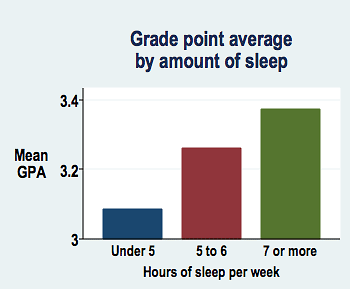
School Start Time

BEEP! BEEP! BEEP! The alarm clock rings out as the drowsy teenager rolls over and slams down his fist on the snooze button. He did not make it to bed until eleven last night (due to his job, homework, and lack of ability to fall asleep) and is now experiencing his typical morning. All schools must start classes no earlier than eight thirty ante meridiem (am). The sleep pattern of a teenager is not in sync with the current early start times of schools. A person is not able to retain information when they are sleep deprived. Some people would say teenagers should go to bed earlier if they are tired and need more sleep but these people do not understand how different an adolescent’s sleep cycle is. The only way to solve the issue of sleep deprived students is to start classes no earlier than eight thirty am.

The sleep pattern of a teenager is not in sync with the current early start times of schools. There are studies showing that during the teen years, the body's circadian rhythm (sort of like an internal biological clock) is temporarily reset, telling a person to fall asleep later and wake up later (How Much Sleep Do I Need? 1). Melatonin is a hormone that controls a person’s sleep cycle. It is produced in a teenager’s body at later times of the day, usually around eleven post meridiem (pm) (Kalish 1). The average adolescent has trouble falling asleep before eleven pm and waking up early. Because of this, many high school students attend school with far fewer hours of sleep than what research shows is needed. Eight and a half to nine hours is the amount of sleep teenagers need in order to be considered well rested (How Much Sleep Do I Need? 1). According to the 2006 Sleep in America Poll by the National Sleep Foundation, only twenty percent of adolescents get nine hours of sleep on school nights, and nearly half of them say they sleep fewer than eight hours (Smith 1). Adolescents simply cannot fall asleep early because of the changes that their body is undergoing.

A person is not able to retain information when they are sleep deprived. Rapid-eye-movement sleep (REM sleep) is essential for a good memory. In one research study, individuals engaged in an intensive language course were observed to have an increase in rapid-eye-movement sleep, or REM sleep. This is a stage of sleep in which dreaming occurs most frequently. Scientists hypothesized that REM sleep played an essential role in the acquisition of learned material (Sleep, Learning, and Memory 1). A student’s performance in school and the amount of sleep they receive are in direct correlation with each other. It has been proven that adolescents who receive a good amount of sleep receive better grades than those who receive less sleep. Researchers at the University of Minnesota reported the results of a study of more than 7,000 high-school students whose school district had switched in 1997 from a 7:15 am start time to an 8:40 am start time. Compared with students whose schools maintained earlier start times, students with later starts reported getting more sleep on school nights, being less sleepy during the day, getting slightly higher grades and experiencing fewer depressive feelings and behaviors (Carpenter 1). The chart below shows the correlation between the amount of hours students sleep per day and their grade point averages. Radwin reports that, on average, the GPA of students who usually sleep at least seven hours per weeknight is 0.10 points (a tenth of a letter grade) higher than students who sleep five to six hours. And it's 0.29 points higher (about the difference between a B+ and a B) than students who slept less than five hours (Cockrell 1). The study clearly shows that as the hours of sleep the students receive per day increases, their grade point averages also increase. Schools have tried all kinds of ways to improve their students’ grades. Delaying the start time of school by half an hour would show better results than anything the schools have tried in the past.



**Hours of sleep per day**

Some people would say teenagers should go to bed earlier if they are tired and need more sleep but these people do not understand how different an adolescent’s sleep cycle is. Even if students want to go to bed earlier it can prove challenging. This is because of the melatonin that is not produced until later in the evening. St. George’s School, a high school in Rhode Island, performed a study with the help of Dr. Judith Owens. The school delayed their start time by thirty minutes. About two hundred students agreed to participate in the study and completed a sleep habits' survey before and after the shift in the school-start time (Dooren 1). At the end of the study, the average sleep duration on school nights increased by forty five minutes (Dooren 1). There were noticeable changes in the students because of this extra rest. The number of students who either missed or were late to their first class because they overslept fell to forty four events from eighty events (Dooren 1). There were also changes in mood with the percentage of students who rated themselves as depressed or "at least somewhat unhappy" falling to forty five percent from sixty six percent before the later start time (Dooren 1). The percentage of students who reported feeling annoyed or irritated throughout the day fell by twenty one percent (Dooren 1). After the initial trial period, students and faculty voted to keep the later start time (Dooren 1). This school serves as a good example in showing all the positive effects that starting at a later time has on the students.

The only way to solve the issue of sleep deprived students is to start classes no earlier than eight thirty am. Schools could then extend their days to end at four thirty pm and no time would be lost. This is the best solution because it better fits the needs of a teenager’s sleep cycle. Students would be able to go to bed at their usual time (between ten and eleven pm) and wake up later. Teenagers tend to have irregular sleep patterns across the week — they typically stay up late and sleep in late on the weekends, which can affect their biological clocks and hurt the quality of their sleep (Teens and Sleep 1). Starting school no earlier than eight thirty would allow teenagers to be better rested, have better health, and focus better in school.

The teenager finally runs through the entrance of the school and dashes to first hour. The teacher eyes him with a disapproving look as she marks the student tardy. Half way through the class the late student is drifting back to sleep and has not heard anything the teacher has said. All schools must start classes no earlier than eight thirty am. The sleep pattern of a teenager is not in sync with the current early start times of schools. A person is not able to retain information when they are sleep deprived. Some people would say teenagers should go to bed earlier if they are tired and need more sleep but these people do not understand how different an adolescent’s sleep cycle is. The only way to solve the issue of sleep deprived students is to start classes no earlier than eight thirty am.