

vision for the future



TRAINING & STUDENT ENGAGEMENT 2

Principles of Adult Learning for the Future

Chemène Sinson



NATIONAL VET CONFERENCE
GOLD COAST 2021

#2021NVC



Principles of adult learning for the future

Welcome!

While waiting to begin



Prepare:

- A4 paper
- Pen

Think:

Why you came—
what would be useful?



**We would like to acknowledge
the Traditional Custodians of the lands in which we gather.**

We would also like to pay respect to the Elders, both past and present,
and extend that respect
to other Indigenous Australians who may be present.

Please...



be purposeful



be curious



be generous

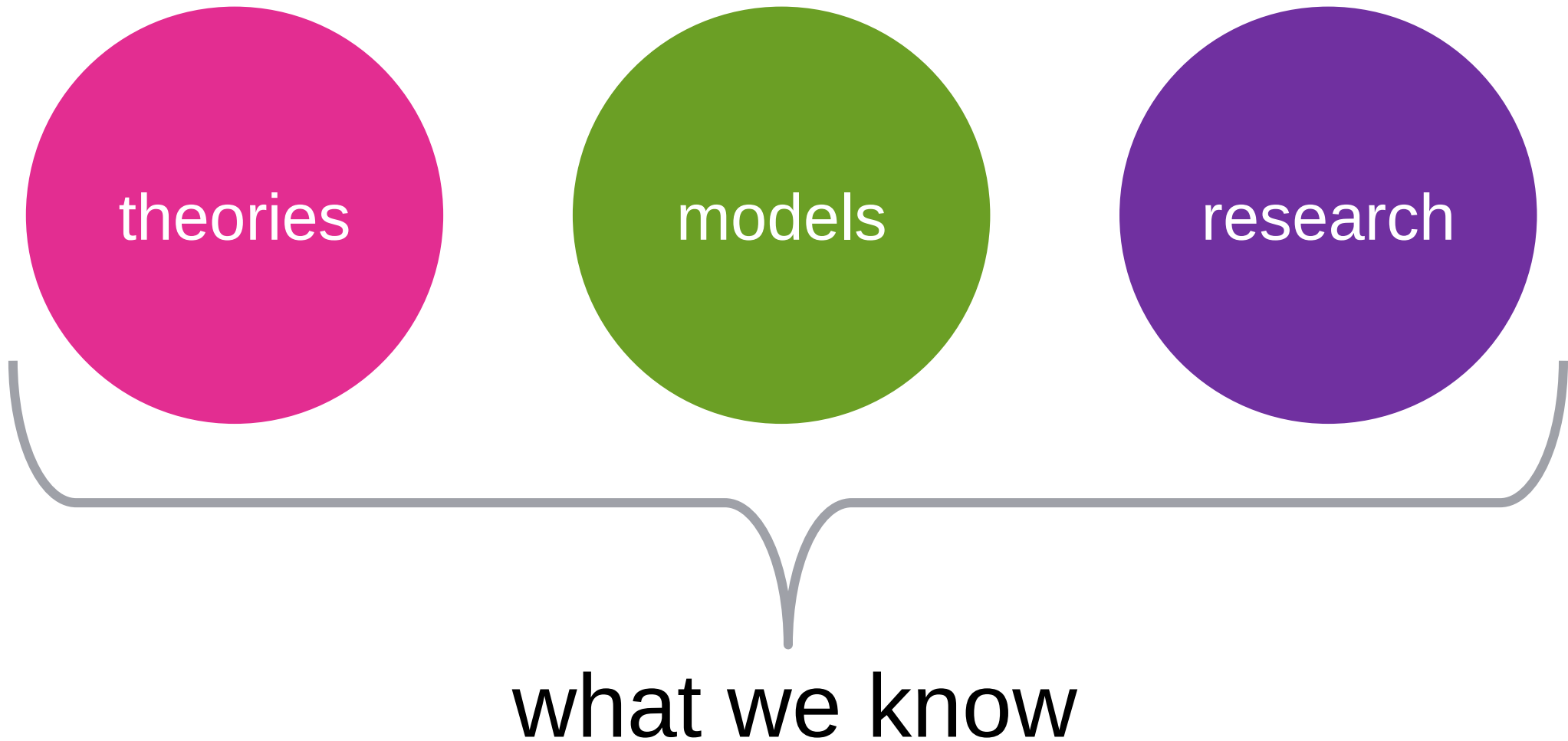
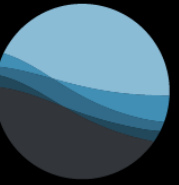


Principles of adult learning

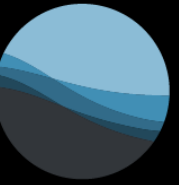
**What we understand
about how adults learn best.**

Chemène Sinson (just me)

We derive principles from...



We derive principles from...



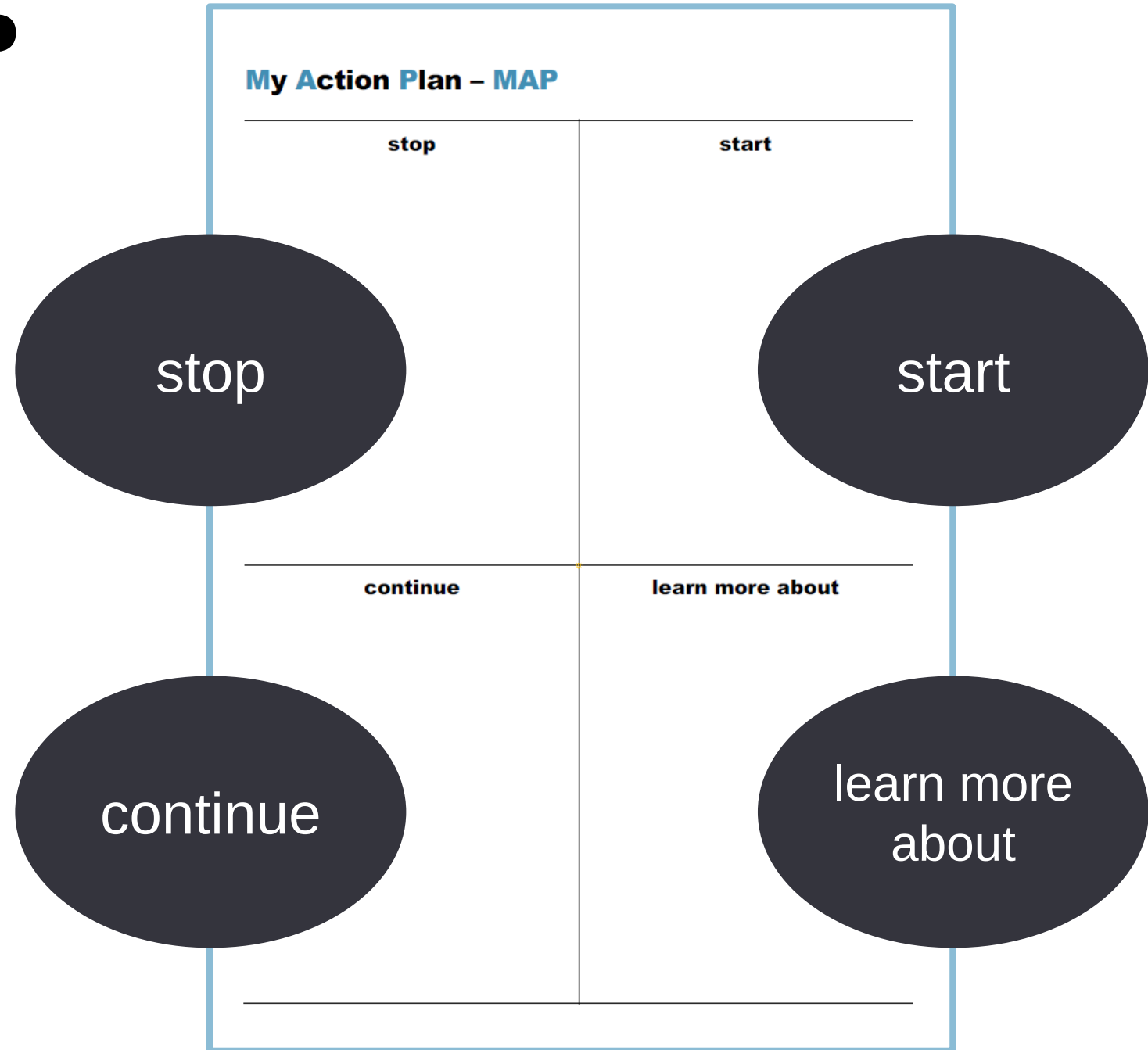
theories

models

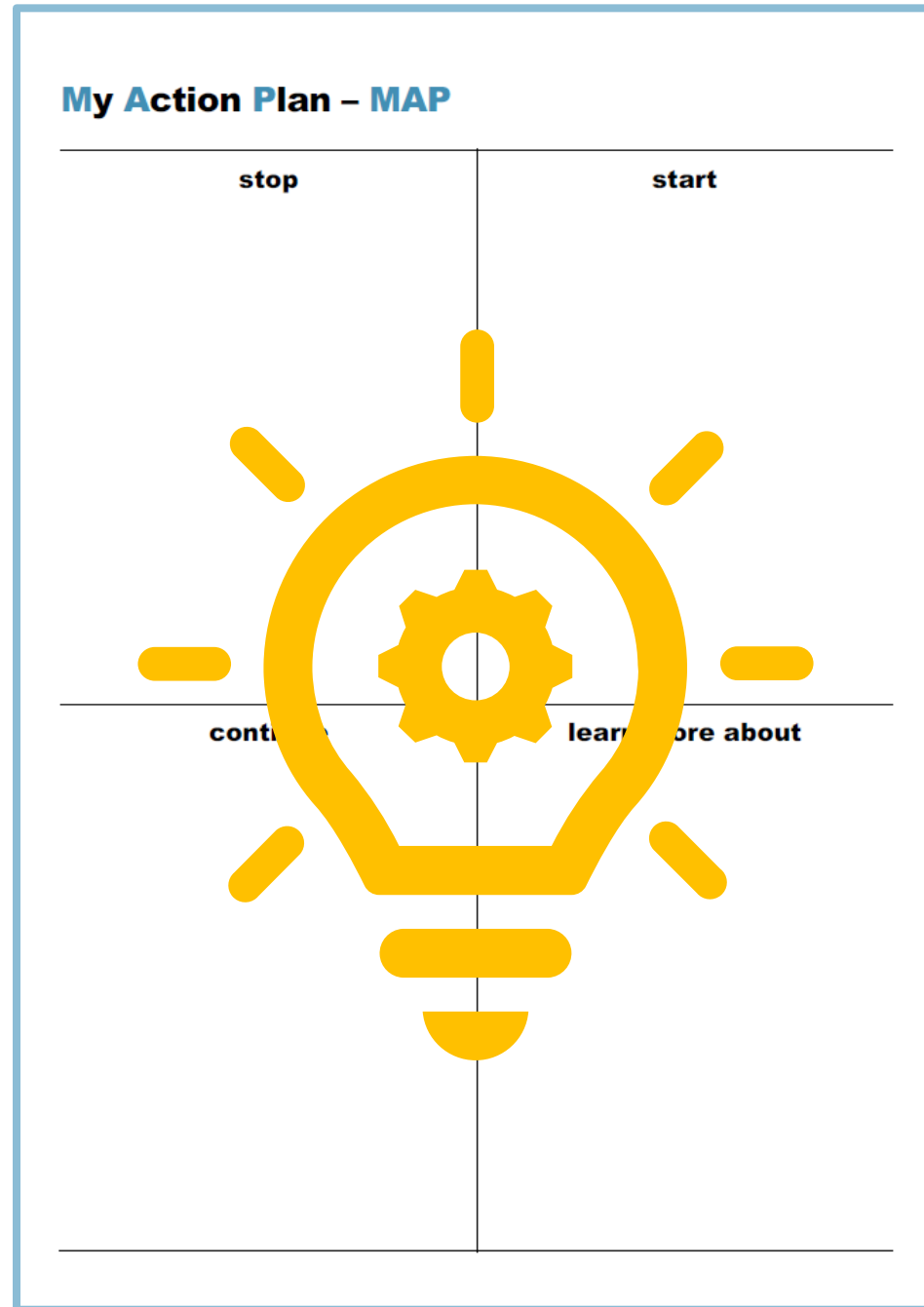
research

what we know
evolves

Make a MAP

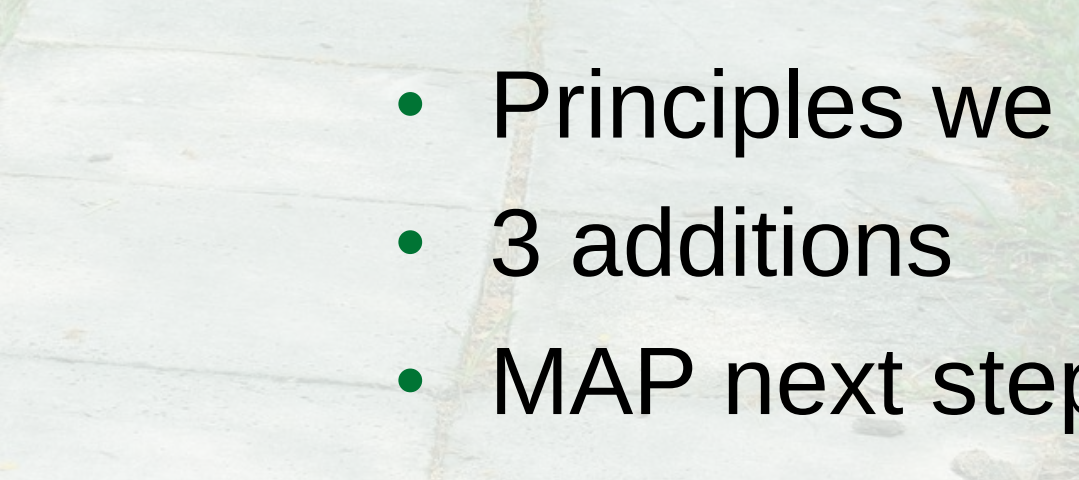


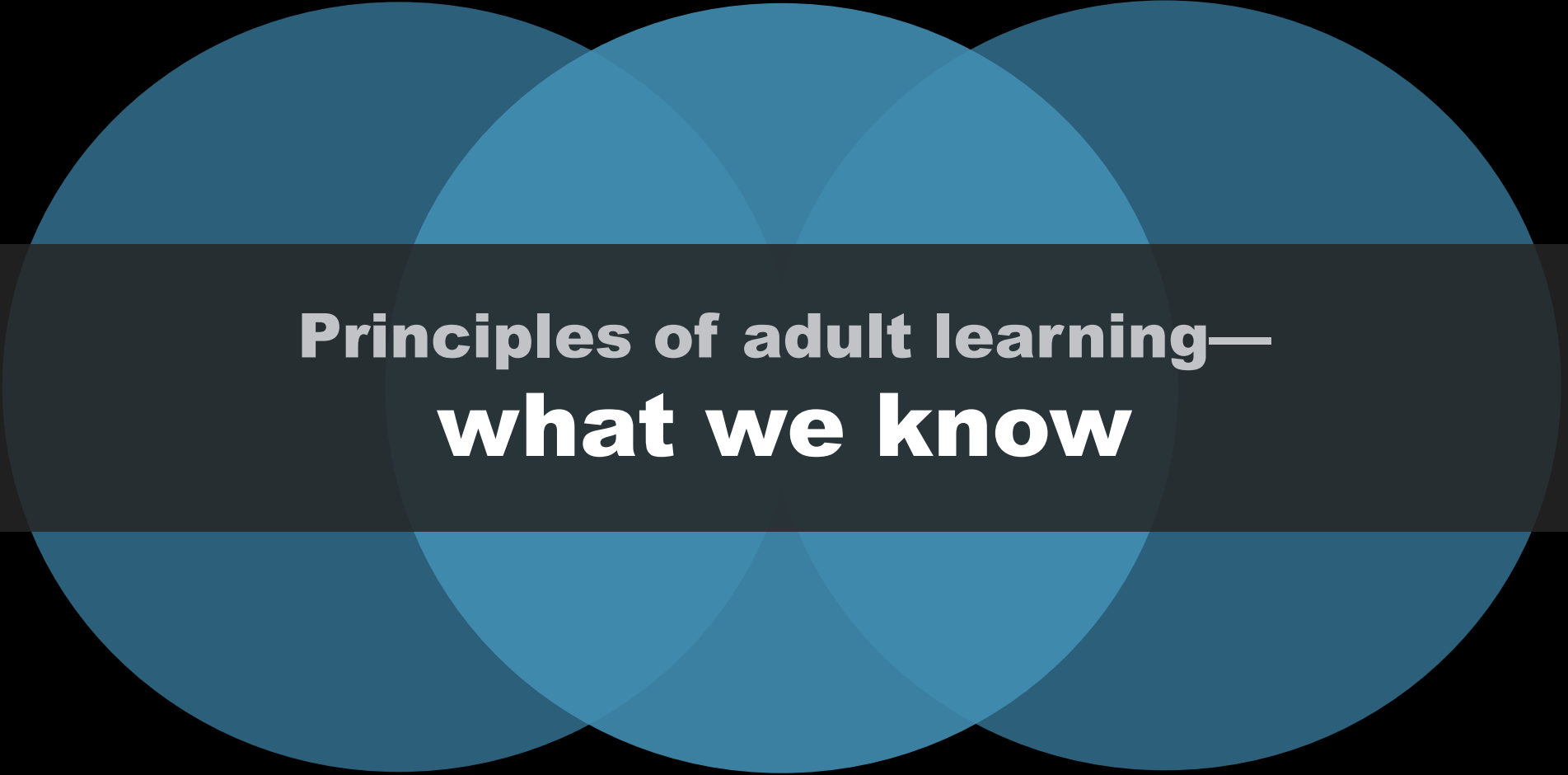
**One key
insight or idea**





Roadmap

- 
- Principles we already know
 - 3 additions
 - MAP next steps



Principles of adult learning— what we know

List adult learning principles you know



or



“Adults learn best...”

2 min



Malcolm Knowles' **assumptions about adult learners**

Adult learners have
experience
that should be acknowledged
and built upon

Adults need to know
why
this is important

Adults are self-directed and
want to make choices
about their learning

Adults learn best when
motivated

Adults are most
ready to learn
skills and knowledge that help
them in their real-life roles

Adults learn best
when the focus is on
problem-solving,
not subject-centred



Malcolm Knowles' **assumptions about adult learners**

Adults need to know
why
this is important

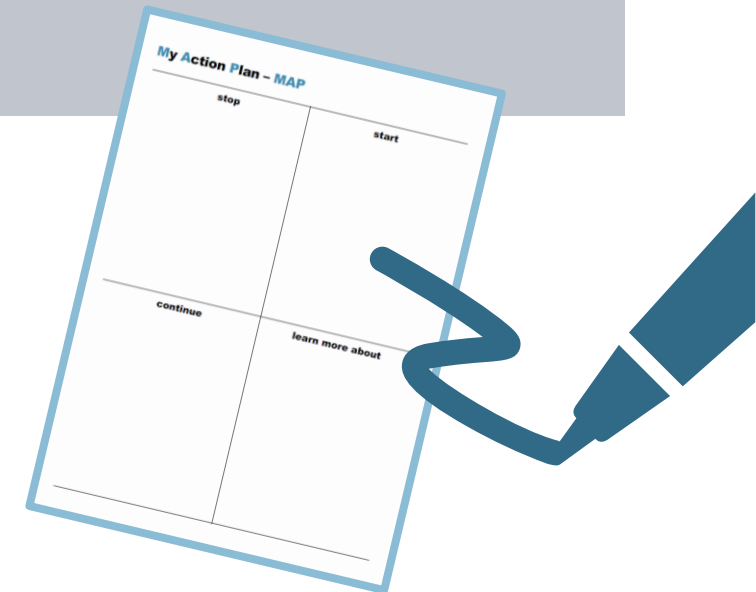
Adults are self-directed and
want to make choices
about their learning

Adult learners have
experience
that should be acknowledged
and built upon

Adults learn best when
motivated

Adults are most
ready to learn
skills and knowledge that help
them in their real-life roles

Adults learn best
when the focus is on
problem-solving,
not subject-centred



Based on information provided – well, everywhere – including: <https://ala.asn.au/adult-learning/the-principles-of-adult-learning/>

Image source: pixabay.com

**Principles of adult learning for 2021 and beyond...
some additions**

1

adults learn best when
we focus on performance

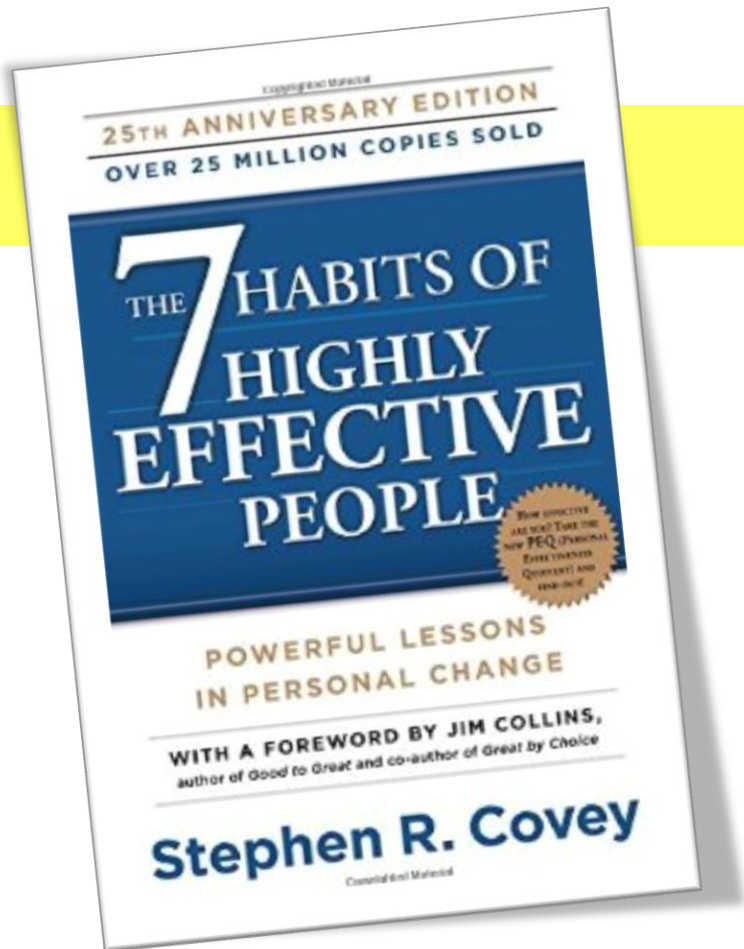
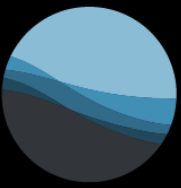
→ **competence**



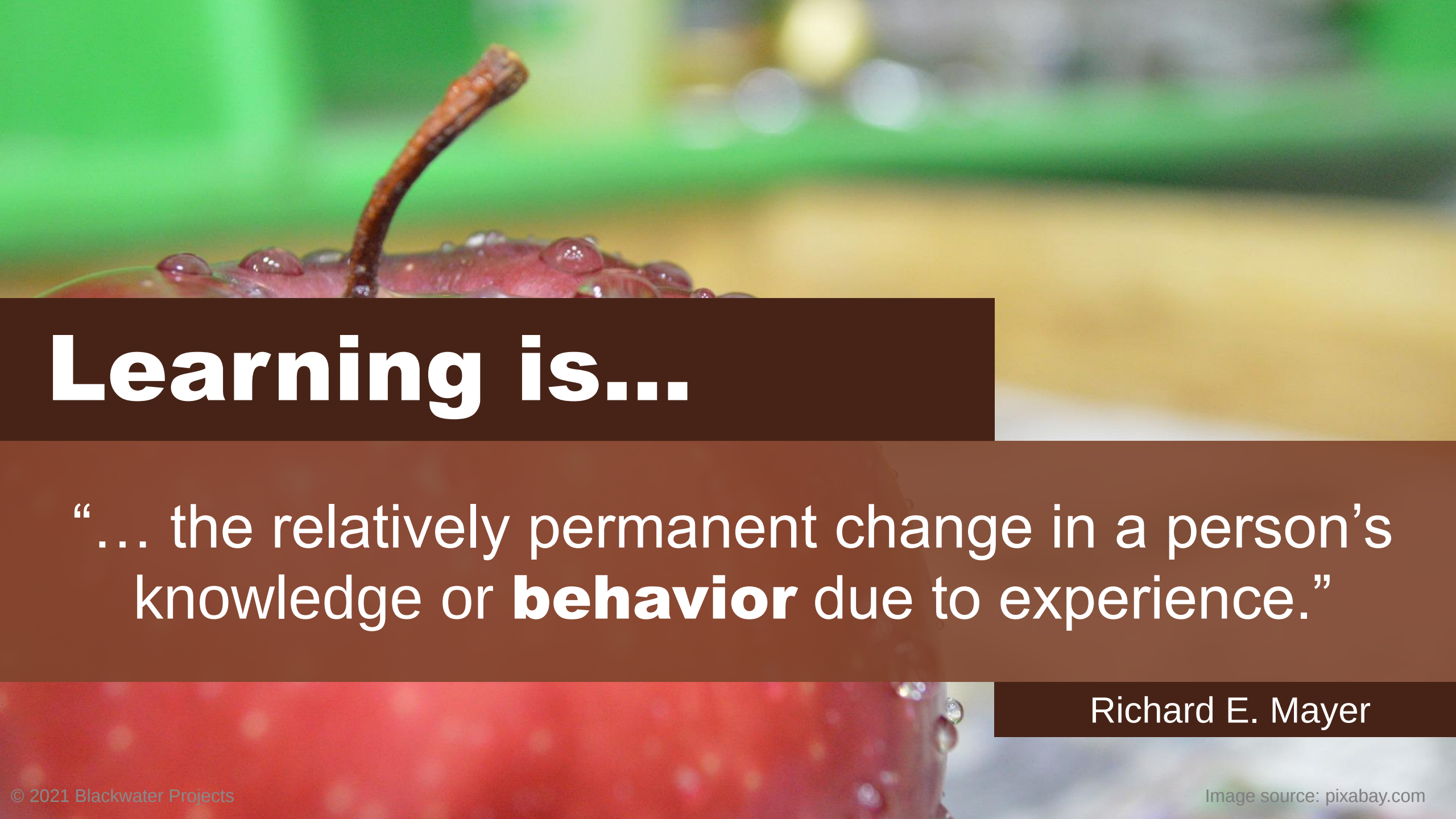
Who's this?

Stephen Covey

Stephen Covey said...



1. Be proactive
2. Begin with the end in mind
3. Put first things first
4. Think win-win
5. Seek first to understand, then to be understood
6. Synergise
7. Sharpen the saw



Learning is...

“... the relatively permanent change in a person’s knowledge or **behavior** due to experience.”

Richard E. Mayer

Learning is...

“...a process that leads to change, which occurs as a result of experience and increases the potential of **improved performance** and future learning.”

Susan Ambrose et al



Competence is about performance

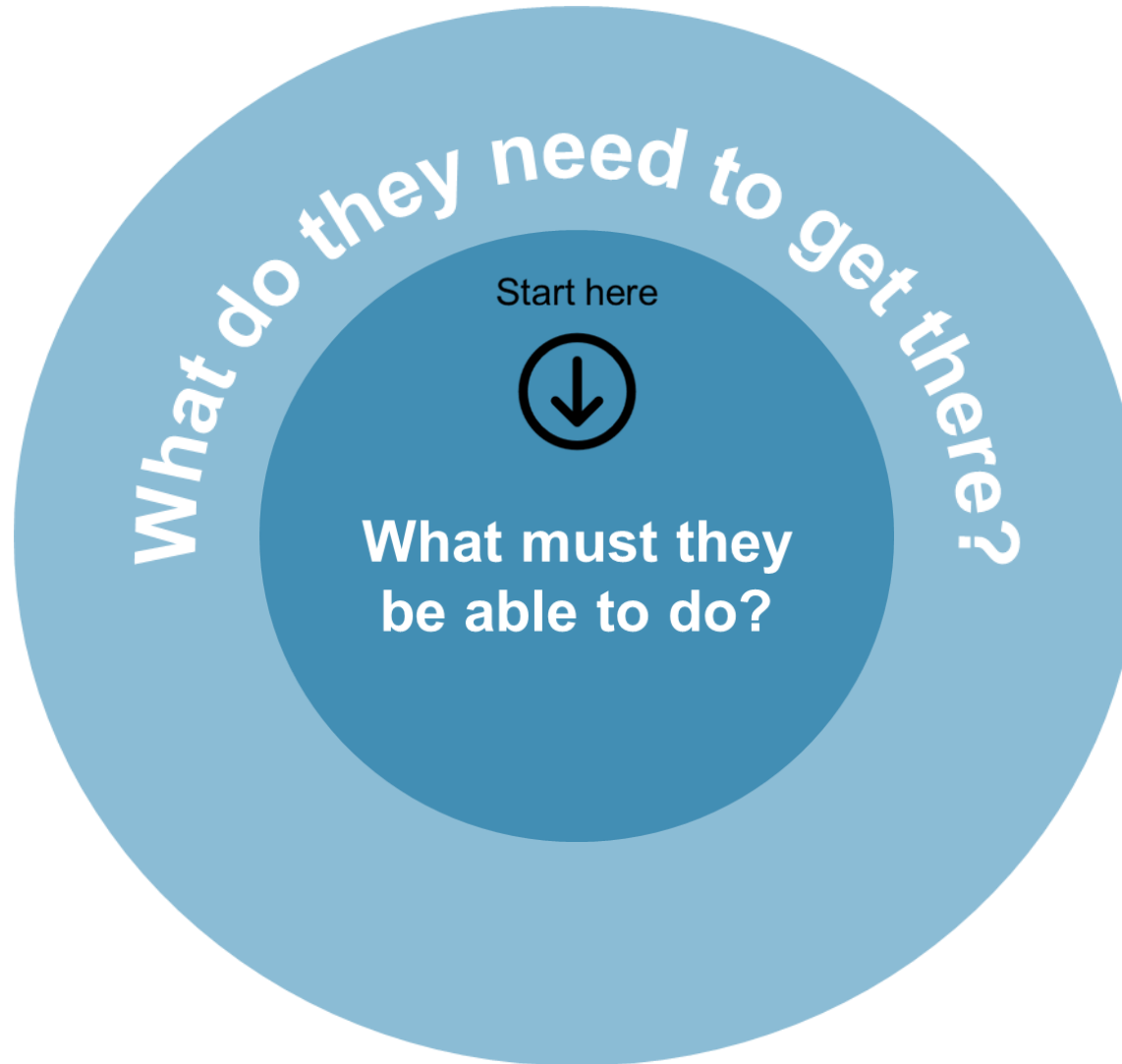
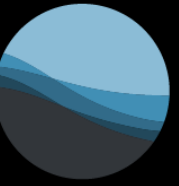


‘Competence’ means...

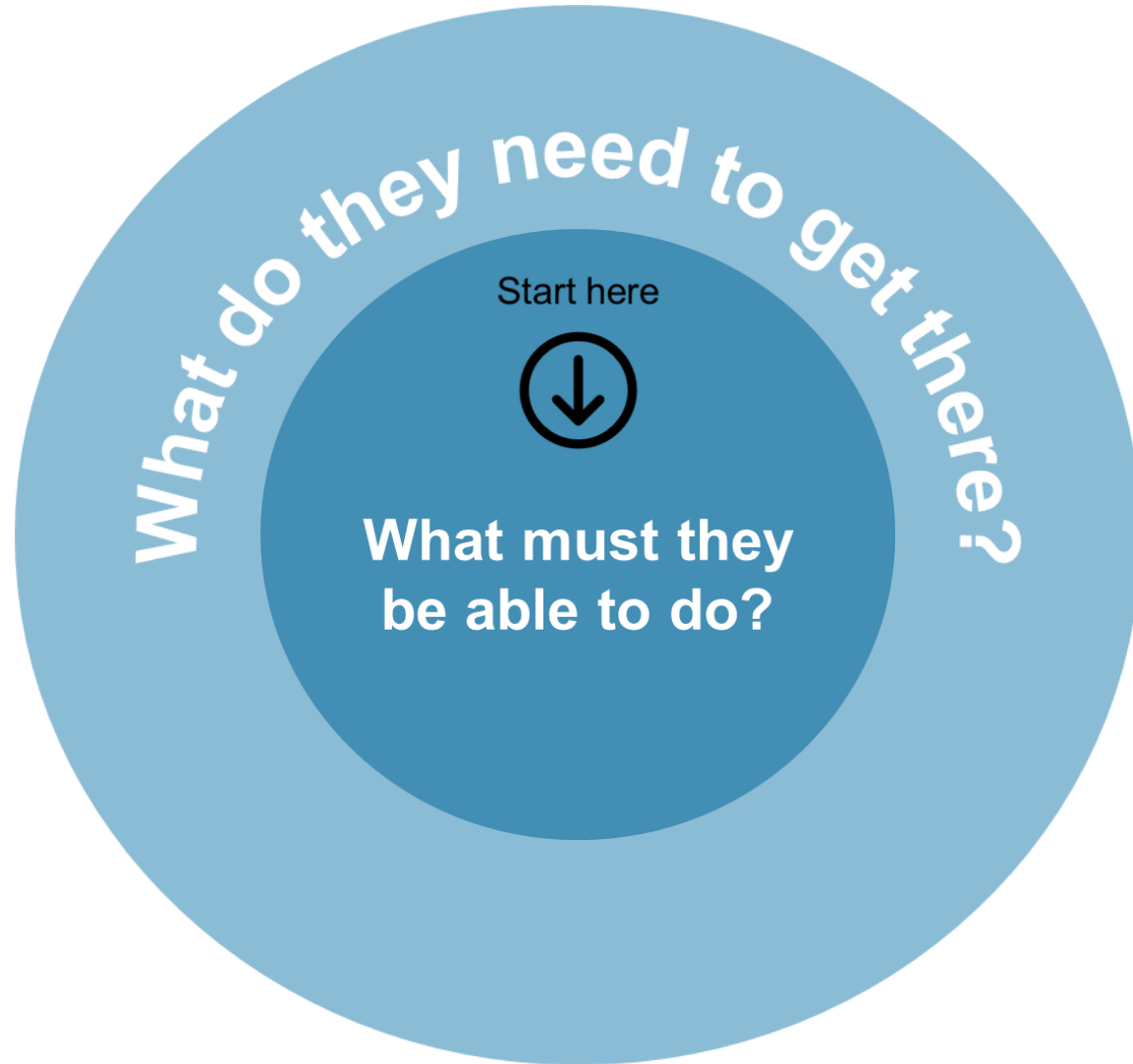
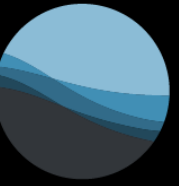
... the consistent application of knowledge and skill to the standard of performance required in the workplace. It embodies the ability to transfer and apply skills and knowledge to new situations and environments.

Standards for Registered Training Organisations (RTOs) 2015, Glossary

Be a 'performance concierge'

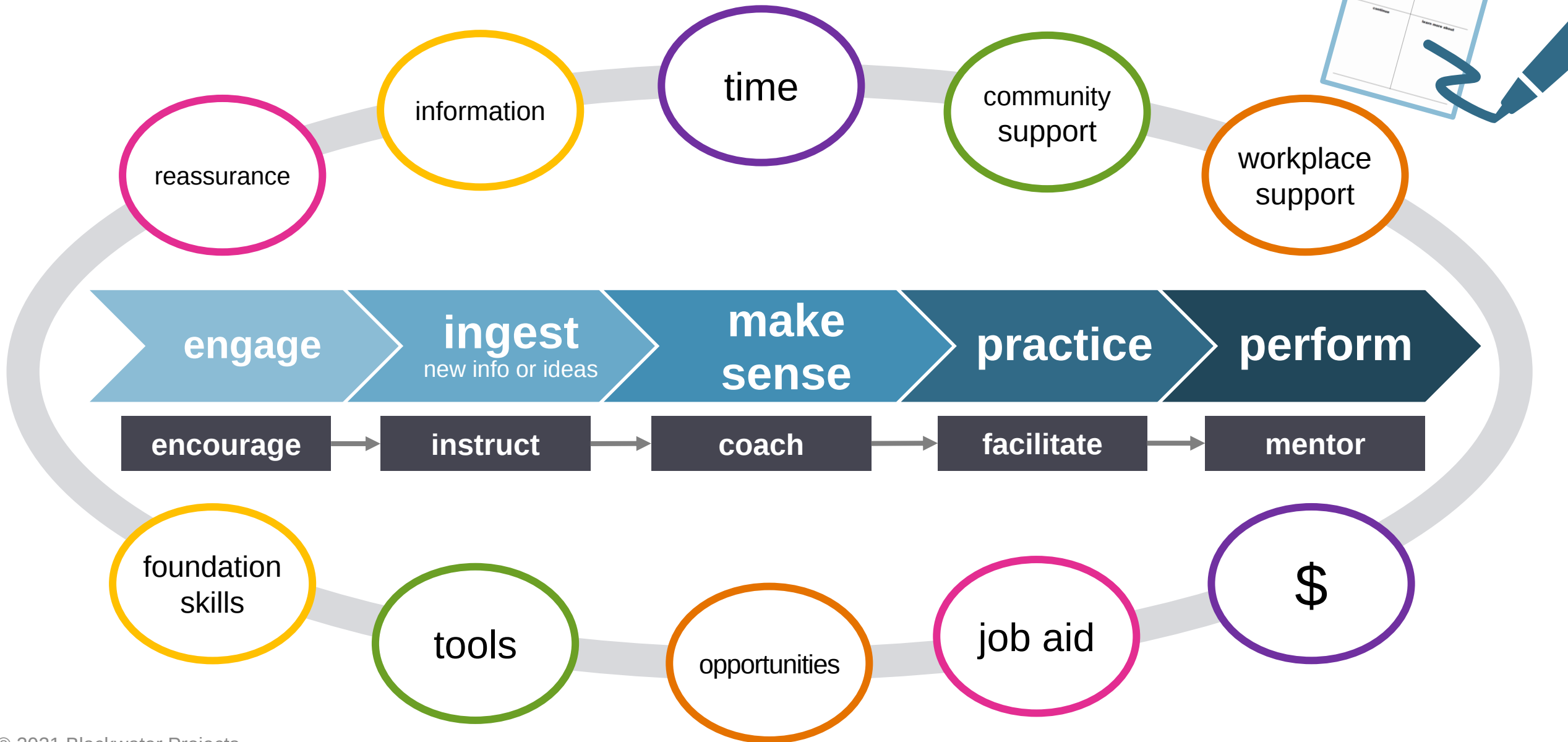


Be a 'performance concierge'



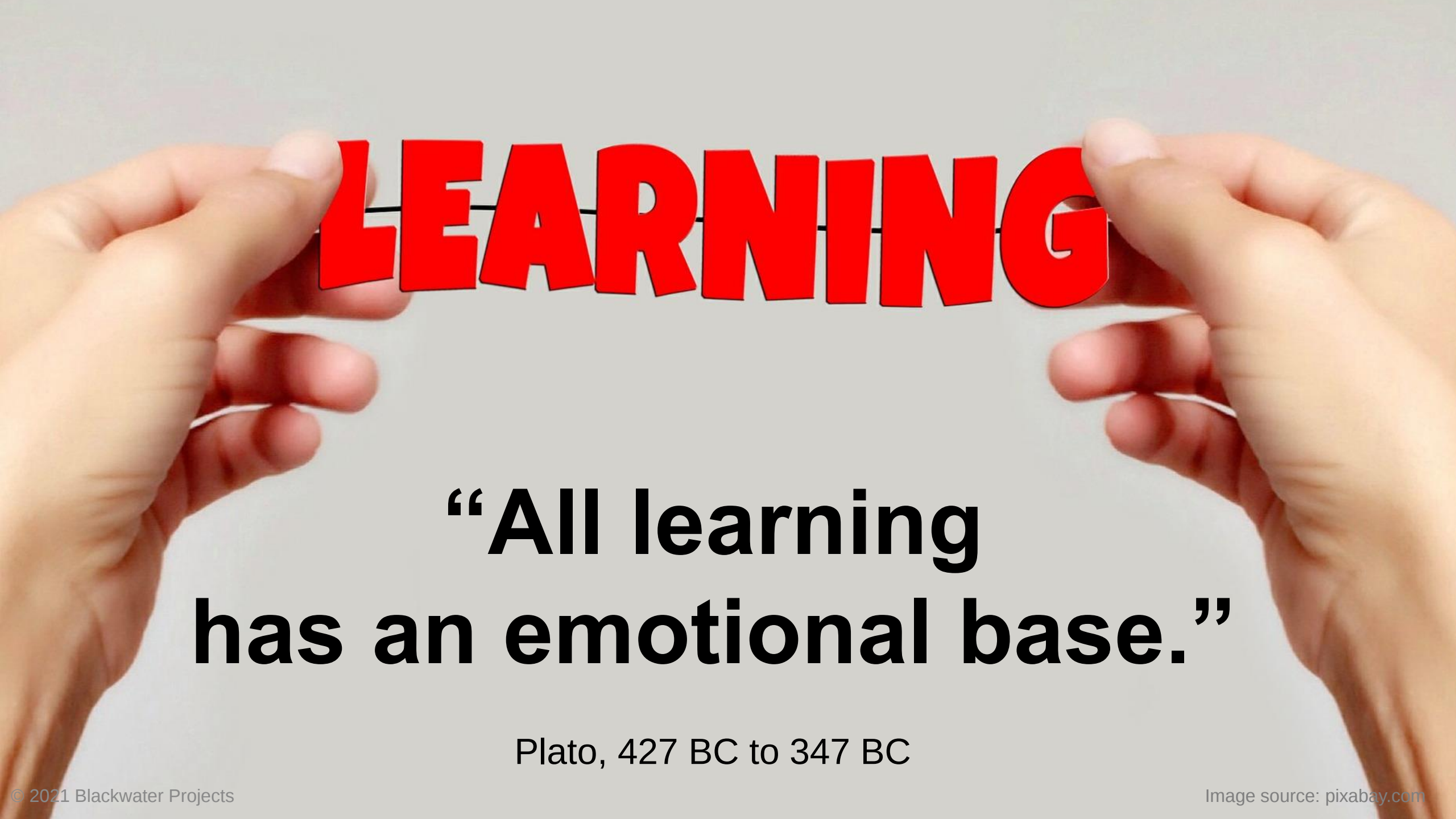
Connect

The journey to performance



2

Adults learn best when
they feel safe

Two hands are shown holding a thin black string. The word "LEARNING" is written in large, bold, red 3D block letters along the string. The hands are positioned at the ends of the string, with fingers visible. The background is a plain, light gray.

LEARNING

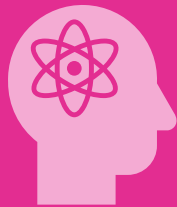
**“All learning
has an emotional base.”**

Plato, 427 BC to 347 BC

Domains of learning



Cognitive



Knowledge

Psychomotor



Skills

Affective



Attitudes

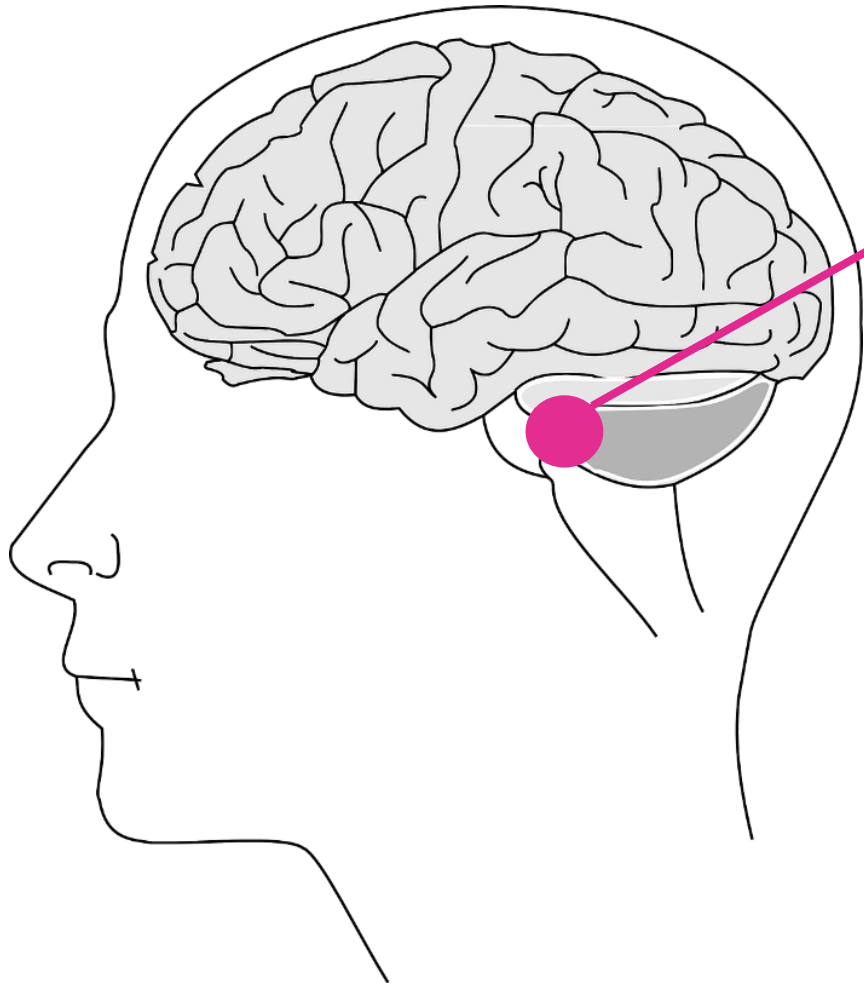
Psychological safety

A belief that one will not be punished or humiliated for speaking up with ideas, questions, concerns or mistakes.

Amy Edmondson

Project
Aristotle

By default, we feel unsafe



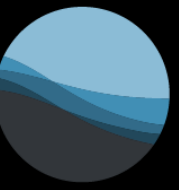
Amygdala **Helps us survive**

- Fight flight freeze
- Instant binary classification—
Good or bad
- We default to ‘bad’

Multiple sources: 1) O’Keefe, Hardwired Humans; 2) Andreatta, Wired to Grow v2

Image source: pixabay.com

A simple example - it's 11:00am



I have some feedback for you. Can we meet at 2pm to discuss?



I have some **great** feedback for you. Can we meet at 2pm to discuss?



How might—or do—you **establish** and **maintain** a psychologically safe learning environment?



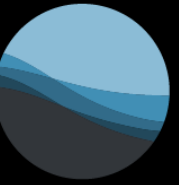
or



2 min



Psychological safety



- Answer questions
- Set—then enforce—ground rules
- Learn from failure



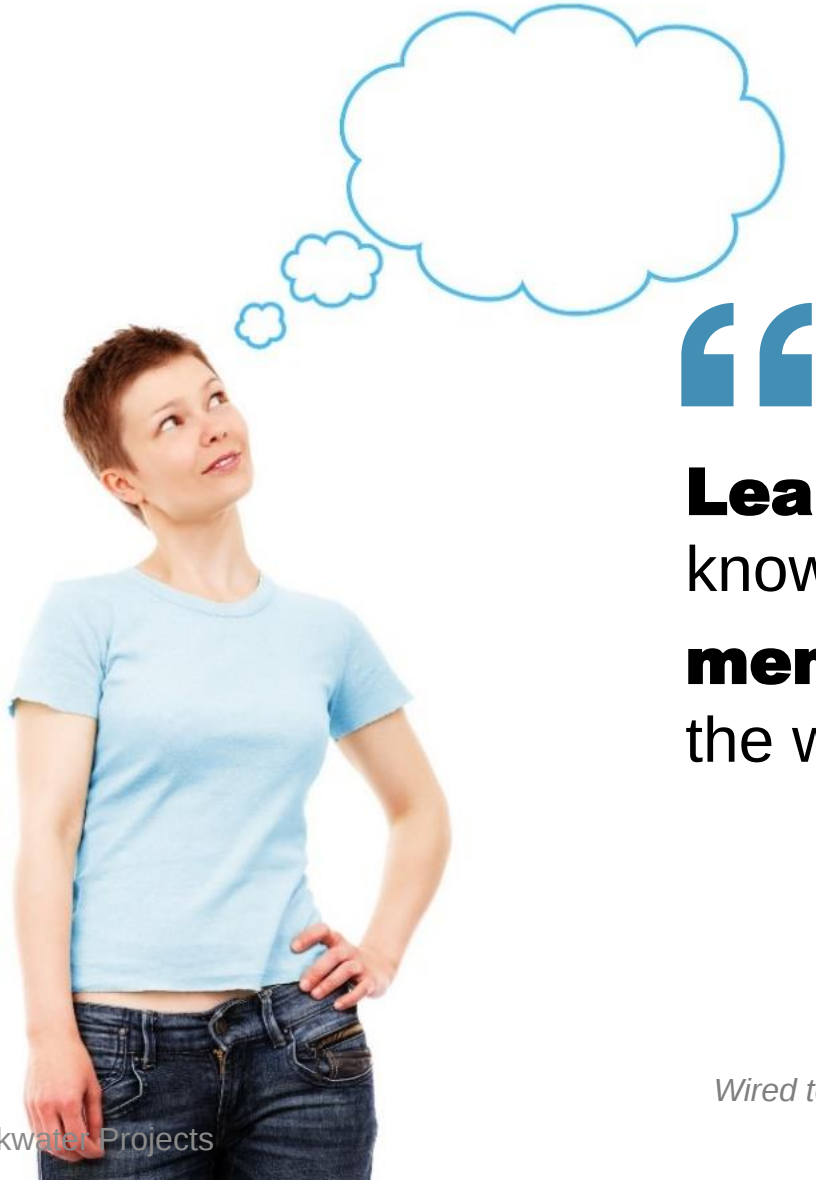
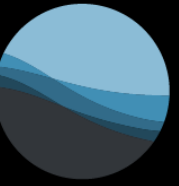
**And now for something
completely memorable!**



3

Adults learn best when
they remember

Learning vs memory



“

Learning is the process by which we acquire knowledge about the world while

memory is the process by which that knowledge of the world is **encoded**, **stored**, and later **retrieved**.

Dr. Eric Kandel, Principles of Neuroscience, cited in Andreatta,
Wired to Grow: Harness the Power of Brain Science to Learn and Master Any Skill, v2.0, 7th Mind Publishing, Inc.

Image source: pixabay.com

Encode



Learning requires our attention



- **Primary distraction**

e.g. you use the phone



- **“Second-hand distraction”¹**

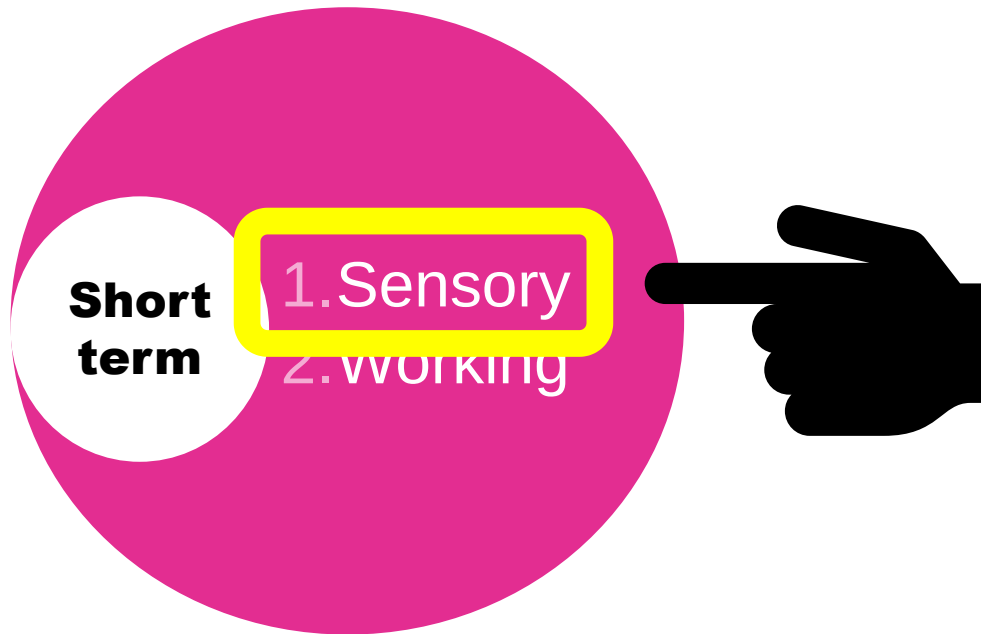
e.g. you notice someone else using the phone

¹ Britt Andreatta, 2019,

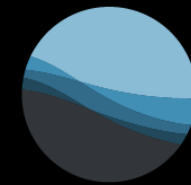
Wired to Grow: Harness the Power of Brain Science to Learn and Master Any Skill, v2.0,

7th Mind Publishing, Inc., p.114.

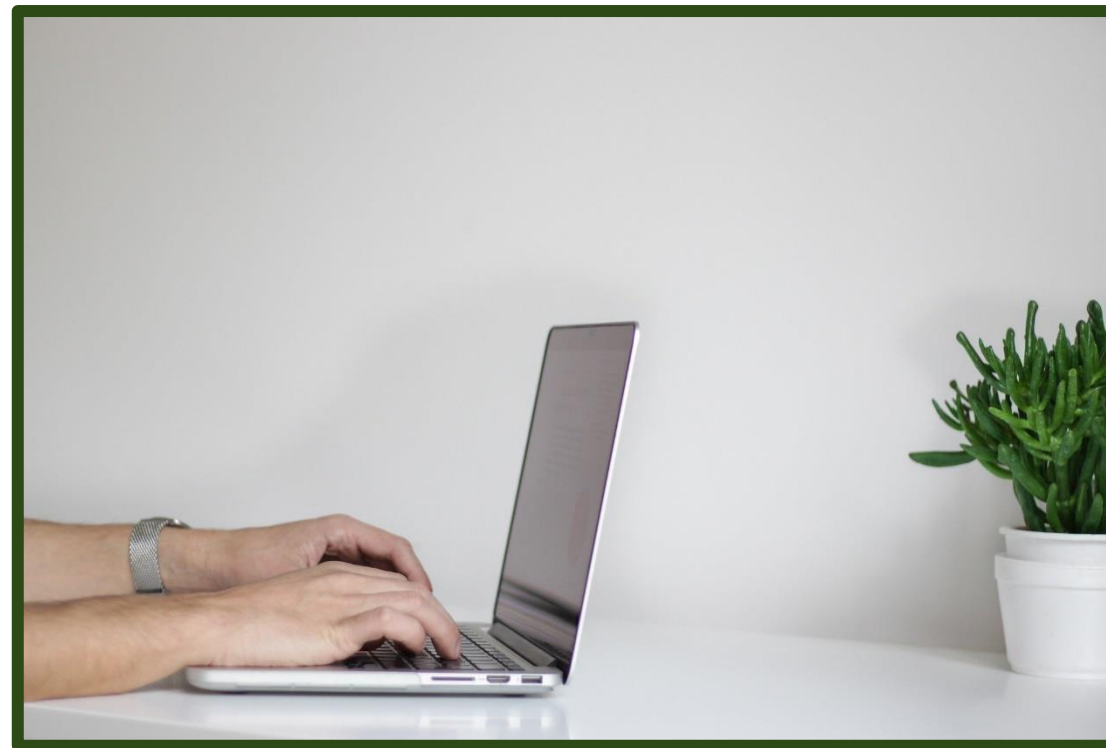
Leverage short-term memory



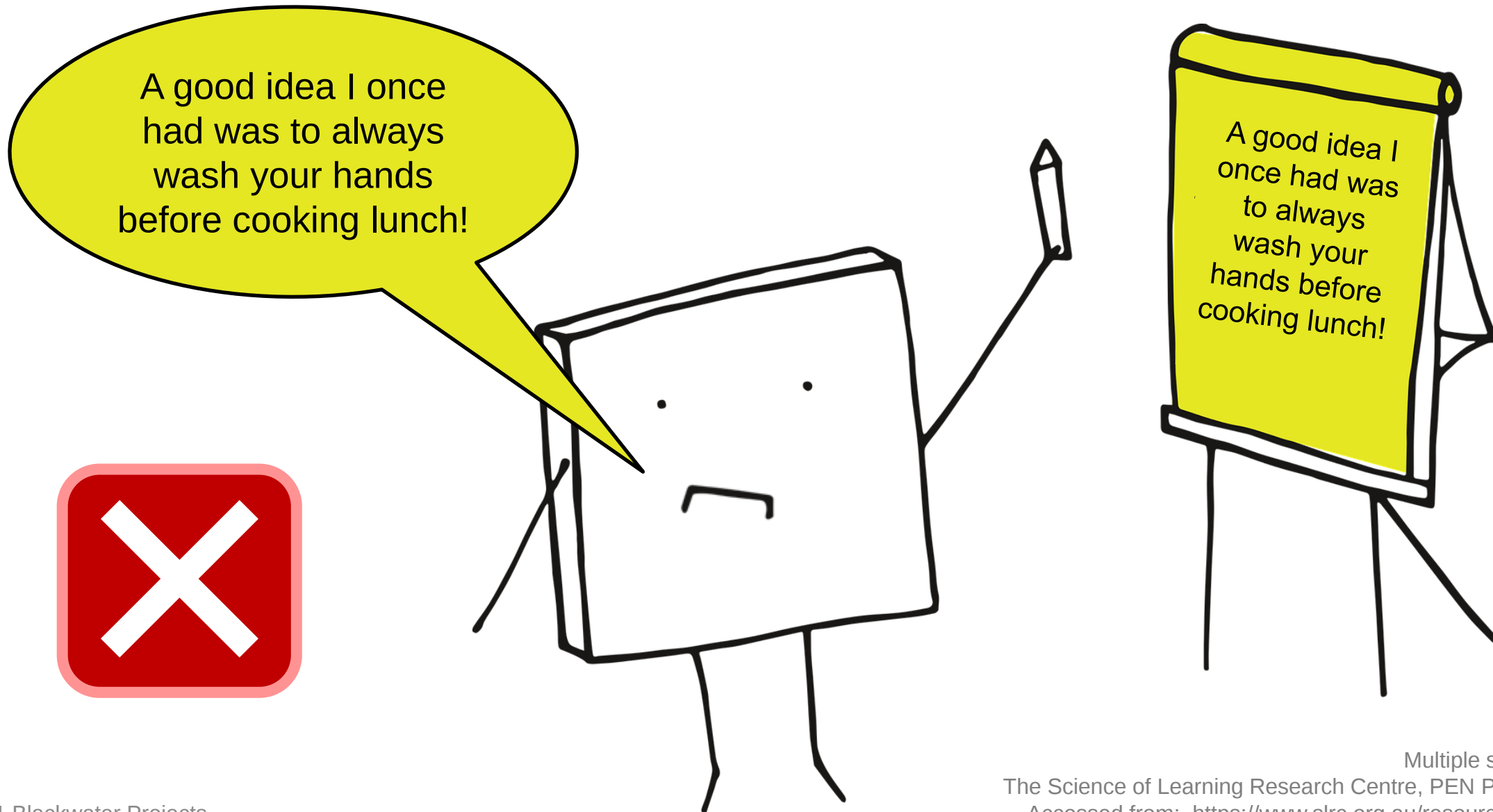
Use multi-sense learning **(in the right way)**



Use the senses appropriate to the task

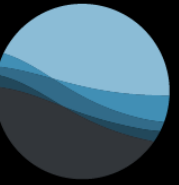


Avoid spoken text + written text

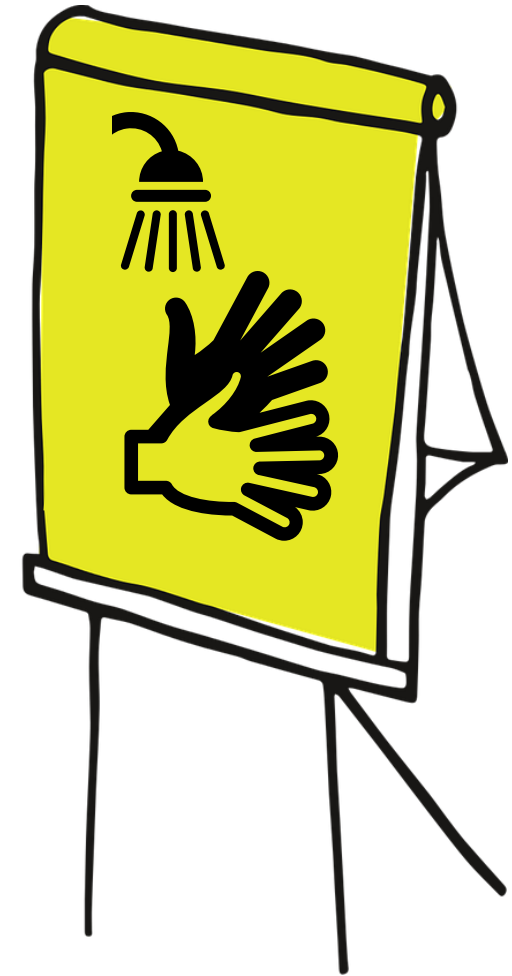
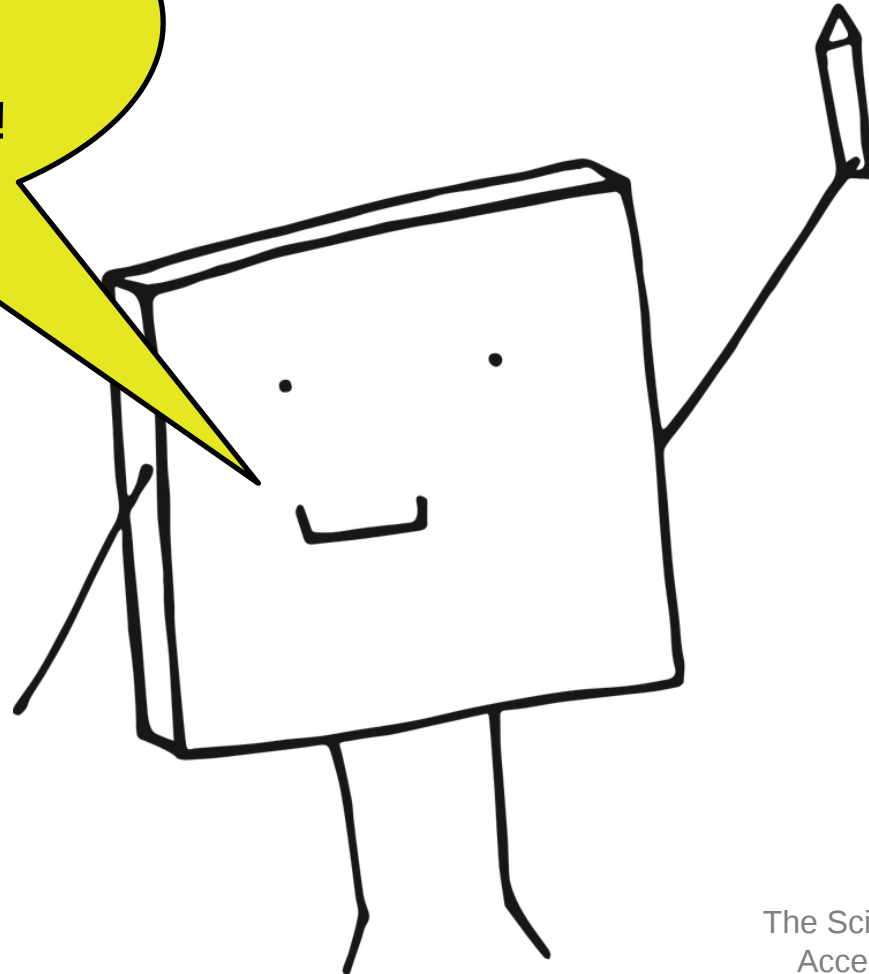


Multiple sources, including
The Science of Learning Research Centre, PEN Principles 1 and 2.
Accessed from: <https://www.slrc.org.au/resources/pen-principles>

Use spoken text + image

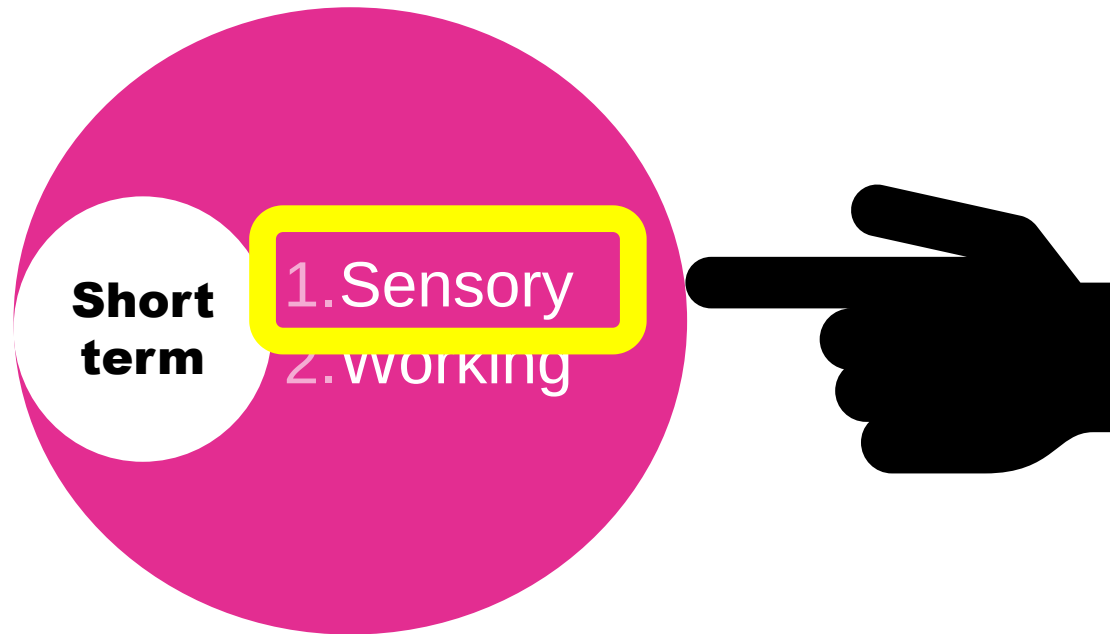


A good idea I once
had was to always
wash your hands
before cooking lunch!

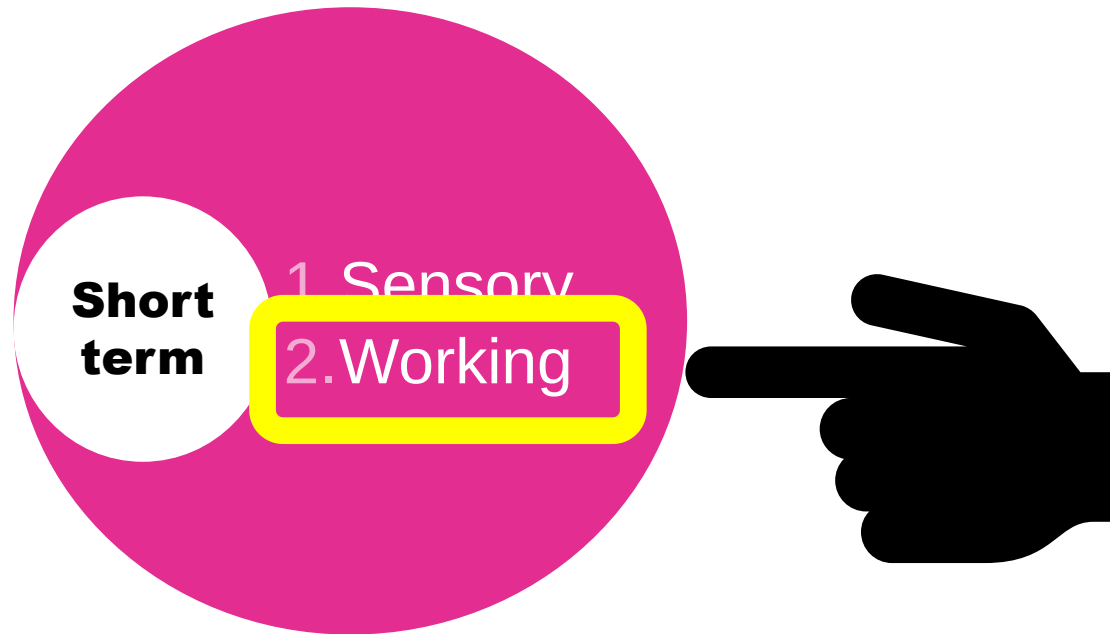


Multiple sources, including
The Science of Learning Research Centre, PEN Principles 1 and 2.
Accessed from: <https://www.slrc.org.au/resources/pen-principles>

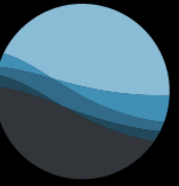
Leverage short-term memory



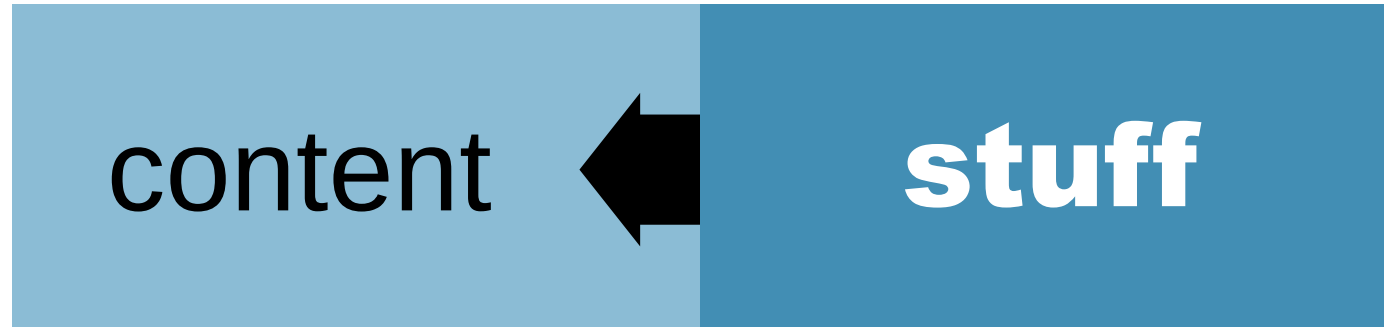
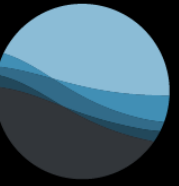
Leverage short-term memory



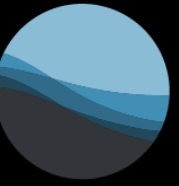
Small chunks of essential ‘stuff’



Small chunks of essential 'stuff'



Small chunks of essential 'stuff'



Small chunks of essential 'stuff'



20 min



Hand-write notes

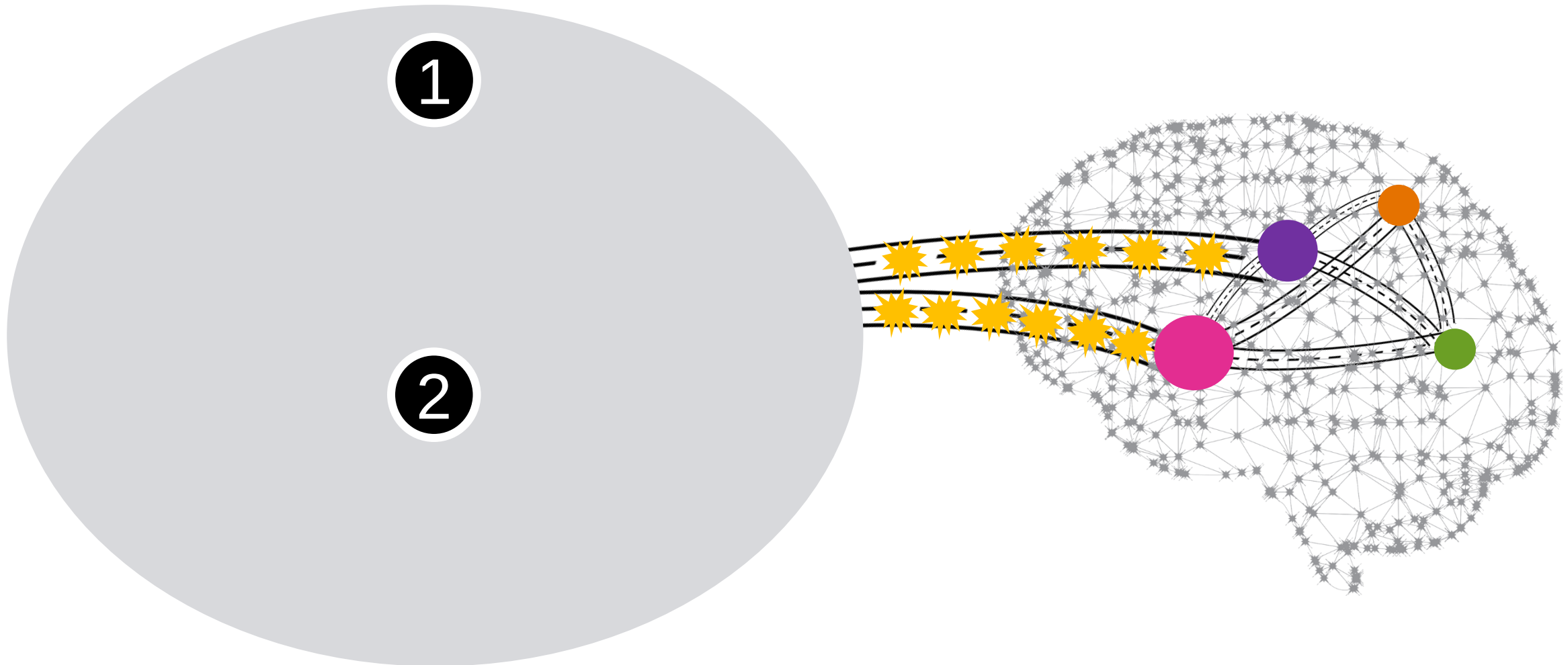
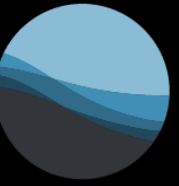
Cindy May, A Learning Secret: Don't Take Notes with a Laptop, in Scientific American, 2014,
about the work of Pam Mueller and Daniel Oppenheimer.

Source: <https://www.scientificamerican.com/article/a-learning-secret-don-t-take-notes-with-a-laptop/>

Image source: pixabay.com

Store

Access existing schemas



The image features two overlapping silhouettes of human heads in profile, facing right. The background is a deep blue space filled with numerous small white stars. The silhouettes are filled with watercolor-style colors. The front silhouette is primarily red and pink, with some orange and yellow tones. The back silhouette is primarily green and blue, with some purple and cyan tones. The text 'pause & reflect' is written in a bold, white, sans-serif font across the middle of the image, overlapping both silhouettes.

pause & reflect

Retrieve

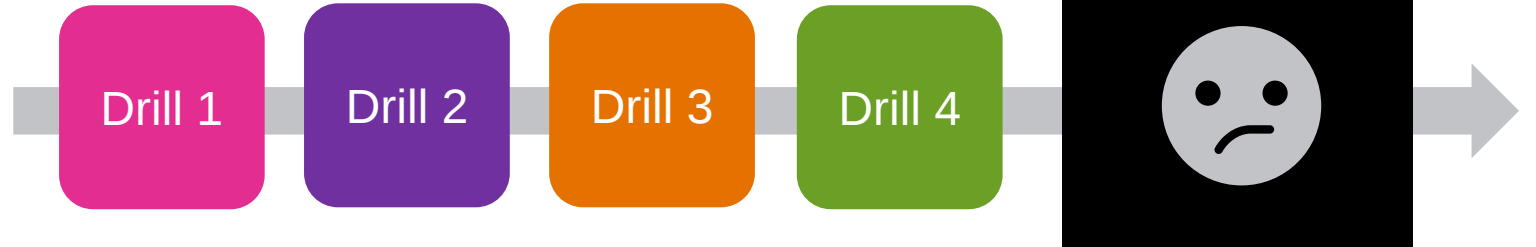
The background of the slide is a dense, overlapping collage of red triangular signs. Each sign has a white border and the word "TEST" written in bold, black, sans-serif capital letters. The signs are layered in a way that creates a sense of depth and repetition, with some signs partially obscured by others. A dark, semi-transparent horizontal band runs across the middle of the image, serving as a backdrop for the main text.

Practice and retrieve (often)!

Use interleaved practice



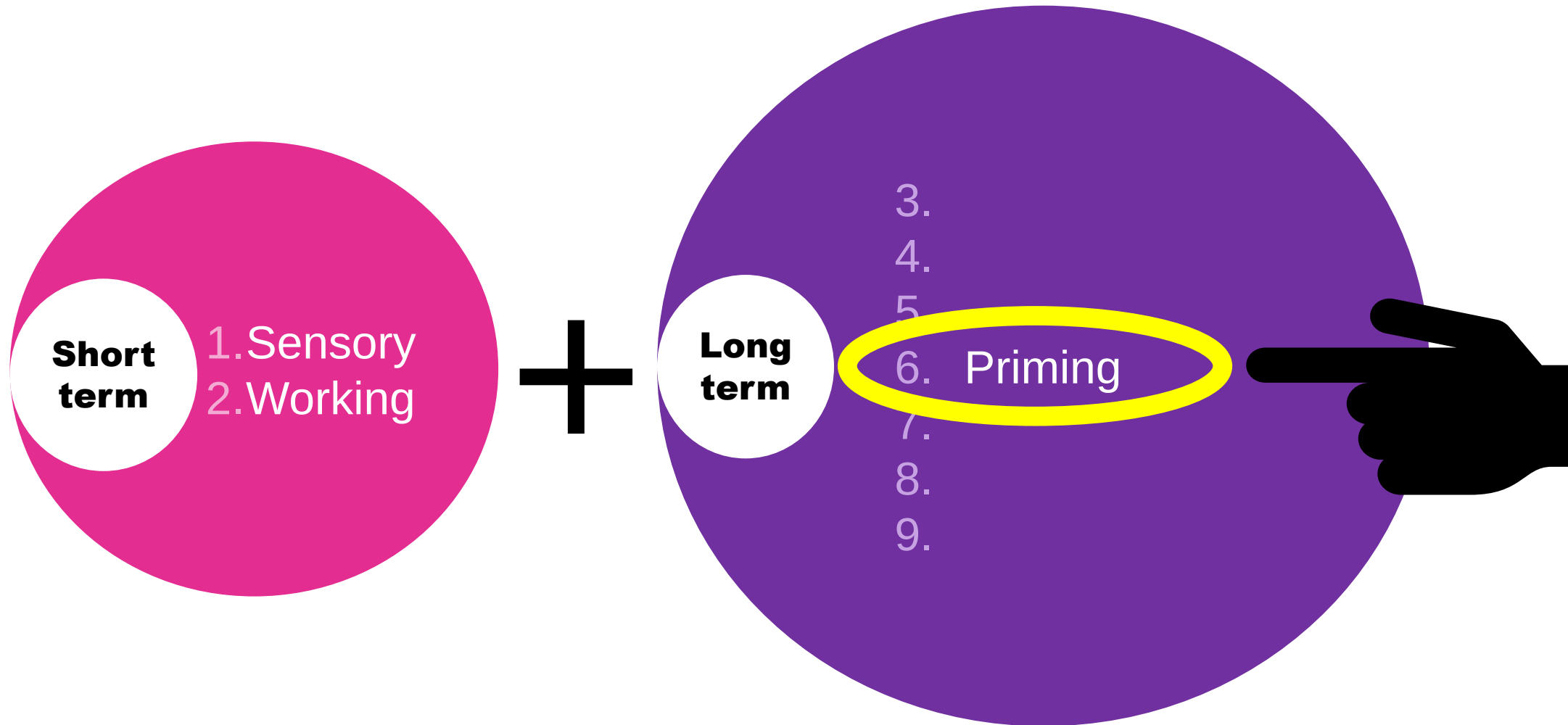
Massed practice



Interleaved practice



9 types of memory

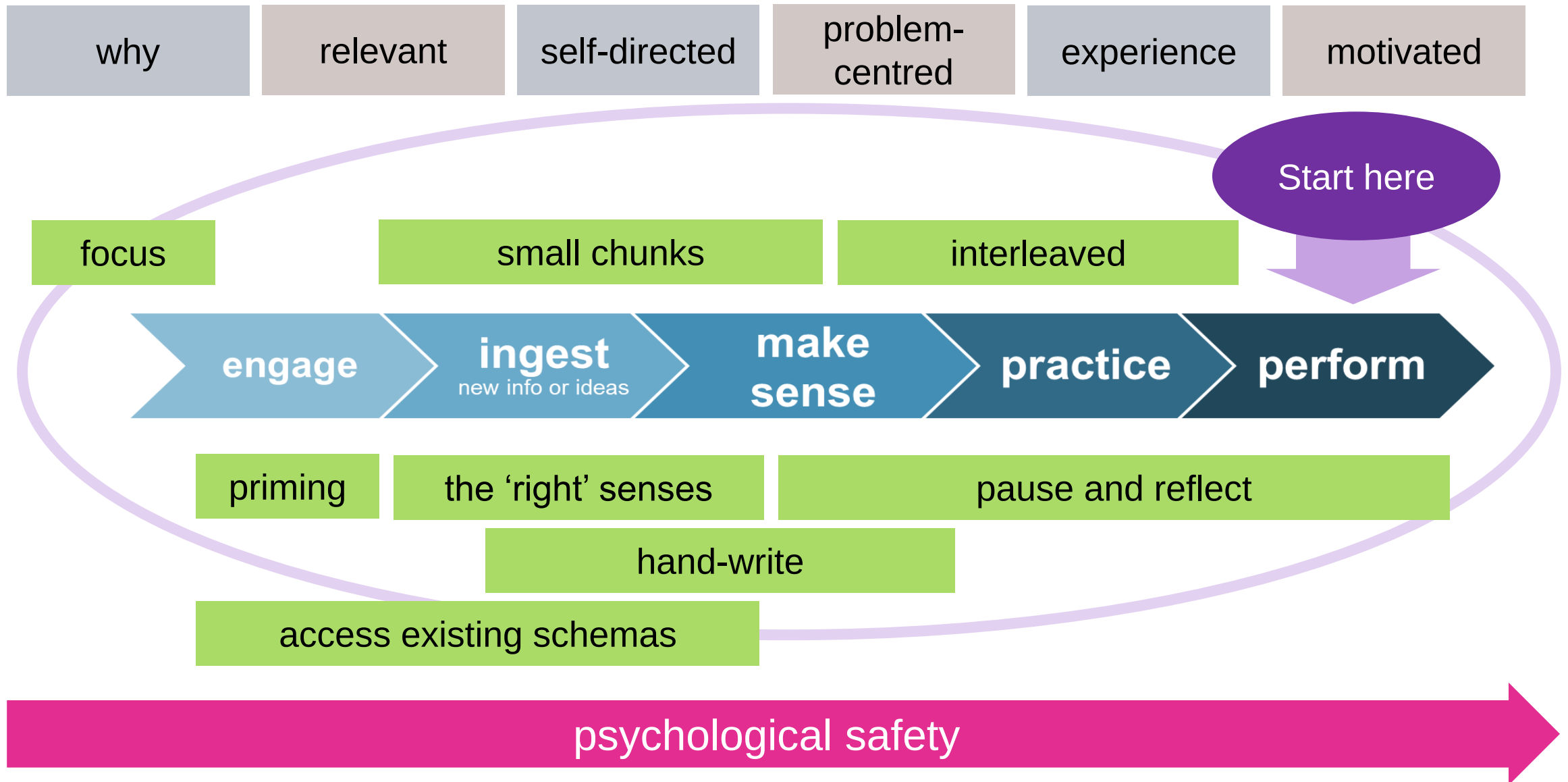


Sources for priming:

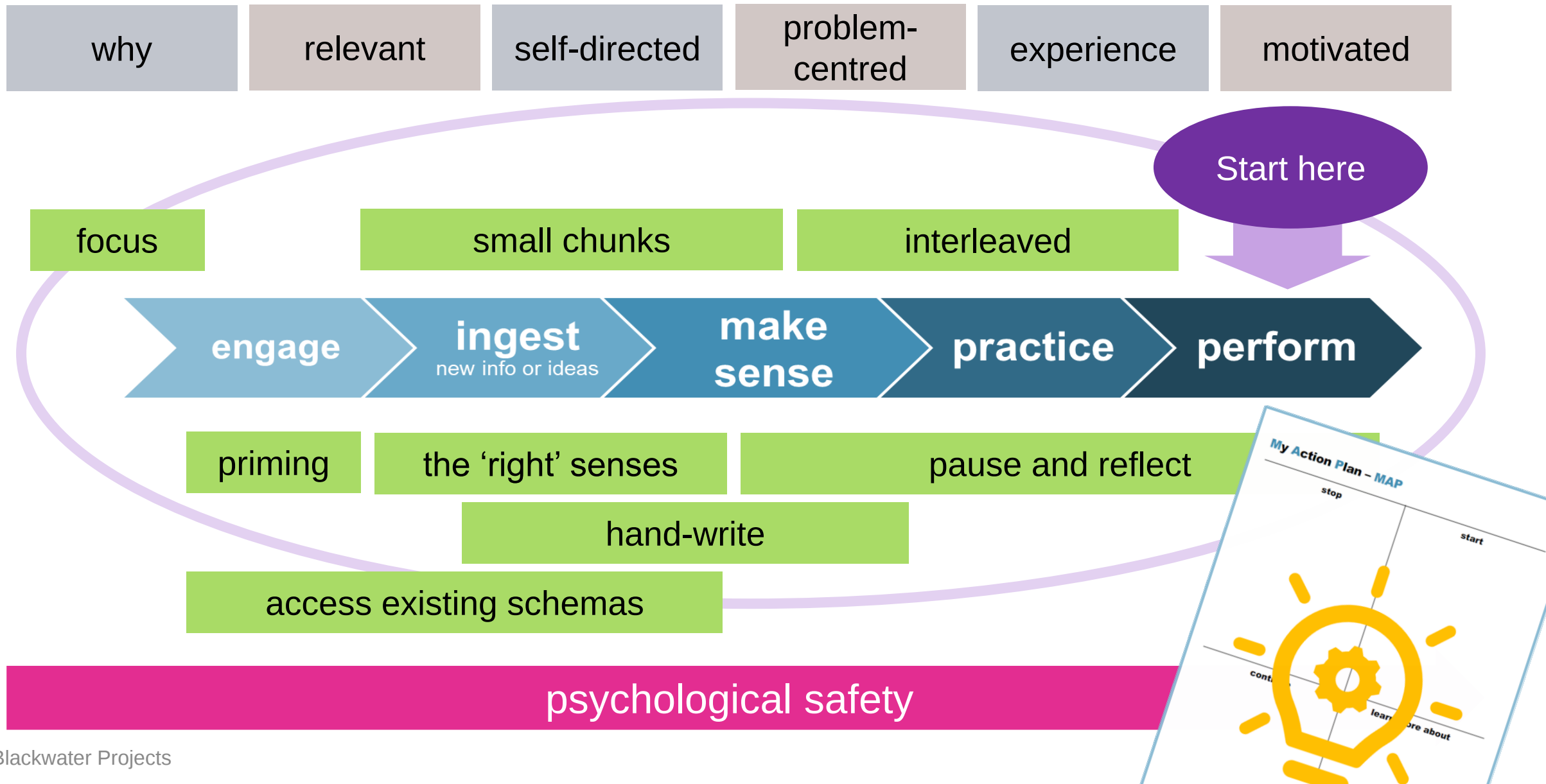
1) Britt Andreatta, 2019, *Wired to Grow: Harness the Power of Brain Science to Learn and Master Any Skill*, v2.0, 7th Mind Publishing, Inc.

2) PEN Principles, Principle 12 - <https://www.slrc.org.au/pen-principle-12>

Recap: principles of adult learning (2021 version)



Recap: principles of adult learning (2021 version)



Thank you!

BLACKWATER
PROJECTS



Chemène Sinson



@ChemeneSinson



<https://www.linkedin.com/in/chemenesinson>



blackwaterprojects.com.au



chemene@blackwaterprojects.com.au

Some good reads...



'A COMPELLING BOOK'
—Dr Jane Goodall

HARDWIRED HUMANS

Successful Leadership
Using Human Instincts



Andrew O'Keeffe

make it stick



The Science of Successful Learning

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

WIRED TO GROW^{2.0}

Harness the Power of Brain Science
to Learn and Master Any Skill



Britt Andreatta, PhD

Author of *The Neuroscience of Learning*, *Wired to Resist*,
Wired to Connect, and *Leading with Emotional Intelligence*

PEN Principles

Ppsychology
Education
Neuroscience



Source: <https://www.slrc.org.au/resources/pen-principles/>

Acknowledgements and references



- Images

Unless otherwise indicated, all images are sourced from pixabay.com

- Useful links

See slides

COMING UP **NEXT:**

3.30 - 5.00PM



vision for the future

VET IN SCHOOLS

**Trainer & Assessor
Compliance and
Effective Industry
Engagement**

Melanie Alexandra

TRAINING & STUDENT ENGAGEMENT

Permission to Play

Jason Ash

MANAGEMENT

**Building a Kick Ass
Strategy for the New
Decade**

Jason Blinman

EXPLORATION

**Tips and Tricks for
DIY Digital Learning
Resources**

Kerri Buttery

DEEP DIVE

**Compliance:
The annual
approach**

Angela McGregor