Utilizing Memory Strategies for Test Preparation
by Rebekah Reysen, Ph.D., NCC, Learning Specialist

One of the first things I tell my students is that the word “study” means something different for everyone. Some people create elaborate study guides with questions and answers, mind maps, charts, etc., while others take 10 minutes to glance over a textbook right before they take a test (you can probably tell which method is more effective than the other). Here are a couple of suggestions for memory strategies and test preparation.

Studying is like Eating!
I frequently compare studying to eating – if we don’t eat, we starve. If we eat all three square meals at once then we get sick! The human memory and how it retains information is quite similar; studying in chunks is much better than cramming. Instead of studying 6 hours the night before a test, break those hours into chunks throughout the week, such as an hour per day for 6 days. Memory research supports this idea. The Serial Position Effect (Murdock, 1962) is a phenomenon whereby information is recalled much more frequently at both the beginning and end of the time spent studying. This is what makes cramming such an inefficient strategy. With 6 hours of cramming, there are just a couple of chunks to remember – the beginning and the end. But with 6 separate study sessions, there are 12 chunks – the beginning and end of each session.

There’s More than One Way to Skin That Cat!
There are a variety of study skills that can help with remembering important class content, including Cornell notes, mind maps, the SQ4R, etc. All of these tasks have one thing in common – taking information in one form (e.g., textbook pages), thinking critically about the material, and transforming the information into another “product”. The key to this process, if done correctly, is thinking critically – not just cutting and pasting information, which doesn’t require thinking whatsoever. In the case of a Cornell note, for example, students can write key questions on the left hand side of their page, answers to those questions on the right hand side of the page, and a summary paragraph of the material at the bottom of the page. This allows students to not only create a study guide for their exam, but actually helps them retain information throughout the process.

Other Tips
In addition to the tips mentioned above, I also recommend that students compartmentalize their time by making sure when they are in class they are truly “mentally attending” as well. Remembering class material is very difficult if students are texting, talking to their peers, and surfing the internet during class and study time. Additionally, I recommend students take time both before and after class to think critically about material. Coming to class prepared, taking good notes, and then creating study guides right after class can add up to studying at least 2 hours a day per class, right off the bat.

For more information about studying strategies and how they relate to the human memory, consider attending Dr. Matthew Reysen’s presentation, Applying Basic Memory Principles to Test Preparation and Studying Techniques, on October 22nd!
“Now, the Star-Belly Sneetches had bellies with stars. The Plain-Belly Sneetches had non upon thars.”
-Dr. Seuss, The Sneetches

References

**Thinking via Bloom’s Taxonomy**
by Nancy Wiggers, Ph.D., Learning Specialist

“No words are oftener on our lips than thinking and thought” (Dewey, 1910, p. 1). You cannot go to any gathering of educators, formal or informal, without the topic of wanting students to “think” being mentioned.

As educators our vocation is encouraging students to think and to develop attributes associated with thinking, e.g. “curiosity, commitment to objectivity, delayed judgment, skepticism, and persistence,” (Svinicki, 2004). Curricula, course objectives, and assessments are devised to ensure that students not only learn the information provided them, but also internalize it, and use it in a way that allows them to grow.

Though there are other models that describe thinking and learning, one of the most common is that proposed by Benjamin Bloom in 1956. Bloom’s model of critical thinking is readily accessible and applicable to classroom instruction and assessment. Despite undergoing some revision in recent years, the basic model is still used in most educational contexts, e.g. instructional design, instructor training, textbook publishing, standardized testing, etc.

Bloom’s Taxonomy divides thinking into 6 levels from least to most complex:

- **Remember**: recall information provided
- **Understand**: summarize, paraphrase, infer from information provided
- **Apply**: use what has been provided in new situations
- **Analyze**: dissect situations or problems to identify patterns and trends
- **Evaluate**: take what is known to form something new and different, e.g. argument, hypothesis, etc.
- **Create**: form something new and different, e.g. argument, hypothesis, etc.

Each step moves students from being dependent on an extrinsic source of knowledge to independent creators of their own knowledge, which is a goal in education.

A common technique that college instructors use to illustrate Bloom’s Taxonomy includes the tale of “Goldilocks and the Three Bears;” however, I prefer to use my favorite story by Dr. Seuss, “The Sneetches,” a tale concerning exclusionary practices of a social group based upon preferences for body art, i.e. “bellies with stars.”

Of course, the moral of the story concerns discrimination, but one could look at the tale from various perspectives, e.g. evaluating McBean’s entrepreneurial endeavors, contemplating the engineering required to create such a tattoo machine, etc. One could also take it a step further and create an alternative ending. For example, after all of the “feel-good” celebrations associated with the realization that a “Sneetch is a Sneetch...” perhaps one Sneetch returned home to emails about upcoming bills and parking fines. Upon reading this news, she suddenly became aware of her bright red, itchy belly, which prompted her to remember the events of the day, comprehend the drain on her bank account, apply this information to the money required for the upcoming emergency room...
visit, **analyze and evaluate** the consequences of her actions in this new context culminating in one overwhelming thought, “OMG! What did I do?”

Bloom’s model provides educators with an easy tool to conceptualize their own thinking, model behaviors associated with it, and guide students to do the same. As a result, students have the opportunity to learn what is out there, make it their own, and create something new.

**References**


This newsletter is created and distributed by the Center for Excellence in Teaching and Learning.