



**THE PUBLIC SCHOOLS OF DOVER AND SHERBORN
SCHOOL START TIMES REPORT**
SUBMITTED BY MR. STEVEN BLISS, SUPERINTENDENT
APRIL 27, 2015

Summary

Following a six-month process of research, surveying, and district-wide communications, and considering the multiple benefits and costs associated with a change in school start times at the middle and high schools, I recommend not changing start times at this point, but instead recommend the promotion of other efforts to reduce stress and improve physical and emotional health for our students within the context of the current schedule.

Overview

In response to considerable data on the topic of adolescent sleep compiled over the past few years culminating in, among other venues, a report by the [American Academy of Pediatrics \(AAP\)](#), and in the interest of student wellness and academic achievement, I created the School Start Times Committee to research and explore potential options for later start times targeted specifically for the middle and high schools.

The 21-person Committee composed of parents, faculty, high school and middle school students, administrators, and a member of each of our three school committees, initially convened in September, 2014 to explore options with respect to a potential change in school start times for possible 2015-2016 school year implementation.

Committee members recognized that as representatives from various stakeholder groups charged with looking at a very serious issue with the potential of significantly impacting peoples' lives, it was critical to remain objective, open-minded, and respectful of all angles and sides of the issue at hand. I will share that all Committee members honored this operating norm. Student representatives, in particular, did a phenomenal job throughout the process in being serious about their research, thoughtful in their approach, and mindful of the importance to reserve judgment. The student representatives are to be especially commended.

The Committee recognized that any potential change in start times would affect a large portion of the Dover Sherborn School Community and therefore committed to transparency in the process. Parents at all levels, faculty members at each school, and middle and high school students were surveyed, and results were shared via the School Start Times landing page of the Dover Sherborn Public Schools website. I met with instructional leadership teams at the middle and high school, presented at each school's faculty meeting, and met with parent organizations including the Dover PTO

(Chickering), POSITIVE (middle school), CSA (Pine Hill), and the PTO (high school). The Committee also considered the impact any change would have upon transportation, extracurricular schedules, and child care issues. Moreover, the School Start Times Committee met monthly and posted extensive research and educational materials to its website, as well as issued press statements on progress as it occurred.

For more information, please visit the DS website at <http://www.doversherborn.org/index.cfm/page/School-Start-Times/pid/21393>.

Scientific Background

Concurrent with the Committee's work, the American Academy of Pediatrics (AAP) released compelling scientific evidence in support of later school start times for middle and high school students in August, 2014. Extensive research suggests that biological changes in sleep associated with puberty prevent teenagers from feeling sleepy until much later in the evening than they had before puberty. This shift in their circadian rhythms is "hard-wired," meaning it is not driven by their sleep habits, but instead drives them. This same shift also prevents most teens from functioning effectively in the early morning hours. In addition, research suggests that lack of sleep in teens contributes to depression, susceptibility to illness and injury, motor vehicle accidents, stunted growth and obesity.¹

The AAP research published this past summer prompted discussion about school start times at school committee meetings and among superintendents both regionally and across the country. After studying the sleep patterns of teenagers, researchers determined that teens are not getting enough sleep, which is impacting their ability to perform in school. According to the report, teens need at least 8.5 hours of sleep each night, and that for the vast majority of teens, the biologically driven sleep period does not begin until late into the evening, which is in conflict with the requirement to be at school and on task often before 8 a.m. The report called upon schools to move their start time to a more reasonable 8:30 a.m. to better accommodate this adolescent sleep pattern. Research on, and debates about, school start times will not soon subside, especially considering the fact that some 43 percent of public high schools in the country begin classes before 8:00 a.m. It is noteworthy that Multiple high-performing school systems across the nation have either begun the process of considering a change, or have already done so, in response to this research. The New Jersey Senate is considering legislation around school start times, and the Massachusetts Chapter of Start School Later, Inc./Healthy Hours (startschoollater.net) is researching such legislation in the Commonwealth.

The AAP report on start times isn't a new idea for schools to consider, but it is for the first time highlighting significant evidence that connects the health of our children with

¹ Adolescent Sleep Working Group, Committee on Adolescence, and Council on School Health. School start times for adolescents. *Pediatrics*. 2014 Sep;134 (3):642-9. Epub ahead of print August 25, 2014; doi: 10.1542/peds.2014-1697. Review. PubMed PMID: 25156998.

their ability to perform in school. Given our nation's efforts to increase the rigor and academic promise of our nation's youth, this report should not be overlooked.

A recent article titled “Sleepless in Fairfax: The Difference One More Hour of Sleep Can Make for Teen Hopelessness, Suicidal Ideation, and Substance Use” cites that an important community factor that contributes to adolescent sleep deprivation is high school start times. The shift that takes place with the circadian rhythms of adolescents makes it difficult for teenagers to fall asleep as early at night as one may think optimum, say for instance 10:00 p.m. What’s more, it is even more critical for adolescents to remain sleeping in the early hours of the morning. Approximately 40 percent of teens have a tendency toward a “nightowl” schedule that is so severe that it is practically impossible for them to fall asleep much before midnight even under the most conditioned family bedtime routines, and such children appear to be at particular risk of mental health problems. Citing research done by Knutson and Lauderdale in 2009, the article indicates that high school start time is a stronger predictor of adolescent sleep quantity than bedtimes, bedtime routines, and time spent doing homework. It is therefore critical for adolescent sleep research to be conducted in the context of specific communities, given each community’s attention to academic success and expectations. According to data on all US high schools from the National Center for Education Statistics (NCES), the average high school start time in the United States is 8:00 a.m., with only 9 percent of high schools nationwide starting before 7:30 a.m.²

The Center for Disease Control’s 2011 Youth Risk Behavior Survey showed that 69 percent of United States high school students get fewer than 8 hours of sleep on school nights, and 40 percent get fewer than 6 hours. Results from the 2013 survey were virtually identical. Sleep deprivation contributes to cardiovascular disease, cancer risk, diabetes, and depressed immune response.

Impacts on the Community

Any change in school start time at DS impacts schools, families, and the communities, and such global effects cannot and should not be ignored. Such a change would impact not only the regional schools, but also family schedules, elementary schedules, and transportation on several fronts. These impacts, coupled with the high demand for time that high school students face for after school activities like athletics, theatre, work, and family responsibilities to care for younger children, must be understood and accounted for before a change could be responsibly considered. The Dover Sherborn Education Association (DSEA), the teachers’ union, also echoed concern that any change in school start time be carefully vetted by teachers as they are also impacted, to varying degrees of course, by any change in school start time.

It is also important to recognize that the extent of impacts from a change in start time may be different from that predicted before the change happens. The experiences of many districts that have changed their start times suggest that there is much less disruption than anticipated, and that families quickly adjust to the change. While no community exactly matches our own, it is not unreasonable to imagine the same experience could occur here.

² Sleepless in Fairfax: The Difference One More Hour of Sleep Can Make for Teen Hopelessness, Suicidal Ideation, and Substance Use, 2014.

It is very important to consider student views, and while it was interesting to hear from DS students who took the survey that a schedule shift would likely lead to an overall shift when one's day ends, that almost universal sentiment was not surprising. Among those students who are currently (privately) driven to school, about 66 percent report that having more time to sleep was their primary motivation for not taking the bus. That said, for many or at least for some students, a schedule shift would allow some number of students to get more sleep because some students will perhaps be more efficient when doing homework or it could actually be that students become more productive due to better sleep timing.

Survey data reveal that students are aware that they need more sleep, are feeling lethargic during the school day, and are heavily committed to a variety of extracurricular activities resulting in a daily schedule that is at times reportedly and understandably exhausting. Given that set of circumstances, it was not surprising that students see benefits to a later start time, but they also share that a later start time may well translate to a later end time to their day.

DS educators, including faculty, staff, and administrators overwhelmingly wish to do what is in students' best interest from a social-emotional, physical, and academic perspective. Educators acknowledge that a change in school start times would impact them personally, to varying degrees. Educators seem to suggest that a modest change would not have too dramatic an effect on their routine, but survey data and anecdotal feedback garnered from educators confirms that a dramatic change in school start times would adversely affect their personal routine. Educators offer that an altered start time may help address student lethargy reported by both elementary and secondary teachers. One particularly salient point derived from the educators' survey is that approximately 48 percent of teachers who currently serve in some extracurricular capacity would be unavailable to continue in that role if school began and ended later. This would represent a potentially adverse programmatic reality if students were unable to participate in some number of extracurricular opportunities at the secondary level due to our ability to provide sufficient coverage for our broad array of offerings in which almost every student is in some way involved.

Consistent with DS educators, both elementary and secondary parents report a desire to do what is in students' best interest from a social-emotional, physical, and academic perspective. Some 447 regional parents completed the survey and 365 parents with elementary children did so. Parents of regional-age students report often driving their child(ren) to school to allow for more sleep as the bus routes begin early. Other common responses communicated that extensive homework contributes to a lack of sleep during the week. Many parents of regional-age students report their child as averaging about 6 hours of sleep during the week. Such sleep deprivation results in after school and evening napping, parents report. Elementary and regional parents communicated through the survey that a later start time would adversely affect their morning commute, and elementary as well as regional parents shared that a later end time (the result of a later start time) would significantly impact children's after school commitments which are already difficult to schedule. Many parents offered additional feedback beyond their

responses to defined survey questions. A common theme to such feedback is appreciation of the fact that the school system is at least looking at school start times. That said, a fair number of respondent parents shared that a myriad of things need to change to make a difference for students' overall well-being, including extracurricular commitments, homework load, and students' disengagement from electronic devices earlier in the evening.

Other Considerations and Efforts Underway

Any potential schedule shift must be contemplated as part of a broader set of inter-related issues. A later schedule can be combined with reducing the duration of sports practices and other campus-based activities such as rehearsals, considering the quality and quantity of homework, appreciating that family time should be a greater priority than our schedules often allow, by imposing a 'curfew' on *all* school-related events at night, and by adjusting start times of afternoon activities (e.g., after school sports practices).

All of this is inter-related and overlaps with our system-wide (K-12) Challenge Success (<http://www.challengesuccess.org/>) effort for which an overriding goal is stress reduction. The stress of managing high expectations imposed by themselves, faculty, and parents, and reaching personal potential in an academically rigorous educational environment is a reality for many DS students. The clear need for a stress reduction campaign is underscored by a sharp increase in stress and anxiety issues among students spanning the past year culminating with hospitalizations in some instances. There is a sentiment among many stakeholders that the Challenge Success effort requires time to take root in order to affect change.

Another area on which work is needed in advance of any proposed change to school start times revolves around bus routes. The work of the School Start Times Committee revealed that many buses arrive to the schools quite early, in some instances up to 12 minutes before students are permitted to enter the schools with appropriate adult supervision in place. What's more, on some routes in both Dover and Sherborn there is up to a 15 minute "lay-over" in between second school drop-off and elementary school pick-up. These issues point to the fact that there is considerable work that can and must be done with respect to bus routes. This work may result in later pick-up times, thereby allowing for additional sleep time for students in the morning without changing school start times.

Conclusion

Modifying school start times is therefore not a "silver bullet" or a panacea for the challenges DS students face related to stress and anxiety. Nevertheless, given all the science about sleep and adolescents, a later start may well be a variable for the DS Schools at some point in the near future. For now, I recommend that the Public Schools of Dover and Sherborn not modify their school start times and instead allow some of the efforts already underway including the Challenge Success Program, bus routes, campus curfews, and other to-be-defined initiatives to take shape.

Please see next page

Thank you to the members of the School Start Times Committee who gave so generously of their time last fall. Members include:

Mr. Steven Bliss, Superintendent of Schools
Ms. Hannah Bruce, Student, Class of 2017
Ms. Juliet Capone, Parent
Ms. Katie Caruso, Student, Class of 2015
Mr. Stephen Cone, Student, Class of 2016
Dr. Charles Czeisler, Parent
Mr. Mark Czeisler, Student, Class of 2015
Ms. Lauren Doherty, Dover School Committee
Ms. Tatum Evans, Student, Class of 2020
Ms. Wendy Evans, Parent
Mr. John Fattore, Student, Class of 2019
Ms. Leonie Glen, Teacher, Dover-Sherborn Middle School
Mr. Frank Hoek, Sherborn School Committee
Ms. Chris Luczkow, Teacher, Dover-Sherborn Schools
Ms. Hannah Potts, Teacher, Dover-Sherborn High School
Ms. Janel Pudelka, Teacher, Dover-Sherborn Middle School
Mr. Richard Robinson, Dover-Sherborn Regional School Committee
Ms. Jen Ryan, Teacher, Pine Hill School
Ms. Kristen Sampson, Parent
Mr. Justin Seymour-Welch, Student, Class of 2016
Ms. Mariam Sharfi, Student, Class of 2018