**Sleep Design Challenge, Grade 8** *(for teachers)*

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Based on a work at http://blogs.ubc.ca/centre/?p=922

**Overview**

Students develop their design thinking and Core Competencies through a design challenge that includes collaborative inquiry, creating an advertising campaign, and designing a visual message with an interactive, online component.

In this example, student teams are asked to create an advertising campaign that will appeal to teens and convey strategies for getting a minimum of 8 hours of sleep per night. Teachers provide opportunities for students to conduct research and explore issues related to sleep deprivation in a digital world.

**Big Ideas**

**Physical and Health Education**

* Healthy choices influence our physical, emotional, and mental well-being.

**Applied Design, Skills, and Technologies**

* Design can be responsive to identified needs.

**Curricular Competencies**

**Physical and Health Education**

* Identify factors that influence health messages from a variety of sources, and analyze their influence on behaviour

**Applied Design, Skills, and Technologies**

*Understanding context*

* Empathize with potential users to find issues and uncover needs and potential design opportunities

*Applied Technologies*

* Identify the personal, social, and environmental impacts, including unintended negative consequences, of the choices they make about technology use

**Content**

**Physical and Health Education**

* Identify factors that influence health messages from a variety of sources, and analyze their influence on behaviour
* Identify and apply strategies to pursue personal healthy-living goals

**Applied Design, Skills, and Technologies**

*Entrepreneurship and Marketing*

* development of a product or service, including its features and benefits
* forms of advertising and marketing that can influence (PEERS)

**Core Competencies**

*Critical Thinking*

* Analyze and critique
* Develop and design

*Communication*

* Connect and engage with others (to share and develop ideas)
* Collaborate to plan, carry out, and review constructions and activities
* Acquire, interpret, and present information (includes inquiries)

**Essential questions**

* Why is adequate sleep key to physical and emotional health?
* How is health impacted by lack of sleep?
* How can limiting the use of technology (i.e., blue screen activity) improve the quality of sleep in teens?
* How can a product advertisement effectively communicate messages about sleep quality to teens?

**Assessment considerations**

This design challenge provides opportunities for assessment of the Curricular Competencies, Content, and Core Competencies in the following ways:

* **Group project (advertising campaign)** —To what degree were the design criteria followed?
* **Research** — What research was conducted and how was it integrated into the project?
* **Teacher observation** —What evidence was gathered regarding effective group communication and collaboration? What are potential areas for improvement?
* **Self-assessment or reflection** — How did students achieve their goals or demonstrate insight into their own behaviour?
* **Peer assessment** — In what ways were peers given an opportunity to provide feedback? How was that feedback delivered and received?

**Sleep Design Challenge** *(for students)*

**Overview**

In 2015, an iKeepSafe survey ([http://ikeepsafe.org/wp-content/uploads/2015/11/Report-Summary-Cyberbalance-in-a-Digital-Culture.pdf)](http://ikeepsafe.org/wp-content/uploads/2015/11/Report-Summary-Cyberbalance-in-a-Digital-Culture.pdf%29) found that 44% of teens admit they do to not get enough sleep because of digital devices. Harvard University’s report states that “experts have concluded that getting enough high-quality sleep may be as important to health and well-being as nutrition and exercise” (http://healthysleep.med.harvard.edu/need-sleep/whats-in-it-for-you/health).

**Design rationale**

Teens lead busy lives as they attempt to balance the demands of family, school, and athletic and other activities. Despite how exhausting their days may be, many teens find it difficult to unplug from their favourite tech devices which, according to research, appears to have a negative impact on the length and quality of sleep. New strategies are required if teens are to successfully change these behaviours and improve the length and quality of their sleep.

What we know about technology and sleep:

* “Blue screens” affect melatonin levels.
* Melatonin helps us fall asleep and stay asleep.

**Background learning**

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| --- | --- |
|   | iKeep has created an Infographic, “CyberBalance in a Digital Age,” to illustrate the results from their teen survey. <<http://ikeepsafe.org/wp-content/uploads/2015/11/Cyberbalance-infographic.jpg>> |
|  | DNews explains in this video, “Why your brain needs sleep”<<https://youtu.be/0o2yyO0JAes>> |
|  | 13 Tips to Follow for Effective Poster Design[< http://demortalz.com/2013/02/11/13-tips-for-designing-an-effective-poster/>](%3C%20http%3A//demortalz.com/2013/02/11/13-tips-for-designing-an-effective-poster/%3E) |
|  | Fonts, Colours, and Image — Why fonts, colors, and images matter <https://designschool.canva.com/wp-content/uploads/sites/2/2014/07/CDS\_Workshop2\_compressed.pdf> |
|  | Backgrounds, Shapes and Layouts — Why backgrounds, shapes, and layouts matter <https://designschool.canva.com/wp-content/uploads/sites/2/2014/06/CDS\_Workshop3\_compressed.pdf> |

**Problem scenario**

Your Promotional Team has been chosen to create an advertising campaign that will appeal to and impact teens in their strategies to get a minimum of 8 hours of sleep per night.

Your promotional package must include:

* a visual message to display in school that can also be displayed online
* an interactive, online component

**Parameters**

* Your message must contain a motto created by your team.
* Your team must communicate information from the experts.
* Your team must address advertising considerations from each of the linked pages.
* Your team must pitch this advertising campaign by either projecting a prototype from technology or using mock-up boards.
* Each team member must create their own script for the campaign pitch.

**Success will be determined by:**

* Alignment of the prototype to the design
* Degree of appeal to a teen audience
* Degree to which the offline representation can be transferred online
* Creativity of messaging