

My Copy

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Middlebury Union Middle School  
7th/8th Grade Social Studies

20 February 2020

Support for S.274, relating to later middle and high school start times

Hello. My name is Evelyn Gray. I am a 7th and 8th grade social studies teacher at Middlebury Union Middle School. I am here to testify in support of bill S.274. This bill addresses an important, and often overlooked, aspect of adolescent development and the impact our school policies have on our students. As students hit puberty their brains and bodies are undergoing essential and exhausting biological changes. As a state we are currently pitting our students' brain development against the demands of our society by asking students to arrive at school by 8:00am or even earlier for extracurricular activities. This is having a detrimental impact on their development as learners and as young people.

This can be attributed to what we know about the development of adolescents' brains. Sleep enables key cognitive functions to take place. It allows one's brain to process information and experiences, strengthens memory and enhances connections between information. Sleep heals their bodies; manages stress levels, which research shows and anecdotally we know is an increasing reality for students in middle and high school years. Sleep can even help students to manage their behaviors, extending its effects throughout the course of a day.

During puberty, the biological clocks of adolescents change. Their melatonin levels cause their bodies to shift their sleep cycles later into the evening, with many adolescents being unable to fall asleep before 11pm ("Later School Start Times: Benefits & Cons"). The recommended amount of sleep for an adolescent is 8 to 10 hours per night ("Sleep for Teenagers"). By asking students to arrive at school by 8:00am we have created a system that has set learners up to fail. If their bodies are telling them to go to sleep at 11:00pm, and we require them to wake up at 6:30am in order to reach school by 8:00am, students will never be able to reach the required number of hours of sleep that is developmentally appropriate.

For the vast majority of my students, school start time is the primary reason that they wake up at the time that they do during the week and is the main cause of a lack of sleep. By pushing back the start time of our middle level and high schools to 9:00am, we allow for students' bodies to follow their natural processes and enable them to get the amount of sleep they need to function and meet the myriad demands we already have in place, as well as encouraging healthy habits to last a lifetime.

The Center for Disease Control states that, "The American Academy of Sleep Medicine recommends that teenagers aged 13 to 18 years should regularly sleep 8 to 10 hours per day for good health. Adolescents who do not get enough sleep are more likely to:

- Be overweight.
- Not engage in daily physical activity.
- Suffer from symptoms of depression.
- Engage in unhealthy risk behaviors such as drinking, smoking tobacco, and using illicit drugs.
- Perform poorly in school

("Schools Start Too Early", 2018)."

In terms of academic performance, I can speak from my own experience as a middle-level teacher. I teach four 82 minute classes that span across two days in an A and B-day rotation. In our two day schedule rotation there are two classes that begin after our Teacher Advisory at 8:25 and two classes that begin after lunch at 12:20. Students at all academic levels and temperaments are spread equally across my four classes, yet I notice a stark difference in the alertness and engagement of classes I teach at 8:25 and the classes I teach at 12:20. At 8:25, the majority of my students are still bleary-eyed and tired despite having been awake for at least an hour. Their motivation, perseverance, attention to detail, and responsiveness in class are significantly lower than that of the students in my afternoon classes.

I also witness chronic tardiness and absenteeism from my morning classes - a trend that is not apparent in my afternoon classes. Students often arrive at school part way through the class period, or after class has ended entirely. When asked about their tardiness they frequently cite, "I couldn't get myself out of bed this morning." These disruptions to their education have lasting impact. If students are consistently arriving to school late because they are so overtired and struggle to get out of bed in the morning, they are unable to access the activities while they are in class. Due to their lack of sleep, they are missing essential instructional time, information, and activities that cannot be made up outside of class with the same integrative and collaborative experience that take place during class time.

Not only are there academic impacts to the lack of sleep our students are getting as a result of an early school start time, there are social and emotional impacts as well. Students who do not get enough sleep are more irritable and struggle to maintain school-appropriate behaviors. Their ability to problem-solve and navigate socially novel situations is significantly decreased, damaging their relationships with peers and adults. When faced with the challenging social dynamics that come with being an adolescent, students who have had less sleep have less patience and diminished problem-solving skills, exacerbating already tricky social and emotional interactions.

Finally, the impact of sleep on adolescents' mental health is not to be understated. According to a study done at the University of Texas Health Science Centre, "teens were four times as likely to be depressed if they were sleep deprived" ("The Impact of Sleep on Teen Mental Health", 2017). Combine this with a population already at an increased risk of unhealthy behaviors like smoking, drinking, and drug use, we put students at a disadvantage in choosing healthy patterns and behaviors for the length of their lives. Keeping the current school start time places the convenience and logistics of our society at a priority over the mental and physical wellbeing of our states' adolescents.

Our students are not able to control the biological functions of their bodies. We require them to meet our expectations, without the ability to do so. Instead, they must suffer the consequences by forfeiting their essential physiological need of sleep in order to conform to the structure we demand of them. It is our responsibility as adults, parents, school officials, and legislators to respond to the differentiated needs of our teenage children by creating systems that respond to their basic biological needs and pushing our schools' start times back to the American Academy of Pediatrics recommended time of 8:30 or later ("Schools Start Too Early", 2018).

Thank you for considering this important matter.

Works Cited:

Later School Start Times: Benefits & Cons. (n.d.). Retrieved February 19, 2020, from <http://www.sleepfoundation.org/articles/backgrounder-later-school-start-times>  
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Sleep for Teenagers. (n.d.). Retrieved February 19, 2020, from

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In addition to my personal testimony I would like to include testimony from some of my 8th graders. In my class this fall students were required to choose an issue they felt passionately about, conduct research to support their findings, and then take constructive action to make positive social change. Many students chose the issue of student sleep deprivation due to early school start times and wrote to our superintendent, Dr. Peter Burrows, to urge him to change the start time for Addison Central School District. They are unable to join me today because we are on school break, but I would like to share their letters as additional testimony.

“August Hodde & \_\_\_\_\_  
Middlebury Union Middle School  
48 Deerfield Lane  
Middlebury, VT 05753

19 December 2019

Dr. Peter Burrows  
49 Charles Ave  
Middlebury, VT 05753

Dear Dr. Burrows,

On behalf of all Addison Central School District students, we would like to propose a new option for our school district's start time. Our objective is for school to start at 9:15 instead of 8:15. Evidence suggests that this is a good idea because with the extra hour of sleep, students will be less tired, more focused in class, and have a better daily life.

The first reason we are proposing this alternative is because of teen's sleep cycle. As students get older, their bodies start to produce melatonin later in the night. Melatonin is a sleep inducing hormone so as the students grow, they want to go to sleep later and get up later. Wendy Troxell, a sleep scientist who reported on NPR stated that for adolescents, waking up at 6:30 AM for school cuts into needed sleep. This is equivalent to an adult waking up at 4:00 AM.

We realize that starting school an hour later might cause problems for parents and children such as drop off times and after school activities, but with all the evidence provided, we feel that there are more benefits than drawbacks to later hours. For example, another reason that later start times are beneficial is because they will have a positive effect on the students' growth and daily life. In fact, "students who don't get enough sleep are more likely to be overweight, not engaged in daily physical activity, suffer from symptoms of depression, and engage in unhealthy risk behaviors such as drinking, smoking tobacco, and using illicit drugs."(cdc.gov) Sleep deprivation has also been linked to an increase in car crashes in adolescents. Based on "a survey with 30,000 teens the data showed that with each hour of sleep that a teen misses there was a 38% increase in kids feeling sad or hopeless/depressed."

Not only has sleep deprivation been affecting a student's sleep cycle and daily life, but it has also had a major impact on their academics. Based on a study created by Education Next.org, schools that started later reported that their students were performing at a higher level on their tests. These scores were not major at the younger levels but became more drastic as the students progressed. In fact, students percentile points increased by as much as five percent at the high school level. As a result more kids graduated and in a recent study less kids are dropping out. This is due to the students being less tired, and therefore having a longer attention span, and a clear head. Also students who get up to 8-10 hours of sleep are proven to have a better memory.

This evidence is too much to just be glanced over. Sleep deprivation, depression, etc, are all very serious problems, and pushing the start time back is a very easy solution with almost no drawbacks. When surveying our classmates, 70% said that they would be more productive and enjoy themselves more if school started an hour later. In conclusion, if school started an hour later, students would be happier, attentive and ready to learn. We hope that you will take this into consideration.

Sincerely,

August Hodde & \_\_\_\_\_”

“Timothy Whitney  
Middlebury Union Middle School  
48 Deerfield Lane  
Middlebury, VT 05753

19 December 2019

Dr. Peter Burrows  
49 Charles Ave  
Middlebury, VT 05753

Dear Mr. Burrows,

I think that school should start later. Teens need lots of sleep or else they will be frustrating to deal with, for the teachers when they are in school. Starting school early makes teens stressed. If school started early then they will be tired in class and won't remember the things taught by the teachers.

Starting school even thirty minutes to an hour later can make a big impact on how kids behave in school. Teens need about nine and a half hours of sleep but homework and phones make this hard to go to bed on time. Most teens need to go to bed at ten o'clock. Nine and a half hours from that is seven thirty then you have all the time to get ready in the morning which takes a while. I think that parents will agree because if their kids are well rested then they will be less grumpy in the morning. When teens get up in the morning they don't want to get up. I know that because I am one.

When I get up in the morning it is a struggle to get me out the door in the morning. Just ask my mom. If school starts later then all parents will be appreciative because they get to sleep in and their kids won't be as cranky. Another reason why school should start later is because some kids live far away. Think about what time kids that live in Rochester have to get up at just to make it to school on time. I would hate to be a kid living down there or even a bus driver because they have to get up even earlier than that to pick up all the kids in the morning.

[...] I am Timothy Whitney and I approve this message.

Sincerely,  
Timothy W.”

Another student who requested anonymity wrote:

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Middlebury Union Middle School  
48 Deerfield Lane  
Middlebury, VT 05753

19 December 2019

Dr. Peter Burrows  
49 Charles Ave  
Middlebury, VT 05753

Dear Dr. Burrows,

In Individuals and Societies we were given the opportunity to choose a problem we are really passionate about and try to make change in that topic, so I chose to try and change the school start time. This is an issue for many reasons, including student performance, health, and the wellbeing of the students. These are some of the reasons that the start time of MUMS [Middlebury Union Middle School] should be pushed back to 9 am.

As our district's superintendent it is your duty to keep your students and staff healthy and productive. Changing the school hours would make students more awake and productive. Middle school students need all the sleep they can get, so pushing the start time will give us another hour of sleep each night. Sleep is very important for kids our age. A study led by a professor at the University of Minnesota found that when school started at 7:30 am, only about a third of students got the required sleep they needed to work efficiently. After, they did a study where the school start time was 9:00 am, and almost all the students got the sleep they needed. Lack of sleep makes you moody and foggy, and a study showed that sleep deprived students get much worse scores than students that have the right amount of sleep. So pushing back our start time could improve our school test scores and our students would be more motivated to work and be happier to be in school.



I took a survey of a mixed group of eighth grade students, asking questions like “Do you think you are getting enough sleep to work effectively in school?”, 91% of students said they don’t think they are getting enough sleep, and it’s hard to stay awake in school. Another question I asked was, “Would you benefit if you had another hour in the morning to get ready, to eat breakfast, and sleep?” 95% of kids said they would benefit from another hour in the morning to sleep. And finally, “How much sleep are you getting each night?” Teenagers should be getting around 8-10 hours of sleep, and only 3% of students responded that they got 8-10 hours of sleep.

I understand that moving back the start time may complicate bussing and sports, and the schedule may need to be rearranged. However, if you were to change the start time these components are able to be adjusted. It may be hard at first, but after a while bussing would get figured out, sports would create new times, and the schedule will be arranged for the wellbeing of students.

In the end, moving the school start time will make students more awake and motivated to learn. Another hour of sleep would make students healthier and increase the wellbeing of students. Overall moving the school start time of Addison Central School District schools to 9 am would make your students happy and increase their scores. I encourage you to consider changing the start time.

Sincerely,

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Thank you for the opportunity to share my opinion and the experiences and opinions of my middle school students.