

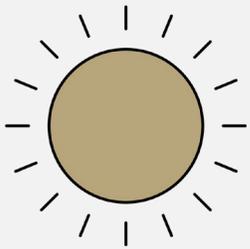
UW SCHOOL OF MEDICINE  
CLINICAL TEACHING  
CERTIFICATE 2025-2026

WELCOME!

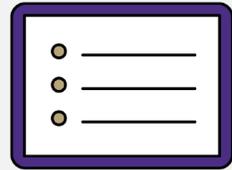


# More opportunities

1.0



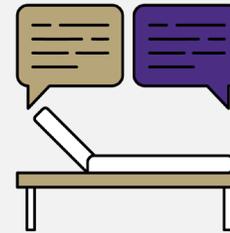
Learning Climate



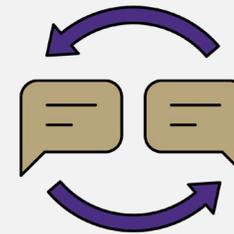
Understanding and Retention



Teaching Efficiently



Teaching in the Presence of Patients

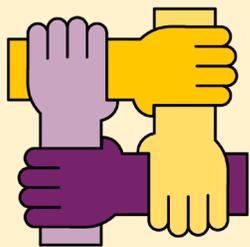


Feedback



Assessment

2.0



Racism and Bias



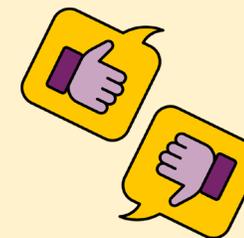
Communication Skills



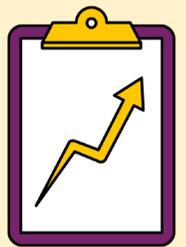
Humanistic Approach



Learners in Difficulty

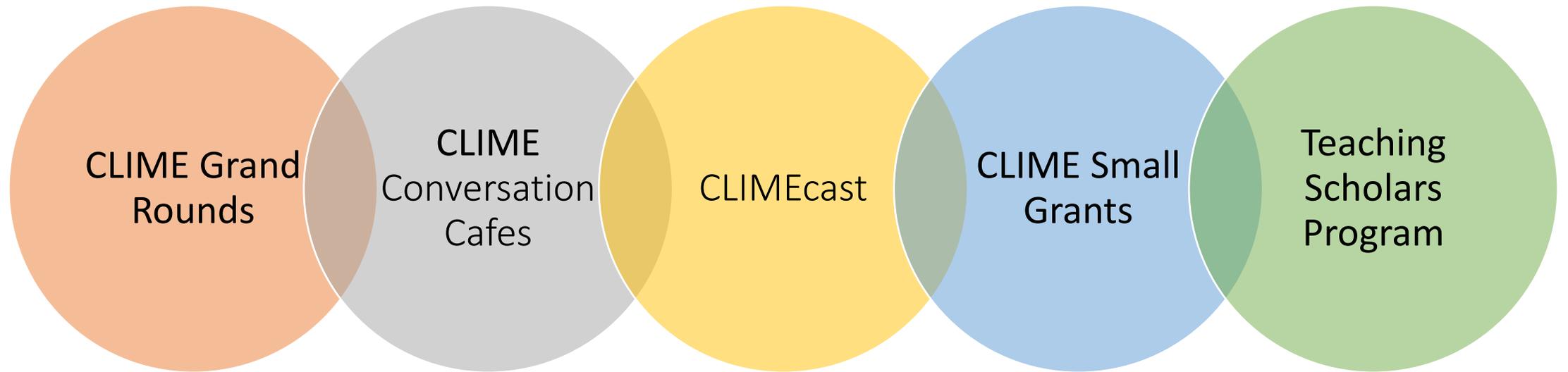


Challenging Feedback



Meaningful Assessment

# Join our community of educators!



Learn more! <https://clime.washington.edu/>

# CME Accreditation

The University of Washington School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The University of Washington School of Medicine designates this activity for a maximum of *18 AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity. (*2 Hours for Live Session, 1 Hour for Online Module*)

## How to claim CME credit:

- If you have never used the CME text attendance system, first text your email address linked to your CloudCME account to 833-394-7078.
- During the session, text the activity code: **13369** to **833-394-7078**
- You should receive a confirmation reply that your attendance has been recorded for *OT2602 UW CLIME Clinical Teaching Program, October 7, 2025*.
- The texting window closes an hour after the live session. If you miss it, please email [agarza16@uw.edu](mailto:agarza16@uw.edu) to ensure our credit is recorded.

# Ground Rules

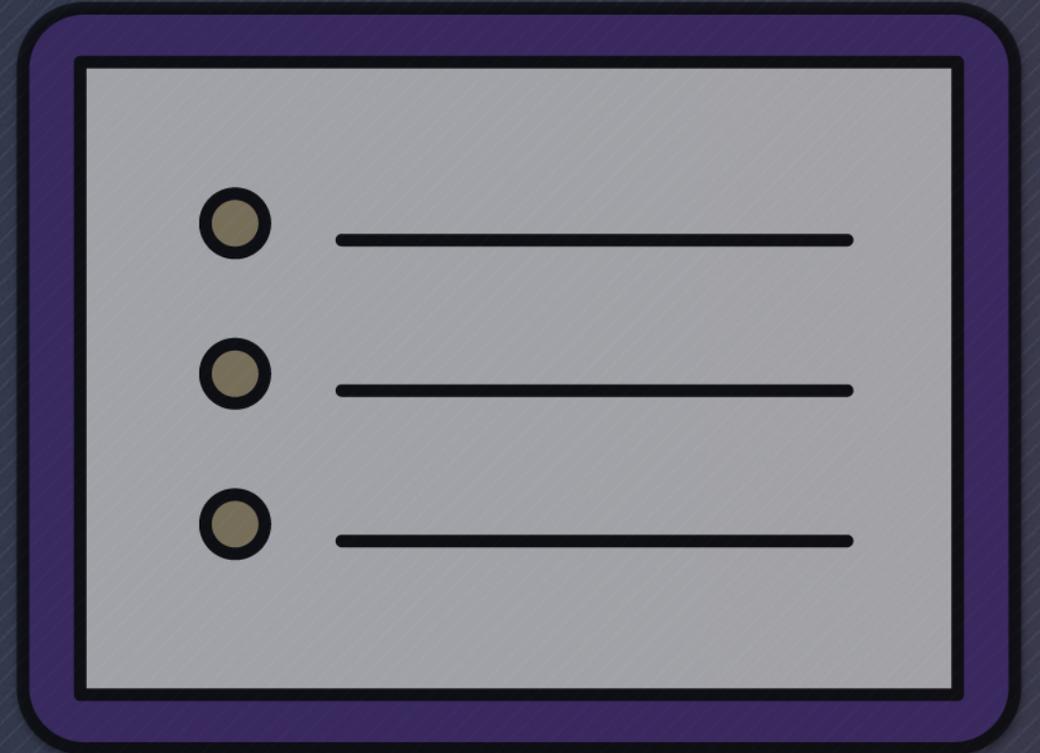
---

- Participate as you are able...
- Be kind and generous to each other in the room and... be kind and generous to those not in the room
- Listen with curiosity and suspend judgment AND share your own thoughts with honesty and candor
- Expect and accept that there may not be closure

# Understanding & Retention

**Certificate Core Faculty Leader:**

*Laura Goodell MD*





# How Can We Teach to Promote Learning?

Knowledge cannot be transmitted from teacher to student

**Learners must construct their own knowledge**

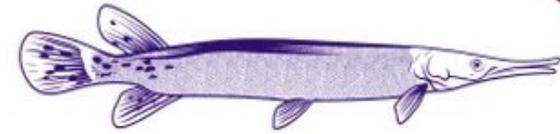
*Self directed . Engagement . Inquiry .  
Problem Solving . Interactive . Social .  
Safe . Practice . Feedback*

# Learning Objectives

1. Collaborate with learners to create shared learning goals.
2. Engage learners in active learning.
3. Use techniques which maximize understanding and retention: emphasize take-home points, use effective visual cues.

# Agenda

---



GAR

## Context

*Educational Theory.*

## Goal Setting

*Targeted.  
Learner centered.  
Clearly communicated*

## Active Learning

*Engage students in active learning techniques you can use at the bedside.*

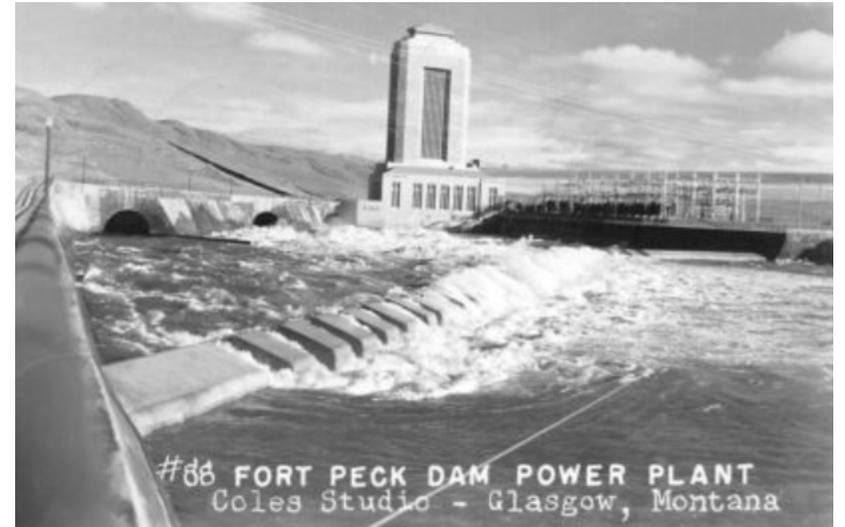
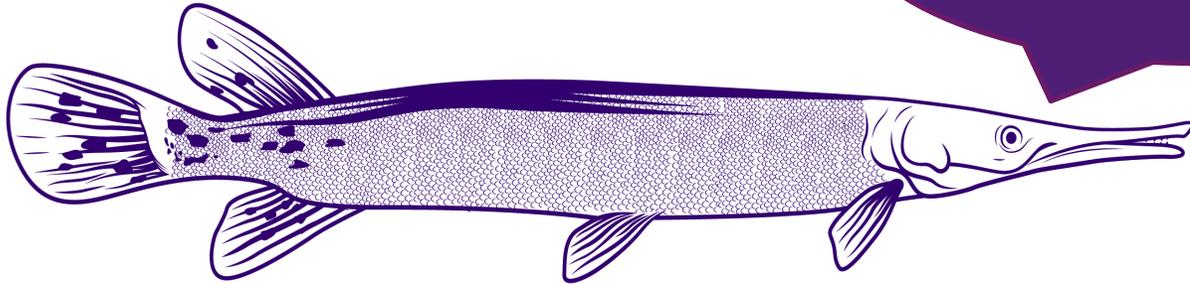
## Reinforce

*Principles in practice:  
Reinforcement.  
Retention & Transfer.*

# If you forget everything else, remember the GAR!

- Goal
- Active
- Reinforce

GAR



# On your own - reflect & write

---

***Reflect on your own training. What is one thing you were taught that you remember well? Why do you remember it?***

***2 min***

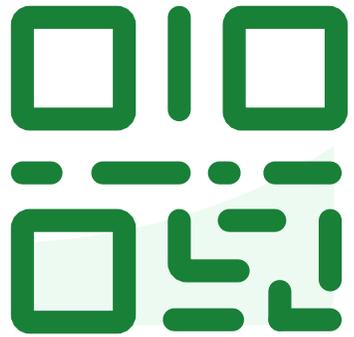
- What was the setting?
- What did the teacher say or do that helped you understand and remember?

***Slido:***

***2 min***

Write one word that describes a technique used by your teacher that led to successful learning, understanding, & retention.

**Do not edit**  
How to change the  
design



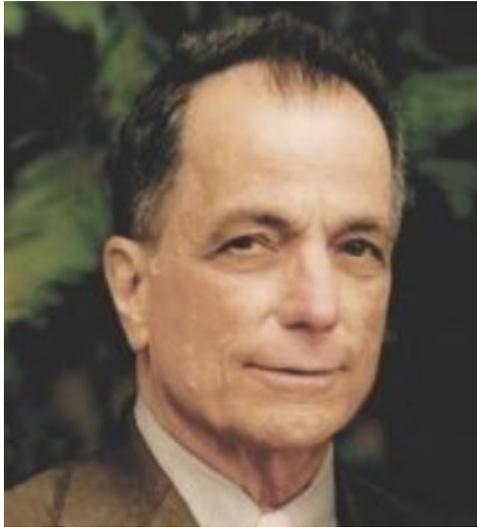
**Join at [slido.com](https://slido.com)  
#3595373**

① The Slido app must be installed on every computer you're presenting from

**slido**



**Enter 1-2 words describing a key ingredient for successful learning, understanding , and retention.**



Dr. W. Patrick Fleet  
1939-2019



Source: M. A. Papadakis, S.J. McPhee, M.W. Rabow: *Current Medical Diagnosis & Treatment 2016*, 55th Ed. [www.accessmedicine.com](http://www.accessmedicine.com)  
Copyright © McGraw-Hill Education. All rights reserved

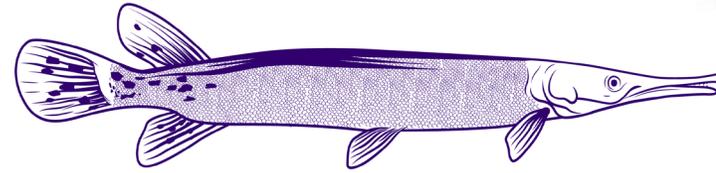
# ATN = Muddy Brown Casts

## *Ingredients for Successful Learning, Understanding & Retention*

- Clear goals
- Reinforce key points
- Visual cues
- Tone of voice
- Compare / Contrast
- Curious
- Storytelling
- Humor
- Everyday experience
- Teach-back
- Repeat
- Model lifelong learning

# Agenda

---



GAR

## Context

*Educational Theory.*

## Goal Setting

*Targeted.  
Learner centered.  
Clearly communicated*

## Active Learning

*Engage students in active learning techniques you can use at the bedside.*

## Reinforce

*Principles in practice:  
Reinforcement.  
Retention & Transfer.*

Where are you teaching?

Who are your learners?

Varied Location:

- Patient bedside
- Hallway
- Office whiteboard
- Classroom

Time:

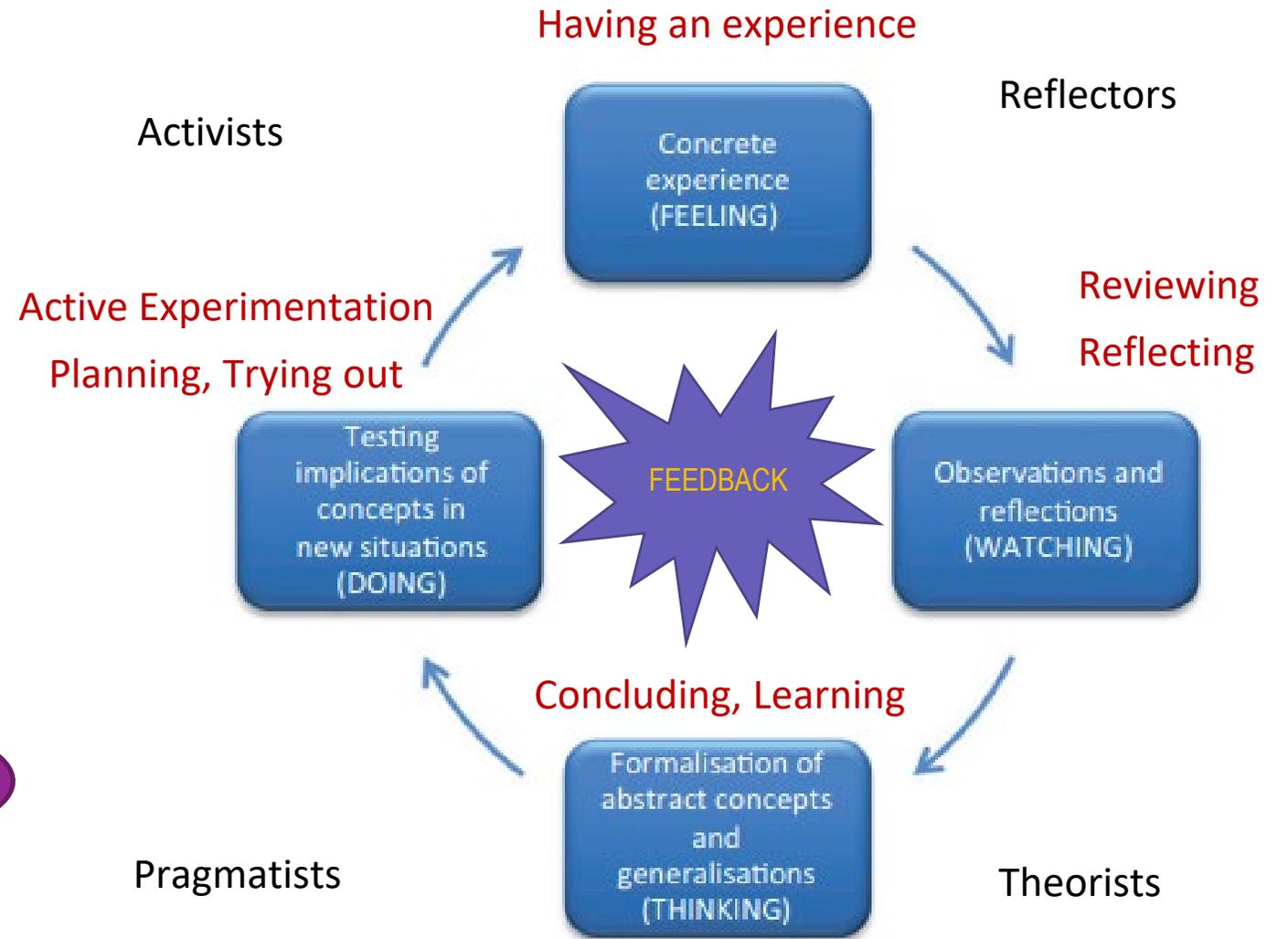
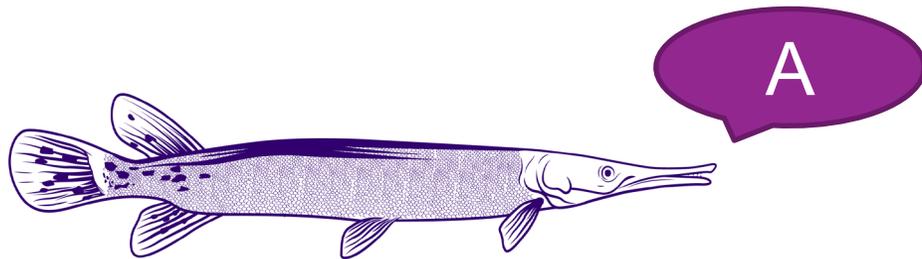
- Variable. 3-5 minutes... 20 minutes

Technique:

- Learners at different levels
- Active Learning Lens

# Adult Learning Theory

## Kolb 1984: Experiential Learning Model



**Figure 1.** The Kolb Cycle after (Kolb 1984).

# Theory in Practice... Active Learning

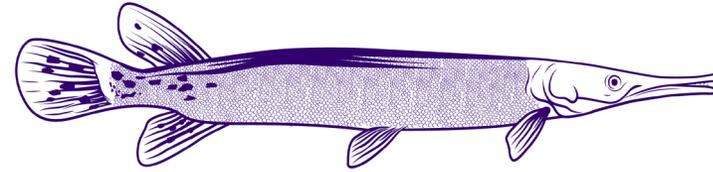
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- A process of **building mental models, testing, receiving feedback & repairing.**
- **“Co-constructing” knowledge** with your learner.
- Dynamic: ask a question, explain a complex concept, sketch, diagram, solve problems, outline solutions, scaffold, predict or interpret, troubleshoot, brainstorm, critique, concept map

**Avoid making lecturing the only thing you do...**

# Dual-Coding Theory

---



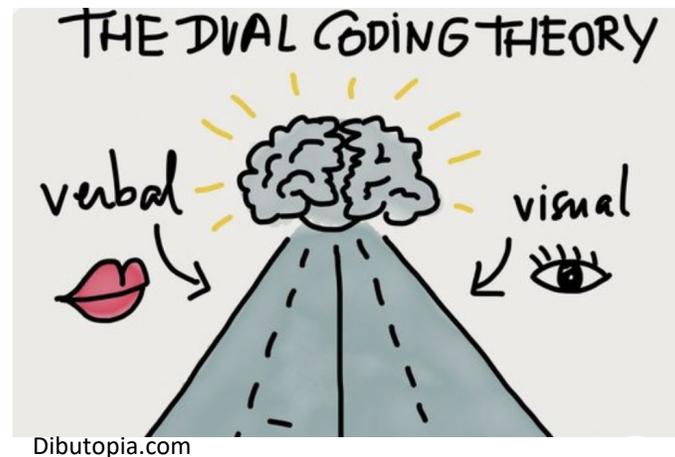
R

## Visuospatial

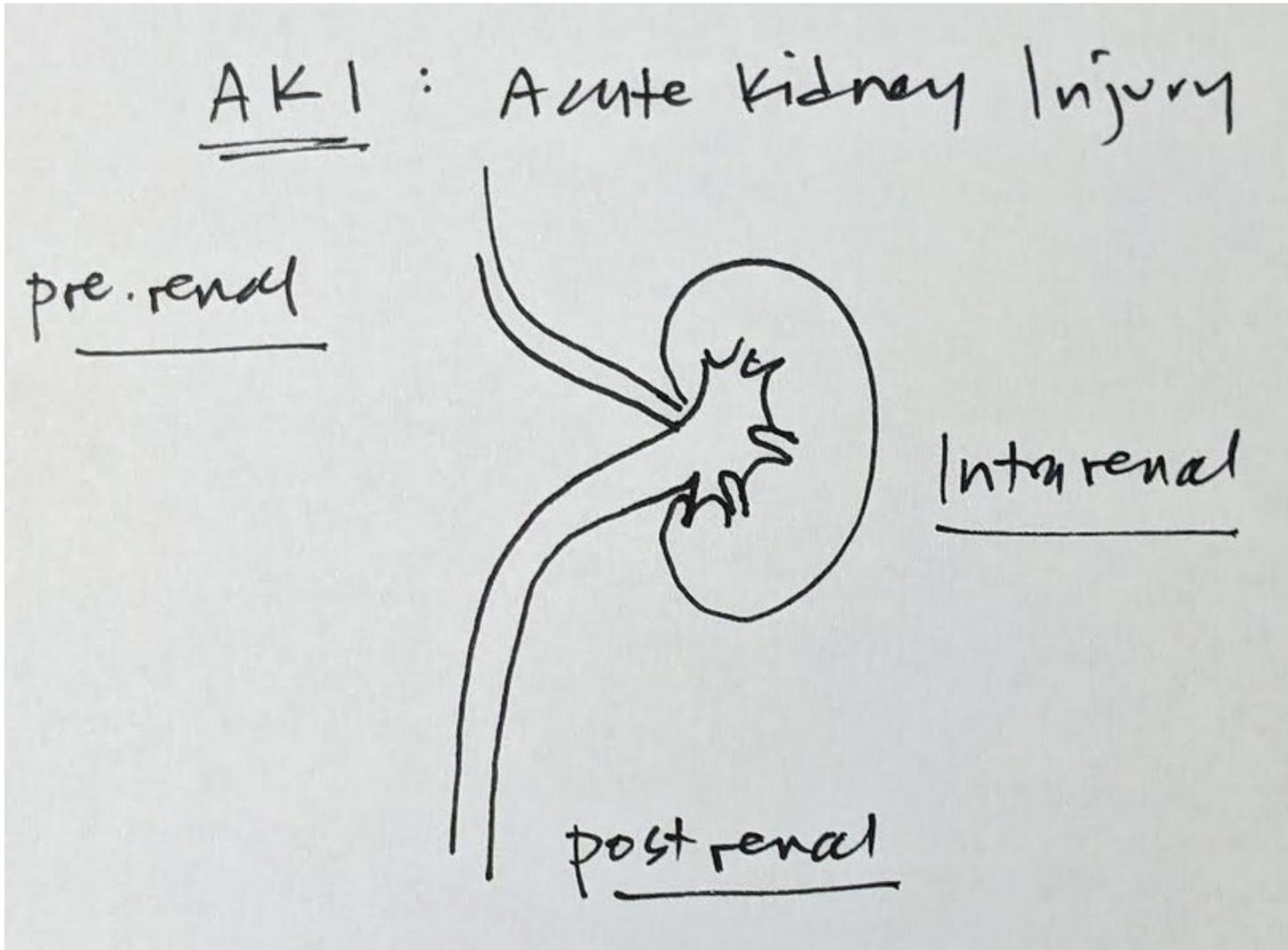
- Concept maps
- Graphs/Tables/Charts
- Online resources (videos)

## Auditory-verbal

- Write or explain verbal info
- Case-based learning
- Small group discussions



# Dual-Coding Example



# Learning Climate

---

Adult learning is supported by learning climate.

***Slido:***

Write down one key principle you recall from Dr. McClintock's session from learning climate.



**Write down one key principle you recall from Dr. McClintock's session on Learning Climate**

# Adult Learning is Supported by Learning Climate

1

Be kind

2

Be  
transparent

3

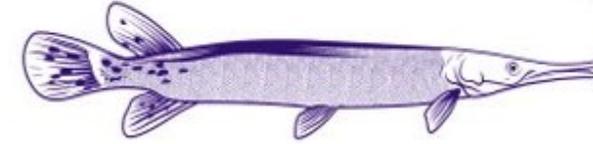
Provide  
autonomy as  
able

4

Model  
humility and  
curiosity

# Agenda

---



GAR

## Context

*Educational Theory.*

## Goal Setting

*Targeted.  
Learner centered.  
Clearly communicated*

## Active Learning

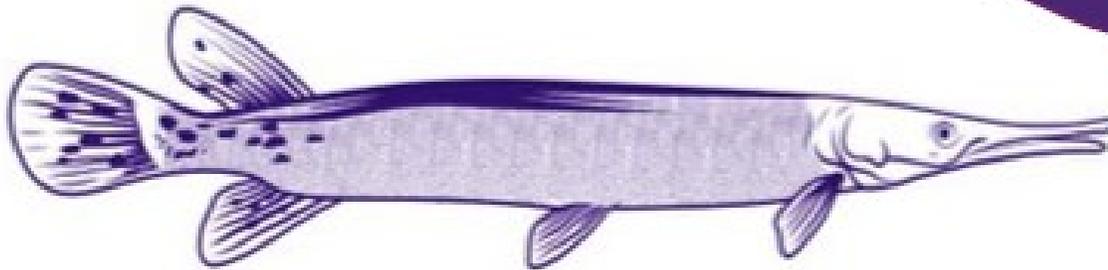
*Engage students in active learning techniques you can use at the bedside.*

## Reinforce

*Principles in practice:  
Reinforcement.  
Retention & Transfer.*

# G: Goal Setting

- Goal
- Active
- Reinforce



GAR

# First Things First



Feedback (3/24/2026)

Assessment (5/8/2026)

*What does your learner already know?*

- Construction of knowledge
- Assess at the beginning of every teaching encounter

*What does your learner believe?*

- “I can’t do biochem”
- Motivation is related to beliefs

Effective teaching:

What you want learners to learn and recall  
+ learners’ beliefs about learning

Halpern, “Applying the Science of Learning to the University and Beyond: Teaching for Long-Term Retention and Transfer” *Change* 2003

# Goal Setting

---

***CLEARLY STATED***

***CONTEXT SPECIFIC***

***LEARNER CENTERED***

- May be ***ADJUSTED*** on the fly
- Establishes ***ACCOUNTABILITY*** between learner & instructor
- Foundation for ***ASSESSMENT & EVALUATION***
- Delivered with ***ENTHUSIASM***

# Goal Setting

---

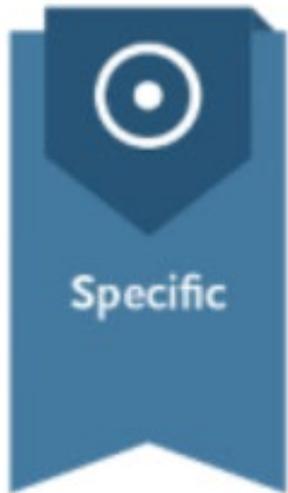


*Can be Teacher Driven or Learner Driven*

# Goal Setting: Specific

---

S



Precisely state what you want the learner to do

- *demonstration of **KNOWLEDGE** (comprehension)*
- ***SKILLS** (problem-solving or technical)*
- ***ATTITUDES** (interaction w/ patients, staff)*

# Goal Setting: Examples

---

*“List 3 tests you should order for every patient with hyponatremia by the end of the end of rounds.”*

*“Name three characteristics on physical exam that support a diagnosis of peritonitis and practice these maneuvers at the bedside of every patient with a complaint of abdominal pain during your ER shift today.”*

*“Demonstrate correct technique for diagnostic lumbar puncture: Identify patient positioning & anatomic landmarks to facilitate proper needle insertion.”*

*“When breaking bad news to a patient, practice responding to emotion using the NURSE mnemonic to guide your interaction.”*

# Small group breakout

**15 m**

***Cameras on! Work together! Everyone takes a turn. Safe space.***

***Goals: 1) Group Introductions***

***2) Practice Setting Goals***

***Directions:***

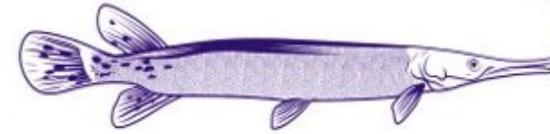
1. Introduce yourself - go in alphabetical order by first name: Where are you located? What is your job? How do you work with learners?
2. Reflect on the last time you worked with a learner.
3. Name a goal that you set for your learner. Did you collaborate with your learner? -OR- Did you choose / name it independently?
4. Share your goal with the group. Is it: Specific? Clearly stated? Learner centered?

A white disposable coffee cup with a lid is placed on a concrete ledge. The cup is the central focus, with a soft shadow cast to its left. The background is a dark, textured surface, possibly a wall or another part of the ledge. The overall lighting is soft and directional, creating a sense of depth and texture.

**BREAK**

# Agenda

---



GAR



## Context

*Educational Theory.*

## Goal Setting

*Targeted.  
Learner centered.  
Clearly communicated*

## Active Learning

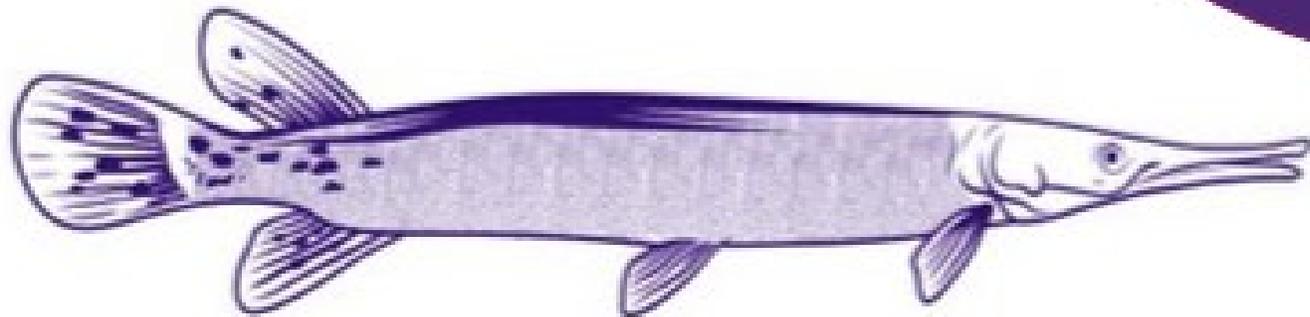
*Engage students in active learning techniques you can use at the bedside.*

## Reinforce

*Principles in practice:  
Reinforcement.  
Retention & Transfer.*

# A: Active Learning Strategies

- Goal
- Active
- Reinforce



GAR

# What is Active Learning?

---

- Approach to teaching where learners are actively engaged via discussions, problem solving, and other methods
- Learning that requires learner to regularly assess own degree of understanding
- Learning that is student-centered



Lectures



Active Learning

# Active Learning Strategies: Case 1

---



Image: Unsplash/Doucett

22 yo M, elite Nordic skier w/ syncope.

Witnessed event during a routine practice in West Yellowstone. Previously well. Reports a brief episode of palpitations preceding syncopal event. Travelled to Europe last week for a World Cup qualifying event. R lower leg has been tender.

Denies PMH / PSH / FH / Meds or Allergies.

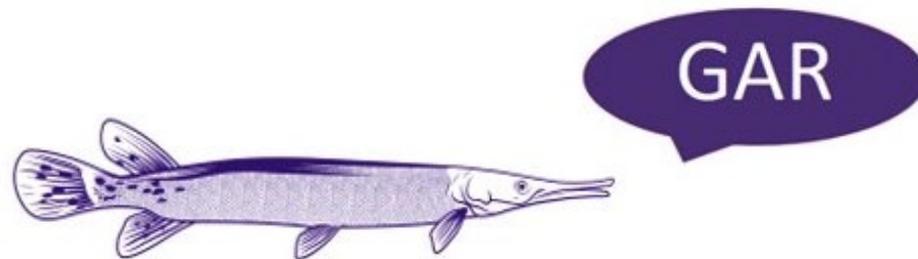
VSS, HR 46 & unremarkable PE.

# Awesome Active Learning: Student Reflections

---

*“Let us struggle in front of you for a while. Observe a specific skill & provide immediate feedback. That’s where I made the most growth.”*

- on communication skills in a palliative care rotation



# Muddiest Point - WHAT

---



- Preceptor **PAUSES** the encounter or procedure for critical assessment of an experience
- Focus on areas **IDENTIFIED BY THE LEARNER** that require further explanation

During or after the encounter

1. Preceptor asks (or learner offers), "**What was the Muddiest Point?**"
2. Preceptor discusses clarifying information with learner.

# Muddiest Point - WHY

---

Guided Reflection  
Efficient Instruction

- Self-assessment by learner:
  - What doesn't make sense?
  - What requires further explanation?
- Preceptor identifies areas of confusion to provide:
  - Targeted teaching
  - Feedback



# Muddiest Point - HOW

---

## Preceptor:

*"What was the **muddiest point** about... your assessment / plan for this Nordic athlete with syncope?"*

## Learner:

- "I'm having trouble formulating a differential for syncope."*
- "I don't remember when I should order a d-dimer."*
- "I'm worried about cardiogenic causes of syncope but I don't know what to look for on ECG."*

# Thinking Hats - WHAT

---



- Preceptor asks the learner to ***consider other perspectives.***
  - *“How do you think the patient understood this?”*
  - *“What would this problem look like from the nurses’ point of view?”*
  - *“How would you feel if this was **your** family member?”*
- Learner reformulates the story of the encounter to identify different concerns.

# Thinking Hats - WHY

---



- Questions assumptions
- Improves understanding of the situation
- Perspective taking allows the learner to understand challenges and opportunities when managing a clinical encounter.

# Thinking Hats - HOW

---

## **Preceptor:**

“What might a consult look like for this patient....”

From a cardiology perspective?

From a neurology perspective?

“How do you think the athletic trainer understood this problem?”

“What would this problem look like from the athlete’s point of view?”

## **Learner:**

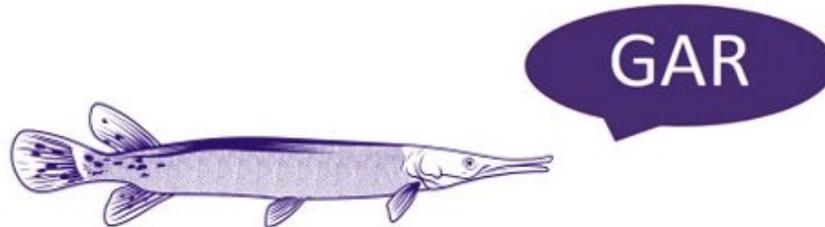
Identifies different concerns. Outlines potential challenges / opportunities in management of the case.

# Awesome Active Learning: Student Reflections

---

*“I might get the right diagnosis for the wrong reason. I learned more when I was asked to actually explain my clinical reasoning.”*

– of inpatient internal medicine service



# Flip The Script - WHAT

---

- After the encounter the preceptor asks the learner to consider a hypothetical:
  - “What if a **key element** of the patient’s story (age, gender, symptom or risk factor) is **changed**?”
- *Learner describes how this would change their reasoning.*
- *Preceptor affirms or corrects new impression of case.*



# Flip The Script - WHY

---

- Guided reflection of reasoning
- Preceptor changes the context to probe the learner's understanding
- Learners reflect on their own thinking
- Metacognitive discussions may help evaluate learner diagnostic constructs.
  - What elevates one diagnoses over another?
  - What differentiates?
  - Overlaps?
  - How do you discern?



# Flip The Script - HOW

---

## **Preceptor:**

- How might your differential change if the athlete...
  - Reported 3-4 days of preceding gastroenteritis?
  - Offered a history of DVT?
  - Took propranolol to treat test anxiety during a final exam the same afternoon?

## **Learner:**

- Reflects on their own reasoning
- Applies knowledge to adapt to different contexts

# Small group breakout

**15 m**

***Cameras on! Work together! Everyone takes a turn!***

***Goal: Practice using an active learning technique.***

**1**

***Pick a scenario:***

- Winter Driver
- Chest Pain in the ED

**2**

***Pick a technique:***

- Muddiest Point
- Thinking Caps
- Flip the Script

**3**

***Two volunteers role play:***

- Teacher
- Learner

***Others observe and give feedback***

**4**

***Switch, rotate, and repeat – everyone takes a turn!***

# Debrief

---



## **Muddiest Point**

*Preceptor:* What was the muddiest point about driving in snowy conditions?

*Learner:* I'm confused about how & when to brake in the snow.

## **Thinking Hats**

*Preceptor:* What would an EMS responder think about this scenario?

What if your infant nephew was in a car seat beside you?

## **Flip the Script**

*Preceptor:* How might you adapt your driving if you had bald summer tires? If you were driving a two-wheel drive tesla? If there was no shoulder?

# Debrief

---



## Muddiest Point

Preceptor: What was the muddiest point about your assessment & plan for CP?

Learner: It's not clear to me if I should order cardiac enzymes.

## Thinking Hats

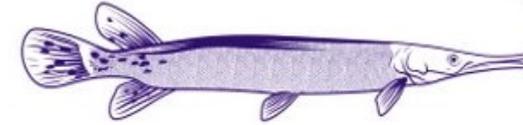
Preceptor: If you had to call a consult, what question might you ask of a 1) Cardiologist? 2) Pulmonologist? 3) Hematologist? How do you think the patient understands her illness? What considerations might the discharge planner take into account?

## Flip the Script

How might your differential change if the pulmonary exam was clear to auscultation? How would your antibiotic considerations change if the patient was neutropenic?

# Agenda

---



GAR



## Context

*Educational Theory.*

## Goal Setting

*Targeted.  
Learner centered.  
Clearly communicated*

## Active Learning

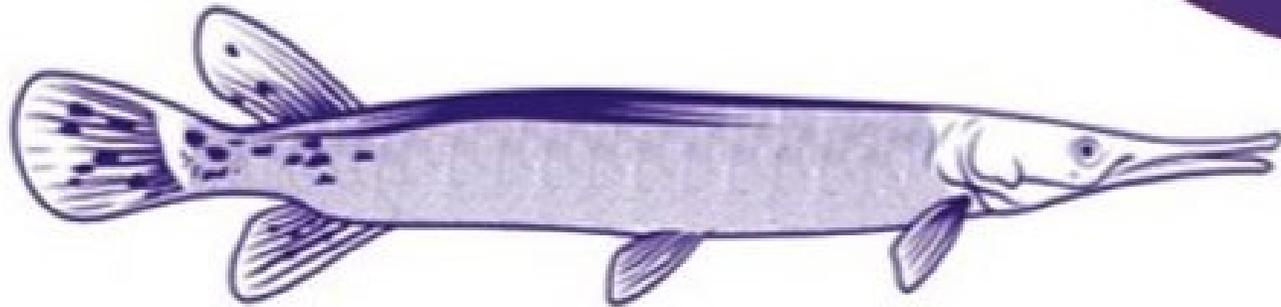
*Engage students in active learning techniques you can use at the bedside.*

## Reinforce

*Principles in practice:  
Reinforcement,  
Retention &  
Transfer.*

# R: Reinforce

- Goal
- Active
- Reinforce



GAR

Active Learning → Reinforce → Transfer

---

## Techniques

- Retrieval practice
- Spaced practice
- Interleaving
- Increasing complexity



# Retrieval Practice

- Make the learners do the work
- Act of retrieving strengthens the memory traces
- Opposite of teacher giving the review



Source: M. A. Papadakis, S.J. McPhee, M.W. Rabow: *Current Medical Diagnosis & Treatment 2016*, 55th Ed. [www.accessmedicine.com](http://www.accessmedicine.com)  
Copyright © McGraw-Hill Education. All rights reserved

QUESTION	ANSWER
What steps can you use to categorize AKI?	
What are the main causes of intrarenal AKI?	
Think about urine sediment. What would support a diagnosis of ATN as a cause for intrarenal AKI?	

# Spaced Practice

---

- Space it out over time
- Less and less cues
- Opposite of cramming



# Interleaving

---

- Learn the basics first
- Interleave related topics
- Opposite of block learning

## **BLOCKING**

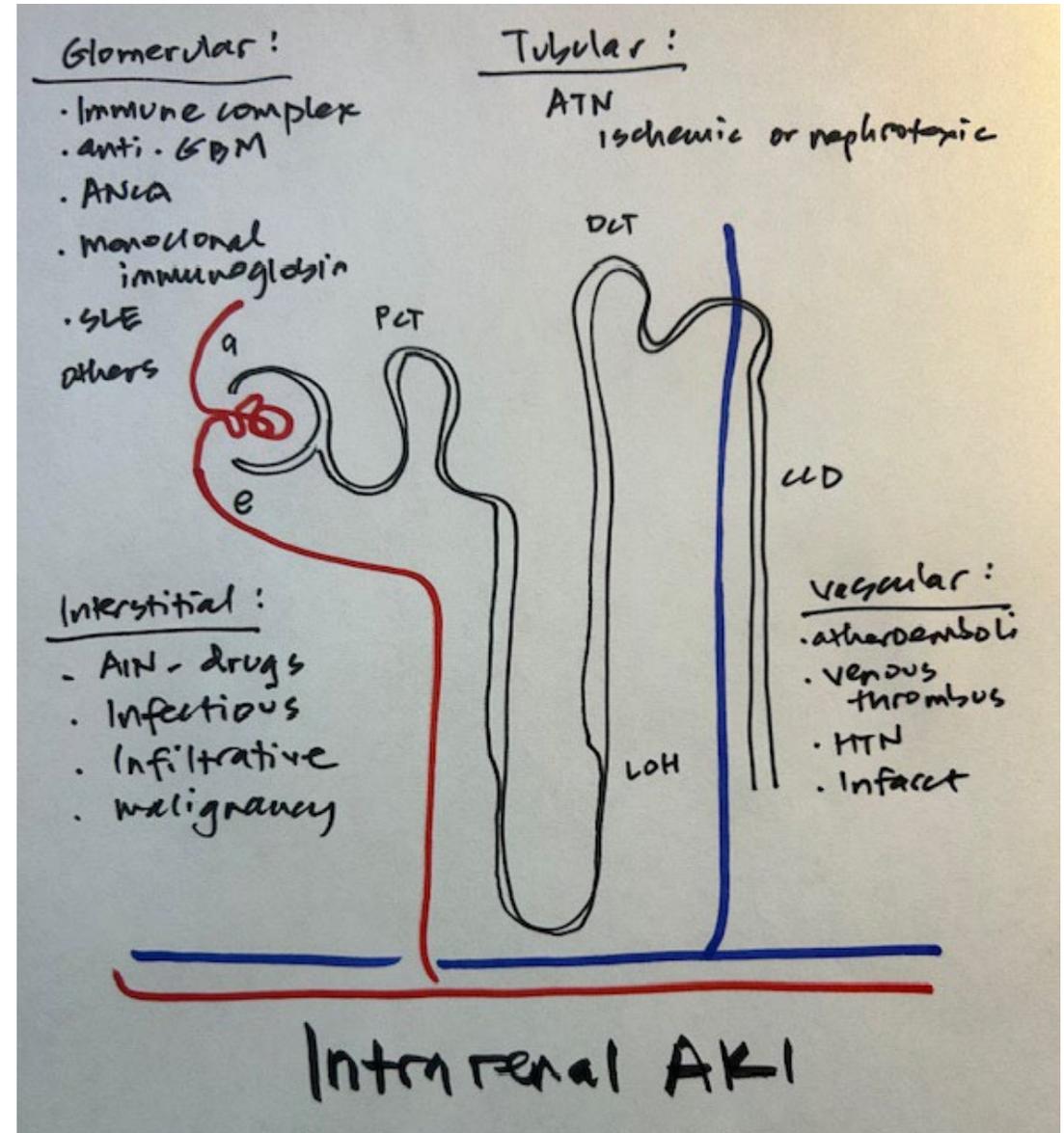


## **INTERLEAVING**



# Increase the Complexity

- Match complexity of retrieval with complexity of information
- Helpful when learners at different levels
- Opposite of simple recall



Active Learning → Reinforce → Transfer

## Techniques to reinforce

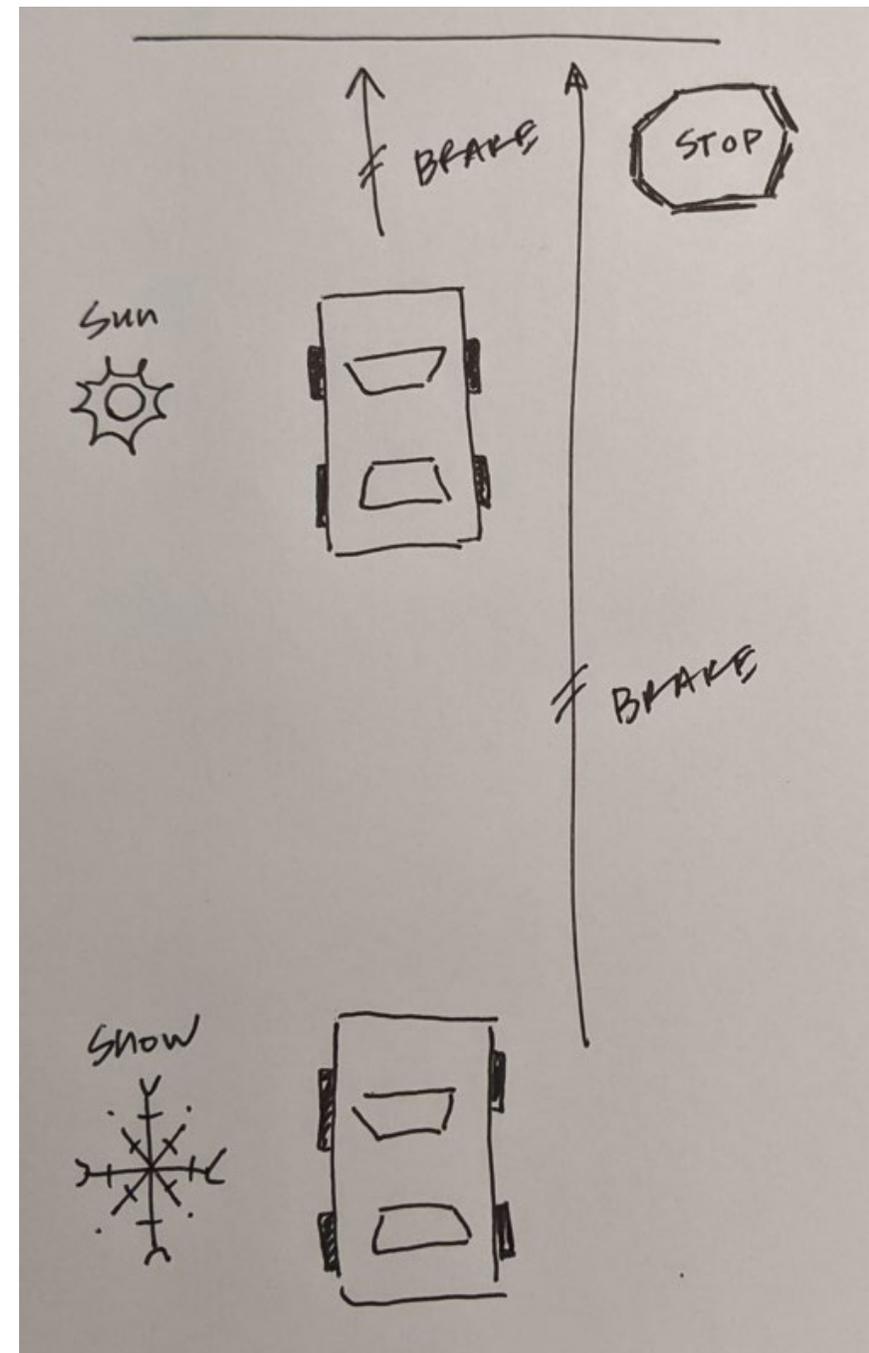
1. Retrieval practice - vary the context, conditions, and application
2. Spaced practice - retrieval practice over time with less cues
3. Interleaving - alternating related topics
4. Employ more advanced reasoning



# Doodle on your own

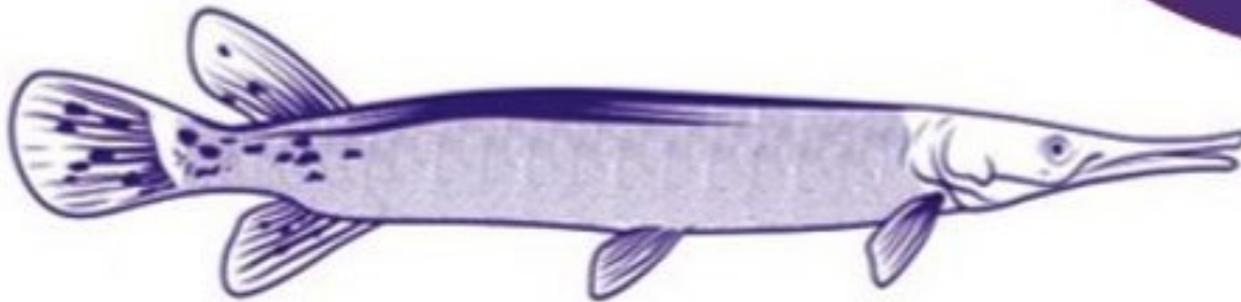
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1. Start thinking about how you might visually **REINFORCE** something you teach.
2. Sketch
3. Save your idea for the online module or a teaching application this coming week.



Summary: "GAR" to facilitate understanding & retention.

- Goal
- Active
- Reinforce



GAR

# THANK YOU!

- Understanding and Retention Module will be live November 6th.
- Please complete the module within 4 months of the session to receive credit towards the certificate
- Please fill out the evaluation!
- Send questions to [clime@uw.edu](mailto:clime@uw.edu)

