## Feeling Sleepy?

Pillar: Healthy Eating, Active Living, Positive Social Environments<br>Division: III<br>Grade Level: 8-9<br>Core Curriculum Connections: English Language Arts

## I. Rationale:

Quantity equals quality when talking about sleep and its impact on virtually every aspect our lives. Current statistics suggest that up to $40 \%$ of Canadian teens suffer from sleep deprivation. Lack of sufficient sleep is a rampant problem amongst adolescents and appears to put them at risk for cognitive and emotional difficulties, poor school performance, accidents and psychopathology, research suggests. This lesson exposes students to the truth about sleep and how much they really need. While reading about their requirement for adequate rest, students are also learning how to identify supporting details within factual material. This lesson serves as an introduction to learning about how to write expository essays because main ideas, supporting details, and transitions are a few of the curriculum outcomes focused on. Upon completion of the sleep article analysis, students choose a health related topic of personal interest to them and compile their own research into a one paragraph article that incorporates relevant supporting details and integrates effective transitions.

## II. Activity Objectives:

The students will be able to:

- describe problems in all areas of health that can arise when teens get insufficient sleep.
- recognize the connection between adequate rest and quality of life.
- identify strategies for getting adequate rest during the teen years.
- apply the skill of recognizing supporting details when reading factual material.


## III. Curriculum Outcomes: Grades 8-9 Language Arts

| Outcomes | Grade 8 | Grade 9 |
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| 1.2 Clarify and Extend <br> Extend understanding | -reconsider and revise initial <br> understandings and responses in light of <br> new ideas, information and feedback <br> from others | - integrate own perspectives and <br> interpretations with new understandings <br> developed through discussing and through <br> experiencing a variety of oral, print and <br> other media texts |
| 2.1 Use Strategies and <br> Cues | •enhance understanding by paraphrasing <br> main ideas and supporting details, and by <br> rereading and discussing relevant <br> passages comprehension <br> strategies | -take notes, make outlines and use <br> strategies such as read, recite, review to <br> comprehend and remember ideas and <br> information |


| 3.1 Plan and Focus Focus attention | - experiment with several ways to focus a topic, and select a form appropriate to audience and purpose | - synthesize ideas and information from a variety of sources to develop own opinions, points of view and general impressions |
| :---: | :---: | :---: |
| Determine information needs | - select the most appropriate information sources for topic, audience, purpose and form | - select types and sources of information to achieve an effective balance between researched information and own ideas |
| Plan to gather information | choose a plan to access, gather and record information, according to selfselected parameters | - select information sources that will provide effective support, convincing argument or unique perspectives |
| Use a variety of sources | obtain information from a variety of sources, such as artifacts, debates, forums, biographies, autobiographies, surveys, documentaries, films, CDROMs, charts and tables, when conducting research | - obtain information reflecting multiple perspectives from a variety of sources, such as expository essays, graphs, diagrams, online catalogues, periodical indices, film libraries, electronic databases and the Internet, when conducting research |
| 3.2 Select and Process Access information | - record key ideas and information from oral, print and other media texts, avoiding overuse of direct quotations | - distinguish between primary and secondary sources, and determine the usefulness of each for research purposes |
| Evaluate sources | - develop and use criteria for evaluating the usefulness, currency and reliability of information for a particular research project | - evaluate sources for currency, reliability and possible bias of information for a particular research project |
| 3.3 Organize, Record and Evaluate Organize information | - organize ideas and information creatively, as well as logically, to develop a comparison or chronology, or to show a cause-effect relationship - organize ideas and information to establish an overall impression or point of view in oral, print and other media texts | - organize ideas and information by developing and selecting appropriate categories and organizational structures - balance all sections of oral, print and other media texts and ensure sentences, paragraphs and key ideas are linked throughout - develop coherence by relating all key ideas to the overall purpose of the oral, print or other media text |
| Record information | - make notes in point form, summarizing major ideas and supporting details; reference sources | - use own words to summarize and record information in a variety of forms; paraphrase and/or quote relevant facts and opinions; reference sources - select and record ideas and information that will support an opinion or point of view, appeal to the audience, and suit the tone and length of the chosen form of oral, print or other media text |
| Evaluate information | - incorporate new information with prior knowledge and experiences to develop new understanding | - reflect on new understanding and its value to self and others |
| 4.1 Enhance and Improve Revise and edit | - use paragraph structures to demonstrate unity and coherence | - revise to ensure effective introductions, consistent points of view, effective transitions between ideas and appropriate conclusions - revise to enhance effective transitions between ideas and maintain a consistent |


|  |  | organizational pattern |
| :--- | :--- | :--- |
| 4.2 Attend to <br> Conventions <br> Grammar and usage | • use words and phrases to modify, clarify <br> and enhance ideas and descriptions in <br> own writing | • use a variety of strategies to make <br> effective transitions between sentences <br> and paragraphs in own writing |
| 4.3 Present and Share <br> Demonstrate attentive <br> listening and viewing | • anticipate the organizational pattern of <br> presentations, and identify important <br> ideas and supporting details | • follow the train of thought, and evaluate <br> the credibility of the presenter and the <br> evidence provided |
| 5.1 Respect Others and <br> Strengthen Community <br> Appreciate diversity | • clarify and broaden perspectives <br> and opinions, by examining the ideas of <br> others | • take responsibility for developing and <br> sharing oral, print and other media texts <br> and for responding respectfully to the texts <br> of others |

## IV. Materials:

- a copy of the article: "Feeling Sleepy?" for each student in the class (included with this lesson).
- Supplementary Information: Teens and Sleep: Why You Need it and How to Get Enough (article) on the Caring for Kids web site which provides child and youth health information from Canada's paediatric experts.


## V. Procedure:

1. Conduct a survey among students in the class regarding average hours of sleep. Instruct each student to write down his or her average bedtime on school nights, as well as the time they get up in the morning. Using these two figures, have students compute their average total number of hours of sleep. Ask a volunteer to come to the board, and note by a show of hands how many class members get seven or less hours of sleep a night, how many get seven and a half, and so on in increments of half an hour. Record this data on the board, stopping at nine hours of sleep. After all data has been recorded, ask students to estimate how many hours of sleep per night health authorities advise teenagers to get on average each night. Entertain several guesses before revealing that the correct answer is nine. Refer to the data on the board showing how many class members get adequate rest.
2. Distribute copies of the article, "Feeling Sleepy? " to students. Have them locate the first subhead"Zombie Zone"-and instruct them to follow along silently as you read the first sentence in the second paragraph of that section (beginning "Scientists aren't exactly sure. . ."). Then ask students to identify reasons why scientists do find sleep important. (It helps muscles repair themselves, gives our brains time to store "data," and may help fight disease.)

- Note that when reading factual material such as an article, it is important to look for and note supporting details like these for all claims made. Add that by isolating details that back up a main point, readers have a better chance of remembering this information later. Suggest that when taking notes during reading, students might think about indenting supporting details or making them stand out in some other way for easy recognition later. Note that details are often set off by transitional words, such as first, next, and another, or by sectional headings.

3. After reading the article, use the following questions to guide discussions as a class or in small groups.
$>$ Summarizing: The opening section of the article refers to a survey of young people. What were the findings of that survey? How did the teens in that survey compare in their sleep habits with those of your class?
> Analyzing: The article quotes Dr. Mary Carskadon, a sleep authority, who states, "Not getting enough sleep affects every part of your life." What supporting details can you find that back up this claim? What area of health is affected by each detail noted?
> Critical Thinking: What problem related to insufficient sleep can be serious for teens who drive? Explain your answer.
> Comparing and Contrasting: What reasons did teens in the survey give to support the claim that getting enough sleep isn't easy? How do these reasons compare with the findings of Dr. Carskadon?
$>$ Analyzing: What does the statement in the article mean that "all sleep is not equal"?
$>$ Synthesizing: What strategies are outlined in the article for ensuring that you get adequate rest? What techniques of your own have you found that work when you are having difficulty sleeping?
4. Have students pair up. Each student should choose a health-related topic to explore that is of personal interest. Possibilities might include:

- Foods that give you energy.
- The benefits of regular physical activity.
- Sports that help build different fitness skills.
- Foods that are low in fat and/or calories and are fun to eat.
- Making your community a friendlier place to live.
- How to handle bullying.
- Managing anger.

5. Instruct students to research their topic and organize the information using a self-selected pre-writing strategy or graphic organizer.
6. Once they have acquired sufficient information to support their topic, they will compose a oneparagraph article backing up their topic with at least three relevant supporting details. Remind students to state their supporting details (facts, reasons, and examples ) in complete sentences to support and develop their main idea.
7. Invite students to exchange articles with a partner and have them identify each other's supporting details by numbering them within the paragraph.

## VI. Extensions and Variations:

- This activity could serve as an introduction to writing expository essays. Students could expand upon their topic by doing further research and then develop an essay outline that includes three main ideas supported by relevant facts, reasons, and examples for each of the main ideas.
- Provide grade nine students with additional instruction (mini-lesson) on incorporating effective transitions. Have them practice integrating transitional words and phrases into their paragraph to connect and reinforce their supporting details and improve the coherence and flow of their ideas.


## VII. Assessment Ideas:

- Assess students' articles or essays based on the following criteria:
$>$ organization (logical sequence, unity, and transitions)
$>$ content (accurate and interesting details)
$>$ sentence structure (complete, effective, and varied)
$>$ word choice (carefully selected, specific)
$>$ conventions (punctuation, spelling, grammar)


## Feeling Sleepy?

As you read this article, notice how it is organized. Think about how you might show the main ideas and supporting details in an outline.
"I have to be dragged out of bed," says Paul, 9. "It would take 20 alarm clocks to get me up."
Paul is not alone. Mara, 8 , says her dad drags her out of bed, too. In fact, when we talked to kids, we discovered that the one thing you hate more than going to bed is getting up in the bmorning.

The reason: You need more sleep! The kids we surveyed get anywhere from 45 to 75 minutes too little sleep each night.

## Zombie Zone

Missing Z's can create big problems. "When I'm sleepy, I can't do much," says Rosalie, 9. "I walk with my eyelids drooping."

Scientists aren't exactly sure why sleep is so important. Many think sleep helps your muscles repair themselves and gives our brains time to store "data" received during the day. Sleep may also help us fight disease. (That could explain why having a cold makes you feel like snoozing all day.)

One thing is certain. "Not getting enough sleep affects every part of your life," says Dr. Mary Carskadon, a scientist who studies snoozers. Sleepy kids have difficulty concentrating on school, friends even on baseballs zooming past their noses.

## Drooping Grades

"Sometimes during school, I put my head on my desk and drift off," says Elizabeth, 11. Desktop catnaps might make you feel better, but they might also show up on your report card. According to Dr. Carskadon's research, kids who earn mainly A's and B's go to bed earlier than those who get D's and F's. In one study, kids who got bad grades slept about 35 minutes less each night than their honor-roll classmates.

## Friendship Fumbles

Losing sleep may also mean losing friends. Why? The reason is that sleep may help kids control their emotions, says sleep researcher Carol Leotta. Lack of slumber can lead to more fights with friends, family, teachers, and others.

## Sports Strikeout

If you want to be a high scorer on your basketball team, you can forget catching the "Late Show." Dr. Carskadon says, "Not getting enough sleep slows your reaction time." That's how long it takes you to respond to something in your environment, like an opening on the court or a clear shot for the basket. To speed up your reactions and improve your game, take a tip from the pros: Go to bed early the night before the game.

## Double Whammy

But the kids we talked to say it's not that easy: After-school sports practices, TV, and loads of homework makes it tough to get to bed on time. "And when I spend the night at a friend's we usually stay up until about 2 A.M.," added Pat.

These "social" reasons for staying awake are only half the problem, says Dr. Carskadon. Her research shows that as your body matures, your brain waits until later at night to release a chemical that makes you sleepy. In other words, it's natural for teens and almost-teens to crawl into bed and fall asleep later.

## Pulling the Plug

Staying up later would be no big deal if you could wake up later, too. You'd just be resetting your internal "clock" (the part of your brain that controls your body's functions) to run on a later schedule. But if you drag yourself out of bed for an early-morning soccer game or to catch the school bus, you can expect to feel like a zombie.

That's because all sleep is not equal. The last hour of sleep, like the highest level on a video game, is worth more. But getting to that high level requires sleeping through all the lower levels first. Waking up too soon is like pulling the plug in the middle of the game.

## Sleep Solutions

One way to make sure you get enough sleep is to stick to a regular schedule. It will be easier to fall asleep - and get up - if you go to bed at the same time every night.

Elizabeth tried to end her school day snoozes by going to bed earlier - at 8:30 instead of 9:45. The change wasn't an immediate success, however. "Last night, I was in bed by 8:30," she reported. "But I finally got to sleep at about 11 o'clock."

If you want to reset your bedtime, Dr. Carskadon says, you need to be patient. Your internal clock is easy to set to a later sleep time - but readjusting to an earlier schedule is more challenging. For the best results, try moving your bedtime 15 minutes earlier each night.

Soothing music may also help. Max, 12, puts on a CD and says, "I'm usually asleep halfway through." Scientists also say to avoid exercise right before bed. And stay away from sugary foods; the energy boots might make you think you're not tired.

Afternoon naps can also help you feel rested. Just make sure you don't nap too close to bedtime. That can make falling asleep at night harder.

The good news: You won't always need as much sleep as you do now. Most adults would be happy with an eight-hour snooze. So enjoy your Z's while you can!

