

The_Dark_Side Written Piece

Rationale: Sleep deprivation is like a disease spreading throughout the world. Worse, no one knows how to cure it! Lack of sleep is associated with artificial lights, which are wrecking our sleep patterns and increasing the sleep deprivation epidemic. Most people don't know that having artificial lights on when we sleep affects our health and well-being. We decided to research the issue of how artificial light affects sleep. We chose this problem because from the statistics that we researched, we learned that most of society today wasn't getting enough sleep. This is especially an issue for many students today, so we wanted to find out exactly what the main cause was. Unlike our expectations that it would've been homework that caused sleep deprivation, it was light! We were intrigued at this and researched it continuously. We found out from several articles from health.harvard.edu, abc.com, ninds.nih.gov, chriskresser.com and washingtonpost.com that one cause was from the blue light (light with short wavelengths) from electronics because it disrupted melatonin production throwing off the circadian rhythm and driving you to sleep later. Regular room lighting such as from LED or energy-efficient light bulbs could also disrupt melatonin production before sleep. However, according to <http://chriskresser.com>, amber-colored lights are neutral to the brain and don't affect melatonin production. After reflecting on our daily routines on whether we slept after looking at electronics or with light on, we knew that others would too. Therefore, we wanted to make an awareness campaign to inform our school, about the dangers that these lights have on disrupting sleep and ruining health.

Methodology: Our approach on this topic was first towards the students of our school and to inform them about how light affects sleep. We wanted to show them that

they should be aware that sleeping after looking at electronics or with light could have many consequences. We addressed this issue by making informational posters and hanging them around our school to show the students the basic facts and statistics of our cause, making shirts and wearing them around the school to advertise our cause, writing an article in our school newspaper, making a website to spread the word even further, and starting social media accounts on Google Plus, Instagram, and Twitter. We knew that these methods would spread the message effectively.

The rationale behind our awareness campaign was to try to share our information to as many students as possible in varied ways. For the posters, we included our research on how light affected sleep in different ways including the definitions of melatonin and

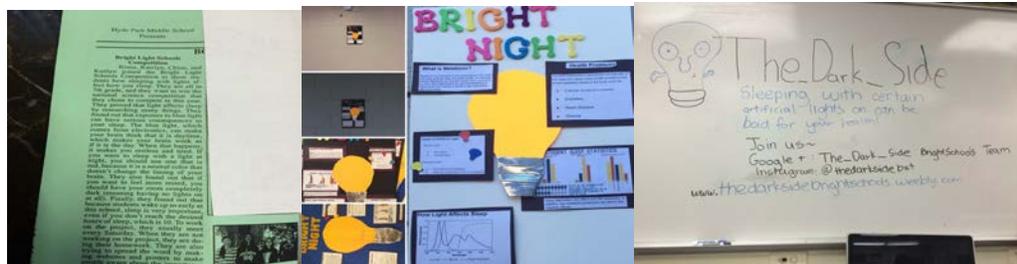


basic statistics and data hanging them in popular locations

around our school. On our custom-made shirts, we walked around wearing our informational shirts and showing them to students around the school as well. In our website

(www.thedarksidebrightschools.weebly.com), we also

elaborated more on the dangers of sleeping with artificial lights and wrote the URL on classroom whiteboards around the school. With our social media accounts, we also posted informational posts and tried following many people to share our message more effectively too.



Our community can benefit from our awareness campaign in many ways. Students would get a better understanding about sleep and its importance. Students would also learn how to sleep better and learn how to feel well rested. However, some students could ignore our advice and not benefit from our campaign because we aren't forcing students to follow our advice. Overall, students could both benefit and not benefit from our campaign.

Next Steps: We learned that different types of light could suppress melatonin production and throw off the circadian rhythm. We also learned that technology can change the world more than what society gives the credit for. Technology can change the way we think, but also the way we sleep. If we had more time and resources, we could do a scientific study to see if there could be a way that technology at night can not affect the way you sleep. For example, a study based on if the brightness of a screen on your mobile device or computer could affect how well you sleep compared to if you left full brightness on. We could also have spread the word of our project by reaching out to radio stations and news stations. We could also have added more on our social media and website. In the end, this topic is far from over in terms of researching and campaigning, but for now, we hop into our beds and pull on the covers. Without checking our phones, we close our eyes, and for once, sleep better.

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