English Language and Composition
Reading Time: 15 minutes
Suggested writing time: 40 minutes
Assignment devised by Eileen Bach, 2010
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**Directions:** The following prompt is based on the accompanying eight sources.

This question requires you to integrate a variety of sources into a coherent, well-written essay. *Refer to the sources to support your position; avoid mere paraphrasing or summary. Your argument should be central; the sources should support this argument.*

Remember to attribute both direct and indirect citations.

**Introduction**

Sleep deprivation has become a major concern for parents and educators, who recognize the need for adequate sleep in order to maintain good health. Numerous studies have shown that adolescents require more than the eight hours of sleep believed to be necessary for adults, and as a result, some school districts are changing their hours in order to accommodate this perceived need. Students have voiced concerns that changing school hours will have a negative impact on extra curricular activities and teen employment.

**Assignment**

Read the following sources (including any introductory information) carefully. Then in an essay that synthesizes at least three of the sources for support, take a position that defends, challenges or qualifies the claim that schools should delay their start time in order to provide students with much-needed sleep.

Refer to the sources as Source A, Source B, etc.; titles are included for your convenience.

**SOURCE A** (ZZZZ Time)
**SOURCE B** (GPA graph)
**SOURCE C** (Lowering Expectations)
**SOURCE D** (Class in Sleep)
**SOURCE E** (Extracurricular)
**SOURCE F** (Addiction)
**SOURCE G** (School Changes)
**SOURCE H** (Benefits of Sleep)
ZZZZZZ Time: Sleep Does More Than Bring You Sweet Dreams
Proper sleep habits in college improve health and cognitive performance
By Jane Schreier Jones
http://www.collegeview.com/articles/CV/campuslife/college-sleep-habits.html

There's no getting around it—sleep matters.
To be your best—academically, socially, athletically, physically—you must sleep for at least eight hours a night. Some say that the last two hours of the night's sleep are the most important, so continually restricting yourself to six hours or less will take its toll.
Find helpful tips below on how to avoid student sleep deprivation.

Avoid the College All-Nighter for Better Health
The all-nighter is almost a cliché, and many students will stay up through the night either studying or socializing. But keep in mind that sleep deprivation has been proven to impair mental function—and weaken the immune system. According to the National Sleep Foundation, although we think of sleep as a time of rest, research is revealing that sleep is a dynamic activity during which many processes vital to health and well-being take place. New evidence shows that sleep is essential to helping maintain mood, memory, and cognitive performance.

Take Charge of Your Sleep Habits
Going away to college may be the first time you'll be in charge of your sleep habits. Mom isn't there to urge you to bed, nor is she there as your back-up alarm. With this freedom comes the temptation to slide into a bad habit of staying up late, oversleeping and missing class, and then taking a long afternoon nap—which prevents you from going to sleep at a reasonable time that night as well.

Sticking to a sleep schedule makes sense, and gives you more control of your life. Experts advise trying to go to bed around the same time each night and, just as importantly, waking up at about the same time every morning. Even on weekends, try not to deviate too much from your sleep schedule. Sure, most college students stay up later on Friday and Saturday nights, but don't mess up your pattern so drastically that you can't go to sleep at your normal time on Sunday night.

Tips for a Better Night's Sleep
If you have trouble sleeping, see if soft sheets and a cushy mattress topper help. Some students use a white-noise machine to block out sounds of the residence hall. If your roommate has different sleep times than you, have a friendly discussion about your needs and their needs and how you can help one another.

Relying on pills to stay awake or to fall asleep is dangerous. "Students who use caffeine-type pills often experience stomach upset and aren't alert for the very test they were studying for," points out Sandra Combs, RN, director of the health center at Methodist University in Fayetteville, North Carolina. "It's much smarter to get the sleep you need."

Jane Schreier Jones is a freelance writer whose work includes hundreds of articles in the field of education. She holds a Bachelor of Arts in English-Journalism from Miami University in Oxford, Ohio
Grade point average by amount of sleep

Mean GPA

<table>
<thead>
<tr>
<th>Hours of sleep per week</th>
<th>Mean GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 5</td>
<td>3.2</td>
</tr>
<tr>
<td>5 to 6</td>
<td>3.4</td>
</tr>
<tr>
<td>7 or more</td>
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Source B

http://berkeley.edu/news/media/releases/2008/01/images/sleep&gpa.gif
A study examined the impact of student employment on classroom knowledge. During the study, the researcher administered a branching questionnaire to 1,577 juniors and seniors from four high schools in Wisconsin, 59.6 percent of whom were working at the time of the survey and 14.1 percent of whom had worked during the past year. Despite the variations in population, location, and programs that existed among the four schools, the responses of those students surveyed generally did not vary greatly from school to school. The survey data generally confirmed the fact that large numbers of students at all income levels and levels of school achievement were working at part-time jobs during the school year. It appeared that conflicts often arose between teachers' academic priorities and students' choices for work as well as between students' and teachers' views of how work related to school.
Students who sleep in class could use a class in sleep

Cornell research shows benefits of proper rest

By Lauren Gold
Cornell News Service

ITHACA — Ask a college student if she’s getting enough sleep, and the answer is likely to be “no.”

Even students who know they’re sleep deprived don’t realize just how severe their sleep deficits — or how it affects their lives.

But new research by psychology professor James Maas shows that educating students about the importance of sleep — while also giving them objective feedback on their own sleep patterns — can persuade them to significantly improve their habits. More sleep can lead to higher grades, better athletic performance and improved emotional and physical health.

For the research, which is the first large-scale study of sleep in college students to include both subjective and objective measures, Maas used the Zeo Personal Sleep Coach — new technology that records a sleeper’s time in light, deep and REM sleep through a small, wireless headband sensor.

The students kept a written sleep log and recorded six nights of sleep data at each of three time points during weeks two, six and 12 of the study.

Between the second and third time points, students heard Maas lecture on the importance of sleep and got personalized e-mail feedback based on their own sleep patterns.

Not surprisingly, said Maas, the students initially reported sleeping just an average of 7 hours 24 minutes a night — much less than the 9 hours 15 minutes recommended for college students. But in comparing the students’ sleep logs with the Zeo measurements, he also found that the students overestimated their sleep time by 47 minutes — meaning they were actually getting an average of 2 hours 28 minutes less sleep than they should.

The study also showed that the combination of sleep education and direct feedback from the Zeo motivated students to sleep better. By the end of the semester, students had increased their total nightly sleep time by an average of 15 minutes, and more than three out of five students had started sleeping almost an hour longer.

And students with the best sleep scores — those who spent the longest total time asleep and the most time in deep sleep — were also the ones with the highest grades in the class.

“Students in the past have said, ‘I’m not going to change my sleep-wake schedule unless you can prove to me that it’s going to make a significant difference in my grades,’” Maas said. “Now we have very good evidence that if you want to improve your general well-being, this is the key; and it’s the key that some Cornellians use, and they’re the ones who are getting the high grades.”

A parallel study was conducted by teaching assistant Rebecca Robbins among premedical students taking Maas’ Psych 101 class at Weill Cornell Medical College in Doha, Qatar. Those results are currently being tabulated.
Extracurricular Activities
by Robert Needman, M.D., F.A.A.P.

http://www.drspock.com/article/0,1510,5922,00.html

Although we talk of children 6 to 12 years old as "school age," children at this juncture actually spend more of their days outside classes than in them. Extracurricular activities, such as sports, drama, music, scouting, dance, and various clubs, are an important part of the educational experience of many students. Most studies find that children who participate in these activities are more successful academically than those who don't. It's not clear whether this is because the brighter, more energetic students are also the ones who participate more in extracurricular activities, or whether the activities themselves boost students' academic performance. Probably both are true.

Extracurricular activities offer other benefits as well. For a child who is not gifted academically, the chance to excel in the arts or in sports, for example, can make a huge difference in self-esteem. Many extracurricular activities teach real-world skills, such as journalism, photography, or debate, which can lead to lifelong interests, even careers. Teens and preteens who devote themselves to service projects, such as food drives, book drives, or neighborhood improvement projects, learn that they can make a difference and contribute to society. They also learn teamwork and leadership skills that may be even more important in the long run than some of the academic subjects they study.

Extracurricular activities also play a role in reducing drug and alcohol use and irresponsible sexual activity in older children and teens, especially those who otherwise would be on their own after school. It's not only a matter of keeping the kids busy. The self-esteem and sense of purpose that children can get from serious involvement in extracurricular activities may help raise their aspirations and give them a reason to say "no" to risky behaviors.

As important as the activities themselves are the relationships young people can build with the committed adults who direct the activities. In a groundbreaking study of children growing up in Hawaii, it was often the presence of this sort of supportive relationship, either with parents or with another adult—that made the difference between success in life and later unemployment or even legal problems.
When Trouble Sleeping Leads to Addiction
By Mark Rosenberg, M.D.


What Sleep Aids Do

Various sleep aids may be obtained by prescription from your doctor. They work by helping you fall asleep or by helping you stay asleep. The most popular brand name drugs like Lunesta, Rozerem, Sonata, Halcion, Restoril and Ambien fall into a category of drugs known as hypnotics.

They suppress and slow the functioning of the nervous system and the brain. This results in impaired physical abilities and mental clarity. It also causes decreased heart rate and breathing, effectively pushing your body toward a state of sleep.

Most over-the-counter sleep aids contain antihistamines. By counteracting histamine, a chemical in the central nervous system, these sleep aids make you drowsy. Though these medicines may help with occasional sleeplessness, they become less and less effective when used repeatedly. They may interact with certain drugs and are not recommended if you have Parkinson's, heart disease, are pregnant, or are breast-feeding.

The Danger of Addiction

I advise my patients to make every attempt to solve their sleep problems by modifying their lifestyle. The reason for this is that some of the effective prescription sleep aids are not suitable for long-term use, and many of them can be habit-forming. Ambien, a popular sleep aid, may become less effective after just two weeks of use. For many people, the effects of sleep aids linger the following day upon waking. Feeling groggy or "cloudy" is common.

In addition, there are many restrictions associated with these medicines. Because they impair your physical abilities, older people run the risk of falling if they awake during the night. People with impaired metabolisms or histories of various chronic diseases should not take sleeping aids. Serious consequences can result if these drugs are taken in combination with alcohol. The central nervous system can become so severely suppressed that coma or death may occur.
Sleep deprivation may be undermining teen health

Lack of sufficient sleep—a rampant problem among teens—appears to put adolescents at risk for cognitive and emotional difficulties, poor school performance, accidents and psychopathology, research suggests.

By SIRI CARPENTER

Monitor Staff

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Researchers push for school changes, public outreach

With such a wealth of evidence about the prevalence of adolescent sleep deprivation and the risks it poses, many sleep researchers have become involved in efforts to persuade school districts to push back high-school starting times so that teens can get their needed rest.

Some schools argue that adjusting school schedules is too expensive and complicated. But others have responded positively to sleep experts' pleas. The Connecticut legislature is considering a bill that would prohibit public schools from starting before 8:30 a.m., and Massachusetts lawmakers are also weighing the issue. And Lofgren's "Zzzzz's to A's" bill, first introduced in the U.S. House of Representatives in 1998, would provide federal grants of up to $25,000 to school districts to help cover the administrative costs of adjusting school start times.

These efforts are a move in the right direction, says Wolfson. But, she says, changing school start times isn't the entire answer. "I think we have to be educating children, parents and teachers about the importance of sleep, just as we educate them about exercise, nutrition and drug and alcohol use."

Toward that end, several public-education efforts are now under way:

- With a grant from the Simmons mattress company, Cornell's Maas recently produced a film on teen-age sleep deprivation, its consequences and the "golden rules" for healthy sleep. The film is scheduled for distribution through parent-teacher associations and school principals this fall. In August, Maas also published a children's book, "Remmy and the Brain Train," which discusses why the brain requires a good night's sleep.
- Next year, the National Center for Sleep Disorders Research at the National Institutes of Health plans to release a supplemental sleep curriculum for 10th-grade biology classes, addressing the biology of sleep, the consequences of insufficient sleep and the major sleep disorders. In a related effort, the center is coordinating a sleep-education campaign aimed at 7- to 11-year-olds.
- Wolfson and colleague Christine A. Marco, PhD, a psychologist at Worcester State College, are pilot-testing an eight-week sleep curriculum for middle-school students. As part of the curriculum, students keep sleep diaries, play creative games and participate in role-playing about sleep, and set goals—for example, for the amount of sleep they want to get or for regulating their caffeine intake. Preliminary results indicate that the curriculum helps students improve their sleep habits.

"Changing school start times is one critical measure we can take to protect young people's sleep," says Wolfson. "And then, if we can only understand what's going on with sleep in these sixth-, seventh- and eighth-graders, we can intervene to change their sleep behavior before it gets out of hand."
Benefits of Sleep

Sleep is a necessary aspect of life and is essential to our health. It is recommended that we get 8 hours of sleep every night. The Harvard Women's Health Watch suggests six reasons to get enough sleep:

1. **Learning and memory.** Sleep helps the brain to commit new information to memory.

2. **Metabolism and weight.** Chronic sleep deprivation may cause weight gain by affecting the way our bodies process and store carbohydrates and by altering levels of hormones that affect our appetite.

3. **Safety.** A lack of sleep contributes to a greater tendency to fall asleep during the daytime. These lapses may cause falls and mistakes such as medical errors, air traffic mishaps, and road accidents.

4. **Mood.** Sleep loss may result in irritability, impatience, inability to concentrate, and moodiness. Too little sleep can also leave you too tired to do the things you like to do.

5. **Cardiovascular health.** Serious sleep disorders have been linked to hypertension, increased stress hormone levels, and irregular heartbeat.

6. **Disease.** Sleep deprivation alters immune function, including the activity of the body's killer cells. Keeping up with sleep may also help fight cancer.

- Harvard Health Publications: Harvard Medical School