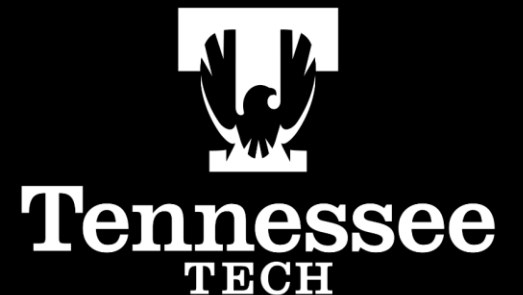


Powerful Teaching

RETRIEVAL PRACTICE



Meet the Team



Heather Rippetoe

College of Education &
Human Sciences

Whitson-Hester School
of Nursing

College of Fine Arts



Mallory Matthews

College of Business
Interdisciplinary Studies

Agriculture & Human
Ecology



Lacy Means

College of
Arts & Sciences



Carrie Roberson

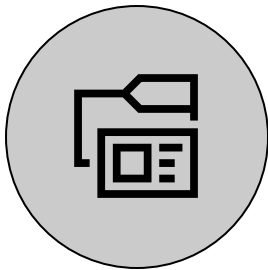
College of
Engineering



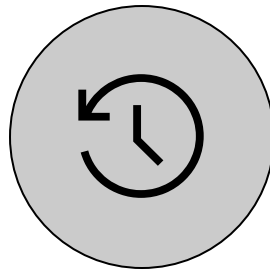
SESSION RESOURCES

- Session will be recorded.
- Slide deck will be shared.
- We will be in the chat to answer any questions.
- Book a consultation with your instructional designer!

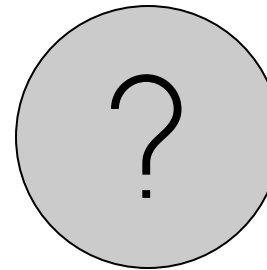
Agenda



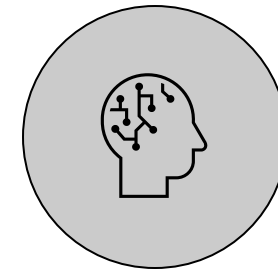
INTRODUCE RESOURCES



POWERFUL TEACHING
RECAP

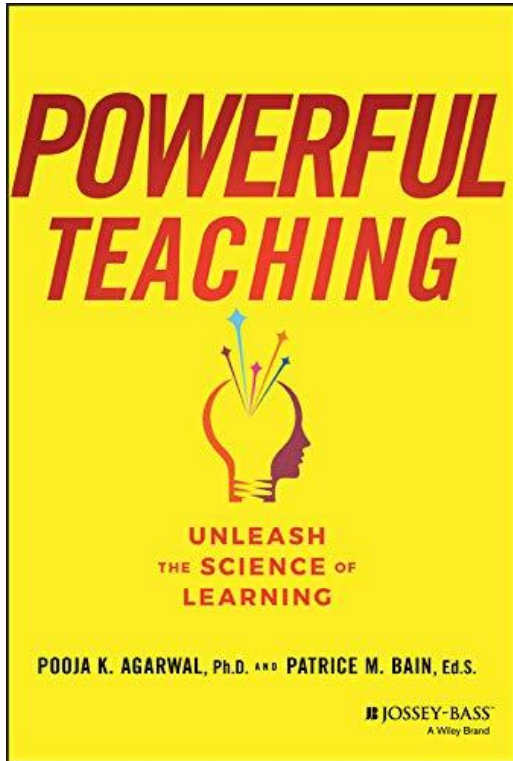


INCORPORATE RETRIEVAL
PRACTICE INTO A LESSON



LEVERAGE ILEARN & AI
EFFECTIVELY

Source Material:



This Photo by Unknown Author is licensed under [CC BY-NC-ND](#)

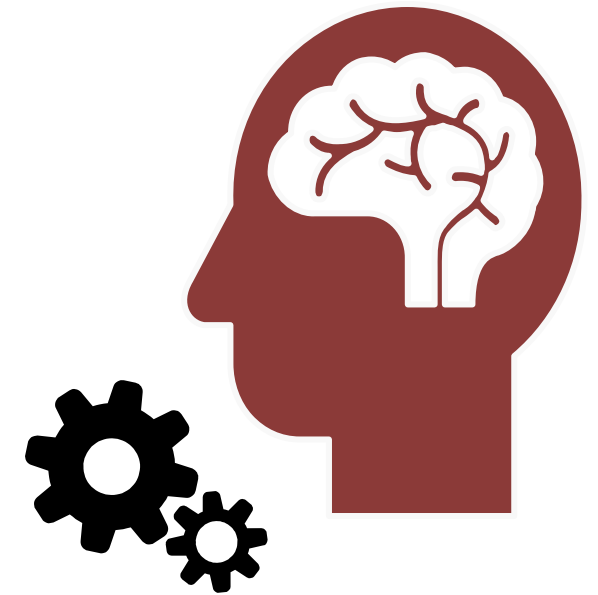
Powerful Teaching: Unleash the Science of Learning

By: Pooja Agarwal & Patrice Bain (2019)

Other Resources:

- powerfulteaching.org
- retrievalpractice.org

Introduction



WHAT IS RETRIEVAL PRACTICE?

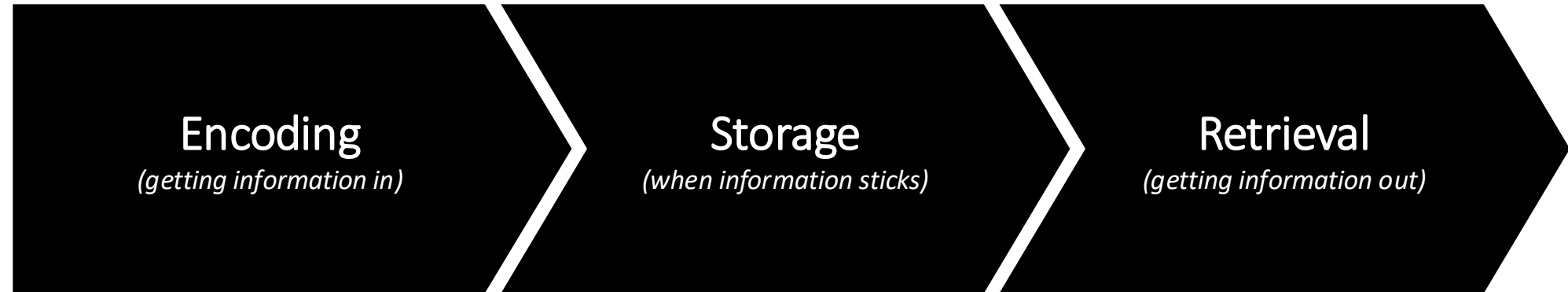
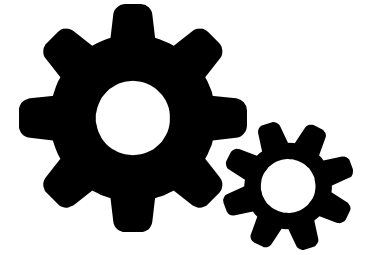
WHY SHOULD I USE IT IN MY CLASSROOM?



Retrieval Practice is a **learning strategy** where we focus on getting information out. Through the act of retrieval, or **calling information to mind**, our memory for that information is strengthened and forgetting is less likely to occur. Retrieval practice is a powerful tool for improving learning without more technology, money, or class time.

(Agarwal, 2019)

Three Stage Model of Learning





Make a simple switch

encode

Here's what we did last week.

retrieve

What did we do last week?



Why should we
include Retrieval
Practice in our
courses?

Benefits of Retrieval Practice

Enhances long-term memory

Improves understanding

Identifies knowledge gaps

Boosts confidence

Promotes active learning

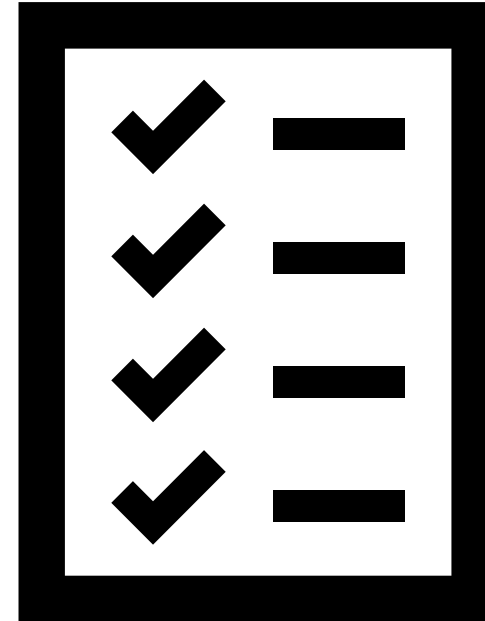
Facilitates transfer of knowledge

Reduces forgetting

Easy to implement

Retrieval Practice Implementation Checklist

- Low stakes or no stakes learning strategy
- Provide frequently
- Space it out
- Use a variety of strategies & question types
- Encourage metacognition
- Examine existing teaching strategies
- Reassure students that “challenging learning” is good!



Add a mental challenge



What did you learn today?

VS.

What did you learn **yesterday?**



Brain Dump

Write down **everything**
you can remember



Two Things

- After a lecture
- After reading a chapter
- At the end of the day
- At the end of the week
- One minute or less!



Think-Pair-Share

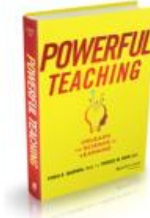
Don't skip the "think" step!

Have students write down what they know
before they pair and share



Mini-Quizzes

- Use for entry and/or exit tickets
- Written, tech tools, and apps
- Multiple-choice and short answer
- No optimal timing or frequency
- You don't have to grade it at all!

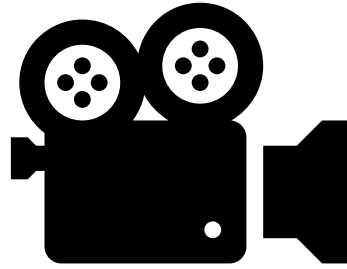


More strategies in Powerful Teaching

- Big Basket Quiz
- Retrieval Cards
- Retrieval Guides
- Mini-Quizzes
- Power Tickets
- Blasts From the Past
- Flash Forward
- Dice Game
- Fishbowl Game
- Lightning Round
- Four Steps of Metacognition
- Metacognition Sheets
- Metacognition Line-Up
- Noun-Name Tag



Poll Question



Yuja Video Quizzes

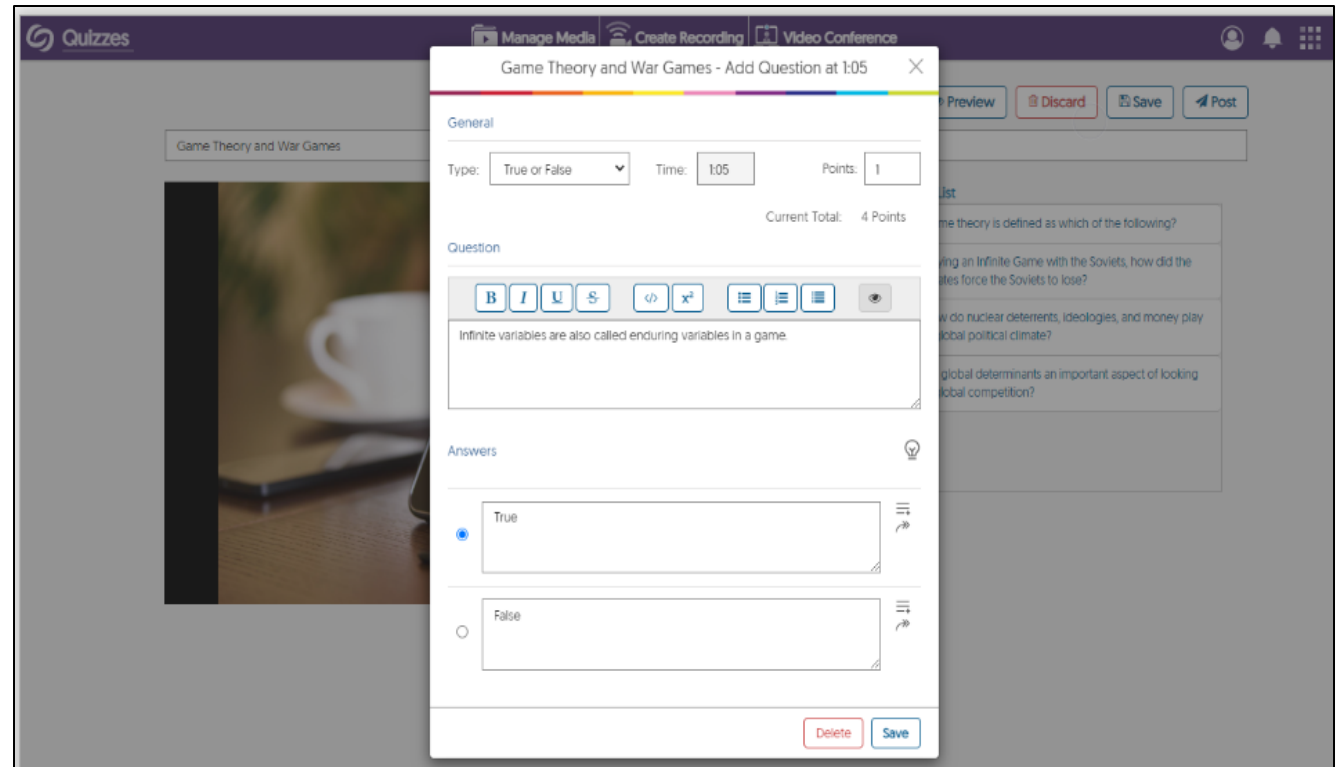


Creator+ Practice

How to use Retrieval Practice in iLearn

Yuja Quizzes

- Interactive Quizzes
 - Playback Quiz
 - Video Quiz
- Seamless Integration
- Regular Assessments
- Promotes Active Viewing
- Accessible



Creator+

- Used with templates within iLearn HTML pages (files)
- Enables you to add interactive components
- Increases student engagement
- Used as no-stakes assessments
- **NOT** tied to grades or release conditions
- Encourages self-paced retrieval practice

Dropdown Fill in the Blanks

Fill in the Blanks

Multi-Select

Multiple Choice

Sequencing

Sorting

True or False



Good News

YOU CAN USE AI FOR THIS.



AI Prompting Refresher

It's important to safeguard your personal information and student information.

When interacting with AI tools, please ensure that you do not include any personal or sensitive information in your prompts.

If you wouldn't post it on the web, don't put it in a prompt.

Generate Questions for Think/Pair/Share

Prompt:

Using the material provided, generate 3 options for think/pair/share that can be completed in one or two minutes, for a college Biology lecture. I want questions that are higher order and use critical thinking skills.

Sure! Here are three quick **Think/Pair/Share** questions that fit within a 1-2 minute discussion:

1. **Which type of microorganism do you think is the most essential to life on Earth? Why?**
 - **Think:** Students quickly choose a type (bacteria, archaea, fungi, protists, viruses).
 - **Pair:** Discuss their choice with a partner.
 - **Share:** A few students share their reasoning with the class.
2. **Why do you think viruses are not classified as living organisms? Do you agree with this classification?**
 - **Think:** Students reflect on the characteristics of life.
 - **Pair:** Debate their stance with a partner.
 - **Share:** A few pairs summarize their discussion.
3. **What would happen if all microorganisms suddenly disappeared?**
 - **Think:** Students brainstorm at least one major consequence.
 - **Pair:** Compare ideas with a partner.
 - **Share:** The instructor gathers a range of answers from the class.

These questions encourage quick critical thinking and discussion while staying engaging! 🚀



Generate Questions for Mini-Quizzes

Prompt:

Using the material provided, generate 3 options for mini-quizzes that can be completed in one or two minutes, for a college Biology lecture.

Multiple Choice Questions

1. Which of the following is NOT considered a microorganism?
 - a) Bacteria
 - b) Archaea
 - c) Plants
 - d) Protists
 - **Answer: c) Plants**
2. What is a key difference between bacteria and archaea?
 - a) Bacteria have a nucleus, archaea do not
 - b) Archaea live only in extreme environments
 - c) Bacteria have peptidoglycan in their cell walls, archaea do not
 - d) Archaea are always pathogenic, bacteria are not
 - **Answer: c) Bacteria have peptidoglycan in their cell walls, archaea do not**
3. Which of the following microorganisms are eukaryotic?
 - a) Bacteria and viruses
 - b) Fungi and protists
 - c) Archaea and bacteria
 - d) None of the above
 - **Answer: b) Fungi and protists**
4. Which of these is a distinguishing feature of viruses?
 - a) They have cell walls made of chitin
 - b) They can replicate independently outside a host
 - c) They are acellular and require a host to replicate
 - d) They contain both DNA and RNA at the same time
 - **Answer: c) They are acellular and require a host to replicate**

Generate Questions for Mini-Quizzes

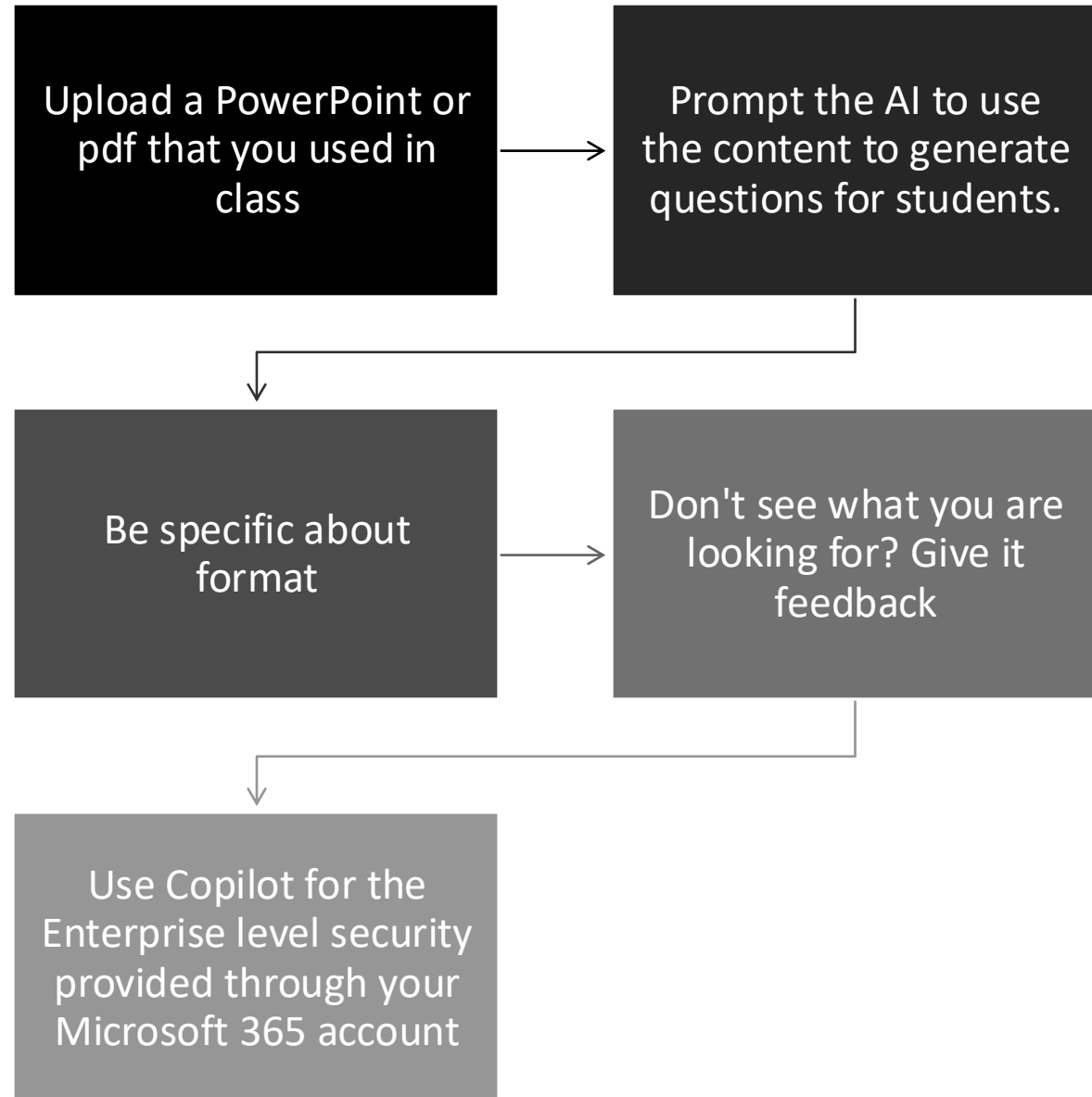
Prompt:

Using the material provided, generate 3 options for mini-quizzes that can be completed in one or two minutes, for a college Biology lecture.

True/False Questions

6. All bacteria are harmful to humans.
 - **False** (Many bacteria are beneficial, such as those in the human gut microbiome.)
7. Fungi can be unicellular or multicellular.
 - **True** (Yeasts are unicellular fungi, while molds and mushrooms are multicellular.)
8. Viruses are considered living organisms.
 - **False** (Viruses are acellular and require a host to replicate, so they are not classified as living.)
9. Archaea and bacteria belong to the same domain.
 - **False** (They are classified into separate domains: Bacteria and Archaea.)
10. Protozoa are capable of movement.
 - **True** (Protozoa use structures like cilia, flagella, or pseudopodia to move.)

"Train" AI with your Content





Retrieval practice is a **learning** strategy
NOT an assessment strategy



Powerful learning

- Retrieval practice takes one minute or less
- Retrieval practice doesn't require extra prep or grading
- Retrieval practice is flexible for your content area and students
- The more students remember, the less you have to re-teach
- With retrieval practice, emphasize **long-term** learning!

Thank you!

Questions, Comments, Concerns?

[Feedback Survey](#)

Register for our session on
April 15th: Trendsetter Grant

Register [HERE](#)



Resources:

- Agarwal, P. K., & Bain, P. M. (2019). Powerful teaching : unleash the science of learning (First edition.). Jossey-Bass.
- Link to Creator+ workshop and Lumi
- [Book a Consultation](#)
- [Creator+](#)
- [Yuja Media](#)