

# Becoming Expert Learners

Teaching Students  
How Learning Works



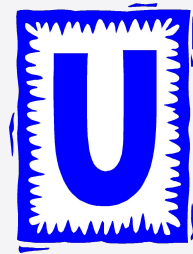
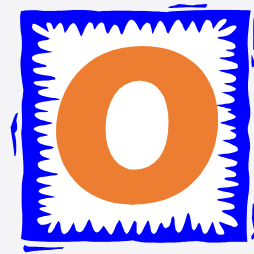
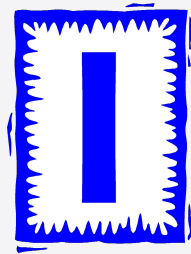
# Presented by

# Michelle Blank

Goshen College  
mblank@goshen.edu



# Count the Vowels



How accurate are you? 30 seconds...

Dollar Bill

Dice

Tricycle

Four-leaf Clover

Hand

Six-Pack

Seven-Up

Octopus

Cat Lives

Bowling Pins

Football Team

Dozen Eggs

Unlucky Friday

Valentine's Day

Quarter Hour

Write down as many words or  
phrases as you can remember  
from the list.  
30 seconds...

Dollar Bill

Dice

Tricycle

Four-leaf Clover

Hand

Six-Pack

Seven-Up

Octopus

Cat Lives

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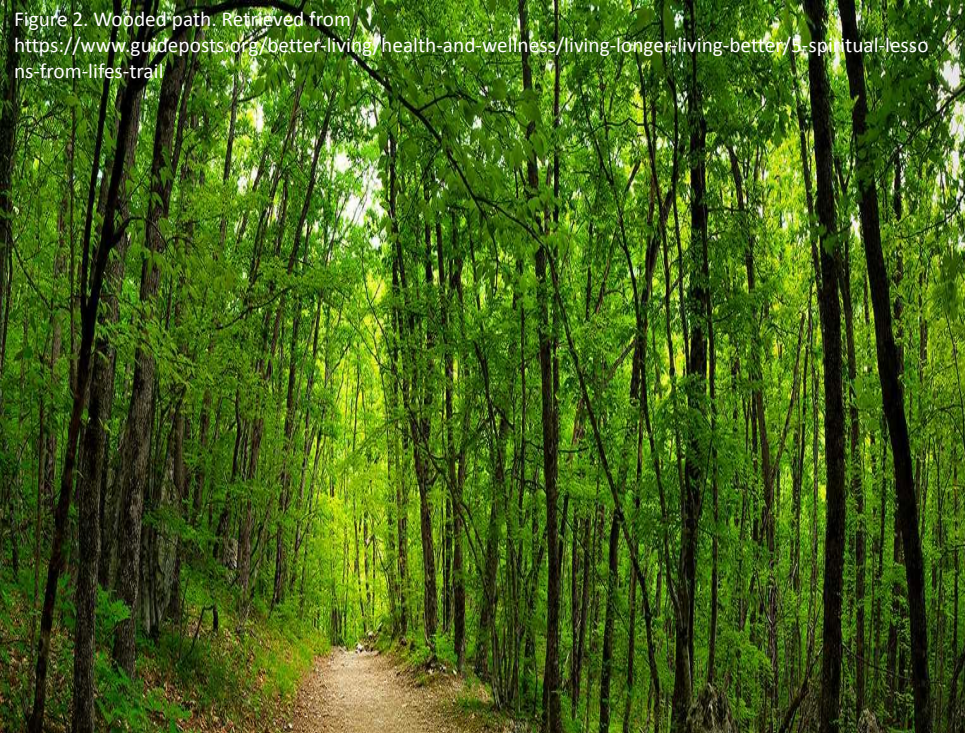
Quarter Hour

# What are we focusing on?

- What are the patterns?
- How is the information organized?
- What's the level of difficulty?

How many words can you remember? 30 seconds...





## The Plan for Our Journey

**What:** Concepts and Strategies to Help Students Become Better Learners

**Why:** “College students prefer to use suboptimal learning strategies when they study” (Chew, 2024)

**How:**

- Brain Files
- Engaging Drew
- Bloom’s Level
- Retrieval Practice
- Spaced Practice



To study EFFECTIVELY students must...  
(Chew, 2021)

1. Study with full focus and minimize distractions
2. Study using effective learning strategies
3. Assess one's level of understanding to identify confusions, gaps, and misconceptions

Learning  
**IS**  
Memory

# Concept 1:

## Brain Files



Figure 13. Head with file folders. From <https://www.scribd.com/doc/61773162/Schema-Poster>

# Using This Strategy

Reading BEFORE Class

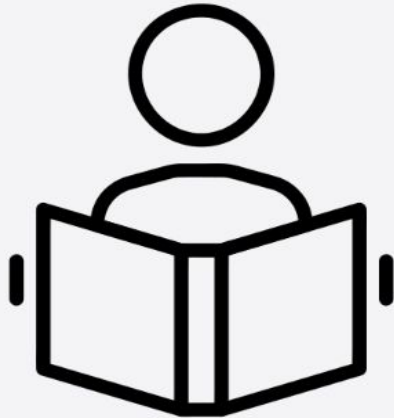


Figure 14. Black and white reading icon. From <https://thenounproject.com/icon/studying-1475748/>

Study Cycle

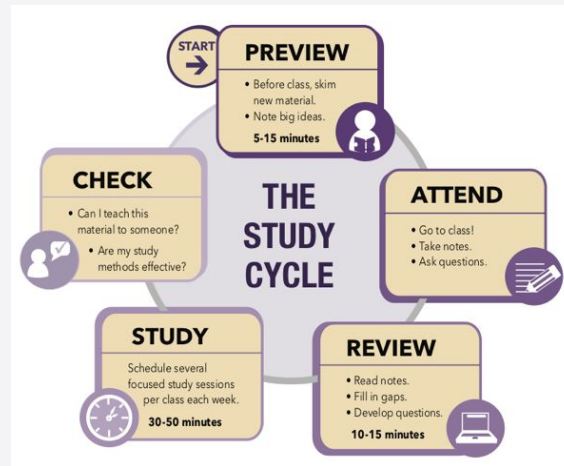


Figure 15. Study cycle. From <https://www.lsu.edu/cas/studycycle.php>

Elaboration

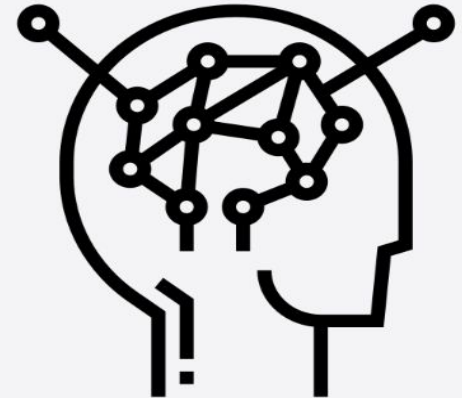


Figure 16. Black and white neuro connections icon. From <https://thenounproject.com/icon/learning-2746226/>

# Teaching **AND** Reinforcing This...

- Role Play
- Concrete Examples
- Every Class Reminders
- Inspected Practice (Elaboration in Notes)



The Doer  
**IS**  
the Learner

# Concept 2:

## Engaging Drew

# System 1 Thinking



Figure 5. Black and white icon of multitasking. Retrieved from <https://www.cleaning.com/free/multitasking.html>

- Fast
- Automatic
- Emotional
- Unconscious

# System 2 Thinking



Figure 6. Black and white Icon of the thinker statue Retrieved from <https://www.symbols.com/symbol/the-noun-project>.

- Slow
- Effortful
- Logic
- Conscious
- **LEARNING!**

Let's see this in action...

(ABC/321)

# Using This Strategy

## 2- Column Notes

?	Answer(s)

Figure 7. 2-column notes

## Concept Maps

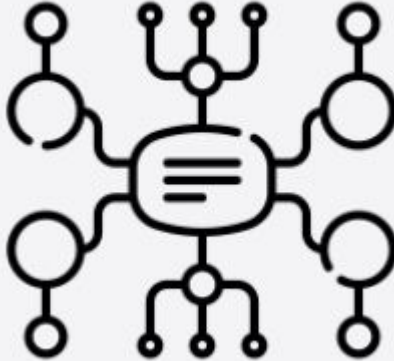


Figure 8. Black and white concept map icon. From <https://thenounproject.com/icon/mind-map-5322826/>

## Teaching Others

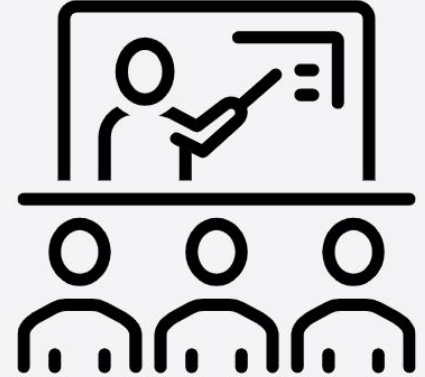


Figure 9. Black and white teacher and students icon. From <https://thenounproject.com/icon/teach-5486510/>



# Teaching **AND** Reinforcing This...

- ABC/321
- Asking “How are we engaging Drew?” (Every Class)
- Muscle Memory examples
- Inspected Practice (Required notes, concept maps, and “teaching” presentations)

People  
Will Choose  
the **Easiest** Path

# Concept 3:

## Bloom's Levels

# Bloom's Taxonomy

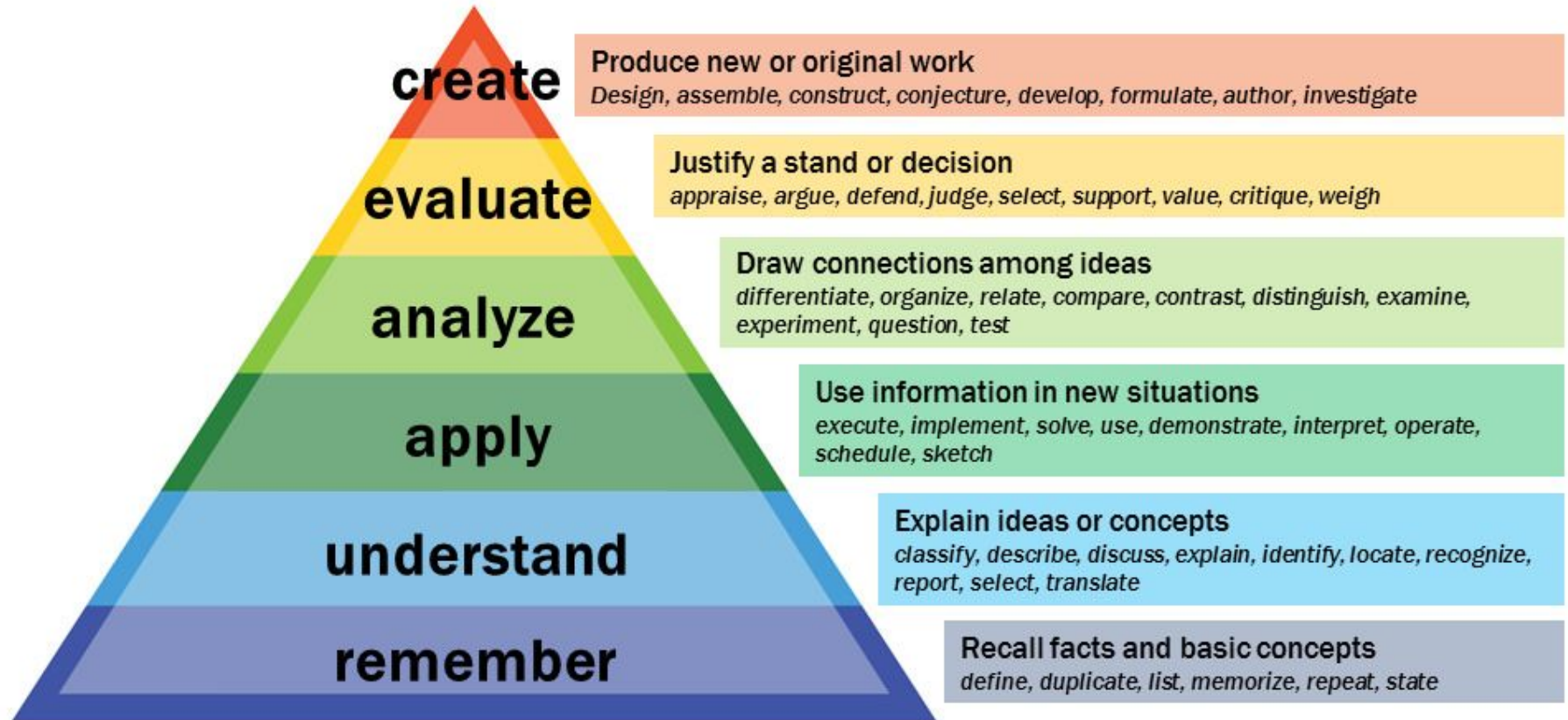
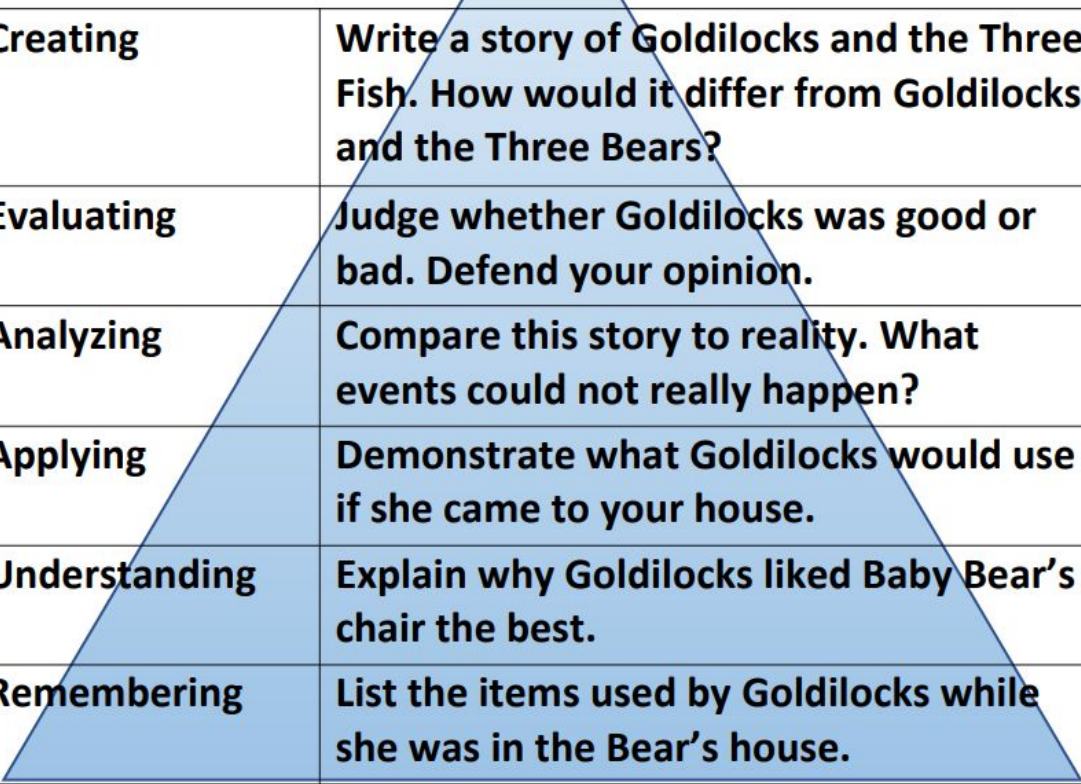


Figure 18. Bloom's taxonomy. From  
<https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/>



Figure 19. Goldilocks questions at Bloom's levels.



<b>Creating</b>	<b>Write a story of Goldilocks and the Three Fish. How would it differ from Goldilocks and the Three Bears?</b>
<b>Evaluating</b>	<b>Judge whether Goldilocks was good or bad. Defend your opinion.</b>
<b>Analyzing</b>	<b>Compare this story to reality. What events could not really happen?</b>
<b>Applying</b>	<b>Demonstrate what Goldilocks would use if she came to your house.</b>
<b>Understanding</b>	<b>Explain why Goldilocks liked Baby Bear's chair the best.</b>
<b>Remembering</b>	<b>List the items used by Goldilocks while she was in the Bear's house.</b>

Source: Saundra Yancy McGuire's Teach Students How to Learn (page 37)  
Adapted from: Practicing College Learning Strategies by C. Hopper, 2013

# Bloom's Application

Class	Assignment	Highest Level	Reason
Academic Voice	Essay 3	Creating	This is <b>creating because</b> I have to come up with my <b>own ideas</b> to answer the research questions and <b>craft</b> those into a persuasive essay and speech. In the research phase I have to <b>analyze and evaluate</b> my sources to decide which ones I should include. I have to be at the <b>understanding</b> phase as I read the research since I'm trying to make meaning from the material.



# Bloom's Application

Class	Assignment	Highest Level	Reason
Accounting 3	Exam 3	Creating	<p><b>Remembering</b>- the definitions of the terms and the formulas</p> <p><b>Understanding</b>- making meaning of the scenario provided on the exam</p> <p><b>Applying</b>- taking the concepts I learned in class and using them to help resolve the problem in the scenario</p> <p><b>Analyzing</b>- looking at each part of the problem in the scenario to figure out how to resolve it</p> <p><b>Evaluating</b>- deciding which strategies would work best in this particular case</p> <p><b>Creating</b>- come up with my own solutions to the problem.</p>

# Teaching **AND** Reinforcing This...

- Count the Vowels (Opening Activity)
- Goldilocks...and other fairy tales
- Bloom's Applications (Often!)
- Inspected Practice

We Remember What We  
**PRACTICE**  
Remembering

# Concept 4:

# Retrieval Practice

# Using This Strategy

Self-Quizzing

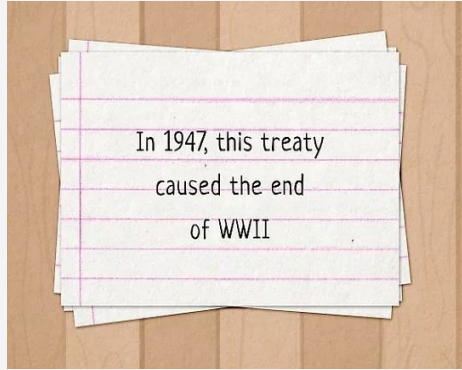


Figure 22. Flashcards. From <https://www.wikihow.com/Make-Flash-Cards>

Teaching Others

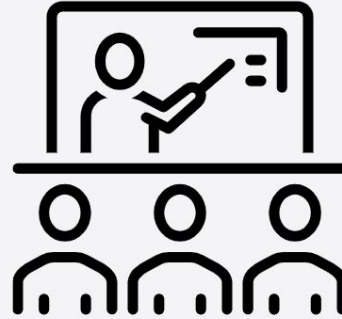


Figure 23. Black and white teacher and students icon. From <https://thenounproject.com/icon/teach-5486510/>

Study Groups



Figure 24. Black and white group icon. From <https://thenounproject.com/icon/users-6443100/>

Brain Dumps



Figure 25. Colorful head with ideas flowing out. From <https://www.neverdefeatedcoaching.net/the-power-of-a-brain-dump-how-to-untangle-your-adhd-mind/>

# Teaching **AND** Reinforcing This...

- What is Retrieval? (Concrete Example)
- Better Together
- Muscle Memory examples
- Practice Matters examples (Transfer)
- Inspected Practice (Doug's Flashcards)

Learning  
Takes  
**Time**

# Concept 5:

# Spaced Practice

1,2,3



## 5-Day Study Plan

### **Break info into 4 parts- starting with earliest (Part A)**

- Day 5 before the test- Study Part A for 30 minutes/ 30 minutes
- Day 4 before the test- Study Part B for 30 minutes/ 30 minutes and Part A for 30 minutes (self-quiz)
- Day 3 before the test- Study Part C for 30 minutes/ 30 minutes, Part B for 30 minutes, (self-quiz) and Part A for 20 minutes (self-quiz)
- Day 2 before the test- Study Part D for 30 minutes/ 30 minutes, Part C for 30 minutes (self-quiz), Part B for 20 minutes (self-quiz), and Part A for 20 minutes (self-quiz)
- Day before the test- Review all parts in two 30-minute sessions (more if needed) THEN rest and relax

**Take short breaks (5-10 mins) between parts**

# Teaching **AND** Reinforcing This...

- 5-Day Study Plan
- Explain “Forgetting”
- Practice Matters examples (Transfer)
- Inspected Practice

Reflection:

What small thing can you change to  
move students toward becoming  
expert learners?

# Strategies Used In This Session...

- Learning Activities: Count the Vowels, ABC/321, Goldilocks
- TWPS
- What, Why, How
- Concept Map/ Graphic Organizer
- Dual- Coding
- Retrieval Practice
- Spaced Practice
- Modeling
- Role Play

# Resources

- Chew, S. L. (2021). An advance organizer for student learning: Choke points and pitfalls in studying. *Canadian Psychology/Psychologie Canadienne*, 62(4), 420–427. <https://doi.org/10.1037/cap0000290>
- Chew, S. (2021). *Improving study skills through psychological science* [Google Slides]. American Psychological Association.  
[https://docs.google.com/presentation/d/16wx76eLZctYZMUnqsL-qoGKFIYIZl1R6fip-Naz6hBI/edit#slide=id.g5e378fe58b\\_2\\_75](https://docs.google.com/presentation/d/16wx76eLZctYZMUnqsL-qoGKFIYIZl1R6fip-Naz6hBI/edit#slide=id.g5e378fe58b_2_75)
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- Gurung, R. A. R., & Dunlosky, J. (2023). *Study like a champ : the psychology-based guide to “grade a” study habits*. American Psychological Association.
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- Kirschner, P.A., & Hendrick, C. (2020). *How learning happens: Seminal works in educational psychology and what they mean in practice* (1st ed.). Routledge. <https://doi.org/10.4324/9780429061523>
- McGuire, S. Y., & McGuire, S. (2015). *Teach students how to learn : strategies you can incorporate into any course to improve student metacognition, study skills, and motivation* (First). Stylus Publishing, LLC.
- Willingham, D. T. (2023). *Outsmart your brain : why learning is hard and how you can make it easy* (First Gallery Books hardcover). Gallery Books, an imprint of Simon & Schuster.