Study Practices that Produce Results

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ACES Student Success Workshop [09.16.2020]
4 Common Misconceptions that Undermine Learning

1. Learning is fast

Dr. Sam Chew’s How to Study video series at http://www.samford.edu/how-to-study/
Deep, Durable Learning Takes **LOTS of Time** and is **Hard Work** –
Hard Work that no one else can do, but **YOU!**
4 Common Misconceptions that Undermine Learning

1. Learning is fast
2. Knowledge is composed of isolated facts

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Bloom’s Taxonomy

- **Remembering**: Recognize and recall previously memorized information.
- **Understanding**: Demonstrate an comprehension of the facts.
- **Applying**: Use information to solve problems; transferring theoretical concepts to practical situations.
- **Analyzing**: Break objects or ideas into component parts, determining how parts relate to one another and to the overall structure.
- **Evaluating**: Judge the validity of ideas or quality of work based on a set of criteria.
- **Creating**: Combine information to produce a unique idea, solution, or product.

Cognitive Level
Bloom’s Taxonomy Quiz

1. What is the definition of socialization?  Remember (L)
2. Carry out an authentic research project.  Create (H)
3. What will happen if the steps in the mixing process are changed?  Analyze (M)
4. Calculate the number of calories in a taco.  Apply (M)
5. Summarize the steps in the scientific method.  Understand (L)
6. Is chicken from free range farming superior to the other farming techniques? Explain.  Evaluate (H)

Remember  Understand  Apply  Analyze  Evaluate  Create
### Connecting Bloom’s Taxonomy to Learning Activities

<table>
<thead>
<tr>
<th>Level of Bloom’s Taxonomy</th>
<th>Explanation of Level</th>
<th>Example Verbs Used for Learning Objectives</th>
<th>Example Learning Activities</th>
</tr>
</thead>
</table>
| Remembering              | Recognize and recall previously memorized information, such as facts, terminology, problem-solving strategies, rules | Arrange, define, identify, label, list, match, name, recall, recite                                      | Quiz self on vocabulary words using flash cards  
                                    |                                                                                                    | Practice labeling a diagram or picture                                                                 |
| Understanding            | Demonstrate an understanding of the facts, such as explaining a concept in your own words | Classify, compare, contrast, differentiate, discuss, distinguish, describe, explain, rewrite                | Explain a concept in your own words  
                                    |                                                                                                    | Discuss course content with peers                                                                 |
| Applying                 | Use information to solve problems; transferring theoretical concepts to practical situations | Apply, calculate, demonstrate, examine, illustrate, solve, use                                          | As you review a process ask what would happen if you changed a step or level in the process       |
| Analyzing                | Break objects or ideas into component parts, determining how parts relate to one another and to the overall structure | Analyze, breakdown, deconstruct, examine, infer, model, question, select                               | Analyze and interpret data  
                                    |                                                                                                    | Compare and contrast two ideas or solutions                                                           |
| Evaluating               | Judge the validity of ideas or quality of work based on a set of criteria             | Appraise, argue, assess, critique, evaluate, grade, judge, recommend                                      | Develop or use a rubric to provide a written peer assessment of strengths and weaknesses of another student’s work |
| Creating                 | Combine information to create a unique idea, solution, or product                    | Assemble, create, combine, compose, construct, hypothesize, reorganize, synthesize                        | Generate a hypothesis or design an experiment based on the topic area you are studying            |
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3. Being good at a subject is a matter of inborn talent rather than hard work

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Growth vs. Fixed Mindset

**GROWTH MINDSET**

“Failure is an opportunity to grow”
“I can learn to do anything I want”
“Challenges help me to grow”
“My effort and attitude determine my abilities”
“Feedback is constructive”
“I am inspired by the success of others”
“I like to try new things”

**FIXED MINDSET**

“Failure is the limit of my abilities”
“I’m either good at it or I’m not”
“My abilities are unchanging”
“I don’t like to be challenged”
“My potential is predetermined”
“When I’m frustrated, I give up”

“Feedback and criticism are personal”
“I stick to what I know”

Mindset (2007) by Carol Dwek
4 Common Misconceptions that Undermine Learning

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4. I’m really good at multi-tasking, especially during class or when I am studying

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The Bottomline: Evidence from psychology, cognitive science, and neuroscience suggests that when students multitask while doing schoolwork (Paul, 2013):

- Learning is far spottier and shallower than if the work had their full attention
- Remembering and understanding is substantially decreased
- Concentrating and applying their learning to new contexts was more difficult
- Studying is not only less effective, it is also less efficient

Replace Distracted Learning with The Study Cycle and Focused Study Sessions!
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POLL

Q. Which of these 4 misconceptions is easiest for you to believe is true?

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The Study Cycle

A comprehensive 5-step framework to help guide and develop your study practices

Get prepared

PREVIEW
- Before class, skim new material.
- Note big ideas.
  5-15 minutes

THE STUDY CYCLE

CHECK
- Can I teach this material to someone?
- Are my study methods effective?

ATTEND
- Go to class!
- Take notes.
- Ask questions.

STUDY
Schedule several focused study sessions per class each week.
  30-50 minutes

REVIEW
- Read notes.
- Fill in gaps.
- Develop questions.
  10-15 minutes

Be present

From: LSU Student Success Center
Be Present. Maximize your learning DURING lecture. It’s Prime Encoding and Note Making Time!

Mind Full, or Mindful?
A comprehensive framework to help guide and develop your study practices.

**The Study Cycle**

1. **Get prepared**
   - **PREVIEW**
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     - Note big ideas.
     - 5-15 minutes

2. **Be present**
   - **ATTEND**
     - Go to class!
     - Take notes.
     - Ask questions.

3. **Do Focused Study Sessions**
   - **STUDY**
     - Schedule several focused study sessions per class each week.
     - 30-50 minutes

4. **Post-Lecture Review**
   - **REVIEW**
     - Read notes.
     - Fill in gaps.
     - Develop questions.
     - 10-15 minutes

From: LSU Student Success Center
Focused Study Sessions

Set your **GOALS** for the study session

Make studying **ACTIVE & at the **REQUIRED LEVEL** of Bloom’s Taxonomy!**

Spaced out study sessions that allow you to learn the material step-by-step over time, rather than all at once during cramming sessions right before the exam.

- **PLAN**
  - Decide what you will accomplish in your study session and get started.
  - (Suggested time: 1 - 2 minutes)

- **STUDY**
  - Interact with material: organize, concept map, summarize, process, read, work problems.
  - (Suggested time: 30 - 50 minutes)

- **BREAK**
  - Step away from material to clear your head.
  - (Suggested time: 5 - 10 minutes)

- **RECAP**
  - Go back over, summarize, wrap-up and check what you studied.
  - (Suggested time: 5 minutes)

- **CHOOSE?**
  - Should I continue studying?
  - Should I take a break?
  - Should I change tasks or subject?

From: LSU Student Success Center
Make Studying ACTIVE, NOT Passive

Passive: Some of the most commonly used, yet least productive learning strategies, are:

- Re-reading the material
- Underlining and highlighting
- Massed practice (i.e., cramming)
- Blocked practice (studying one topic at a time)

These activities generate a feeling of familiarity, but familiarity ≠ mastery; students must be fully engaged in building course content in their OWN brain to achieve mastery!
Make Studying **ACTIVE, NOT Passive**

**Active:**

**Retrieval Practice:** Practice retrieving newly learned material from memory (e.g., self quizzing)

**Generation:** Work on problems without looking at an example

**Elaboration:** Finding additional layers of meaning in new material (i.e., relating it to what you already know, explaining it to others in your own words, or explaining how it relates to your life outside the classroom (i.e., expanding to a larger context)

**Reflection:** Stop and think about what you are learning and why you are learning it
Focused Study Sessions

Set your GOALS for the study session

Make studying ACTIVE & at the REQUIRED LEVEL of Bloom’s Taxonomy!

REST following learning is crucial for restoring energy & motivation and for allowing information to “sink in.”

SUMMARIZE & CHECK what you have learned

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Test yourself, before the test

Do Focused Study Sessions

From: LSU Student Success Center
Q. Which step of the Study Cycle is/would be the most challenging for you to put into practice?

**THE STUDY CYCLE**

**PREVIEW**
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  *5-15 minutes*

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References and Resources

Chew, S. How to Study video series. Retrieve from: http://www.samford.edu/how-to-study/


