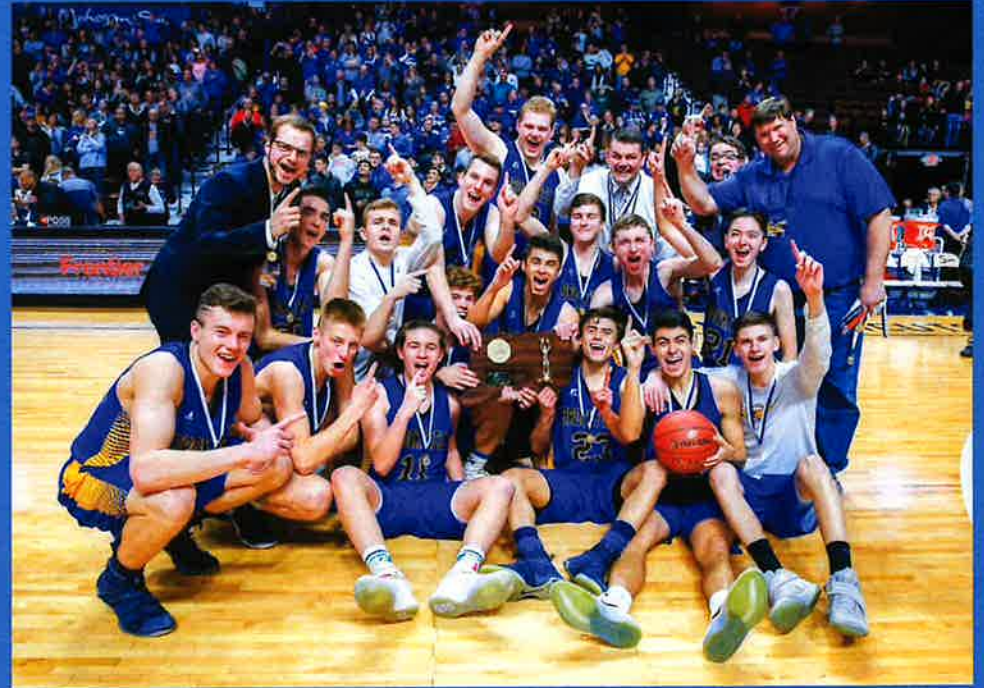
Conclusions Based on Survey

High School students, in particular, are not getting the recommended amount of sleep and are less alert in their first classes.

Our community values the healthy implications of proper sleep.



Impact on Athletics



School	Start	End	Currently Examining Start Times	Later Start Time Change
Bethel	7:35	2:15	Yes	
Brookfield	7:15	2:00	Yes	
Bunnell	7:40	2:10	Yes	Start time changed from 7:25
Immaculate	7:40	2:00	No	Start time changed from 7:30
Joel Barlow	7:30	2:08	Yes	
Kolbe Cathedral	8:15	2:15	No	
Masuk	7:25	2:00	No	
New Fairfield	7:19	1:58	Yes	Moving to 7:50 to 8:00 am In 2023
New Milford	7:35	2:15	No	
Newtown	8:00	2:32	No	Start time changed from 7:25
Notre Dame Fairfield	8:00	2:00	No	Start time changed from 7:40
Pomperaug	7:20	2:05	No	
Stratford	7:40	2:10	No	Start time changed from 7:25
Weston	7:45	2:30	Yes	

Key Takeaways on Impact on Athletics

Sleep deprivation is a leading contributor to an increase in injuries among student athletes.

Adequate sleep can lead to an increase in athletic performance.

Using our current athletic schedule, student-athletes would miss their last class 5 times per season.



Bus Options Investigated: 3 Tiers

OPTION A: *We explored options of moving all times, regardless of order, later by 30 minutes*

T1 BHS 7:45am - 2:30pm

T2 WMS 8:25am - 3:10pm

T3 K-5 HHES/CES 9:10am – 3:55pm

The last bus tier has students departing school for some time in the dark and arriving home in the dark during the shorter days of winter (later buses home by 5pm)

OPTION B: *We explored overlapping bus runs of the 3 Tiers System*

T1 BHS 8:00am – 2:45pm

T2 WMS 8:30am - 3:45pm

T3 HHES/CES 8:50 – 3:35

Pro - No student waits in the dark or arrives home in the dark

Con - Will need **19 additional buses** which will cost \$1.6 million budget increase to the existing \$2 million budget cost

Recommended Busing Option: 2 Tiers

OPTION C

T1 Gr. 6 - 12 WMS/BHS 8:00am – 2:45pm *Middle and High School students ride together*

T2 Gr. K- 5 HHES/CES 8:50am – 3:35pm

- Meets early start time recommendation of moving BHS to an 8am start time
- School schedules and bus schedules are aligned with the science of student sleep patterns
- The survey responses from parents, staff and students are addressed
- Student safety at the bus stops for both pick up and drop off are addressed
- All students wait for the bus and arrive home during daylight all year

The cost exceeds the 3 Tier System driven by the K-5 increase of 2 buses by an additional 2 buses

- The total increase to the transportation budget with a 3 Tier System, regardless, is going to take 2 more buses or a \$140,000 increase to current transportation budget, **it will not meet any of the Committee's Goals for health or safety**
- The recommended 2 Tier System will increase the transportation budget by a maximum of 2 more buses above the new K-5 transportation needs, costing an additional \$140,000 **and meets all student health and safety needs**

Conclusions

The science, data, and our surveys all indicate that our current model does not align with healthy student sleep times.

Our recommendation is to revise School Times for the 2022-2023 School Year:

WMS/BHS - 8am to 2:45 pm

CES/HHES - 8:50 to 3:35 pm.

High School students gain 45 minutes of sleep and other schools have minor adjustments.

Minimal disruptions to after school activities and athletics.

Two year lead time will coincide with new school opening and gives all stakeholders time to plan and adapt to change

Next Steps: Plan and Educate

PLAN for the change

- Administration will work to execute the plan
- Bus contract negotiations with the BOE

Continue to EDUCATE about the health benefits of sleep

- PTO meetings
- Presentations
- Open Houses
- Parent University

-

Sleep Research Resources

Dr. Craig Canapari, Director of Pediatric Sleep Center, Yale University, [Presentation to Brookfield Board of Education, January 2, 2019 \(22:56 -1:02:35\)](#)

Lynne Lamberg, [School Starts Too Early for Teens, Pediatricians Agree](#). Psychiatric News. September 2, 2014

American Academy of Pediatrics, [Policy Statement: School Start Times for Adolescents](#), 2014.

Amy Wolfson, PhD. [Adolescent Sleep Update](#), Sleepreviewmag.com., March/April 2007.

Society of Behavioral Medicine. [Position Statement: Start Middle School and High School at 8:30 or Later to Promote Student Health and Learning](#), November, 2017/

Journal of Clinical Sleep Medicine. [Delaying Middle School and High School Start Times Promotes Student Health and Performance: An American Academy of Sleep Medicine Position Statement](#), 2017.

Judith Owens, Director of Sleep Medicine, Boston Children's Hospital, [The Science of Sleep and School Start Times Presentation](#).

Society of Pediatric Nurses, [Position Statement on Early School Start Times](#).

Sleep Research Resources continued

[American Association of Sleep Technologists 2019 Position Statement:](#)

National PTA 2017 Position Statement: [RESOLUTION](#)

American Medical Association 2016 Position Statement: [AMA Supports Delayed School Start Times to Improve Adolescent Wellness](#)

TED Talk on why schools should start later for teens: [Guilford Public Schools](#)

Sleep Health Journal. [Self-report surveys of student sleep and well-being: a review of use in the context of school start times](#), September, 2017

Pediatrics, Official Journal of the American Academy of Pediatrics, [School Start Times for Adolescents](#)

NJ.com [Waking up teens too early is over for 5 N.J. high schools. The law says so.](#)

[Teens Decoded:](#) Are high school and middle school students in Connecticut at risk because school starts so early? presentation by Dr. Judith Owens

Dr. Shalini Paruthi, [Common Causes, Effects and Solutions to Sleep Deprivation in Children](#), SleepReviewMag.com, March, 2016.