

Health in Action Project



Feeling Sleepy?

Pillar: Healthy Eating, Active Living, Positive Social EnvironmentsDivision: IIIGrade Level: 8-9Core 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
1.2 Clarify and Extend Extend understanding	 reconsider and revise initial understandings and responses in light of new ideas, information and feedback from others 	 integrate own perspectives and interpretations with new understandings developed through discussing and through experiencing a variety of oral, print and other media texts
2.1 Use Strategies and Cues Use comprehension strategies	 enhance understanding by paraphrasing main ideas and supporting details, and by rereading and discussing relevant passages take notes, make outlines and use strategies such as read, recite, review to comprehend and remember ideas and information 	

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

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

IV. Materials:

- a copy of the article: "Feeling Sleepy?" for each student in the class (included with this lesson).
- Supplementary Information: <u>Teens and Sleep: Why You Need it and How to Get Enough</u> (article) on the <u>Caring for Kids</u> 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!