GETTING STUDENTS TO THINK CRITICALLY INSIDE AND OUTSIDE OF THE CLASSROOM
… ABOUT STRESS AND SLEEP DEPRIVATION

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I teach psychology and sociology, and the subject of critical thinking generally comes up in the first or second textbook chapters of both disciplines. The pros and cons of stress, eustress (a healthy stress), sleep, and sleeping problems are usually found in the “Health, Stress, and Well-Being” or “Health and our Society” chapters, or some similar chapter headings, of these textbooks. Since students are usually interested in these two subjects, it is not so difficult to get their attention. I also peak their interest by telling them that I am going to explain to them how they can get rid of stress and get more sleep. They are a bit less enthused when I tell them that they might have to change their behavior and work at getting these rewards, in addition to having to think. Think! Some are amazed. “How could this teacher, or any professor, ask us to do such a thing. Think?”

We then go through a short relaxation routine and carry on with the business of thinking critically. I am kidding a bit here, but I do advise them that they must think critically in order to get or change anything in their lives, not just sleeping habits and stressful lifestyles. They must see that critical thinking is to be used inside and outside of the classroom.

I was honored to be greeted by 100 students and faculty in Rennie Forum on December 8, 2004, for a PowerPoint lecture that I presented on Thinking Critically About Stress and Sleep Debt: Strategies for Prevention and Change. I informed the audience that the typical college student gets an average of 6 to 6½ hours. This is not enough sleep for the average, busy adult. I further explained to the audience that we are supposed to use our high technology and other “time savers” to enhance our lives and save us some time, but what many of us do is to use our newfound time to do more things, and at a faster pace. Many Americans seem pressed into high gear. We are doing too much – simply because we can.

“You might have thought like a scientist in order to help yourself.” This is one thing I tell my students as an introduction to understanding the importance of critical thinking, and slowing down the pace of their minds and bodies. It is good that most students come into the classroom having a basic understanding as to what critical thinking is anyway. My experience has been that students like learning the organized and strategic steps to critical thinking. Getting them to understand that this “new” type of thinking should become a part of their lives and that they should apply it in learning as well as life is another story.

Depending on the makeup and personalities of my classes, sometimes before teaching and discussing the professional and general definition of critical thinking, I might ask the students a certain set of questions about a particular subject. Today’s subject is sleep and how the lack of it can cause stress:
1. Do you get drowsy and fatigued during the day?
2. Do you feel stretched for time, like there aren’t enough hours in the day?
3. Do you go to sleep as soon as your head hits the pillow?
4. Do you need an alarm clock to wake up?
5. Do People in Nashville, Tennessee, get a better night’s rest than people in Washington, D.C.?
6. Do you often feel irritable and tired?
7. Does your society dictate your actions?
8. Is the prefrontal cortex located in the front or back of the brain?

Classroom instruction for discussion: I might begin with the question, “Which one of the above is a critical-thinking question? Choose the most logical answer.” The students choose an answer. We discuss it (you know how time consuming this could be); we then address the other answers, and think more carefully about them. (Find the answer to #5 and information about the other questions at the end of this article.)

It is now time for the students to get a more in depth and academic understanding of critical thinking. Many definitions apply to the term critical thinking. The first simple definition of critical thinking that I give students is the same one that I gave in an article I wrote as a Special to the Owl (PGCC student newspaper) in 1995: “Critical thinking is to cast a skeptical and mental eye on all available information, then make a rational, logical, and intelligent decision.”

According to the Foundation for Critical Thinking, “Critical thinking is that mode of thinking – about any subject, content, or problem – in which the thinker improves the quality of his or her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them.”

Some parts of this next definition come from Psychology: Concepts & Connections (Rathus): Critical thinking is to examine definitions and terms, foster the ability to inquire about causes and effects, as well as increase one’s curiosity about certain behaviors about oneself and/or others. A critical thinker should also be able to analyze arguments rationally. They cannot really do this if they are stressed or sleep deprived. A sleep-deprived person experiences lowered decision-making and learning skills, poor concentration, and faulty memory.

From lecture and discussion, the students already understand that a good critical thinker is also an independent thinker. Therefore, they know to utilize the best definition in their lives for whatever they might personally need to gain or change. As a class, we formulate a problem and decide on a solution.

Problem: Lack of sleep is causing stress. Because of this, concentration, memory, learning, likeability, and thinking skills are lowered. Irritability, frustrations, negative moods, and emotions are heightened.

Solution (Critical Thinking Steps):
1. Raise important and clear questions about the problem. For example: “Why don’t I get enough sleep?” And if it is a time management problem (and it usually is), ‘What exactly steals my time?’

2. Carefully evaluate and analyze your answers. Be a healthy skeptic. “I don’t get enough sleep because I don’t have enough time?” Is that really the case? Evaluate the evidence.

3. Learn about sleep and stress. Gather and access relevant information on why you are stressed out or sleep deprived. Arm yourself with knowledge. Many studies have shown that the more knowledge a person has about a particular bad habit and how it can negatively affect you, risky and negative behaviors decreased (as knowledge increased). Ask yourself, “What (or who) are my stressors?”

4. You must come to a well-reasoned and intelligent conclusion. Take sensible and realistic steps to solve the problem. For example, a good critical thinker will know that you can not assume that you will be able to change your sleeping habits from four or five hours a night to seven or eight hours a night … overnight.

5. Be open-minded. Assess and obtain alternative ideas from others. Be willing to let go of previous judgments about yourself, and even others. Know that you can change sleeping habits, stress levels, and lifestyle.

Dr. James Maas, sleep expert and researcher, states that in order to get rid of sleep deprivation and stress, some good starting points might be to set a bedtime, then go to bed at this time every night, including weekends. Do not take problems to bed; try to resolve them, or “agree to disagree” (This is my suggestion.). Maas says to have no caffeine within six hours of the set bedtime, and try to get in a good 15-minute power nap during the day. However, my research shows that a 12-minute nap might be better, because a 15-minute nap might turn into an hour of sleep for a sleep-deprived person.

As sociological and psychological beings, we allow many things in life to stress us out, and cause us to lose sleep. Our lifestyles generally are determined by our culture and society; though some stresses are most certainly self-imposed. I implore students to take the time to think critically, to manage their time wisely, and to take the time to de-stress in order to find more time for a restful night’s sleep. Clearly, critical thinking can be taught and learned. In this regard, my classes have enjoyed and benefited from Prince George’s Community College’s “Year of Critical Thinking.”

Addressing the questions from the top of the article:

If you a) feel drowsy and fatigued during the day; b) fall asleep as soon as your head hits the pillow; c) need an alarm clock to wake up; or d) feel stretched for time, you are probably stressed, sleep deprived, or both (Maas, J., Power Sleep, 1999).

Recent studies show that people in Washington, D.C. get more sleep than people in Nashville, Tennessee (Washington Post, December 5, 2004, www.parade.com; click on “intelligence”). Scientific studies are a must; we cannot always just use our common sense.

By the time the question is asked about behavior and society, my students have already learned from our discussions of the first two or three chapters, or from previous experience or classes,
that many of our actions are most certainly dictated by our society. So, the answer to this question was already pre-learned.

Studies have shown that the front portion of the brain, the prefrontal cortex, is the first to go to sleep and the last to wake up. This is the part of the brain where critical thinking, intellect, logical thinking, and decision making lives. This is the executive part of the brain. If this part of the brain is experiencing stress and strain, it is going to make it difficult for a person to think critically.

References:
Barber, Auset-Janet, “Thinking Critically about Stress and Sleep Debt: Strategies for Prevention and Change.”
BRIDGE Program, Dixon Research Center, Morgan State University; Rennie Forum, Prince George’s Community College, 2004.