# Promoting Health Across the Lifespan: Sleep Topics 

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## Authors

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Title: The benefits of sleep \#getmoresleep
Author: Ryleigh Stearns

Time and Format: Classroom setting
Audience/Learners: College students, young adults

## Overview:

To educate students on the importance of sleep, the main benefits of sleep and a brief history on why humans need sleep through various learning activities such as collaboration and brainstorming using their knowledge of the subject.

## Healthy People 2020 Objectives:

SH-4: Increase the proportion of adults who get sufficient sleep

## Workshop Goal:

Increase the opportunities for young adults to get more sleep everyday and have knowledge on why they should be getting an adequate amount of sleep.

## National Health Education Standards:

Standard 1: Students will comprehend concepts related to health promotion and disease prevention to enhance health.
Standard 4: Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.
Standard 5: Students will demonstrate the ability to use decision-making skills to enhance health.

## Learning Objectives:

After this workshop, students will be able to:

1. Identify and describe 3-5 health benefits of getting an adequate amount of sleep. (NHES 5)
2. Communicate with colleagues and be able to hold open discussions of the topic during class. (NHES 4)
3. Show what they have learned by taking and passing an in-class quiz by the end of the class period and use what they have learned from the PowerPoint. (NHES 1)

## Key Concepts \& Terminology:

These concepts should be talked about in the introductory PowerPoint to give students a brief history on sleep and why humans need sleep. Learners should be able to differentiate each theory and be able to describe each one when quizzed on at the end of class. The instructor should also have knowledge about the main benefits that sleep can have on the body and be able to encourage the learners to brainstorm and discuss as a class.
Brain Plasticity Theory: The sleep that we get directly correlates with the changes in the structure and organization in our brains.

Inactivity Theory: This theory says that the time that we sleep has to do with evolution. We are inactive at night due to our survival skills that the species adapted.
Energy Conservation Theory: Sleep reduces the demand for energy and allows us to use our energy for more useful things like finding food during the daytime.

Frank, M.G., Siegel, J.M., Porkka-Heiskanen T. (December 2007). Why do we sleep, anyway? Healthy Sleep. Retrieved from http://healthysleep.med.harvard.edu/healthy/matters/benefits-of-sleep/why-do-wesleep.

## Teaching Steps (timed 50 min ):

- Engage, Describe, Do
- Welcome everyone to the class and give introduction with PowerPoint that discusses the history of sleep, its benefits, and a relatable video on sleep. [LO 3] (10 min)
- Get students into groups of four, pass out one piece of paper per group, have students brainstorm main benefits of sleep from their own knowledge of the subject and prior experience. [LO 1\&2] (5 min)
- Examine, Discuss, Analyze
- Grab a volunteer student to write the best benefits of sleep in front of class.
- Hold a group discussion with the entire class and choose the best answers from the group work to put onto the class poster. [LO 2] ( 15 min )
- Create \& Integrate
- Take the top ten best answers from the group discussion and write them on the poster. [LO 2] ( 5 min )
- Assess
- Students will take a short debrief quiz on the material talked about in class to test their knowledge that will not be counted towards their grade. [LO 3] ( 15 min )
- Closure
- Collect quizzes and encourage students to think about what they learned about sleep and think about that before they go to sleep the same day.


## Assessment Measures:

AM 1: One combined poster paper listing the most valuable benefits of sleep
AM 2: Overall passing grade on the quiz given near the end of class

## Materials \& Preparation

- Writing tools \& scrap paper
- Space to gather in groups
- Large poster paper
- Candy for rewards
- Quiz for the end of class period
- Introduction PowerPoint


## Annotated Bibliography:

Frank, M.G., Siegel, J.M., Porkka-Heiskanen T. (December 2007). Why do we sleep, anyway? Healthy Sleep. Retrieved from http://healthysleep.med.harvard.edu/healthy/matters/benefits-of-sleep/why-do-wesleep.
This article was published on the website Healthy Sleep. It talks about the many benefits of sleep. More importantly, it touches on the main theories of why we are suppose to get an adequate amount of sleep. The three theories discussed are the inactivity theory, energy conservation theory and brain plasticity theory.

Sparacino, A. (2016). 11 surprising health benefits of sleep. http://www.health.com/health/gallery/0,,20459221,0
Author Alyssa Sparacino touches on many important benefits of sleep. Not only does it list benefits individually, but also underneath describes why sleep gives us these benefits. It is clear that the author has gotten her information from credible sources and her information is well stated. She is an educated journalist who published her work on a well-known site.

Griffin, R.M. (2011, December). 9 surprising reasons to get more sleep. WebMD. Retrieved from http://www.webmd.com/sleep-disorders/features/9-reasons-to-sleep-more\#1.
Author R. Morgan Griffin is a freelance writer and editor graduated from the University of Massachusetts Amherst with a major in English. He has written for many other websites and newspapers which makes him a credible source. Because this article is not based on opinion but is based on facts from valid sources, it is a source that can be used by many that are looking for an unbiased force. The article was published through WebMD which is a much used website for many medical related things.

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## Title: \#GetMoreSleep- Creating a Healthy Sleep Environment

## Overview:

These series of lesson plans will educate and increase opportunities for student participants to get adequate sleep thus contributing to overall health.

## Audience/Learners:

College students, ages 18+

## Time \& Format:

45 minute group workshop and discussion.

## Workshop Goal:

To increase awareness and practice of healthy sleeping habits among young adults.
To educate, identify, and prepare for creating a sleep environment that leads to adequate sleep patterns.

Learning Objectives- After the workshop, students will be able to:

1. Identify three barriers as to why participants are not getting adequate sleep.
2. Understand how each of the five senses can contribute to a better sleep environment, thus contributing towards a better rest.
3. Apply sleep sense knowledge to create a bedroom environment conducive to a positi nights rest.

## National Health Education Standards:

- Standard 2: Students will analyze the influence of family, peers, media, culture, and technology, and other factors on health behaviors.
- Standard 5: Students will be able to demonstrate the ability to use decision-making skills to enhance health.
- Standard 6: Students will be able to demonstrate the ability to use goal-setting to enhance health.


## Healthy People 2020 Objectives:

- SH-4: Increase the number of adults who get sufficient amounts of sleep.
- OG-4: Promote quality of life, healthy development, and healthy behaviors across all life stages.


## Materials \& Preparation:

- Space to gather with a public writing surface
- Six poster boards \& markers
- Lavender essential oil


## Terminology and Concepts:

Trans theoretical Model: The stage of preparation within this model is key for properly preparing you for a behavior change to increase success. This stage involves identifying barriers to prepare for obstacles that could occur. Understanding participant readiness to make change, appreciating barriers to change and helping participants anticipate relapse can improve patient satisfaction and lower physician frustration during the change process (Zimmerman, Olsen, \& Bosworth, 2000).

Brainstorm Strategy- Diverge and Converge: This technique offers a non-judgmental and 'anything goes' motto to come up with as many creative results to solve a problem. After, you take the best most realistic concepts and narrow down the ideas to create a strong outcome. Having the student participants move from poster to poster will create the best and most elaborative ideas that can be synthesized together (TeacherVision, 2016).

Bedroom Environment- Using your Senses: (National Sleep Foundation, 2012-2016).

1. Touch: A great night's sleep can depend on the comfort you feel.
2. See: A great night's sleep can depend on the visual condition of your bedroom environment.
3. Hear: Listen to noises to see if they are keeping you awake.
4. Smell: What you breathe while you sleep can affect how you feel the next day.
5. Taste: In the hours before bed, what you eat and drink can affect your sleep.

Teaching Steps: Total time $=45$ minutes

- Activity 1: Ask/ Discuss/ Examine: linked to learning objective one.
- (10-15') Group brainstorm session on the barriers we identify that lead us to not getting adequate sleep. This activity is based off pre-established barriers from Montana's tracking lesson plan.
- Facilitator will be recording responses on chalk board.
- Activity 2: Create \& Integrate: linked to learning objective two.
- (10') 20-person class will split into 5 groups of 4 . Each group will have a blank poster with a marker that will be posted strategically on the wall of the classroom. Each poster will have a sense assigned to the top. Every 3-5 minutes, students will rotate from poster to poster and add to each how we can influence that specific sense to contribute to a sleep environment.
- Facilitate incorporation of established sleeping barriers.
- Activity 3: Evaluate: linked to learning objective three.
- (10-15') At this point, we will converge our findings into one pre-designed bedroom, creating a sketch or illustration. We will discuss our findings and analyze why addressing these specific components on our senses will lead to an adequate sleep environment and therefore better sleep health.
- Activity 4: Closure
- (3') Conclusion on our discussion and also introduce hashtag \#GetMoreSleep to record thoughts on changing behavior. Sweet dreams!


## Assessment Measures:

- AM 1: Photo of scripted group brainstorm activity- barriers leading to why we don't get enough sleep following activity one.
- AM 2: Five posters boards- each displaying how to impact a specific sense to enhance sleep patterns following activity two.
- AM 3: Final collaborated illustration of a successful bedroom environment following activity three.


## Annotated Bibliography:

Center for Disease Control (CDC). (August 18, 2016). National Health Education Standards. Retrieved from http://www.cdc.gov/healthyschools/sher/standards/index.htm on Nov. 17, 2016.

- This resource supplies us with the National Health Education Standards that dictate our lesson plans. Brought to you by the Center for Disease Control, these standards offer us pre-established responsibilities so all health educators are on the same page with expectations with a necessary baseline of curriculum agenda. The specific standards chosen exemplify what specific targets this lesson plan will be administering.

Division of Sleep Medicine at Harvard Medical School. (December 18, 2007). Sleep and Disease Risk. Healthy Sleep. Retrieved from http://healthysleep.med.harvard.edu/healthy/matters/consequences/sleep-and-disease-risk on Nov. 25, 2016.

- This article from the Division of Sleep Medicine at Harvard Medical School on sleep health gives evidence-based research on the benefits of sleep. This article also demonstrates the chronic conditions that lack of sleep can lead to such as obesity, diabetes, hypertension, and heart disease. The research also touches on the mental hardships that happen when lack of sleep is present. This data relates directly to the introductory activity regarding the benefits of sleep, from a trustworthy source.

GRETCHEN L. ZIMMERMAN, PSY.D., CYNTHIA G. OLSEN, M.D., and MICHAEL F. BOSWORTH, D.O., Wright State University School of Medicine, Dayton, Ohio

Am Fam Physician. 2000 Mar 1;61(5):1409-1416. Retrieved from
http://www.aafp.org/afp/2000/0301/p1409.html on Dec. 9, 2016.

- This article from the American Family Physician Journal gives the readers a premise as to why it is important to incorporate the Transtheoretical Model to behavior change. This is to decrease the likelihood of participant relapse by identifying barriers and being prepared for anticipated change. This article, written by licensed doctors gives practical knowledge and understanding from a patient to doctor relationship standpoint. Also, this
resources gives a descriptive analysis of the Transtheoretical Model from simply understanding change and moving through each individual stage.

HealthyPeople.gov. (November 23, 2016). Sleep Health. Objectives. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/sleep-health/objectives on Nov. 25, 2016.

- This data collection brought to you by Healthy People 2020, gives us an insight to the national objectives relating to sleep health. Healthy People 2020 offers us statistics in sleep patterns as well as the overarching goals that health educators should be aiming to obtain. This site provided us with relatable sleep health objectives to implement within the lesson plan.

National Sleep Foundation. (2012-2016). Inside your Bedroom- Using your Senses [Data File]. Retrieved from https://sleepfoundation.org/bedroom/ on Nov. 17, 2016

- This resource serves as a database of information relating to the individual senses and how to address them to enhance sleep patterns. Brought to you by the National Sleep Foundation, the various sense links gives unique tips and topics that correlate with the five different senses and how to address each to create a successful bedroom environment. After reading these tips, lesson plan instructors can understand different ways to incorporate different senses into a sleep environment.

TeacherVision. (August, 2016). Brainstorming: A Strategy for Creative Productivity. Retrieved from https://www.teachervision.com/teaching-methods/resource/5046.html on Dec. 9, 2016.

- This article is important because it takes a teaching lens to the idea of brainstorming and synthetic conclusions. This article also gives advice on different mechanisms to incorporate this philosophy of teaching into the classroom. The article states that brainstorming and converging ideas is positive for a number of reasons by taking a creative approach to solve a problem. This innovative teaching strategy is an emerging concept in the working force.


Creating a Healthy Sleep Environment by Sydney Copp is licensed under a Creative Commons Attribution 4.0 International License.

Title: Sleep Health - Building Healthy Sleep Habits
Author: Makenna Franklin
Time \& Format: 50 minutes, classroom setting, involving PowerPoint presentation and group thinking/sharing

## Audience/Learners: Early Career Health Care Workers (Age 24-30)

Topic Overview: From this workshop, early health care workers will be introduced to the importance of sleep health and ways to integrate healthy sleep skills into their lives, allowing them to become healthier overall and be more successful in the work place. This workshop can be delivered in a classroom setting with access to a displaying system for a PowerPoint presentation. In addition, it can be delivered to either a small or large group of individuals.

## Healthy People 2020 Objective(s):

- SH-2: Reduce the rate of vehicular crashes per 100 million miles traveled that are due to drowsy driving
- SH-4: Increase the proportion of adults who get sufficient sleep

Workshop Goal: To improve the quality of life for early health care workers.

## National Health Education Standards addressed:

- Standard 1: Students will comprehend concepts related to health promotion and disease prevention to enhance health
- 1.12.3: Analyze how environment and personal health are interrelated
- 1.12.5: Propose ways to reduce or prevent injuries and health problems
- Standard 6: Students will demonstrate the ability to use goal-setting skills to enhance health
- 6.12.1: Assess personal health practices and overall health status
- 6.12.2: Develop a plan to attain a personal health goal that addresses strengths, needs, and risks


## Specific Learning Objectives (linked to NHES and assessments):

Through participating in this workshop learners will be able to:

1. Describe at least 2 ways that sleep is a critical determinant of health and wellness
2. Identify at least 3 personal positive sleep skills to apply in daily living
3. Identify at least 3 ways to build a sleep-friendly bedroom environment
4. Practice goal setting using the SMART Goals technique

## Key Concepts \& Terminology:

Critical Determinant of Health: The range of behavioral, biological, socio-economic and environmental factors that influence the health status of individuals or populations. For this lesson plan, we are focusing on sleep, one of the critical determinants of health.

Sleep as a Critical Determinant: Sleep is a basic requirement that everyone needs, it is especially important to infant, children, and adolescent health and development. Sleep schedules and duration affect our endocrine, metabolic, and neurological functions that are critical to the maintenance of individual health. If an individual is sleep deprived or has untreated sleep disorders it can negatively impact family health and interpersonal relationships, reduce productivity, increase the chances of mishaps such as medical errors, workplace accidents, and even motor vehicle crashes. Sleep deprivation can increase the risk of heart disease, high blood pressure, obesity, diabetes, and mortality. (Healthy People 2020)

Getting Adequate Sleep: Adequate sleep is necessary to fight off infection, support the metabolism of sugar to prevent diabetes, perform well in all activities you choose to participate in, work effectively and safely in the workplace, and decrease the chances of an accident due to fatigue. This "accident" can involve anything from a workplace accident like a needle-stick injury, accidently administering the wrong medication, or it could be out of the workplace when you are driving home from a late shift. It is always important to get adequate sleep before going into work, you have to learn to take care of yourself before taking care of others/your clients.

Recommended Hours of Sleep/Sheet: Sleep duration recommendations depends on the age of the individual, the older you are the less sleep you require. In addition, it also depends on the individual personally, regardless of age, some people tend to just need more sleep than others in order to feel well rested throughout the day. As seen on the sleep duration handout, individuals age 24-30 tend to need 7-9 hours of sleep, but some may need as little as 6 to feel well rested while others could need up to 11 , it is important to find the duration you require, suggest to the class that they take a few nights to test out how many hours they need and then stick to that time. (The National Sleep Foundation)

Bad Sleeping Habits: Sometimes we don't realize that things may be distracting us and preventing us from getting the recommended hours of sleep that we truly need. There are a variety of things that should be completely avoided in order to get a good night's sleep. This includes things like eating too close to bedtime since lying down can cause stomach acid to rise into the throat making it uncomfortable and difficult to fall asleep. Other things to avoid can include caffeine and nicotine because any stimulants can make it difficult to fall asleep, using technology in bed, and having odd sleeping hours. As health care workers, it can be difficult to prevent the odd sleeping hours due to doubles or working the night shift, it is important to create a regular sleep routine, and try to avoid sleeping in or staying up late on your days off.

Surviving the Night Shift: Some health care workers will be unable to adapt to working nights no matter how hard they try to adjust, whether it is because of biological factors or social responsibilities. Some suggestions for coping with the night shift and battling fatigue include avoid rapid rotation (working different shifts in the same week), wear dark sunglasses on your
way home from work to block out the day light, and follow a regular sleep schedule regardless of which shift you are working. You can use room-darkening or blackout shades in your bedroom, avoid eating any large meals within four hours of sleeping, avoid caffeine to keep your up, and avoid alcohol to make you sleep. It is important to consistently defend your sleep, let family members and friends know your "do not disturb" hours, and avoid scheduling appointments and activities during your set sleep time. The body functions better when a routine is followed, if you are working the night shift you must be willing to make adjustments and be committed to making the night shift work for you. Research has shown that health care workers who have adjusted to the night shift have a strong commitment to working the shift and using sleeping, eating, and exercise strategies to cope with its challenges. (The American Journal of Nursing) If you are not committed, then there is a good chance that working the night shift will always result in fatigue and sleep deprivation, which will negatively affect your health and possibly your social life.

Ideal Bedroom/Sheet: A sleep-friendly bedroom environment is important to prevent distractions that can cause us to have a restless night of sleep. The "Design a Sleep-Friendly Bedroom" sheet outlines a variety of tips for an ideal bedroom environment brought to you by the leading experts in sleep health, The National Sleep Foundation. It offers tips such as dimming the lights about an hour before bed to help regulate your body and tell your brain that it is time to shift into sleep mode. Other rips include making your room relaxed and peaceful through wall colors and decorations that you enjoy, keeping a cool room, choosing mattress, pillows, and sheets that are comfy, reducing noises, and surrounding yourself with scents that you like. A good scent would be lavender, which is known for decreasing your heart rate and blood pressure. Any scent that you truly enjoy can help to relax you and boost your mood, preparing you for a good's night sleep.

Identifying Strengths/Skills: A quality that an individual finds to be useful or valuable. A person's strengths are a mixture of their talents, knowledge, and skills. A skill is the ability to do something well. The theory behind strengths is that everyone has strengths they are born with but few people know what these are, by identifying your strengths you will be able to rapidly learn new information and approaches.

SMART Goal Setting: A comprehensive way of goal setting by identifying a desired outcome that is specific, measurable, appropriate, realistic, and time sensitive. This type of goal creates a clear vision of what is to be expected of the goal and provides the individual with a direct-action plan and time limit for their goal. This allows the individual to stay on track to achieve their goal in a timely manner. The skills that the individuals identify in their groups within themselves and others will be a stepping stone to setting a SMART Goal in relation to their sleep habits and sleep environment.

SMART Goal Setting Sheet: This handout is a cheat sheet for setting SMART Goals in five easy steps, it is specific to the overall learning objectives in regards to building positive sleep habits. Participants will be able to walk away with a goal that is specific, measurable, appropriate, realistic, and time-sensitive after filling out the sheet. Under each of the five concepts there is a description to guide everyone in creating a goal that is SMART.

## Teaching Steps (timed):

- Activity 1: Instructor passes out all three handouts before beginning. As an opener to the topic, ask the audience: "How many hours of sleep did you get last night?" and "Why do you think that sleep health is important?", after this discussion instructor gives a brief PowerPoint presentation on the importance of sleep health and how it is a critical determinant to overall health. The presentation ends with a few examples of positive sleep skills to adapt, and gives suggestions on designing a sleep-friendly bedroom to give the audience some ideas for the second activity. [LO:1]
- Activity 2: Instructor asks the class to get into groups of 3-4 to brainstorm and come up with two lists. The first list identifies individual positive sleep habits as well as identifies sleep skills of other individuals in the group that each person can learn from/adapt. The second list is the groups own ideas on how to create a sleep-friendly bedroom. Everyone should have their own sheet of paper divided in half with the two lists to reference back to when creating a SMART goal in a later activity. [LO:2, LO:3]
- Activity 3: Instructor brings the class back together and asks a few groups to share their strengths and ideas of a sleep-friendly bedroom. From this share session, participants can add new ideas to their individual lists that they may want to adapt and fit into their SMART goal in the last activity. [LO:2, LO:3]
- Activity 4: Instructor presents the idea of a SMART goal format using the SMART goal handout, and gives examples of each component - Specific, Measurable, Appropriate, Realistic, and Time Sensitive. Instructor tells participants to write down 2 personal SMART goals and share with the person next to them for feedback. [LO:4]


## Assessment Measures:

AM 1: From activity two individuals will have developed a composite sleep skills list and a list of ideas for a sleep-friendly bedroom

AM 2: SMART Goals relating to what assets or tips they plan to adapt from the lesson

## Materials, Resources, Preparation:

Writing instruments and paper
Area for groups to gather (3-4 each)

## Annotated Resource Bibliography:

Pronitis-Ruotolo, D. (2001, July). Surviving the Night Shift. The American Journal of Nursing, volume 101 number 7. Retrieved from
http://www.jstor.org.libproxy.plymouth.edu/stable/3522522?seq=2\#page_scan_tab_conte nts

- Peer reviewed article highlighting different coping strategies for keeping a regular sleep schedule when working night shift's frequently. Provides real life stories of individuals who have experienced the night shift and how they coped with the issues correlated to it.

Healthy People 2020. (n.d.). Sleep health. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/sleep-health

- Used as a resource for why sleep health is important and how it is a critical determinant. Provided information on the affect that sleep timing and duration have on the body and why adequate sleep is necessary for overall wellness.

Haughey, D. (n.d.). Smart goals. Retrieved from https://www.projectsmart.co.uk/smart-goals.php

- Provided information in regards to SMART goals and all of the parts that make up the goal to make it specific, measurable, appropriate, realistic, and time-sensitive. Received downloadable handout from this resource to help participants in the lesson better understand the concept of a SMART goal.

National Sleep Foundation. (n.d.). How much sleep do we really need. Retrieved from https://sleepfoundation.org/how-sleep-works/how-much-sleep-do-we-really-need

- Retrieved downloadable handout from this resource on the topic of how much sleep we really need based on an individual's age. Eighteen leading scientists and researchers came together for The National Sleep Foundation to develop the official recommendations found in the handout.

National Sleep Foundation. (n.d.). Six tips to design the ideal bedroom for sleep. Retrieved from https://sleepfoundation.org/sleep-news/six-tips-design-the-ideal-bedroom-sleep

- This resource provided a downloadable handout expressing six tips to design the ideal bedroom for sleep. It is important to take the time to design a sleep-friendly bedroom environment so that you can wake up feeling refreshed and not fatigued. Using all five senses can help accomplish this goal.

Michaud, L. (2016, January 19). 7 bad sleeping habits to avoid to receive a good night's sleep. Retrieved from http://www.alaskasleep.com/blog/7-bad-sleeping-habits-to-avoid-to-receive-a-good-nights-sleep

- Provided a list of seven bad sleeping habits to avoid to receive a good night's sleep. The list is published on the Alaska Sleep Clinic's website, a company that specializes in diagnostic testing for sleep disorders, they have a sleep clinic located in Alaska that was developed in 2002


## Appendix of Support Materials:

PowerPoint Presentation
Recommended Hours of Sleep Handout
Design a Sleep-Friendly Bedroom Handout
SMART Goals Outline Handout

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## SMART GOALS

Setting SMART Goals in 5 Easy Steps

| Name |  |
| :--- | :--- |
| Goal |  |
| Date |  |
| Reason this goal is important to me |  |


| Step | Concept | Description |
| :---: | :---: | :---: |
| 1 | Specific <br> Exactly what is it you want to change in regards to your sleep habits/bedroom environment. A good goal statement explains the what, why, who, where and when of a goal. If your goal statemen is vague, you will find it hard to achieve because it will be difficult to define success. |  |
| 2 | Measurable <br> You must be able to track progress and measure the result of your goal. A good goal statement answers the question, how much or how many. How will I know when I have achieved my goal? <br> Tip: This would relate to how many hours you require for a good night's sleep! |  |
| 3 | Appropriate <br> Your goal must be relevant to the topic and your sleep health. Examples of people who would agree with your goal could be the other students participating this activity, or the instructor. Is your goal remaining on topic? |  |
| 4 | Realistic <br> Your goal should be stretching, but realistic and relevant. Make sure the actions you need to take to achieve your goal are things within your control. Is your goal achievable? |  |
| 5 | Time-Bound <br> Goals must have a deadline. A good goal statement will answer the question, when will I achieve my goal? Without time limits, it's easy to put goals off and leave them to die. As well as a deadline, it's a good idea to set some short-term milestones along the way to help you measure progress. |  |



## Why is Sleep Health Important?

- It is considered to be a critical determinant of health
- Sleep is a basic requirement that everyone needs, it is especially important to infant, children, and adolescent health and development
- Sleep timing and duration affect our endocrine, metabolic, and neurological functions that are critical to the maintenance of individual health


## Sleep loss and untreated sleep disorders:

- Negatively impact family health and interpersonal relationships
- Reduce productivity
- Increase the chances of mishaps such as medical errors, workplace accidents (needle-stick injuries), and even motor vehicle crashes
- Increase the risk of:
- Heart disease
- High blood pressure
- Obesity
- Diabetes
- Mortality


## Adequate sleep is necessary to:

- Fight off infection
- Support the metabolism of sugar to prevent diabetes
- Perform well in all activities you choose to participate in
- Work effectively and safely in the workplace
- Decrease the chances of an accident due to fatigue


## Recommended Hours of Sleep

- Depends on the age of the individual, the older you are the less sleep you actually require
- Depends on the individual personally, regardless of age, some people tend to just need more sleep than others and some people don't require a lot of sleep to feel well rested throughout the day
- People within the age of $24-30$ tend to need 7-9 hours of sleep


## How to Survive the Night Shift

Some health care workers will be unable to adapt to night shifts
Coping:

- Avoid rapid rotation
- Wear sunglasses on the way home
- Follow a regular sleep schedule
- Use room-darkening techniques
- Avoid caffeine and nicotine
- Avoid using alcohol to help you sleep


## Avoiding Bad Sleeping Habits

- Sometimes we don't realize that things may be distracting us and preventing us from getting the recommended hours of sleep that we truly need

Things to Avoid:

- Eating too close to bedtime - lying down can cause stomach acid to rise into your throat making it uncomfortable
- Caffeine and nicotine - stimulants that can make it difficult to fall asleep
- Using technology in bed
- Odd sleeping hours - create a regular routine, try to avoid sleeping in or staying up late on your days off


## Tips to Design the Ideal Bedroom for Sleep

- Sometimes we don't realize that our environment can prevent us from getting a good night's sleep, make sure that your bedroom is sleep-friendly!!


## Tips for a Sleep-Friendly Bedroom:

1. Dimming the lights
2. Your room should make you feel relaxed and peaceful - but shouldn't distract you
3. A cool room is preferable
4. Choose mattresses, pillows, and sheets that are comfortable
5. Reduce noises in and outside your house, use a fan for a consistent soothing backdrop
6. Surround yourself with scents you like that are soothing to you

## Get Into Groups of 3-4!

Activity:

1. Create a list of your own positive sleep skills/things you avoid doing when going to bed - write them down on a piece of paper as well as what other members in your group offer up, perhaps things you would want to adapt yourself
2. Brainstorm and create a list with your group on your own ideas of how to create a sleep-friendly bedroom, what works for you? What do you think the ideal sleep-friendly bedroom should include?

## Create a SMART Goal

- A comprehensive way of goal setting by identifying a desired outcome that is:
- Specific
- Measurable
- Appropriate
- Realistic
- Time Sensitive
- Use the information that you gathered with your groups to develop a SMART Goal in regards to your sleep habits and sleep environment, something that you want to adapt and change about your sleep habits! Use the handout to help you.

Title: \#GetMoreSleepPSU
Author: Jaymie Fitzgerald

Time and Format: 45 minutes

Audience/Learners: Older adolescents; young adults.

Topic Overview: This lesson provides a capstone experience for participants following other lessons addressing the importance of sleep for health and ways to improve sleep habits. Participants will apply and evaluate ways to improve their sleep quality and habits using a social media.

## Healthy People 2020 Objectives:

SH4- Increase the proportion of adults who get sufficient sleep

Workshop Goal: Young adults will experience improved sleep quality and habits.

## National Health Education Standards addressed:

- Standard 1-Students will comprehend concepts related to health promotion and disease prevention to enhance health.
- Standard 4- Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks

Specific Learning Objectives - Through participation in this workshop learners will be able to:

1. Describe three health benefits of adequate sleep (NHES\#1)
2. List three ways to improve personal sleep habits (NHES\#1)
3. Tweet out at least 3 positive communications about health sleep habits. (NHES\#4)

## Key Concepts and Terminology:

Many young adults do not get enough sleep at night and don't acknowledge that it's a curtail element to health. Poor sleep health is a common problem with 25 percent of U.S. adults reporting insufficient sleep or rest at least 15 out of every 30 days. "The public health burden of chronic sleep loss and sleep disorders, coupled with low awareness of poor sleep health among the general population, health care professionals, and policymakers, necessitates a wellcoordinated strategy to improve sleep-related health."(healthypeople2020) When people don't get at least 6 hours of sleep a night they put themselves at risk for heart disease, high blood pressure, obesity, and diabetes. "Sleep health is a particular concern for individuals with chronic disabilities and disorders such as arthritis, kidney disease, pain, human immunodeficiency virus (HIV), epilepsy, Parkinson's disease, and depression." (healthypeople2020) We need to stress the importance of sleep education because we can increase the awareness of so many diseases
linked to poor sleeping habits. With the student's knowledge of what they learned in the previous lessons you can have a fun lesson incorporating social media.

## Teaching Steps:

- Activity 1: Set up a hashtag \#GetMoreSleepPSU and have students each post one test Tweet. Have a live feed on the computer screen to see tweets.
- Activity 2: Group "shout out" on all the benefits of sleep. Gather into a word cloud (alternatively do this in small groups and "tweet" out a photo of cloud to \#GetMoreSleepPSU
- Activity 3: Students will get into groups of 3 and brainstorm about things they might really do to improve their sleep habits and quality of sleep. Ask for specific things (goals?) Instructor demonstrates a picture of a specific way to gets a good night's sleep and uploads it to a social media site.
- Closure: Review home assignment: Students will tweet out to \#GetMoreSleepPSU something that they learned from class that helps them sleep better at night.


## Assessment Measures:

AM1: Word cloud; complete list of benefits (LO \#1)
AM2: Initial in class tweet to check for social media competency (LO 3)
AM3: Hashtags from student on application of skills and knowledge (LO\#2, 3).

## Materials, Resources, Preparation:

1. Cell phone with camera
2. Create a twitter account if student doesn't already have one.
3. Chalk Board/White Board
4. Projector for PowerPoint presentation

## Annotated Resources Bibliography:

Center for Disease Control (CDC). (August 18, 2016). National Health Education Standards.
Retrieved from http://www.cdc.gov/healthyschools/sher/standards/index.htm on Nov. 17, 2016.
-Scholarly source with additional facts and information

Healthypeople2020. sleep health. (2014). retrieved November 27, 2016, from https://www.healthypeople.gov/2020/topics-objectives/topic/sleep-health
-Excellent source where I found most of information listed under key concepts and terminology.

Meyer, K. A., Wall, M. M., Larson, N. I., Laska, M. N., \& Neumark-Sztainer, D. (2012). Sleep duration and BMI in a sample of young adults. Obesity, 20(6), 1279-128 doi:10.1038/oby.2011.381
-Additional facts found here about the importance of sleep health

## Appendix of Support Materials:

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Title: \#GetMoreSleep: Creating a positive sleeping environment

## Author: Taylor Raney

Time and format: 3 Hour -group meeting; snack breaks
Audience/Learners: College students in a residence hall.
Topic Overview: Sleep health.
Getting a good night of sleep is important to academic success. Life on a college campus is generally not the best environment for sleeping and poor sleep is a common problem. This lesson will help to address strategies for establishing an environment that is conducive to sleeping.

Workshop Goal: To increase opportunities for student participants to get adequate sleep.

## National Health Education Standards:

Standard 1: Students will comprehend concepts related to health promotion and disease prevention to enhance health.

Standard 7: Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.

Standard 8: Students will demonstrate the ability to advocate for personal, family and community health.

Learning Objectives - By the end of this workshop, participants will be able to:
LO 1: Describe three qualities of "good sleep". (NHES \#1)
LO 2: Identify three factors that negatively impact sleep. (NHES \#1)
LO 3: Describe the qualities of an environment that supports or enhances falling sleep (NHES \#7)
LO 4: Plan three ways to advocate for better sleeping environment with peers, roommates and friends. (NHES \#8)

## Concepts and Terminology:

## - Why is Sleep Health Important?

- Sleep, like nutrition and physical activity, is a critical determinant of health and wellbeing. Sleep is a basic requirement for infant, child, and adolescent health and development. Sleep loss and untreated sleep disorders influence basic patterns of behavior that negatively affect family health and interpersonal relationships. Fatigue and sleepiness can reduce productivity and increase the chance for mishaps such as medical errors and motor vehicle or industrial accidents.
- Poor sleep health is a common problem within 25 percent of the United States population. On average adults are reporting insufficient sleep or rest for at least 15 out of every 30 days. The public health burdens from chronic sleep loss and sleep disorders, coupled with low awareness of poor sleep health among the general population, health care
professionals, and policymakers, necessitates a well-coordinated strategy to improve sleeprelated health.
- Adequate sleep is necessary to fight off infection, support the metabolism of sugar to prevent diabetes, perform well in school and work effectively and safely
- Sleep timing and duration affect a number of endocrine, metabolic, and neurological functions that are critical to the maintenance of individual health. If left untreated, sleep disorders and chronic short sleep are associated with an increased risk of heart disease, high blood pressure, obesity, diabetes and all-cause mortalities.
- Sleep health is a particular concern for individuals with chronic disabilities and disorders such as arthritis, kidney disease, pain, human immunodeficiency virus (HIV), epilepsy, Parkinson's disease, and depression. Among older adults, the cognitive and medical consequences of untreated sleep disorders decrease health-related quality of life, contribute to functional limitations and loss of independence, and are associated with an increased risk of death from any cause.
- Qualities of a sleep environment: (cite source)
- Clean and orderly
- Adequate ventilation
- Comfortable temperature and humidity
- Calming colors
- Lighting
- Sound control


## Teaching Steps:

## Engage and Motivate:

1. Introduce each other and share about most recent sleep experience. As a group discuss what students think about the definition of "Sleep". Break into smaller groups to write out their thoughts about "good sleep" on a white board to record thoughts. Debrief with larger group.(30 min) (LO\#1)
2. Show video on sleep. (10 minutes) (LO\# 1\&2)
3. Lecture/discussion on the importance of sleep for good health. ( 30 min ) (LO\#1\&2)
4. Yoga break - centering ( 30 min .)
5. Participants return to resident hall rooms and take photos of sleeping quarters in all dimensions to use in evaluating the quality of the sleeping space. (1 hour)
6. Brief presentation on the environmental factors that impact getting to and staying asleep (20 $\min )$
7. Partners will look at each other's sleeping spaces and rate according to sleep quality parameters. ( 30 min ) (LO 3\&4)
8. Partners produce a list of simple changes that can be made to improve the sleeping environments. Care and share and compare differences between peoples' ideas. ( 10 min )

## Assessment Measures:

AM 1: Photo of white board product
AM 2: Photos of sleeping spaces
AM 3: Care and share results

## Materials \& Preparation:

$>$ Open space with TV's and white boards
> Camera's or smartphones
> Computers that have an HDMI import so can hook up to the TV's
$>$ Benefits of sleep handouts, PowerPoints and videos

## Annotated Bibliography:

National Health Education Standards. (2016). Retrieved November 04, 2016, from http://www.cdc.gov/healthyschools/sher/standards/index.htm

Sleep Hygiene. (n.d.). Retrieved November 04, 2016, from https://sleepfoundation.org/ask-the-expert/sleep-hygiene

Sleep Health (n.d.). Healthy People 2020, retrieved on Web. 09 Dec. 2016.
"See." See: Visual Conditions \& Sleep - National Sleep Foundation, retrieved on Web. 09 Dec. 2016.

Matthew A. Ctensen1, Bettencourt, L., Kaye, L., 3, Sai T. Moturu3, Kaylin T. Nguyen1, Jeffrey E. Olgin1, Mark J. Gregory M. Marcus1 * Direct Measurements of Smartphone ScreenTime: Relationships with Demographics and Sleep
\#GetMoreSleep: Creating a positive sleeping environment by Taylor Raney is licensed under a Creative Commons AttributionNonCommercial 4.0 International License.

## Title:

How do YOU sleep?\#GETMORESLEEP
Author:
Montana Dunstan

## Time \& Format:

45-minute workshop

## Audience/Learners

College Students (undergraduate or graduate)

## Topic Overview:

Students will be able to understand how a Fitbit works and apply that knowledge to tracking sleep. Students will also keep track of their activities around their sleep. College students perform many different activities that are taking a huge toll on their sleep health. Many of them are not aware of this. This workshop will help the students understand what their quality of sleep is and will begin them thinking about some of the barriers that are causing this kind of sleep, or lack thereof.

## Healthy People 2020 Objective(s):

o Increase the proportion of adults who get sufficient sleep
o Increase the proportion of persons with symptoms of obstructive sleep apnea who seek medical evaluation

## Workshop Goal:

To increase the student's awareness of sleep quality by using a motion monitoring device and the activities performed around their sleep

## National Health Education Standards addressed:

o Standard 1: Students will comprehend concepts related to health promotion and disease prevention to enhance health.
Performance Indicator -1.2.2 Recognize that there are multiple dimensions of health.
o Standard 3: Students will demonstrate the ability to access valid information, products, and services to enhance health.
Performance Indicator- 3.12.3 Determine the accessibility of products and services that enhance health.
Performance Indicator- 3.8.2 Access valid health information from home, school, and community. o Standard 6: Students will demonstrate the ability to use goal-setting skills to enhance health.
Performance Indicator- 6.12.3 Implement strategies and monitor progress in achieving a personal health goal.

## Specific Learning Objectives (linked to NHES and assessments):

Through participation in this workshop learners will be able to:
[L01: Describe and accurately use a Fitbit and a Fitbit application. (NHES 3\&6)]
[LO2: Describe and Apply the usage of a non-technology source to track sleep and movements around sleep. (NHES 3\&6)]
[LO3: Create a list of subjects that are important to track when regarding sleep and topics related to sleep (NHES 1)]
[LO4: Describe the application of these concepts in their current living situations (NHES 3)]

## Key Concepts \& Terminology:

Track: Follow a course or trail (of someone or something), in order to observe and document the progress.
Document: Record (something) in written, photographic, or other form.
Observation: The action or process of observing something or someone carefully in order to gain information.
Recording: The action of writing or some other permanent form for later reference.
Why track your sleep?: Tracking your sleep offers the ability to monitor the sleep that you're getting and let you know from the data whether you're getting enough sleep, too much sleep or not enough good sleep. Fitful sleepers may be able to get an idea of what time of night they are able to get the best sleep. Also, people who don't get sleep on a regular pattern can get information that might help them either establish a pattern or at least see what they're doing with their activities during the day when their pattern is off.
Why do we need sleep and how much do we need: Sleep is important for a number of reasons. It restores our energy, fights off illness and fatigue by strengthening our immune system, helps us think more clearly and creatively, strengthens memory and produces a more positive mood and better performance throughout the day. Sleep is not just a passive activity and something to fill the time when we are inactive, but rather it is an active and dynamic process vital for normal motor and cognitive function. Most adults need somewhere between 6-10 hours of sleep per night. Different people need different amount of sleep to feel rested.
Why college students: Daytime sleepiness, sleep deprivation, and irregular sleep schedules are highly prevalent among college students, as 50\% report daytime sleepiness and $70 \%$ attain insufficient sleep. The consequences of sleep deprivation and daytime sleepiness are especially problematic to college students and can result in lower grade point averages, increased risk of academic failure, compromised learning, impaired mood, and increased risk of motor vehicle accidents.

## Teaching Steps [45]:

1) Engage and Describe [ 5 min ]
o Introduce the Fitbit and explain how it tracks your sleep
o Pass out the Fitbits (one to each person)
o Show them how to wear it appropriate and how to use the app to track with it

## 2) Do and Examine [10 min.]

o The students go outside and take a walk around the building/campus. (try to make it last at least 5 minutes)
o Have them take a video for their Instagram while walking around the building/campus and have them add their own custom hashtag that they think is appropriate
o Once back in the classroom, have them open the Fitbit application and use what they learned to determine how many steps they walked and calories burned, etc. (this helps them get familiar with the application)
o Have them write down their results and post another picture to Instagram with a new caption that they think captures their results

## 3) Analyze and Apply/Create/Integrate [10 min.]

o Pass out a blank grid sheet of paper (2 for each person)
o Have the students get into groups of 3 or 4
o In their groups the students will come up with ideas of what they think they should track along with their sleep. If students are struggling gear them towards what they do before sleep, or things that they think could affect their sleep in general.

## 4) Assess [15 min]

o Gather the groups together and bring their attention upfront
o Together combine ideas and narrow it down to a list of 4 things to put in the grid to track along with your actual sleep.
o Have them fill out their second chart as a finalized copy in which they will use at home to record the data
o Have them take a picture of this chart and post it on Facebook with the caption "How are YOU sleeping?"

## 5) Close [5 min]

o Tell the students to track their data for one week
o Tell the students to come to the next few workshops prepared with their data to discuss and analyze it.

## Assessment Measures:

AM 1: Photos of walking posted to Instagram with a custom \#
AM 2: Results for walking at least 5 minutes also posted to Instagram with a custom \#
AM 3: A finalized chart of what will be recorded posted to Facebook with the caption "how are YOU sleeping?"

## Materials, Resources, Preparation:

o Fitbits
o Make sure everyone has a cell phone or computer that can run the Fitbit app, Snapchat, and Facebook
o Whiteboard to brainstorm ideas as a whole class
o Enough grid sheets to cover 2 per person
o A safe place to walk around for a minimum of 5 minutes
o Pens and Pencils for students who did not bring any

## Annotated Resource Bibliography:

@coolcatteacher, V. D. (2014, February 27). A Guidebook for Social Media in the Classroom.
Retrieved November 17, 2017, from https://www.edutopia.org/blog/guidebook-social-media-in-classroom-vicki-davis

- This resource helped me reassure that I wanted to use social media in my lesson plan. It gave some great ways teachers use social media in classrooms now so I could get a feel for how they make use of it and incorporate it into learning.

Crowley, B. (2016, April 29). Connecting a Classroom: Reflections on Using Social Media With My Students. Retrieved November 17, 2016, from
http://www.edweek.org/tm/articles/2015/09/09/connecting-a-classroom-reflections-on-using-social.html

- This source also helped me firmly decide that I should incorporate social media into my lesson plan. It lists off many good reasons to why to connect. It also had some good ways
to help me choose my platforms. These ideas led me to the decision of Instagram instead of snapchat.

Do You Need To Track Your Sleep? (n.d.). Retrieved November 16, 2016, from http://www.fitnessexact.com/tracking-sleep/

- This source is what led me to the idea of the grid and tracking things other than just your sleep patterns. It made me think about how much outside sources affect your sleep so I felt that is was needed to keep track of some of these things to get correct data and help analyze in later workshops.
F. (Ed.). (n.d.). How do I track my sleep? Retrieved November 15, 2016, from https://help.fitbit.com/articles/en_US/Help_article/1314
- This article helped me understand why exactly you would want to track your sleep and why it's important. I wanted to be able to tell my students that there is a reason behind doing all of this. I feel this source gave this workshop good validity.
Hershner, S. D., \& Chervin, R. D. (2014, June 23). Causes and Consequences of sleepiness among college students. Retrieved December 09, 2016, from
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4075951/\#!po=64.0625
- This article helped me with communicating why college students particularly struggle with getting enough sleep. It helped me summarize the lots of information into a small informative few sentences to get the point across. It was pretty eye opening to see the crazy statistics that college experience relating to sleep.
Sleep Rocks! ...get more of it! (n.d.). Retrieved December 09, 2016, from https://www.uhs.uga.edu/sleep
- This article helped me understand why we need sleep and gave a brief overview of how much we need. I thought this was a great resource to add to my key terms and concepts to help others who use this lesson plan really understand why they would want to use this lesson plan and its importance.
W. (n.d.). External Factors that Influence Sleep. Retrieved November 14, 2016, from
http://healthysleep.med.harvard.edu/healthy/science/how/external-factors
- This source helped me understand more about how to use the Fitbit so I can explain it thoroughly to the students. It helps if they have any questions that you don't know, you can probably find them on this page. It's a great source for people just starting out with this new Fitbit technology.


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