

School Start Time: Science Paragraphs Student Work

Do you feel that you get enough sleep on school nights? Research shows that teens' sleep patterns don't allow them to get enough sleep required. Therefore, because of the research on teens' sleep patterns, we should delay the start of school until 8:30. Delaying the start of school will benefit health, safety, and academics. According to Dr. Judith Owens, the director of sleep medicine at Children's Medical Center says, "teens are biologically programmed to fall asleep at 11:00 and wake up around 8:00" (Fox). This shows that we need to push up our school starting time. In other words, starting school later will boost up our health, safety, and academics.

~~Madison, Emma, Kate, Will, and Jack~~

Because of the research on teens Academics, BGJHS should move our school start time later by one hour. According to a five year study held in Minneapolis, "The new start time improved graduation rates. Kids who had been sleeping through their first hour were no longer short on credits" (Associated Press 11). Consequently, the extra hour of sleep these kids got can increase their grades and increased grades can lead to a better future.

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Starting schools an hour later would be beneficial towards students because it decreases teen crash rate. In "Kentucky (1998): Preventing Drowsy Driving Crashes" it says "Comparison in collision rates of Fayette county teen revealed that the crash rate for 16-18 year olds dropped following the change [Starting school an hour late] (Fayette County, Kentucky)." This means that teens with less sleep will put themselves and others in danger of car collisions, because when teens are exhausted they can crash into others, bringing them injuries and the other drivers harm, and even potentially bringing fatality. This concludes that teens should go to school an hour later because it'll help prevent many injuries, or death, caused by drowsy drivers crashes.

Table 6

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The research on teen's sleep patterns shows, we should delay the start of school until 8:30.

An experiment conducted by Dr. Mary A. Carskadon of Brown University, found that teens had later circadian rhythm timing. Circadian

rhythms are physical, mental and behavioral changes that follow a 24-hour cycle, they respond to light

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If schools start later, students will be mentally and physically ready for school.

~~Research~~ Even the ~~Research~~ ^{Page}
According to Dr. Mary A. Carskadon, a scientist who studies sleep habits at Brown university,
"The biological clocks that control circadian rhythms are groupings of interacting molecules in cells throughout the body. A 'master' clock in the brain coordinates all the body clocks so that they are in synch." As teens mature, their biological clocks go out of synch, making it harder to go to sleep at a reasonable time. Because of this BGJHS should move their start time back one hour to better accommodate teen's sleep needs to help with academics, safety, and health. "Students got less sleep in high school, on school nights they averaged six hours and 56 minutes, this was seventeen minutes less than in middle school, which is significant because the students were already sleep deprived" (Carskadon). This is important because with such sleep deprivation, students' grades will drop dramatically, they will stay up later to study, and the cycle continues. According to National Highway Traffic Safety Administration, an organization that keeps track of crashes, "Among drivers age 15-24, more than 1,500 fatalities each year are associated to such crashes [caused by drowsiness]." With an extra hour of sleep, teens will feel more rested and make better judgement while driving, leading to fewer crashes and fatalities. According to Dr. Mary A. Carskadon, who lead an experiment concerning sleep in teens, "This finding shows that melatonin secretion occurs at a later time in adolescents as they mature." (Carskadon 1) Melatonin is a hormone that controls drowsiness. When melatonin is secreted at a later time, it makes it harder to go to sleep at an earlier time. That is why BGJHS should

~~Stress~~

~~Routine~~

Many schools have early start times - 7:30 or earlier - but this is harming their students. Research shows that teens' internal clocks cause them to fall asleep naturally at 11:00, or later. Usually, teens need $8\frac{1}{2}$ to $9\frac{1}{4}$ hours of sleep, but with these early start times this is impossible (Carskadon et al., 1995). In conclusion, teens need more time to sleep in order to succeed in school.

Bowling Green Junior High School should start their school one hour later than usual. Bad health is one reason why we should start earlier. According to research school starting times and biology, "Nearly half of the 10th high schools showed signs of narcolepsy. They moved immediately into REM sleep before non-REM sleep. This reflected the mismatch between their school day waking times and their circadian rhythms." Because of students lack of sleep, they are very tired in the mornings and can easily fall asleep in their classes all day.

~~This means, it will affect their academic scores. According to Doctor Carsadon, Director of G.P. Bradley Hospital Research Laboratory and professor in Department of Psychiatry and Human Behavior at Brown University School of Medicine, says teens need at least 9 1/4 hours of sleep, but no students even get 8 1/4 hours. If we can push back school hours, students would be better off in the day.~~

↓ This means we should push back school starting hours by one hour so students can focus all day in school.

One member from student group typed and developed into a full essay because she was interested in the topic

School Start Time

I dread getting up in the mornings. I have watched video after video to improve getting ready for school. I try to pick out the outfit and my schedule is down to the science, but I still have problems waking up. I feel that if I go to bed late and wake up on time, I feel refreshed. As the day goes on, I begin to become extremely exhausted. In my opinion, I feel that if schools started later, teens would be able to have a better overall day. Even though some adults say that starting school time would reduce the number of after school activities, it would cause teens to improve mood and overall health, enhance performance in school and daily life, and follow their biological sleep patterns.

Sports and other extracurricular activities are very important, but when health and mood comes into play, health should have an advantage. Sometimes these extracurriculars get in the way of the most important things. Heather Macintosh, who is part of a national organization called Start School Later says, “ ‘What is the priority?... It should be education, health and safety. All other stuff may not be perfect - you may have to have your violin lesson before school or install lights on your field for sports - but it will work itself out.’ ” (Associated Press) This reveals how adults and teens care more about their extracurriculars more than their overall health and Heather says that these things can be worked out. Once the priority is chosen, there will be little problems to maneuver around and if this isn't thought about bigger problems could occur. For example, “[teens] who don't get their rest suffer from irritability, depression, poor impulse control and violence. ... They may use tobacco and alcohol.” (Backgrounder) Consequently, teens would be more emotional than they already are and could pick up bad habits at an early age. Adults pick up alcohol and smoking when they are stressed and teens could become like that too. There are posters everywhere telling teens not to do drugs or drink but there is no way they could control their actions if they are sleep deprived.

Many schools open very early and most people ride the bus. This means they have to get up even earlier especially if they are one of the first stops. They become very tired and can not pay attention in school and many people are advising that this changes. According to the Centers for Disease and Prevention report, “Nearly 70 percent across America aren't getting enough sleep to work properly and some experts are saying Middle and High schools should start later so teens can sleep in.” (Center for Disease) Therefore, if schools decided to start school later, America would work more efficiently because we would have more sleep.” For instance, “ [teens] are unable to maximize their learning opportunities. Sleep deprivation impairs their ability to be alert, pay attention, solve problems, cope with stress and retain information.” (Backgrounder) This is all school is and it proves that teens are not ready for school without a good night's sleep which is hard to find.

A teens biological schedule is not like kids or adults. For example, “[most] teens experience a sleep-phase delay. This means they tend to fall asleep later at night and wake up later in the morning. This is why we “feel wide awake” when it is time to go to sleep because our brain thinks we are when we are actually “exhausted”. (Backgrounder) So when I finally decide to go to bed at 10:00, I end up waking up around 6:00 feeling refreshed. My body then realizes later in the day that I did not get enough sleep and tries to shut down which is very inconvenient. Teens can not help their sleep patterns because their body is changing and there’s nothing they can do about that because it is just a part of growing up. Many studies have been done over this topic and have had the same conclusion which is, “ teens don’t get sleepy until around 10:45 p.m. ... Once they fall asleep, they stay asleep for about nine hours and 15 minutes. They naturally wake up around 8 a.m. ... ‘It’s a human phenomenon, not geared to any culture.’ “ (Associated Press) This means that all teenagers have at least one thing in common which is their sleep habits. They can’t be reversed because it has always been this way so teachers and schools need to cope with these habits to improve not just their students, but their overall school.

In conclusion, Bowling Green Junior High School should change their start time. It would improve a teen’s mood and health, excell their education, and cause teens to follow their regular sleep schedule improving their overall life. Changing start time would have a lot of benefits on the teenage body. Teachers and administrators just need to think what is more important here, extracurriculars or their students.