



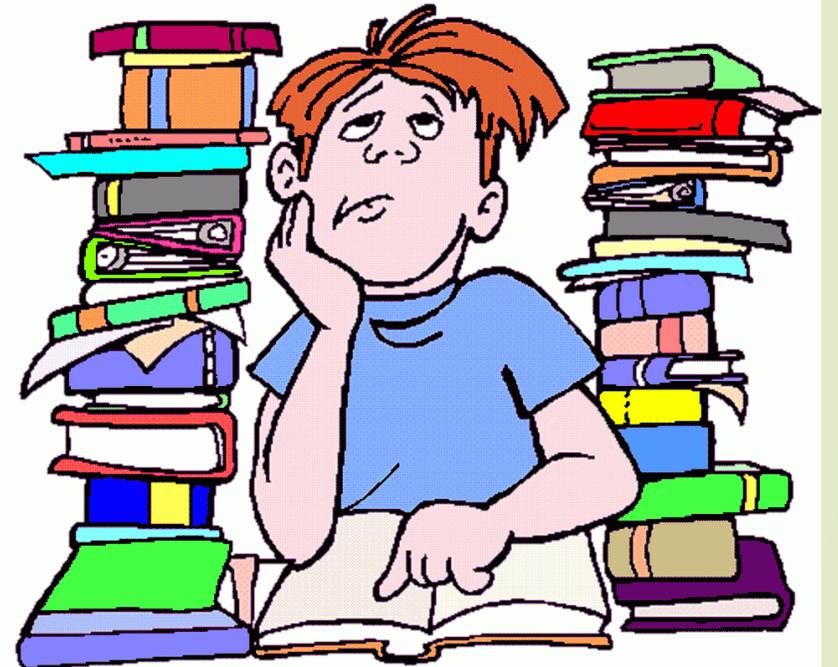
TEACHING FOR PROGRESS.
HELPING STUDENTS “GET BETTER” AT THEIR SKILLS.

The goal of this workshop is to help audience members **become more effective at delivering feedback that improves student progress and performance.**

INTRODUCTION AND OVERVIEW

MY ASSUMPTION: You are a teacher, and you want your students want to “get better” at something.

I wonder what I'm going to learn today?





OBJECTIVES

By the end of this workshop, audience members should be able to:

- ✓ **Describe** Bloom's scale of learning and apply it to the topics they teach;
- ✓ **Describe** what is meant by a mental representation. Audience members should be able to clearly explain or describe what *really good* looks like when it comes to the skills they are teaching;
- ✓ **Explain** the letters in TOAST and apply the acronym to giving feedback;
- ✓ **Identify** at least two methods for improving feedback techniques to enhance student progress; and,
- ✓ **List** at least three fairly common mistake teachers make when trying to get students to improve.

BENJAMIN BLOOM

How does learning work?



BLOOM'S MADE EASY



BLOOM'S MADE HARD/DIFFICULT.

Applying Bloom's to bear safety.

► FAMILIARITY

- This person is a novice or beginner.

This person has little to no understanding of why bear attacks happen. What information they have might be wrong.

► RECALL

- This person is familiar with a topic, but she is not super good at recalling all relevant facts nor is she good at performing skills especially well, especially without prompts or practice.

Without prompts, this person can recall some steps in bear safety, prevention, and response; however, the person's responses are limited and are not comprehensive.

► UNDERSTANDING

- This person understands concepts and can effectively perform skills on a consistent basis. She or he has a fairly solid depth of knowledge in a given topic area and can solve routine or foreseeable problems.

Person not only has a solid grasp of bear safety, but she probably has a solid grasp of typical predator and prey behaviors and understands why certain prevention/ response actions are and are not effective. Can demonstrate what *really good* bear safety prevention/response looks like.

► CRITICAL THINKING

- This person has not only depth of knowledge, but she can also apply concepts across topics, and she can problem-solve difficult tasks.

Based on similar and overall knowledge of animal behaviors, person can effectively extrapolate and problem solve; could likely "figure out" what to do in many "surprise" or unfamiliar situations.

BLOOM'S TAXONOMY AND A MENTAL REPRESENTATION OF **REALLY GOOD** SPLINTING SKILL/KNOWLEDGE

Familiarity (novice skills)	Recall (can mimic skills and answers)	Understanding (able to figure things out)	Critical Thinking
<p>Introduction of new material, often as the result of lecture, video, demo, etc. Novice students would not be able to build really good splints without seeing one first.</p>	<p>Students can recall relevant facts about splinting, but they need to refer to prompts/cues if they are to build a <i>really good</i> splint. Students can mimic a demo but, without prompts, might miss steps/details.</p> <p>Students can recreate effective splints as long as they were given a demo and as long as they have access to the same splitting materials. They are unable to problem solve and splint new injuries effectively, without a demo.</p>	<p>Students can follow more complex topics as they are described, but the students are not able to thoroughly and accurately describe and explain the same concept(s) in their own words. They should practice using their own words to describe topics as much as possible.</p> <p>Students are not skilled at giving effective feedback to peers.</p> <p>Students can recall facts efficiently and accurately without assistance. They are able to build really good splints, as long as they are simply mimicking what they've learned and practiced.</p> <p>Students can mimic demonstrations without having to refer to a checklist. They can easily recall the three Cs of splinting.</p> <p>Students can thoroughly and accurately explain the three Cs of splinting, and they can describe concepts in their own words. They can easily recall the anticipated problems associated with extremity injuries.</p>	<p>Students can problem solve unfamiliar problems; e.g., they can build an effective splint using improvised and unfamiliar material.</p> <p>Students are able to explain why things happen and why certain treatments make sense (or should be avoided), etc. They can apply splinting concepts to difficult situations and can come up with sound decisions.</p> <p>Students can grasp and explain complex relationships, such as how blood clots are anticipated problem of forearm/wrist injuries. They can explain how and why splinting can exacerbate the potential for blood clots. They can reason out how and why certain environments—such as altitude or very cold temps—also exacerbates this potential even more.</p> <p>Students can fairly and accurately evaluate their own decisions and performances and can assess the decisions and performance of their peers.</p> <p>Students can effectively compare the pros and cons of two equally compelling options that will not necessarily result in an optimal outcome in either case; they can make sound decisions and can justify their choices.</p>



THREE STEPS TO IMPROVING STUDENT PROGRESS

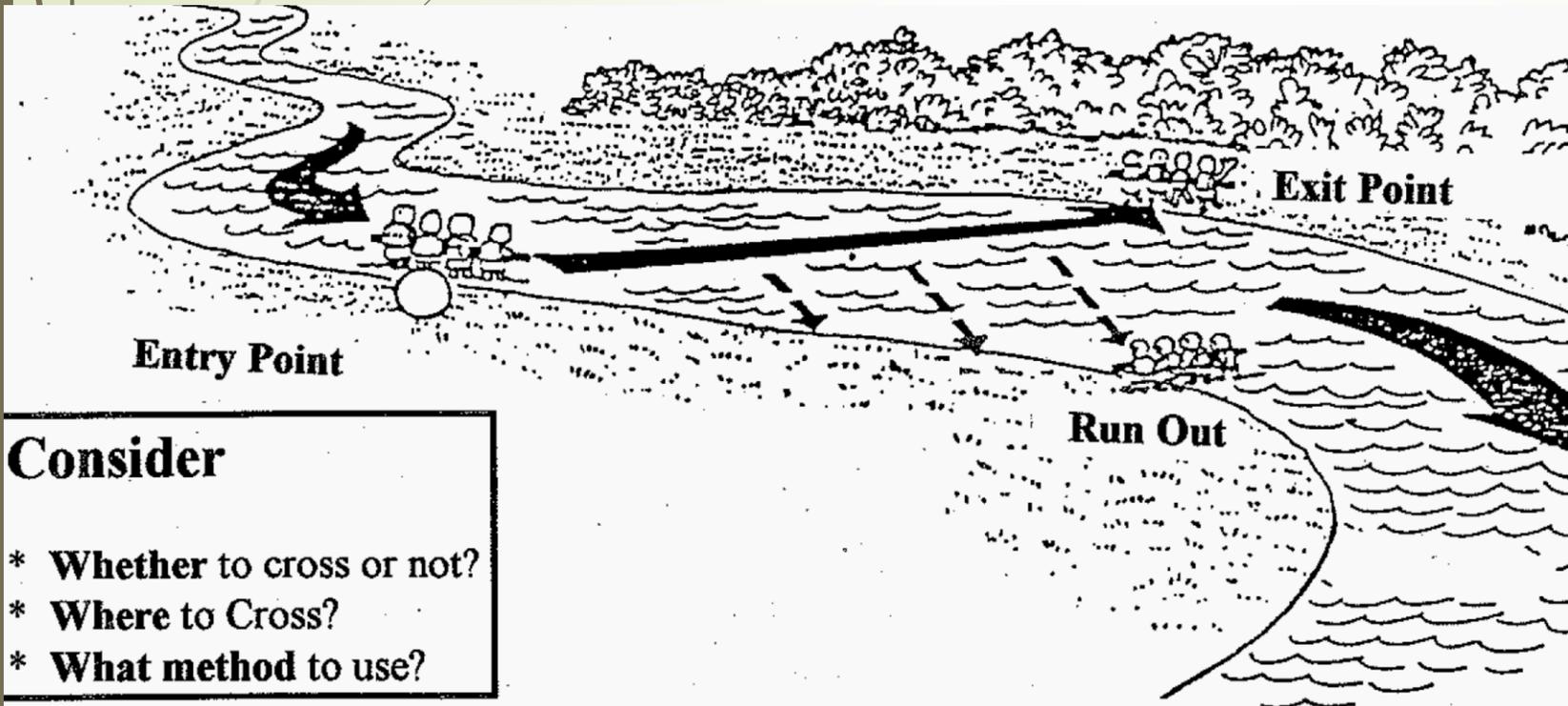
(How do we get our students to move to the right on Bloom's?)

1. Both teacher and student must have a detailed **mental representation** of *really good*.
2. Provide **content-based feedback** that is based on a comparison with *really good*.
3. Use a **TOAST** to ensure the feedback is effectively and tactfully delivered and is received.

STEP 1:

HAVE CLEAR AND EXPLICIT MENTAL REPRESENTATIONS.

What does really good mean to you?



What does really good training session look like?

Consider

- * Whether to cross or not?
- * Where to Cross?
- * What method to use?

AT BEST ... your students might achieve their/your mental representations. Help them by setting the bar high.



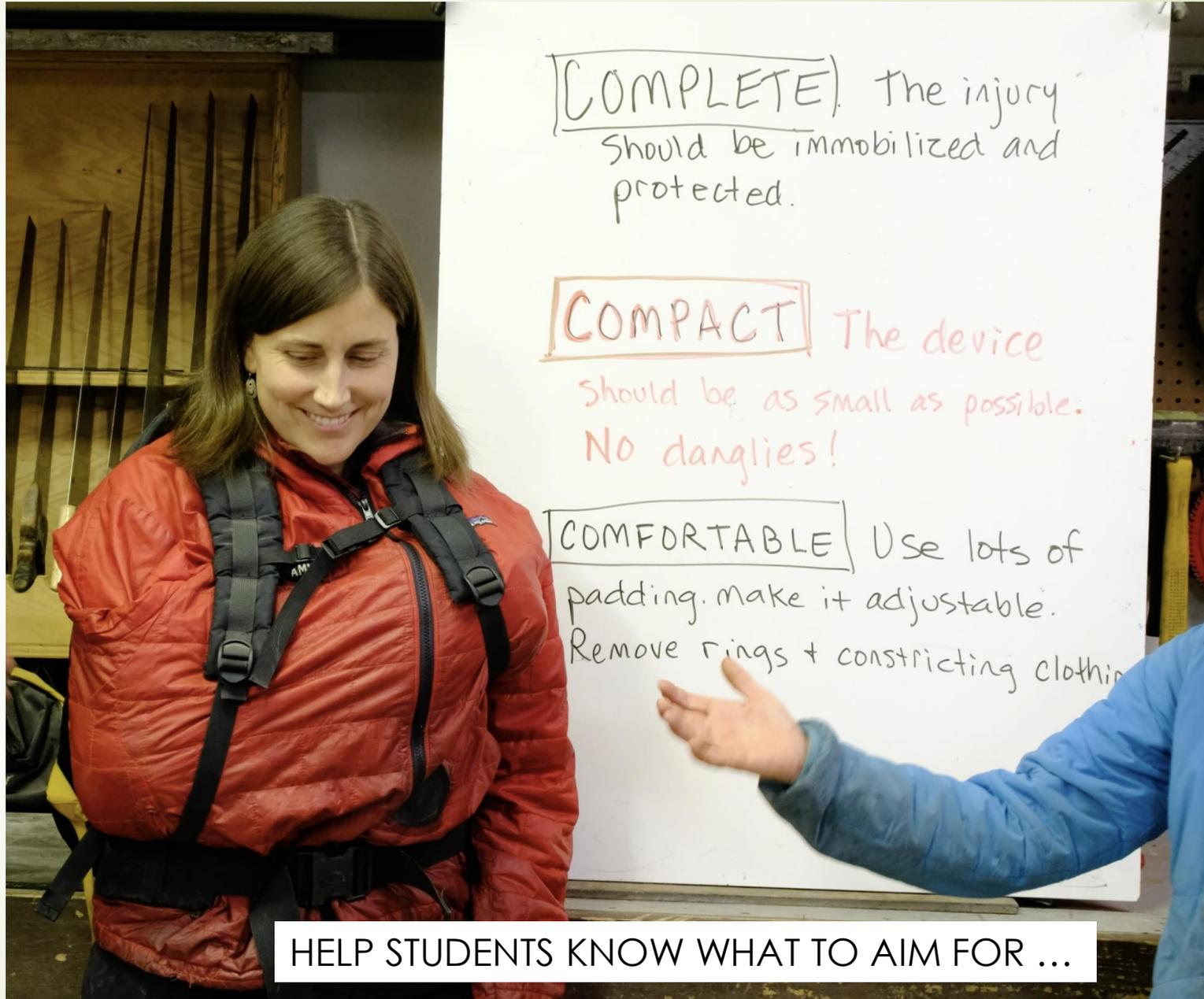
What does *really good* look like?

**EVERYONE MUST START BY KNOWING
WHAT *REALLY GOOD* LOOKS LIKE.**

HAVE HIGH EXPECTATIONS, AND
BASE ALL FEEDBACK AGAINST THE *REALLY GOOD* STANDARD.



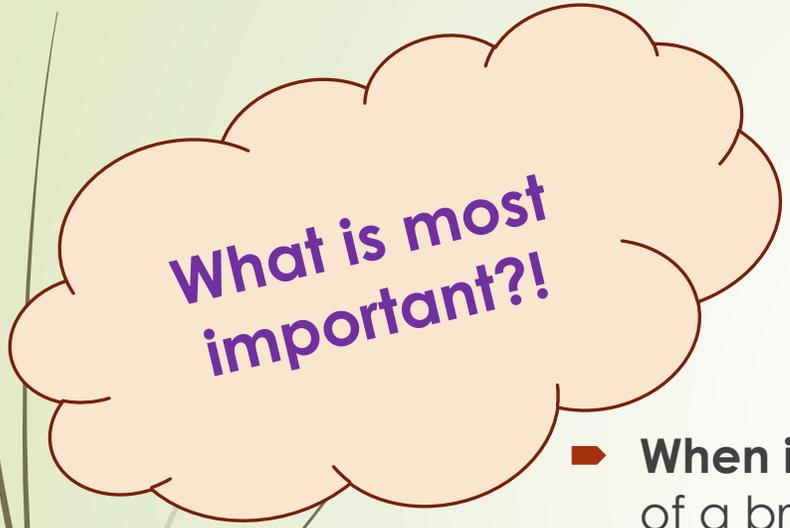
Deb's mental representation
of a REALLY GOOD SPLINT IS ...



HELP STUDENTS KNOW WHAT TO AIM FOR ...



Emphasize **NEED TO KNOW** points of any topic!



What is most important?!

- **When it comes to forearm injuries, it is all about PERFUSION!** You cannot die of a broken forearm; however, if the hand does not get adequate blood flow, then cells in the hand can die or suffer permanent damage.
- **Treatment priorities:** You should focus on protect the arm/injury so that the hand maintains good perfusion (circulation).
- You need to know: Is it a **BIG DEAL** or **LITTLE DEAL**? If there is good perfusion, it is a little deal that does not require an urgent evac; if there is poor perfusion, it is a big deal that requires urgency.

POINT OUT COMMON MISTAKES

... AND HELP THEM KNOW WHAT TO AVOID.



Here's the scoop: It is winter and your friend broke her arm.



1. In small groups (of 4-6 people) you will review and practice your recall of splints.
2. Everyone will watch a video of a really good forearm/wrist splint and immobilization device that would work well for this injury. Your team members should make notes on some of the features.
3. Everyone will watch a second video (which includes some errors). Concurrently, each of you should take note of good features and missing or less-than-perfect features of the student's work.

TIME FOR SOME EXERCISE ...



In small groups (4-6 people), you will spend 10 minutes polishing your recall of splinting so that you are equipped to provide quality feedback.

- Review the **THREE Cs of splinting**
- Review the two slides of really good forearm splints
- Review the **common mistakes handout**
- Review the two videos

video 1



video 2





Is Aubrey's splint a really good splint?

IS IT COMPLETE?

Does the device protect and immobilize the injury site?

Does the end product firmly immobilize the wrist and elbow?

Is the hand elevated (to minimize swelling) in the midrange, fist position?

IS IT COMPACT?

Is it too bulky or are there unnecessary poles/sharp items?

Is anything dangling? Have straps, cords, and clothing been tucked in?

IS IT COMFORTABLE?

Is it well padded at the injury site? Are all pokey things and straps well padded?

Is the hand warm and toasty? Do you have access to fingers/CSM?

Is it adjustable? (You will almost certainly have to loosen or tighten it over time.)

Have constricting clothing and jewelry been removed?

Is the patient and the splint protected from the elements?

How close to perfect was the splint?



How did Aubrey do?
Let's hear it.

HIT THE BULLSEYE

Lots of padding at site

Well protected at site

Hand well elevated

Adjustable splint

MISSED THE BULLSEYE

Inadequate binding beyond knuckles

Forgot to remove ring

No added heat

Triangular bandage on neck without
adequate padding





This is the feedback that you'll deliver.

Your feedback has been selected and is ready to be delivered.

The injury is well-protected; there is lots of padding

It is easily adjustable (easy-to-use tabs)

Her hand is well elevated to limit swelling

Inadequate binding beyond knuckles

Rings should be removed (can create tourniquet)

No chemical heat/added heat/no glove

Bandage on neck lacks adequate padding

Giving feedback as a TOAST!



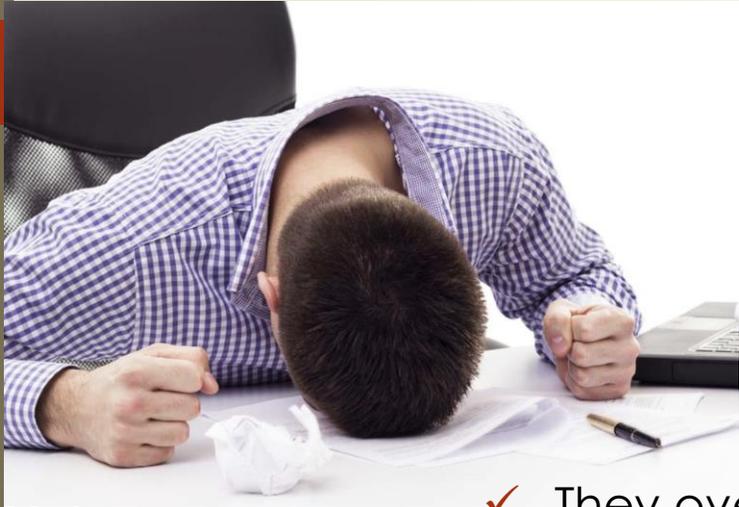
- **TACTFUL**
- **OBJECTIVE (think facts, not emotions)**
- **AIMED AT THE RIGHT PERSON**
- **SPECIFIC (provide details)**
- **TIMELY**

COMMON MISTAKES WHEN GIVING FEEDBACK

- **Too hard** (harsh or abrasive) **or too soft** (sounds like a suggestion or doesn't help them understand the importance of the feedback).
- **Too subjective.** Feedback is not based on an agreed-upon template. Includes "I like" statements. (It should not be about whether or not a teacher likes something.)
- **Targets a group, not an individual;** feedback is not aimed at an individual's answer or performance.
- **Not specific enough.** ("That's great. I love your energy!" type feedback can improve motivation, but it does not tend to lead to improvement. Tell students exactly why something is or isn't *really* good.)

Another common mistake: Teachers do not allow time time for a re-do.





MOST COMMON MISTAKES teachers make when trying to help students improve:

- ✓ They overestimate a student's understanding of *really good*.
- ✓ They allow students to evaluate self/peers.
- ✓ They wait too long to give feedback (or don't give it at all).
- ✓ They wrongly assume that practice leads to competence.



PRACTICE DOES NOT INHERENTLY LEAD TO IMPROVEMENT!

And practicing without feedback often serves to solidify bad habits.

But, research consistently shows that practice, followed by corrective feedback, leads to improvement.



**IMPROVE
YOUR SKILLS!**

Practice Time



Choose one peer to be Aubrey. Using your content feedback, one or more people should practice giving her a TOAST.



If time allows ...

1. Identify a skill you teach. Brainstorm with others in your group and create a mental representation of perfect.
2. How can you effectively teach the mental representation to students?
3. What are the Need to Know emphasis points?
4. List common errors beginning students make on their way to competency.
5. List the specific steps students often do well (that are easy for them to learn).

Come up with a realistic scenario in which a student makes a few, common errors while performing a skills. Designate one group member to be student. Practice delivering your feedback to that student, describing what he/she did wrong/right and what she/he should have done instead.



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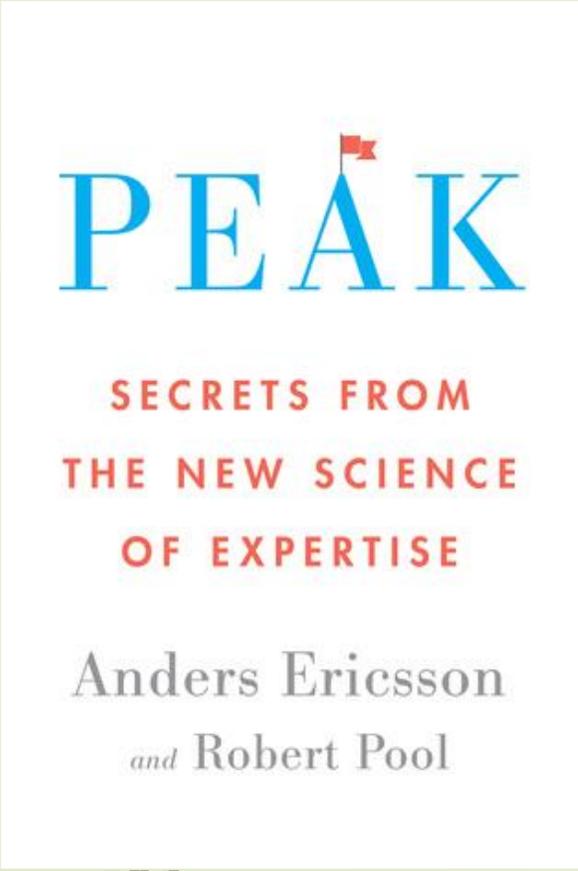
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Performing Under Pressure: The Science of Doing Your Best When it Matters Most by Hendrie Weisinger and J.P. Pawliw-Fry

Visible Learning and the Science of How We Learn by John Hattie and Gregory Yates

How We Learn by Benedict Carey



PEAK

SECRETS FROM
THE NEW SCIENCE
OF EXPERTISE

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