

Dear Commissioner Morath:

Examination of “best practice” education strategies to promote success of Texas public school students include setting parameters for daily high school start times for adolescents. An effective education system recognizes the biology of its learners.

Many school districts, in the early 90s, decided they could save money by staggering the start times of their schools allowing them to utilize the same fleet of buses over and over. Most tiered busing districts decided high school students should start the day first based on zero science. As a result many high school students across the state begin their day in the 7 o'clock hour with bus pick-up beginning an hour earlier. In some months of the year, this is over an hour before sunrise.

As “tiering” of bus schedules occurred, adolescent sleep research emerged. Today almost 30 years of adolescent sleep research indicate teens, who need approximately nine hours of sleep, experience a delayed sleep phase beginning at puberty through their early twenties. Teens cannot fall asleep until 10:30-11:00 pm regardless of their sleep hygiene.

The research, which is abundant and irrefutable, has linked sleep deprivation with numerous health and safety conditions such as depression, anxiety, suicide ideation, substance abuse, poor attention, poor problem-solving, and drowsy driving car accidents, all factors affecting student success.

Academically, later start times result in an increase of achievement in all four core subjects, increased graduation rates, decreased disciplinary referrals, and increased attendance rates.

A Hamilton Project report by the Brookings Institute estimated that academic benefits of delaying middle and high school start times from 8 to 9 am. would not only increase academic achievement for all but **benefit disadvantaged students by twice the rate as their peers**. A recent study of Air Force cadets showed that early school start times reduce performance among disadvantaged students by an amount equivalent to having a highly ineffective teacher.

The American Academy of Pediatrics [policy statement](#) recommends all middle and high school students begin the day after 8:30 am. The AAP identified early daily school start times as the most critical factor affecting teen sleep deprivation. The American Medical Association also issued a similar [policy statement](#).

The [Centers for Disease Control and Prevention](#), which has labeled adolescent sleep deprivation an epidemic, has determined that at least 70% of all youth are sleep deprived with 20% falling asleep in school regularly.

Numerous other health and education agencies, including the American Academy of Child and Adolescent Psychiatry, the National Association of School Nurses, the American Foundation for Suicide Prevention, and the Education Commission of the States, are sounding the alarm about the harm early daily school start times are inflicting on our adolescents. And blame can be placed at the school house door.

Start School Later Texas is one of four Texas chapters and part of the national non-profit [Start School Later, Inc.](#) which currently has 83 chapters in 25 states all advocating for a return to healthy school hours. I started the Arlington chapter the first week my daughter began high school in 2012. After campaigning the Arlington ISD during my daughter's entire high school experience, she is currently a college freshman, it is increasingly apparent the forces to protect the status quo are very powerful.

Daily start times are influenced by misplaced adult priorities that have nothing to do with education. Superintendents who are reluctant to use valuable political capital changing bell schedules, need a framework of appropriate school hours to motivate a local change.

School hours must ultimately be resolved at the local level. However, vested interests, human nature, widespread myths and fear of change prevent most school districts from prioritizing health and learning when they set daily school hours.

In the past, lack of sleep has been seen as a badge of honor. As society begins to recognize that sleep is non-negotiable, laws and regulations are being put in place to protect the sleep of adults, but not our children. A teen's sleep requirements would be protected if he was an air traffic controller, a pilot, a train conductor, or a medical intern, but not a student.

The state sets parameters for teens with a graduated licensing program, school lunch requirements, texting while driving, seat belts, and school speed zones, but not daily school start times. We have learned as a society that children cannot learn when they are hungry. However, we have failed to understand that they cannot learn when they are sleepy.

A comprehensive state public education plan must include an examination of districts where teens arrive at school alert, rested and ready to learn. Top ranking and most affluent school districts such as Frisco and Richardson begin high school at 9 am. As you are well aware, two nationally ranked Dallas high schools, begin the day at 9:15 am.

Start School Later Texas is currently researching the daily start time of high schools for the over 1200 districts in Texas. Unfortunately there is no requirement that districts report this information to the state.

To date, the earliest high school start time identified in Texas goes to [Galena Park ISD](#) which requires adolescents be seated and ready to learn at 7:10 AM. If you are unfortunate enough to need the bus to get to North Shore Senior High School and are picked up at Normandy Street and Old Pine Lane, you must be at the bus stop before 5:59 AM.

So if you are the average teen that cannot fall asleep until 11:00 PM and must rise at 5:00 AM to catch that 5:59 AM bus, you are getting six hours of sleep each night at most. After one week of class, you have a sleep deficit of 15 hours.

Now imagine losing 15 hours of sleep, week after week, month after month, for the entire academic year. No amount of sleeping in on the weekends will overcome that amount of sleep debt. Within the first couple weeks of school, teens are walking zombies.

Peer-reviewed evidence, accumulated over decades, replicated in multiple schools across the nation, has unequivocally found a later start time to be both cost-effective and overwhelmingly beneficial for students. The problem is political will. The state must set parameters that support academic success assisting local districts to overcome obstacles that undermine evidence-based school hours compatible with the student success in high school.

As the TEA develops strategies for the Every Student Succeeds Act, please examine the available research of school start times and its effect on adolescents.

To quote Dr. Judith Owens, Director of Sleep Medicine at Boston Children's Hospital and leading authority on adolescent sleep, "Every day we fail to make a decision about this there is a cost and it is a cost to our children."

References:

Buckhalt, J.A. (2011), Insufficient Sleep and the Socioeconomic Status Achievement Gap. *Child Development Perspective*. 5:59-65.

'Examining the Impact of Later High School Start Times on the Health and Academic Performance of High School Students: A Multi-Site Study' (Feb. 2014), Center for Applied Research and Educational Improvement, University of Minnesota.

'Organizing Schools to Improve Student Achievement,' Brookings Institution Hamilton Project Report, 2011.

'Still Sleepless in America: The Paradox of Local Control in Education,' August 2015, Education and Health.