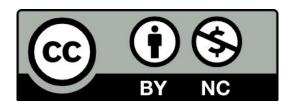




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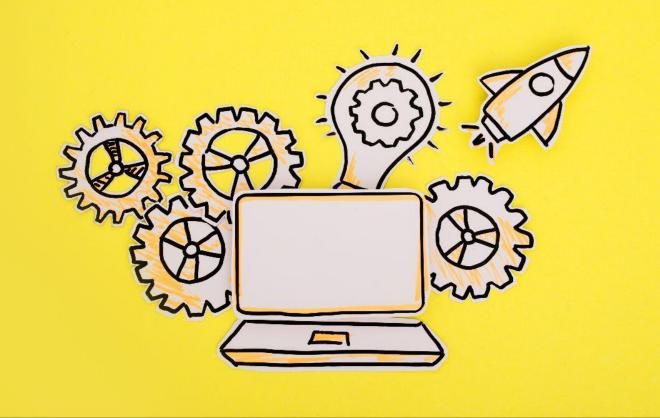
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## **Module 1: Adult Learning Principles**



Module content developed in part by <u>UNC-IRIS Project</u> & <u>UNC-Project CLIMB</u> <u>ASL lectures</u> by: Stephanie Hakulin, Shira Leitson-Grabelsky & Erin Sanders-Sigmon



## **Overview & Objectives**

**Overview:** This is the first in the facilitator/mentor training modules designed to prepare you for the work you will be doing with IRIS participants. This module will cover the core principles of how learning works as outlined in the book, *Make It Stick*. The learned principles will be used as a foundation for how you will facilitate and mentor IRIS participants.

#### **Learning Outcomes and Objectives**

#### **Upon Completion of this module participants will be able to:**

- 1. Identify core principles learned from the book, Make It Stick.
- 2. Define key terms related to the science of successful learning.
- 3. Discuss the value of a growth mindset when working with novice rural interpreters.



### Introduction

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#### Make It Stick

When working with a interpreter with less professional experience, you want to make sure that what they learn sticks with them out in the real world and over time. This module is about strategies and techniques you can use to make their learning stick.

In the book, Make It Stick: The Science of Successful Learning (Brown, Roediger, & McDaniel, 2014), the authors describe evidence-based research for strategies that lead to more durable improvements in knowledge and competency.

It is interesting to note that much of the evidence in learning and memory is counter-intuitive and may go against principles you have learned in the past. However, using these principles can help you guide the interpreters you will be working with, toward mastery of the concepts in the IRIS CORE: Initiative.

Visit <u>Retrieval Practice</u> for further information about *Make It Stick*.

#### make it stick



The Science of Successful Learning

Peter C. Brown Henry L. Roediger III Mark A. McDaniel



# What do you already know about adult learning?

#### A lot

You have demonstrated your commitment to learning and have shown dedicated persistence as a participant here in the IRIS Project. As a rural interpreter, you have the lived experience of being professionally isolated with limited educational opportunities to develop your interpreting acumen. You may have had teachers, facilitators, mentors, supervisors, family, friends, and colleagues providing you with support and guidance bringing you to where you are today. Draw from those experiences and sources of wisdom as you navigate through the lessons within this course. You have ample expertise to share as well as space to grow.

Let's get started . . .



# Discussion: What do you already know about adult learning?



**NOTE:** You have to log into Canvas to complete this assignment

#### **Original post directions:**

Take this time to think about what you already know about adult learning.

- 1. What have your learning experiences been like?
- 2. Where and in what conditions/settings have you learned best?
- 3. Where and in what conditions/settings have you been in that were not a good fit for you?

#### **Response post directions:**

Create a response post to at least one of your colleagues that discusses the conditions/settings they mentioned as not being a good fit.

- 1. How might you address the conditions/settings they identified as a facilitator or mentor?
- 2. What skills/tools might you need as a facilitator or mentor in order to address the conditions/settings identified by your colleague?



# Adult Learning Principles: Four Key Concepts

Review the <u>interview with Peter Brown</u>, the principal author of *Make It Stick* (<u>ASL translation</u>). In this video, he explains four key concepts in the science of successful learning.

#### Four key concepts:

#### 1. Learning is about getting it out, not putting it in

The importance of retrieval: In order to "make it stick", a person needs to practice retrieving new knowledge or skill from memory. Repeated retrieval of information/skill will make the learning more durable.

#### 1. Some difficulties in learning are desirable

The more effort learning takes, the stronger the learning and retention of information/skill will be.

#### 1. Growth mindset motivates

Challenges in the learning process are opportunities for growth. Learners become motivated to overcome challenges in order to achieve new skills.

#### 1. Intuition steers us wrong

Spaced practice gives learners the opportunity to practice retrieval and demonstration of new information/skills.



## Big Idea #1, Part I

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#### Learning is about getting it out, not putting it in.

In order to "make it stick," a person needs to practice retrieving new knowledge or skill from memory. Repeated retrieval of information/skill will make the learning more durable.

#### **Example**

Think about a child learning to ride a bike.

They can try to learn by "putting it in":

- They can read books about riding bikes.
- They can listen to stories about riding bikes.
- They can watch their siblings ride their bikes it looks so easy!

What happens the first time they get on the bike?

- They tip over!
- And their parents provide guidance about how to maintain balance.
- And their parents keep their hands on the back of the seat to help them balance.

Then the child tries again. And again. And again.

- Each time the child "gets it out" through practice, they make mistakes, adjust what they are doing, and learn.
- As they try and try again, their neurons send and receive more and stronger chemical signals (short-term memory)
- As they engage in repeated and spaced practice (every afternoon for a week they get out their bike and practice), their sensory and motor neurons develop new synaptic connections (long-term memory). Their brains change!



## Big Idea #1, Part II

#### Now apply this same concept to mentoring and facilitating

You can try to learn how to mentor and facilitate by "putting in" information. Meaning, you can read books, talk with experienced mentors and facilitators, and observe them in practice. However, the first time you engage as a facilitator or mentor, you are likely to fumble. Tell yourself that it is okay to fumble. It is a natural part of the learning process.

You will need to practice repeated retrieval as you begin to consider:

- Is your mentoring practice centered on the mentor or mentee?
- How do you work with participants to create goals and guide them toward achieving their goals?
- Do you and the participant share a similar framework for what mentoring and facilitation entail?
- Is the focus on skill-building via error analysis or do you employ a dialogic approach?
- Does your mentoring practice allow for discussions of the psychosocial aspects of mentoring work?



## Big Idea #2

#### Some difficulties into learning are desirable

The more effort put in learning, the stronger the learning and retention of information/skill will be.

#### **Example**

A novice interpreter is placed in a rehabilitation commission for supervised interpreting. The agency deals with both state and local governments and interpreted interactions are often littered with acronyms. Being new to the system, the novice interpreter must learn these acronyms and what they stand for. By the end of the first week, the novice interpreter is feeling pretty confident in his knowledge. However, he is struggling to recall an acronym he knew the week before after a long weekend.

#### Why is this a desirable difficulty?

The novice interpreter really wants to know what this acronym stands for. Forgetting over the weekend is an example of the difference between short-term and long-term memory. Because of his motivation, when he struggles to remember it in the new week, his brain is primed and more open to learning. When he is finally given the information, he is more likely to store it in his long-term memory.



## Big Idea #3

### A growth mindset motivates



#### **Cultivating a Growth Mindset**

We will explore growth mindsets in depth during module 5. For now, analyze this image that offers a visual distinction between a "growth" mindset and a "fixed" mindset.

Educating novice interpreters about growth mindset helps them recognize that the difficulties, albeit frustrating, they experience are actually physically changing their brains to solidify the skills they're learning. This can motivate them to embrace these challenges.

**Curious to learn more?** See more from <u>Peter Brown on Growth Mindset</u> and its accompanying <u>ASL translation</u>.



## Big Idea #4, Part I

#### Intuition steers us wrong

The illusion of mastery is what feels productive, but often is not.

In *Make It Stick*, the authors use the example of a batting practice experiment with the California Polytechnic State University baseball team (pp. 79-81).

#### **The Experiment**

The first group used massed practice.

- They practiced hitting 45 pitches which were grouped according to type: 15 fastballs, then 15 curveballs, then 15 changeups.
- As batters anticipated what type of pitch was coming, their batting improved.
- This was easy!

The second group used varied practice.

- This group also practiced hitting 45 pitches, but the pitches were thrown in random order.
- The batters didn't know which type of pitch would be coming next. They struggled to discern the type of pitch and had more difficulty connecting with the ball and did not hit as many pitches as the first group.
- This was hard! And frustrating!



## Big Idea #4, Part II

#### The Results

After batting practice sessions twice a week over a period of six weeks, both groups of players participated
in an assessment of their hitting. Those in the second group, who had practiced hitting pitches in random
order (varied practice), demonstrated marked improvement over the first group, who successfully practiced
hitting groups of similar pitches (massed practice).

#### **Takeaways**

- The "easier" practice created an "illusion of mastery" but that mastery was only there when the single skill (e.g., hitting a curveball) was the focus. This focused work improved short-term memory - after a number of pitches of the same type, players were more proficient at hitting those pitches.
- The more difficult practice interleaved practice of varied skills (e.g., fastballs, curveballs, changeups) which
  was frustrating in the short-term and produced less successful short-term results (e.g., batters did not hit as
  many pitches as the first group). However, mixing work on different skills embedded the learning in
  long-term memory and produced more successful long-term results.

#### **Going forward**

• How might the concepts here, illusion of mastery and interleaved practice, relate to the work of interpreting, facilitating, and mentoring?



## **Discussion: Making it Stick**



**NOTE:** You have to log into Canvas to complete this assignment

#### **Original post directions:**

Think about big idea #4: Intuition steers us wrong, as presented on the previous two slides.

1. What practices have you seen within interpreting/interpreter education that might create an illusion of mastery in the short-term, without resulting in long-term improvement/change? And why?

#### **Response post directions:**

Respond to the post of one of your colleagues by asking clarifying questions, seeking additional information, or expressing an idea that encourages critical thinking and moves the conversation forward.



# Adult Learning Principles: In Application

How do you apply the big ideas to your mentoring and facilitation practices?

#### Frequent low-stakes retrieval exercises

- Low-stakes Practice exercises in which responses are not evaluated. Responses may not necessarily be shared with others.
- Retrieval Getting the information out is essential for moving knowledge/skills from short-term to long-term memory.

#### **Spaced learning**

- Allowing enough time to pass between working on a skill so that you begin to forget and the act of retrieval is more difficult.
- Effort in retrieval leads to more durable learning If it feels hard, that means you're learning!

#### **Interleaving activities**

• Mixing work on different skills and knowledge into lessons, rather than only working on one thing at a time.

#### Reflection

• The process of reflection helps us learn from our experiences. Strengthening our own reflective practice will help us model these skills for the interpreters we work with.



## **Emotional Intelligence**

Although not mentioned by Brown, et. al., in the book, *Make It Stick*, we must also pay attention to the importance of *emotional intelligence*.

#### **Emotional Intelligence**

There are four areas of emotional intelligence:

- Self-awareness ability to recognize and understand our own emotions
- Social awareness ability to recognize and understand the emotions of others
- Self-management use of self-awareness and social awareness to guide our behavior
- **Relationship management** use of self-awareness and social awareness to manage our relationships (Zachary 2012, p. 5)

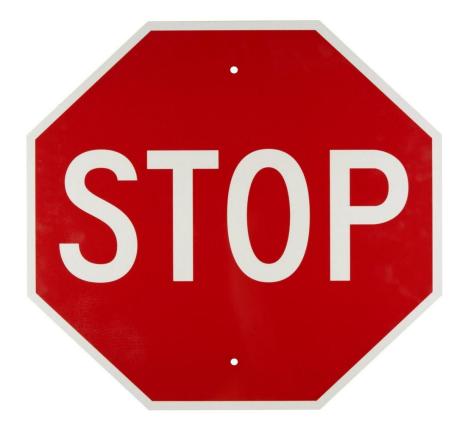
**Curious to learn more?** Watch <u>Understanding the Emotionally Intelligent Sign Language Interpreter</u> by Sarah Wheeler.



### **Post-Test**

**NOTE:** You have to log into Canvas to complete this post-test

- 1. What are the four big ideas Peter Brown shares from his book, Make It Stick?
- 2. What are four strategies based on Brown's big ideas that you can use with novice interpreters to help them learn interpreting concepts in this program?
- 3. How do the Make it Stick principles in this module apply to your future work with novice interpreters?



Correct responses: 1.Learning is about "getting it out," not "putting it in", some difficulties are desirable, having a growth mindset is critical, and intuition steers us wrong: varied practice is more beneficial than massed practice., 2.Low stakes retrieval, spaced learning, interleaving practice, and reflection., 3.Answers will vary.



### Resources

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- Wheeler, S. (2021, August 11). Understanding the emotionally intelligent sign language interpreter. StreetLeverage. https://streetleverage.com/live\_presentations/understanding-the-emotionally-intelligent-sign-language-interpreter/



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