

Public Speaking Center: Sample Informative Speech (Full Sentence Outline)

I. Introduction

- a. Attention Getter: When I was in high school, I did an experiment for a psychology class where I gave up social media for a week.
 - i. Although that week was a little tough, I noticed a big change in that I was getting incredibly good sleep because I wasn't scrolling through my phone before bed.
 - ii. It was easier for me to get out of bed in the morning and I didn't feel tired throughout the day anymore.
- b. Relevance to Audience: I'm sure most of us in this room have been in a situation where you claim you are going to sleep but then end up in your bed scrolling through your phone instead of actually sleeping. VISUAL AID
- c. Speaker Credibility:
 - i. I know that personally, going through my social media accounts, watching videos, and setting alarms is always a part of my nighttime routine.
 - ii. I know that scrolling through a phone before bed is a pretty common habit amongst teenagers.
- d. Thesis: Even though the use of cellular phones or electronic devices before bed is a common routine for people throughout the world, the blue light emitted from them may be impacting our overall well-being in a number of ways.
- e. Preview Main Points: In this speech, I will be focusing on how blue light affects our sleep patterns and the health of our eyes.

II. Effects on sleep

- a. In my survey, the responses showed that most of you have heard about blue light but don't know much about it.
 - i. So, in order to understand how blue light affects us, we must first have to understand what blue light is.
 1. The article "Will blue light from electronic devices increase my risk of macular degeneration and blindness" written in 2010 by medical doctor David Ramsey, states QUOTE "Blue light is visible light with a wave length between 400 and 450 nanometers (nm)...it is of concern because it has more energy per photon of light than other colors in the visible spectrum" END QUOTE
 2. VISUAL AID – electromagnetic spectrum
 - ii. I am sure that most of you have seen a version of this picture before, this is an image of the visible light portion of the electromagnetic spectrum.
 1. The blue light section is at the end of the spectrum with the lower wavelength and higher frequency.

2. Essentially this means that blue light holds more energy than other colors of light and therefore has a greater impact.
- b. One of the ways blue light impacts us is by shifting our sleep patterns and circadian rhythms.
 - i. The circadian rhythm, in general terms, is your body's internal clock. It is the basic 24-hour sleep/wake cycle that your body naturally follows.
 - ii. Ramsey later states in his article that blue light QUOTE “**may stimulate the circadian clock more than traditional light sources, keeping you awake, disrupting sleep, or having other effects on your circadian rhythm**” END QUOTE.
 - iii. A shift in the natural circadian rhythm of individuals can ultimately lead to trouble sleeping, loss of sleep, and drowsiness during the day.
 - c. Another way that our sleep can be affected by blue light is through manipulation of a hormone called melatonin.
 - i. An article published by Harvard medical school in 2012 called “Blue light has a dark side,” states that QUOTE “**exposure to light suppresses the secretion of melatonin, a hormone that influences circadian rhythms**” END QUOTE.
 - ii. As I am sure many of you know, melatonin is the hormone that makes you feel tired and therefore works hand in hand with our circadian rhythms.
 1. In a 2010 experiment testing different colored wavelength effects on melatonin suppression, David Holzman in his article “What’s in a color? The unique human health effects of blue lights” concluded that QUOTE “**blue wavelength suppressed melatonin for about twice as long as the green. In other experiments, blue also proved more powerful in elevating body temperature and heart rate and in reducing sleepiness**” END QUOTE.
 2. The suppression of melatonin before bed can make it much more difficult to fall asleep and to stay asleep.
 - d. The effect that blue light has on our sleep patterns ultimately leads to a loss of sleep.
 - i. Not only does this affect tiredness throughout the day, but short sleep routines are also linked to a number of health issues.
 - ii. Like cardiovascular problems, diabetes, and an increased risk for depression, as summarized in the article “Blue light has a dark side” from 2012.
- III. Effects on eye health
- a. Blue light affects our quality and depth of sleep in a matter of ways, but it also may have a negative impact on the health of our eyes.

- i. The way that our eyes transmit light is through the use of photoreceptor cells in our retinas.
 - ii. Photoreceptor cells capture the visual images and the light that we see and transmit them to our brains using a form of Vitamin A called retinal, as summarized in an online article written in 2018 by medical doctor Robert Glatter.
 - iii. However, when retinal is affected by blue light the result is a multitude of different chemical reactions. Glatter states QUOTE “some of these reactions lead to toxic radicals which can permanently damage these photoreceptor cells, leading to cell death” END QUOTE.
 - b. Unfortunately, our photoreceptors are not capable of regenerating after cell death occurs.
 - i. High levels of this particular cell death has the potential to lead to macular degeneration, which is a disease that causes vision loss.
 - ii. The general increased use of electronic devices also shows increases in the developments of dry eye diseases due to a decrease in blinking.
 - c. The most common suggested way to reduce the effect of blue light on our overall health is to reduce screen time.
 - i. Glatter states QUOTE “This is especially important at night time since the energy from transmitted blue light can be more focused, intensified, and channeled to cause more damage to our retinas” END QUOTE.
 - ii. Not only would reductions in screen time decrease the amount of strain on your eyes, but it would also improve your quality of sleep.
- ii. Conclusion
 - a. Signal the End: In conclusion, even though blue light may affect us in a variety of ways, it can easily be managed by reducing screen time and being conscious about electronic habits.
 - b. Review Thesis and Main Points: It is important to understand the impacts that blue light can have on our sleep patterns and our eye health so we can stay aware and make changes to our tendencies as needed.
 - c. End with a Clincher: So next time you claim that you are going to bed, maybe it would be a good idea to actually go to bed.

This speech was written and delivered by Kristen Nathe as a CST 110 Student at UW-La Crosse in Spring 2020. Be sure to consult with your instructor if they have specific requirements for outlining & speaking notes.