



**CAL STATE LA**

CALIFORNIA STATE UNIVERSITY, LOS ANGELES

# Something borrowed: Collaborative learning strategies in law education

Association of American Law Schools Annual Meeting  
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## Handouts used in this session:

- Color cards, which will serve as “clickers”
- “Exam wrappers” which you can use to reflect with as I give the “lecture”

Raise your hand if you don't have these.

# People learn by failing.

- A) TRUE (Pink card)
- B) FALSE (Green card)
- C) NO CLUE (Orange card)

How did so many of us know this is true?

Why did so many people answer this question correctly?

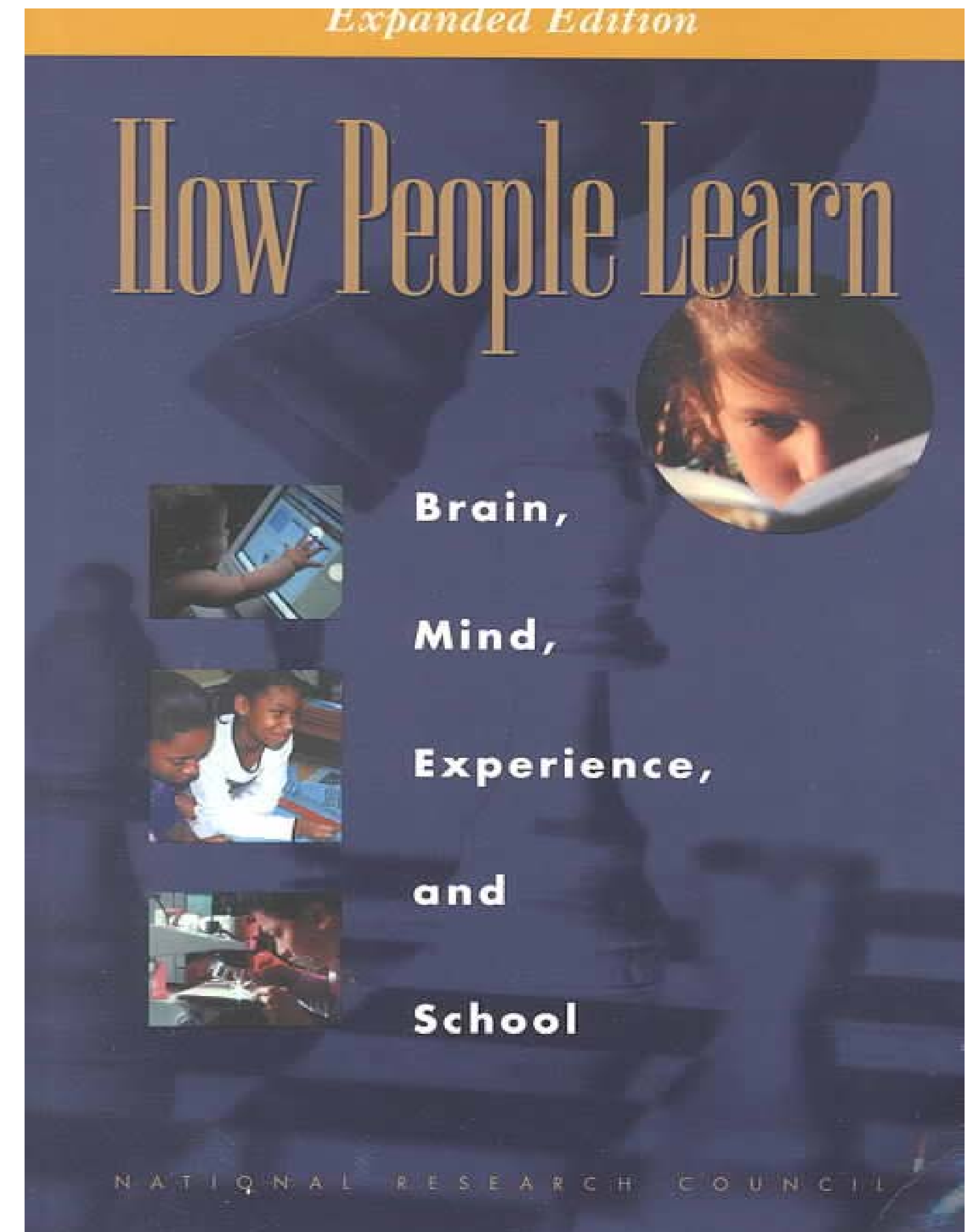
John Bransford, 1994

Legal education can **borrow** from a huge literature on cognition and learning.

**Classical law education also models some best practices for learning.**

***How people learn:  
Brain, mind, experience, and school***  
(Bransford, Brown & Cocking, 1999)

PDF free online at National Academy of  
Sciences (NAS)



# Mini-Lecture: *How People Learn*

## Lecture Wrapper

As you listen to the mini-lecture on *How People Learn*, connect the three key findings to your teaching.

Reflect on your teaching and students as you address the questions on the left-hand side.



Lecture on <i>How People Learn</i> – Connections to Your Teaching
1. What prior knowledge do students bring to your class? What are the common misconceptions?
2. What differences exist between experts and novices in your discipline?
3. What self-regulated learning / self-awareness strategies are most valued in your discipline?



# How People Learn

Bransford, Brown, and Cocking, 1999

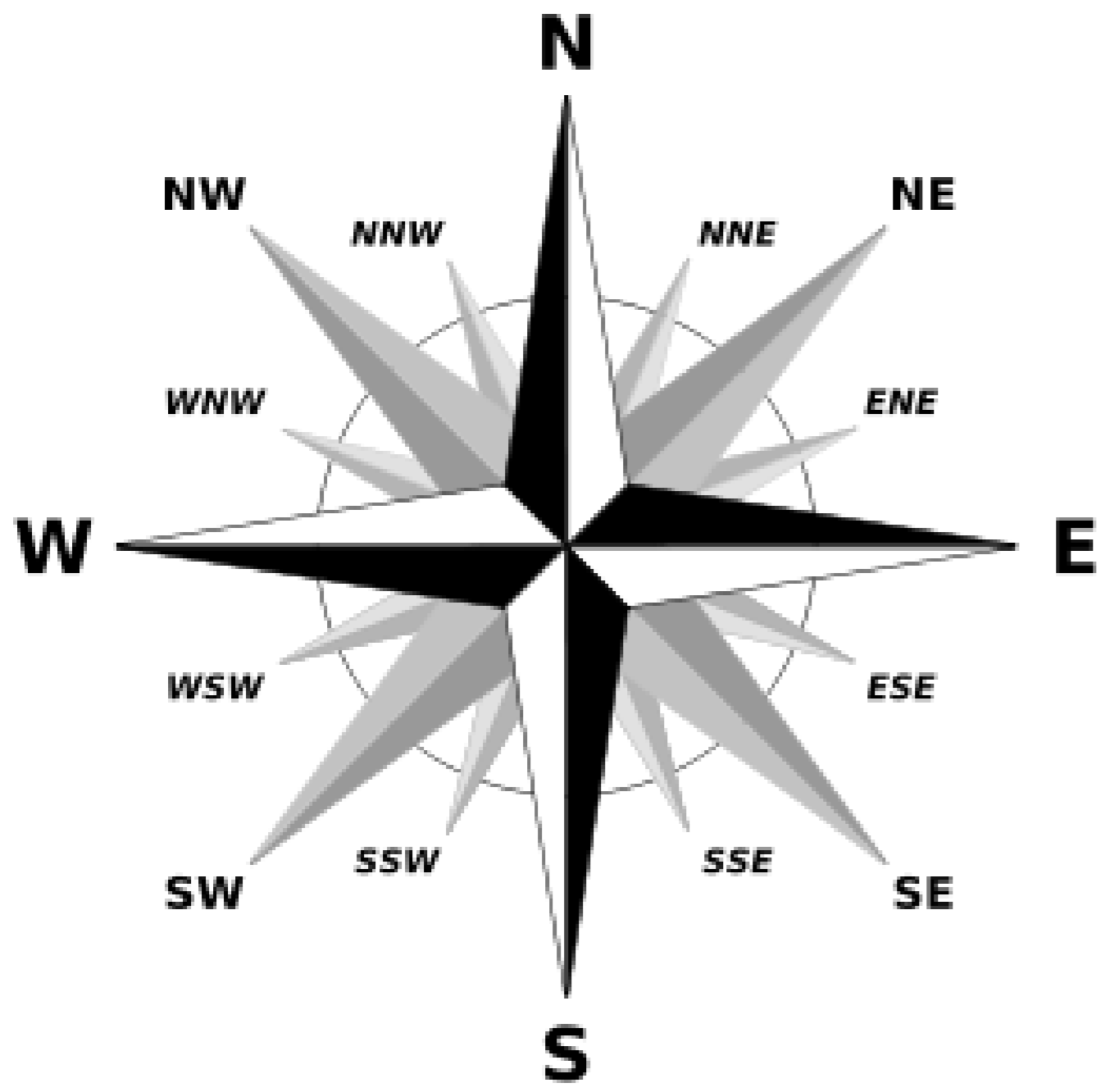
2-year study conducted by the Committee on Developments in the Science of Learning (National Research Council), which ran **a meta-analysis of hundreds of studies on cognition, learning, development, culture, and the brain.**

Bransford, Brown, and Cocking found three overarching themes.

# Prior Knowledge

1.

If I say **cardinal**  
you think of:





What about **battery**?

# Battery

## TECHNOLOGY

A container consisting of one or more cells, in which chemical energy is converted into electricity.

## MEDICINE

A group or series of tests administered for analytic or diagnostic purposes.

## LAW

An intentional act causing harmful or offensive contact with the 'person' of another.



# Battery

## **MILITARY SCIENCE**

An indefinite number of guns placed together in the same position.

## **MUSIC**

A term used in Baroque music for the practice of arpeggiating passages notated as chords.

## **SPORTS**

In baseball, the pitcher and catcher.





Individual learners show preferences for the mode in which they receive information (e.g., visual, auditory, kinesthetic).

- A) TRUE (PINK card)
- B) FALSE (GREEN)
- C) NO CLUE (ORANGE)

Learning styles (i.e. *verbal* or *visual* learners) are not supported by empirical research.

- A) TRUE (PINK card)
- B) FALSE (GREEN)
- C) NO CLUE (ORANGE)

Both statements are **true**.

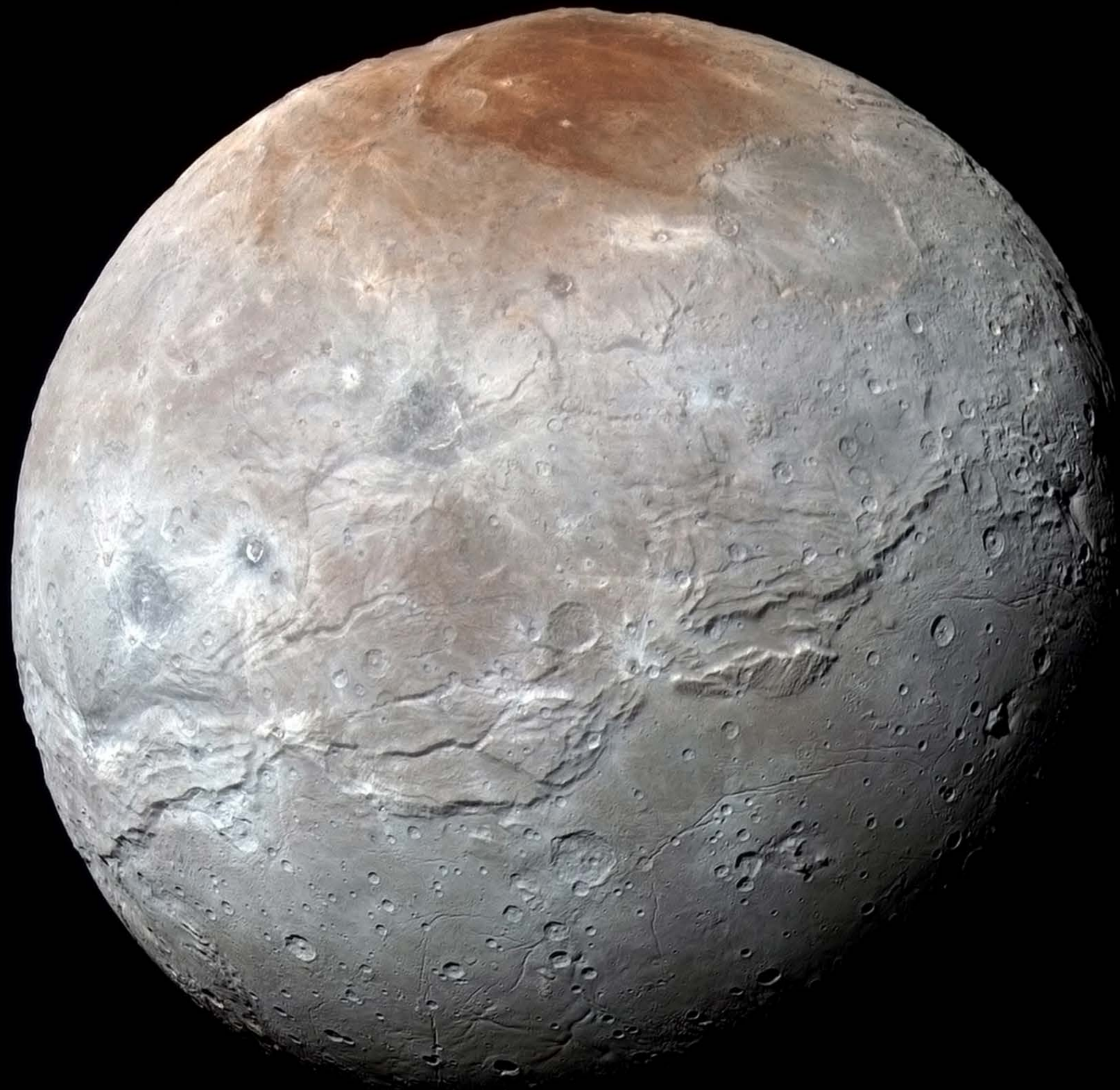
Did your prior knowledge about 'learning styles' get in the way of hearing me say it's not proven?

Results demonstrated no statistically significant relationship between learning style preferences (auditory, visual word) and learning comprehension based on instructional method. The study did find that instructors appealed to visual as opposed to auditory learning modes.

- Rogowsky, Calhoun, & Tallal (2014)

**Research suggests that ‘learning styles’** (Lilienfeld, Lynn, Ruscio, & Beyerstein, 2010; Pashler, McDaniel, Rohrer, & Bjork, 2009; Rogowsky, Calhoun & Tallal, 2014; Willingham, 2009), **left brain-right brain theory** (Alferink & Farmer-Dougan, 2010; Dekker, Lee, Howard-Jones, & Jolles, 2012; Gazzaniga, 1985, 2002, 2015; Lilienfeld, et al., 2010; Lindell & Kidd, 2011; Willingham, 2009, 2010), **and ‘multiple intelligences’** (Waterhouse, 2006) **do not exist.**

**I’m sorry.**



The way  
some of us  
felt about  
Pluto.

**“There are different abilities, but really, we all learn the same way.”**

– Daniel Willingham, 2009

*Why don't students like school: A cognitive scientist answers questions about how the mind works and what it means for the classroom.*  
Jossey-Bass, 2009.

# Prior knowledge is powerful and matters.

“Students come to the classroom with preconceptions about how the world works. If their initial understanding is not engaged, they may fail to grasp the new concepts and information that are taught, or they may learn them for purposes of a test but revert to their preconceptions outside the classroom.”



*“Pucker” by April Maciborka & David Wile*

# Prior knowledge can also be wrong. Terribly wrong.

Learners with incorrect prior knowledge have terrific **misconceptions** and may resist change.





**Which can  
manifest as  
maladaptive.**

**YOU'RE FIRED**

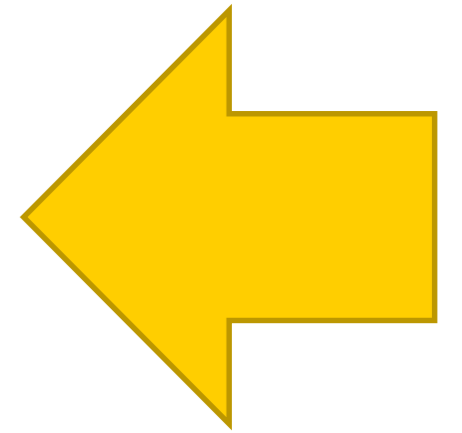


# Prior Knowledge

What prior knowledge do students bring to **your** class?

What are some common **misconceptions** students have about law?

Lecture on <i>How People Learn</i> – Connections to Your Teaching
1. What prior knowledge do students bring to your class? What are the common misconceptions?
2. What differences exist between experts and novices in your discipline?
3. What self-regulated learning / self-awareness strategies are most valued in your discipline?



# What misconceptions do your students have about the law?

**I like to argue; I'll make a good lawyer.**

Law is all about cherry-picking.

**You'll be fine if you know 'black letter' law.**

**The law is black and white.**

It's an answer you find.

**You need a good memory.**

**There is a "right" answer.**

# Thoughts?

# What misconceptions do students have about your assignments?

It's a product, not a process

Rote memorization gets you far

It can be done overnight

Sloppy, undisciplined writing should be rewarded

# Reflect.

**Think about a situation you experienced with students where a common misconception dominated their ability to learn.**

How can you engage that misconception—in class or via assignment?

Bransford, Brown & Cocking, 2000

**Key Finding 1:**

**Prior knowledge matters (for your teaching).**

# The good news is, their prior knowledge is a hook.

- ❑ Replace naïve with scientific understanding by giving students the opportunity to reveal their understanding as naïve—to see where it falls short.
- ❑ Structure a class session to undo a big (confounding) misconception.
- ❑ Allow them to have an A-HA moment: ask them to predict an outcome you know they'll get wrong.
- ❑ Use analogy and metaphor to link what they know with what you want them to learn.





# Take advantage of it.

Things you might consider surveying in your classroom

**Attitudes** (Learned predispositions)

**Beliefs** (Personal knowledge/behavioral)

**Values** (Enduring beliefs)

**Interests** (Personal/situational preferences)

**Self-Concept** (Self-evaluations)

**Self-Efficacy** (Self-perceptions of an ability to do something well)

# ONCE UPON A TIME...

Evolution wired our brains for storytelling.

- Storytelling puts our entire brain to work.
- It connects **prior knowledge** with something new.
- This is why everyone loves a story.

**THE END**

# Experts and Novices

## 2.



# Experts v. Novices

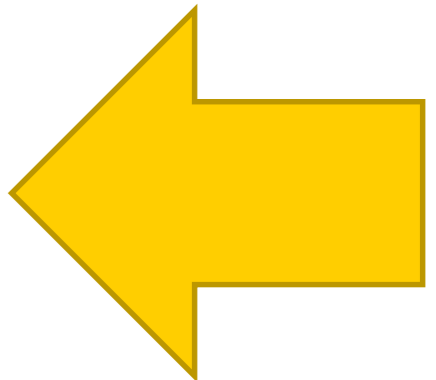
What differences exist between experts and novices in law?

## Lecture on *How People Learn* – Connections to Your Teaching

1. What prior knowledge do students bring to your class? What are the common misconceptions?

2. What differences exist between experts and novices in your discipline?

3. What self-regulated learning / self-awareness strategies are most valued in your discipline?



# Experts

Your knowledge is well organized.

You recognize patterns.

Organizational sensemaking allows for easy retrieval of relevant knowledge.

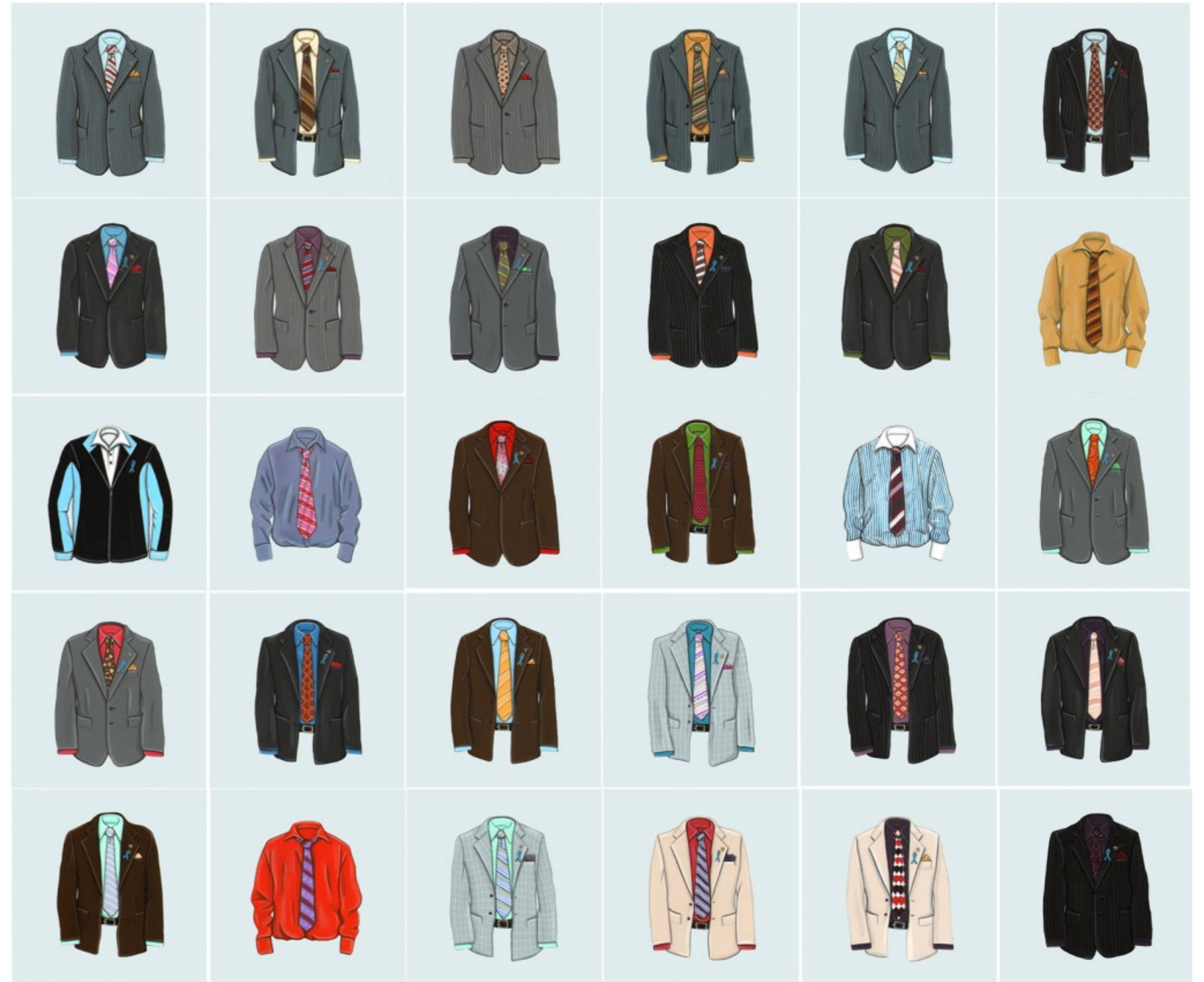


# What is 'expertise'?

**To develop competency a novice must:**

1. Have a deep understanding of factual knowledge
2. Understand this knowledge within the context of a conceptual framework
3. Organize this knowledge in ways that facilitate retrieval and application

# Experts (you)



Kiersten Essenpreis

**Novices (Students)**







Novice learners  
need to practice  
and will make  
mistakes.

That's okay.

# Naïve Versus Skillful Learners

## Naïve Learner Characteristics

Non-specific goals

Self-handicapping strategies

Avoid self-evaluation

Attribute ability

Cannot adapt

Not interested

## Skillful Learner Characteristics

Self-regulating

Set goals

High self-efficacy

Seek self-evaluation

**Practice**

Can Adapt

Intrinsically interested

Trying to solve a problem before being taught the solution leads to better learning, even if your first answer is wrong.

- A) TRUE (PINK card)
- B) FALSE (GREEN)
- C) NO CLUE (ORANGE)

**True.** Students given hands-on exercises **before** they do assigned readings (or watch videos) outperform students who read or watched first.

-Blikstein and Pea, 2013

Preparing for future learning with a tangible user interface: The case of neuroscience.  
*IEEE Transactions on Learning Technologies*, 6, 2013.

Bransford, Brown & Cocking, 2000

**Key Finding 2:  
Novices are not experts.**

They think differently about the law than you do.

# Metacognition

3.

# Metacognition

“Thinking about one’s thinking” (Flavell, 1970)



# Metacognition

'Knowing about knowing'

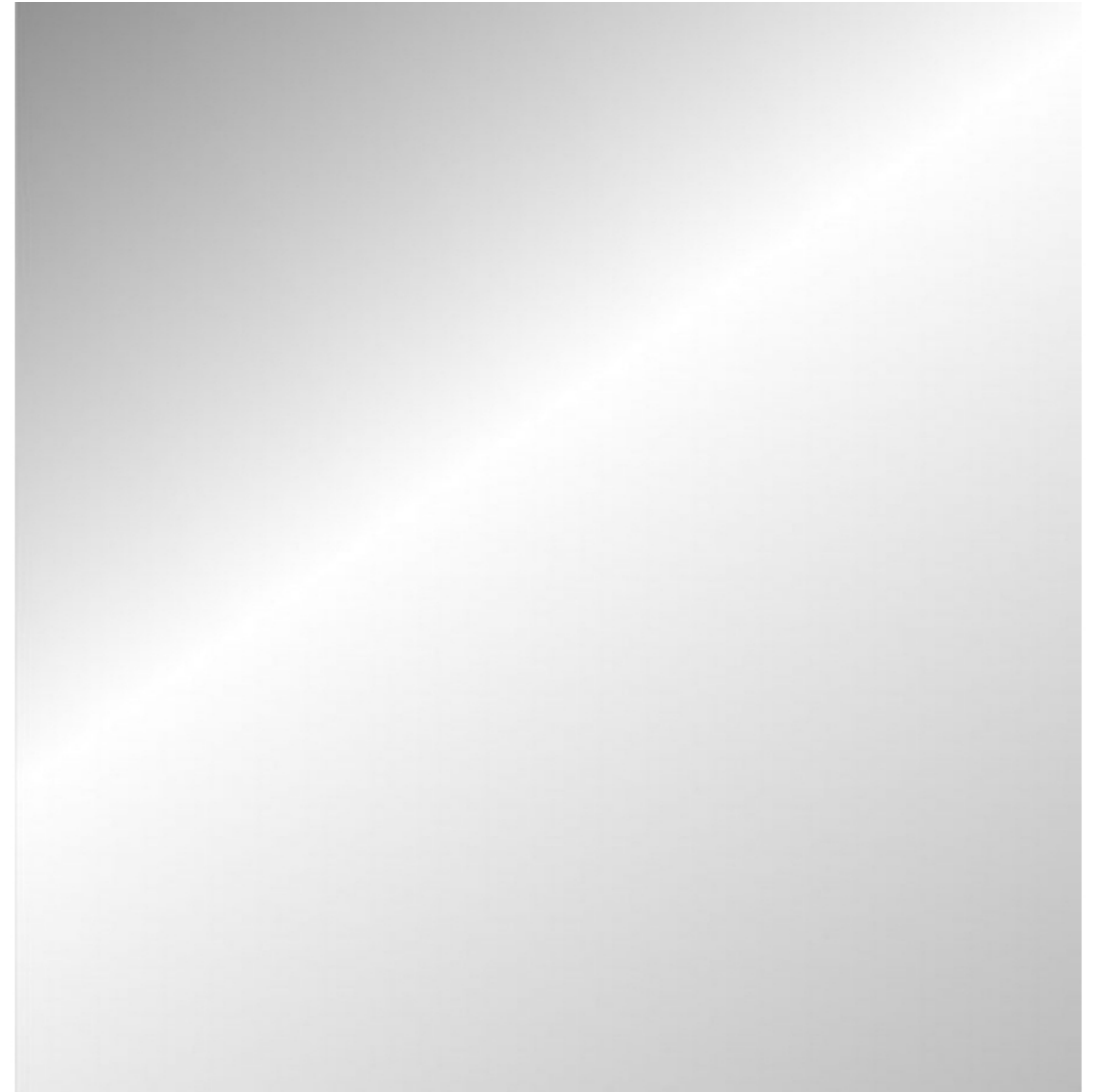
Self-awareness

Monitoring

Goal-setting

Mindset

**AKA taking a look in the mirror.**







**Dunning-Kruger Effect** —  
our incompetence masks  
our ability  
to recognize our incompetence.

**No self-awareness  
so he wouldn't have  
seen it coming**



# Metacognition: 3-2-1

3. Three things you learned today
2. Two things you want to know more about
1. One thing you will apply in a course you teach based on this workshop

# **I could share my outcomes for this workshop with you:**

1. Create a learner-centered environment where you could play and not/fail.
2. Persuade you of something you hadn't seen, known, or believed before, based on my experience and empirical evidence.
3. Get you to reflect on your own teaching identity as this impacts your good work.
4. Affirm the contributions that legal education makes to learning.

# I could make the design of this workshop visible:

- **‘Clicker’ questions:** Engagement; activated your thinking and prompted self-regulation
- **Mini-Lecture:** Framework
- **Exam wrapper:** Cognitive work in collaboration with peers; further tapped your prior knowledge and helps you to self-assess
- **Active learning:** 14 exercises/tasks I asked you to participate in
- **Interleaved practice:** mixed up the concepts so you have to make connections
- **This slide:** Transparency and role-modeling
- **Next/concluding activity:** Metacognition, Self-Regulation in your own teaching
- **Reflection:** How do you see yourselves within the context of this workshop?

# Metacognition

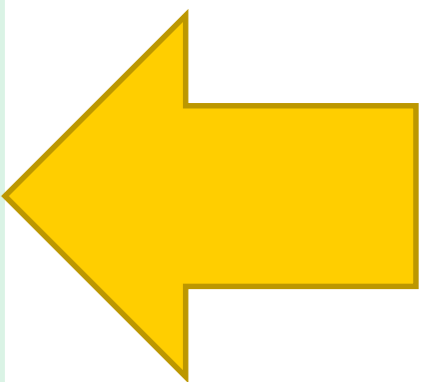
What self-regulated learning / self-awareness strategies are most valued in your field of law or practice?

## Lecture on *How People Learn* – Connections to Your Teaching

1. What prior knowledge do students bring to your class? What are the common misconceptions?

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# Example: Metacognition in (trial) practice

Know where your feelings end and those of your clients begin.

Understand your personal values and their influence on the client relationship.

Realize how you influence outcomes.

Recognize and manage internal dialogue.

Understand and control personal defense mechanisms.

Know when and how clients are reacting to your style.

Modify behavior based on reactions of clients.

# Naïve Versus Skillful Learners

## Naïve Learner Characteristics

Non-specific goals

Self-handicapping strategies

Avoid self-evaluation

Attribute ability

Cannot adapt

Not interested

## Skillful Learner Characteristics

Self-regulating

Set goals

High self-efficacy

Seek self-evaluation

Practice

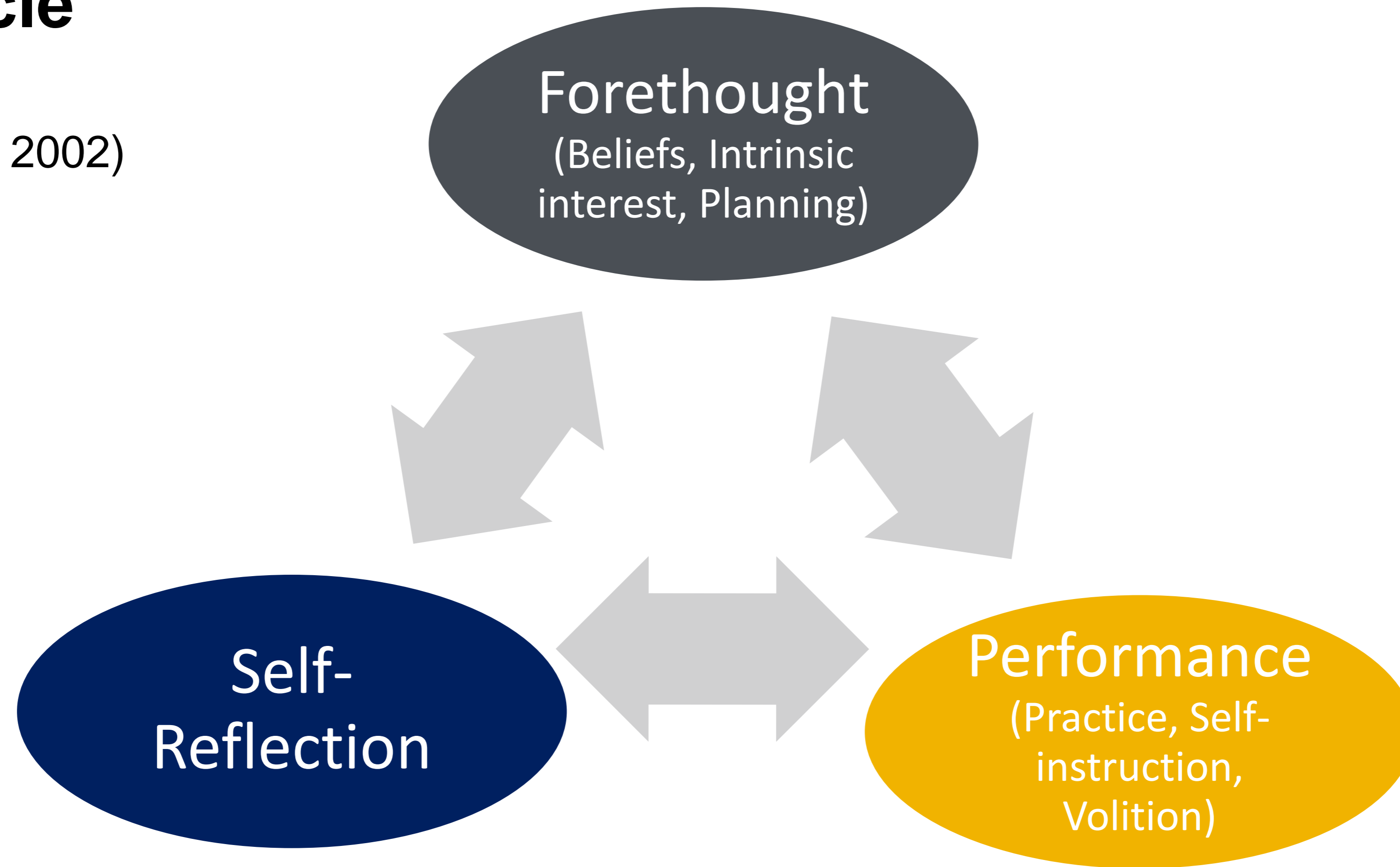
Can Adapt

Intrinsically interested



# Self-Regulated Learning Cycle (SRL)

-(Zimmerman, 1990, 2002)



Reflection is a powerful form of practice which leads to greater learning.

- A) TRUE (Pink)
- B) FALSE (Green)
- C) NO CLUE (Orange)

**The first 20 minutes of the first day of class are among the most critical of the entire course.\***

How could a common misconception be addressed on the first day of class using metacognition?

**Briefly discuss at your table.**

Scholl-Buckwald, S. (1985). The first meeting of the class. In Teaching as though students mattered, J. Katz (Ed.). *New Directions for Teaching and Learning*, No. 71. San Francisco, CA: Jossey- Bass.

# First-day metacognitive assignment examples

**Predict** an outcome based on incomplete information

**Writing prompt:** One-minute paper

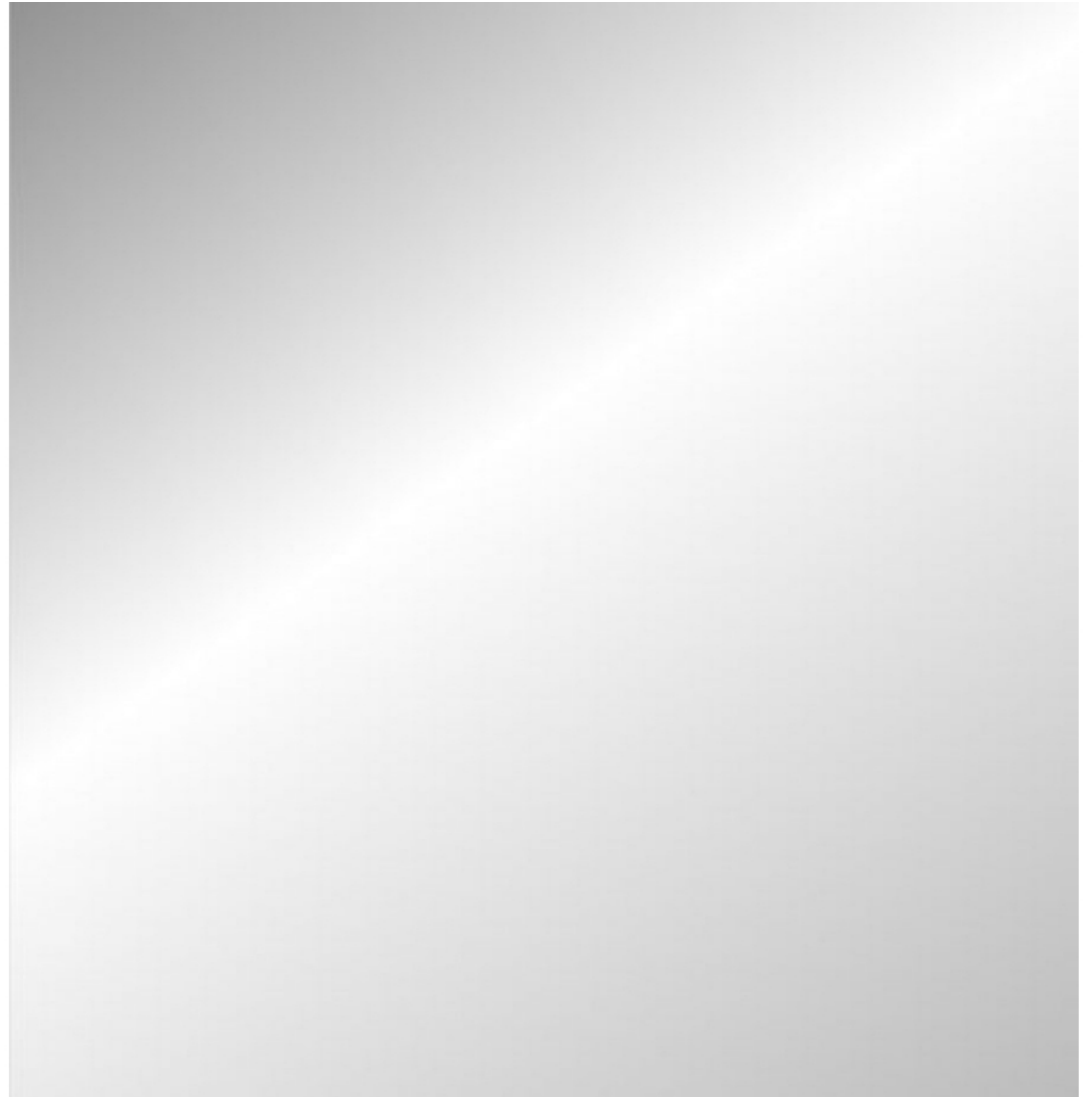
**Pre-assessment:** Encourage students to examine their current thinking

**Muddiest Point:** Give students practice in identifying confusions

**Knowledge Survey:** Google “threshold concepts”

# Metacognition

“A metacognitive approach to instruction can help students learn to take control of their own learning by defining learning goals and monitoring their progress in achieving them.”



Bransford, Brown & Cocking, 2000

## **Key Finding 3:**

**Metacognition works to bridge the expert-novice gap.**

# Even 'experts' differ.

Metacognitive skills matter to levels of expertise:

**Adaptive experts:** Can transfer knowledge from one setting to another

**Routine experts:** Function well in a standard, context-dependent setting







**Our capacity for self-knowledge is overrated.**

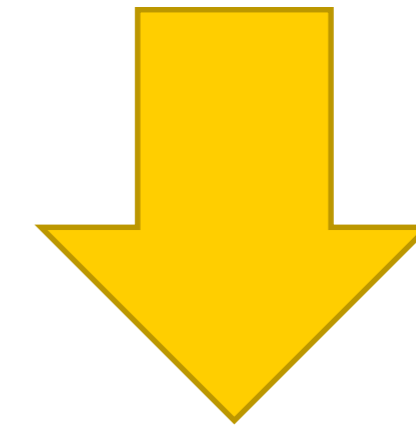
Vazire et al

**We are probably not good judges of our own learning.**

Vazire, S. (2010). Who knows what about a person? The self-other knowledge asymmetry (SOKA) model. *Journal of Personality and Social Psychology, 98*(2):281-300.

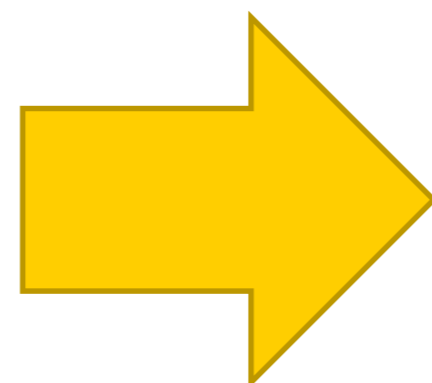
Vazire, S., & Mehl, M.R. (2008). Knowing me, knowing you: The accuracy and unique predictive validity of self-ratings and other-ratings of daily behavior. *Journal of Personality and Social Psychology, 95*(5):1202-16.

# Mini-Lecture: *How people learn* Lecture Wrapper



**Place the handouts side by side.  
Use the right side to structure your  
reflection of the session and  
activities you've experienced so  
far.**

Place side by side



Lecture on <i>How People Learn</i> – Connections to Your Teaching
1. What prior knowledge do students bring to your class? What are the common misconceptions?
2. What differences exist between experts and novices in your discipline?
3. What self-regulated learning / self-awareness strategies are most valued in your discipline?

Reflect on Our Session
1. How have we leveraged your prior knowledge today?
2. How have we helped you bridge the gap between expert and novice? What frameworks have we used?
3. How have you thought about your own learning today?

**“What faculty do matters.”**

John Hattie, 2009

*Visible learning: A synthesis of over 800 meta-analyses relating to achievement.*  
New York: Routledge, 2009.

What law education gets right



# COLD CALLING

The practice of calling on students who do not raise their hands.

Infrequent because it's usually punitive.



Based on what you have learned today, why is **cold calling** still effective?

# Why is it effective?

- ❑ A form of 2-way **feedback**, critical for their learning and your teaching (Hattie, 2009)
- ❑ Students **practice** thinking in real time and become **self-aware** (Bransford et al)
- ❑ Like testing, can initiate a form of *effortful retrieval* (self-quizzing), a tool for durable retention (Brown, Roediger, McDaniel, 2014)
- ❑ Reveals **common misconceptions** that can be examined



# Humane cold-calling

- ❑ Have a clearly stated policy in the syllabus and connect it to course goals.  
**It's a course goal if you want them demonstrating that skill or attitude.**
- ❑ The stakes are up to you, but start low. Begin the term with innocuous questions that only require an opinion.
- ❑ If they don't have the answer, they should have a question.
- ❑ Your questions should create a supportive atmosphere where it is okay to fail.





# SOCRATIC METHOD

A method of teaching in which the master imparts no information, but asks a sequence of questions, through answering which the pupil eventually comes to the desired knowledge.

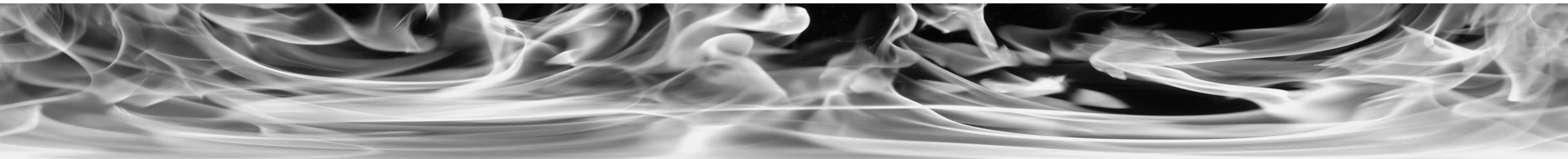
Socratic *irony* is the pose of ignorance on the part of the master, who may in fact know more about the matter than he lets on -OED



Based on what you have learned today, why is the **Socratic method** still effective?

# Why is it effective?

- ❑ Like cold calling, a unique form of two-way **feedback** (Brookfield, *et al*)
- ❑ Done well, a form of intensive **practice** (Brown, Roediger, McDaniel, 2015)
- ❑ Uses questions to examine – and destabilize — **misconceptions** (Reich, 2003)
- ❑ **Links novice to expert:** reasoning, argumentation, and synthesis (Bransford, *et al*)
- ❑ Encourages **reflection**



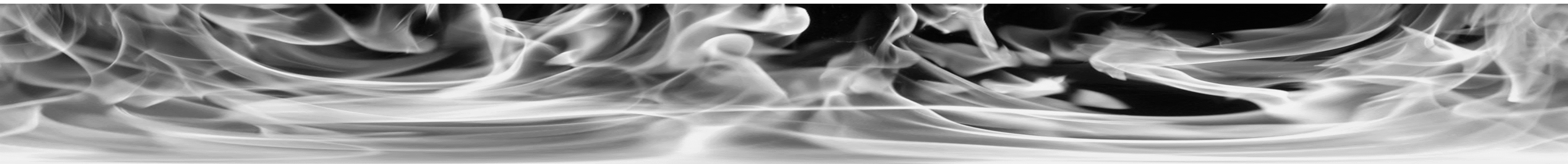
# Why do it?

- ❑ Law is a discursive discipline, rhetorical and philosophical
- ❑ The method is a unique and time-tested form of active learning



# A better method

- ❑ Employ the method only when it serves course objectives.
- ❑ Use it to introduce ‘productive discomfort’, not panic (Reich, 2003).
- ❑ Structure your questions to teach students to ask better questions.
- ❑ Set down conversational guidelines and allow students to establish rules of the road.
- ❑ Learn students’ names and have them address each other by given names.



# A better method

- ❑ Pace yourself and use *wait time*—silence is productive (Rowe, 1973). Length and correctness of responses increase.
- ❑ Follow-up questions are good; play neither advocate nor devil's advocate.
- ❑ Discourage appeals to (your) authority.
- ❑ Be open to learning something new and admit when you don't know.
- ❑ Resist lecturing.



# Use the method in writing

- ❑ Practice the **process** method. Rhetoric-composition experts focus on process over product.
- ❑ Give students feedback throughout the writing process, not just the final draft.
- ❑ Break down and grade separately the writing stages.(Kearney & Beazley, 1991):
  1. Assignment features an 'instigating question'
  2. Student's written answer via focus drafts and private memos
  3. Teacher's written response using Socratic questions
  4. The student-instructor conference can also use questioning
  5. Revised work



# THE CASE STUDY METHOD

A teaching approach that employs decision-forcing and puts students in the shoes of those forced to make the same decision in the past.

Based upon Langdell's **Case Method**, which uses a court decision and the Socratic Method to analyze.



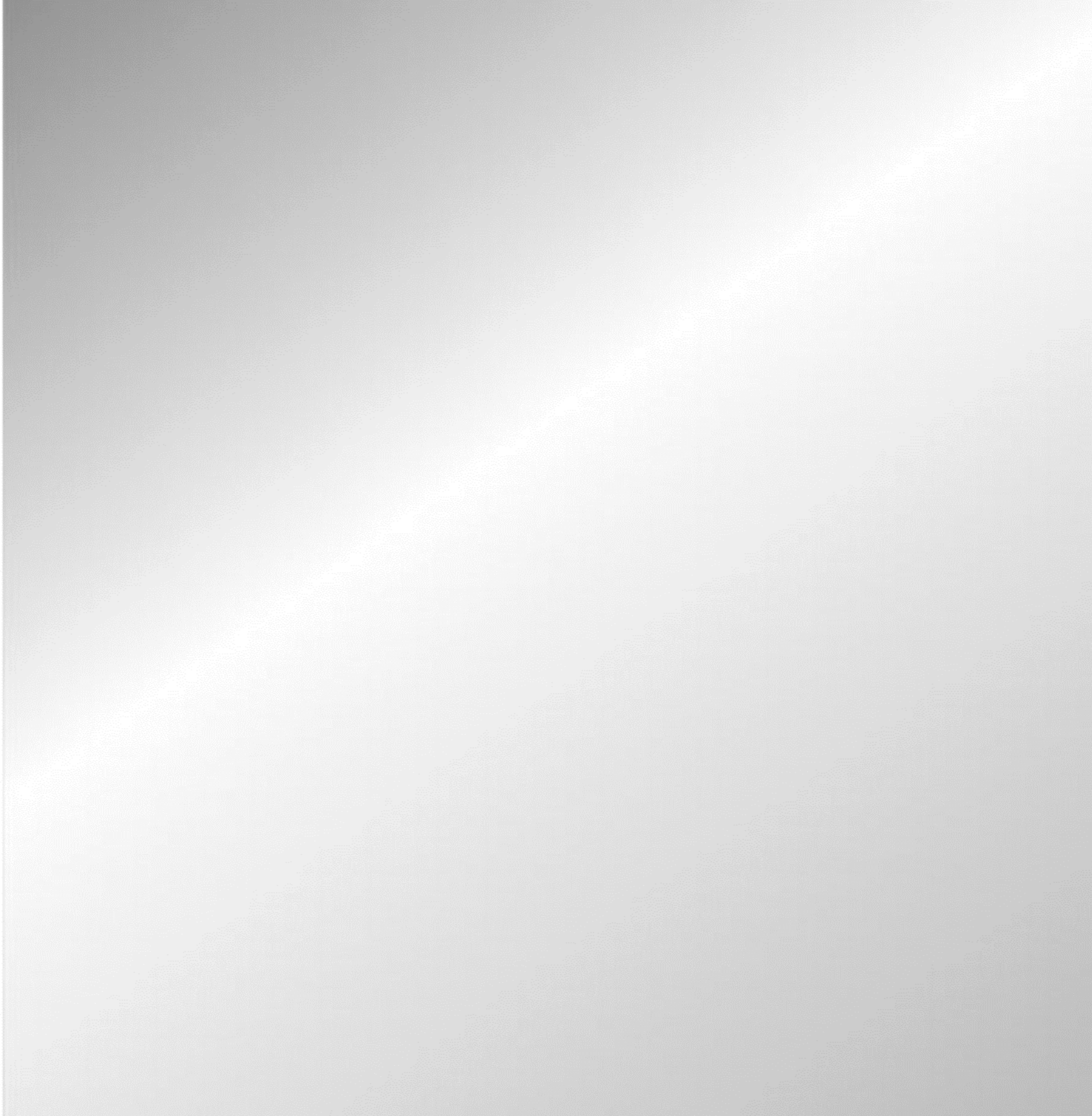


Based on what you have learned today, why is the **case study method** effective?

# Why is it effective?

- ❑ Uses experiential, problem-based learning, a type of ‘discovery’ learning (Bruner, 2009) that allows for **prior knowledge** and **practice** (Bransford, et al)
- ❑ Develops problem solving and **motivation** in students (Zimmerman, 1990)
- ❑ Mimics real world ambiguity, frustration, incompleteness and allows for self-examination (**metacognition**)
- ❑ Links **novice to expert behavior** (Bransford et al)





# Attention span

The concept of the 15-minute attention span remains unsupported. (Bradbury, 2016)

The greatest variability in student attention arises from differences between teachers, and not from format. (Bradbury, 2016)

# AND

Technology likely does not rewire our brain (affect our ability to pay attention). (Pinker, 2010; Willingham, 2010)

Technology **can** alter our beliefs about what is worthy of attention. (Willingham, 2017)

Seventy-three percent of Generation Z has access to subscription video on demand services. (Nielsen, 2017)

- Most sleep with their phones. (Twenge, 2017)

# Questions and Observations

# Evidence

**There is no empirical basis for ‘learning styles’ --or left/right brain theory.**

Gazzaniga, M. (2015). *Tales from both sides of the brain: A life in neuroscience*. Ecco.

Pashler, H., McDaniel, M., Rohrer, D., & Bjork, R. (2008). Learning styles: Concepts and evidence. *Psychological Science in the Public Interest*, 9, 105–119.

Rogowsky, B. A., Calhoun, B. M., & Tallal, P. (2014). Matching learning style to instructional method: Effects on comprehension. *Journal of Educational Psychology*, 107, 64–78. doi://10.1037/a0037478

# Evidence

## **Learning myths stubbornly persist.**

Dekker, S., Lee, N.C., Howard-Jones, P. & Jones, J. (2012). Neuromyths in education: Prevalence and predictors of misconceptions among teachers. *Frontiers in Psychology*, 3:429- . doi: 10.3389/fpsyg.2012.00429

## **Deep learning is achieved through reflection as opposed to experience alone.**

Ash, S.L., & Clayton, P. H. (2009). Generating, deepening, and documenting learning: The power of critical reflection in applied learning. *Journal of Applied Learning in Higher Education*, 1, 25-48.



# Evidence

**Give an in-class activity before you have them do the reading.**

Schneider, B., Wallace, J., Blikstein, P., & Pea, R. (2013). Preparing for future learning with a tangible user interface: The case of neuroscience. *IEEE Transactions on Learning Technologies*, 6,117-129. doi:10.1109/TLT.2013.15

**Mix up your practice.**

Brown, C.B., Roediger, H. L., & McDaniel, M.A. (2014). *Make it stick: The science of successful learning*. Cambridge, MA: Harvard Belknap.

# Shout out to you for caring.

**Faculty who participate in their own professional development improve their students' success.**

Condon, W., Iverson, E.R., Manduca, C.A., Rutz, C., & Willett, G. (2016). *Faculty development and student learning: Assessing the connections*. Bloomington, IN: Indiana University Press.



**CAL STATE LA**  
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**NO**

**YES**