Grade 10 - Health Promotion

Unit 7

SOLs:

10.1.d Explain the physical, mental, social, and academic benefits of sufficient sleep, and the relationship between sleep deficiency and chronic disease and increased risk for injury and substance use.
10.2.a Compare physical activity, sleep, and personal hygiene practices with research-based guidelines.

Title: Sweet Dreams

Objectives/Goals:

- Students will be challenged to analyze 1 sleep article and answer general questions on these articles. They will then become “experts” on this topic and be responsible for presenting the material to the class.

Materials:

- Copy of sleep quiz
- Copy of PowerPoint
- Copy of Sleep Sheet
- Copy of Sleep Articles
  - Driving Drowsy
  - Napping
  - Teens & Sleep
  - Stress & Insomnia
  - Late Start Times
  - How Much Sleep Do You Need?
  - Teen Brain
- Copy of Where Did The Time Go? worksheet
- Copy of Sleep Diary worksheet

Procedure:
<table>
<thead>
<tr>
<th>Step 1</th>
<th>Students will complete the sleep quiz by circling agree or disagree with each corresponding statement.</th>
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</table>
| Step 2 | Pass the bead box around to the students as they answer the What do you know? quiz. Students will place the color bead that corresponds to their sleeping habits in the can.  
- Yellow: 9 or more hrs of sleep  
- Black: 7-8 hrs of sleep  
- Blue: 5-6 hrs of sleep  
- Red: 4 hrs of sleep  
- Green: 3 or less hrs of sleep  
  
**Teacher note:** An old shoe box with a peanut can with the lid split surrounded by colored beads will suffice for a bead box. The student has privacy of what colored bead they put in the box. Open the can and tally how many beads were listed under each cover and write them on the board for the students to view. |
| Step 3 | Go over the answers of the sleep test on the PowerPoint |
| Step 4 | **Sleep Articles**  
Students will get in partners and be given an article to analyze. They will answer questions from the “Sleep Sheet” and become experts on their topics. Each group will come up and give a summary about the article they read and answer their peer’s questions to the best of their abilities.  

**Key ideas of each article:**  
1. **Driving Drowsy**  
   a. 60% of adult drivers say they have driven a vehicle while feeling drowsy the past year  
   b. The National Highway Traffic Safety Administration estimates 100,000 crashes are directly related to driver fatigue  
   c. This results in an estimated 1,550 deaths, 71,000 injuries, and $12.5 billion in cost.  
   d. Adults between 18-29 most likely to drive while drowsy  
   e. Being awake for 18 hours is equivalent of a .05 BAC  
2. **Napping**  
   a. A 2008 study reported naps as the most effective way to cope with afternoon
3. **Teens & Sleep**
   a. Sleep is food for the brain
   b. Sleep is as important as breathing, drinking, and eating
   c. Sleep deprivation can cause unhealthy eating habits
   d. Establish a bed and wake-time
   e. Get in a routine

4. **Stress & Insomnia**
   a. Stress can cause insomnia by making it difficult to fall asleep and to stay asleep
   b. Set your bed and wake-time according to the number of hours of sleep you are currently getting and gradually increase the time allotted by 15 minutes
   c. Spend some time winding down
   d. Bedroom should be visually appealing and comfortable

5. **Late Start Times**
   a. Teens average fewer than 7 hrs per school night
   b. This leads to lower overall performance in everything from academics to athletics
   c. Most adolescents undergo a sleep phase delay, which means a tendency toward later times for both falling asleep and waking up
   d. The effects of changing sleep patterns are compounded by the other demands placed on students

6. **How Much Sleep Do You Need?**
   a. Exercise and nutrition are essential for optimal health and happiness, so is sleep
   b. It is not just the number of hours in bed but the quality of those hours
   c. Average adults sleep less than 7 hrs a night
   d. Lack of sleep affects your judgment, coordination, and reaction times
   e. Non-REM sleep consist of four stages of sleep, each deeper than the last
   f. REM sleep is when you do most active dreaming
   g. Try setting a wake-up time that’s a multiple of 90 minutes (the length of the average sleep cycles)
   h. Deep sleep is a time when the body repairs itself and builds up energy for the day ahead

7. **Teen Brain**
a. Biological clock in teenagers is shifted forward creating a “forbidden” zone for sleep around 9 or 10 p.m.
b. Learning continues to take place while a person is asleep
c. Inside the brain, proteins strengthen the connections between nerve cells consolidating the new skills learned the day before
d. Learning a new task is greatly helped by getting a good night’s sleep

<table>
<thead>
<tr>
<th>Step 5</th>
<th>Where Did The Time Go?</th>
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<tbody>
<tr>
<td>Students will complete the worksheet, filling out the number of hours they spend doing each aspect of their day. Then they will re-allocate those hours when they dedicate 9 hrs to sleep (a good night’s sleep). This shows them that it is possible to complete everything they need to do but they will need to make sacrifices and not waste time doing frivolous activities.</td>
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<tr>
<th>Step 6</th>
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<tr>
<td>This assignment will be given at the end of class but will not be do until a week from the assigned date. Students will be responsible for recording times they wake up and fall asleep for an entire week. From this, students will calculate average bed time and average wake time and write a small reflection on their findings.</td>
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References:

Melanie Lynch, M.Ed. State College Area High School