



coffee



I think it's kicking in

Resources for this presentation

- aldi.learnquebec.ca 
- ALDI professional development resources 
- powerpoint

Today's discussion and activities

1. What is Universal Design for Learning?

- *Student diversity*
- *Origins of UDL*

2. How to design accessible learning

- *(plus a bit of neuroscience thrown in...)*

3. Where do I start?

- *Active Learning Strategies to Support UDL*

What is Universal Design for Learning?

An educational approach that aims to increase access to the curriculum by reducing barriers to learning.

To understand UDL, we have to discuss....

Student diversity

We know that...

We have a diverse student population that need flexible approaches to teaching and learning in order to succeed.



OUR TYPICAL CLASSROOMS

Students who are disengaged/demotivated

***Students with
emotional
difficulties***

***Students with learning
disabilities***

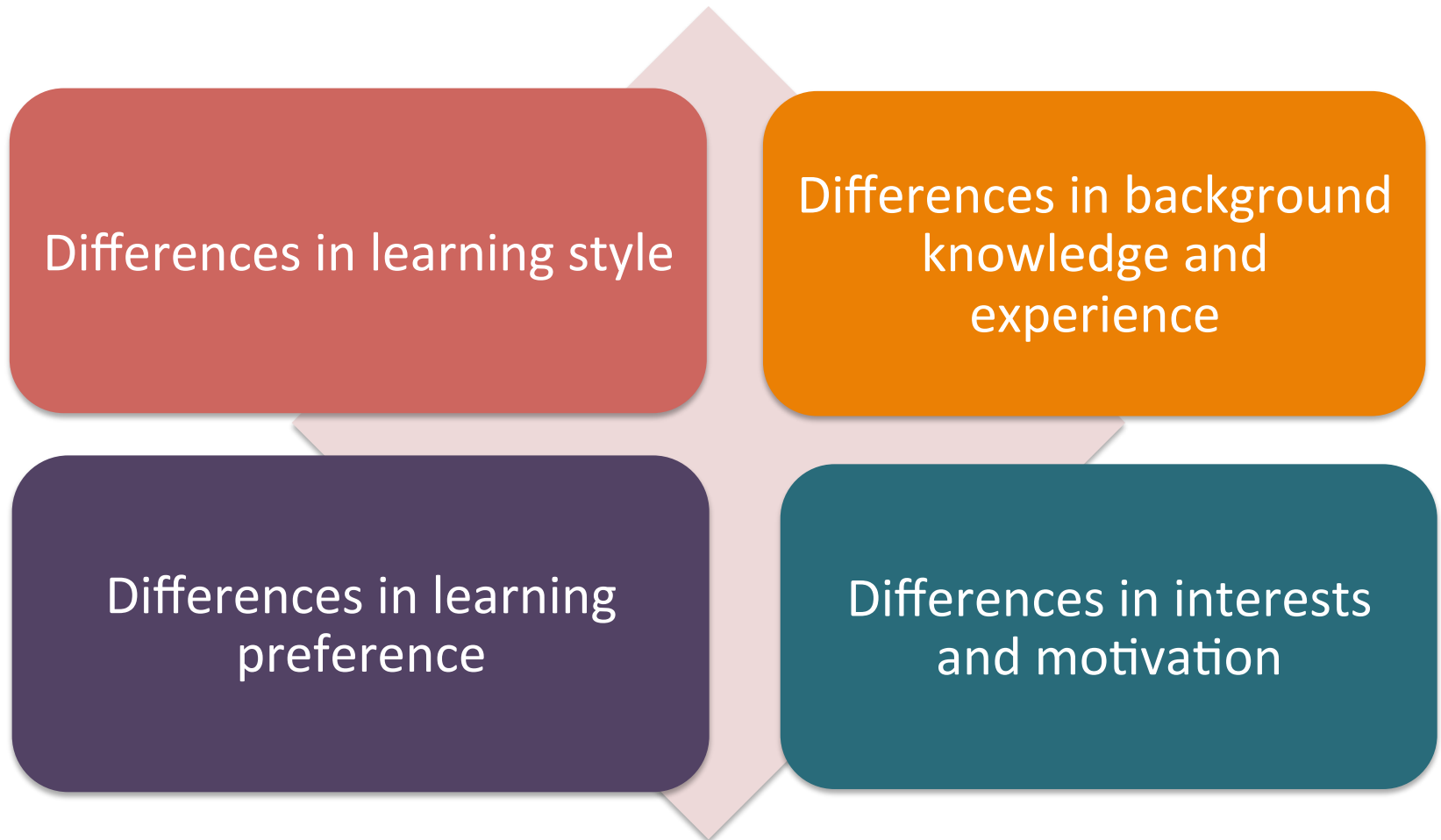
***Students with
Autism
Spectrum
Disorders***

***Students who require
acceleration***

***Students who have difficult home lives/
conditions***

***Students who require
support for mental
health issues***

What does diversity look like?



Inclusive Teaching Practices

Introducing...

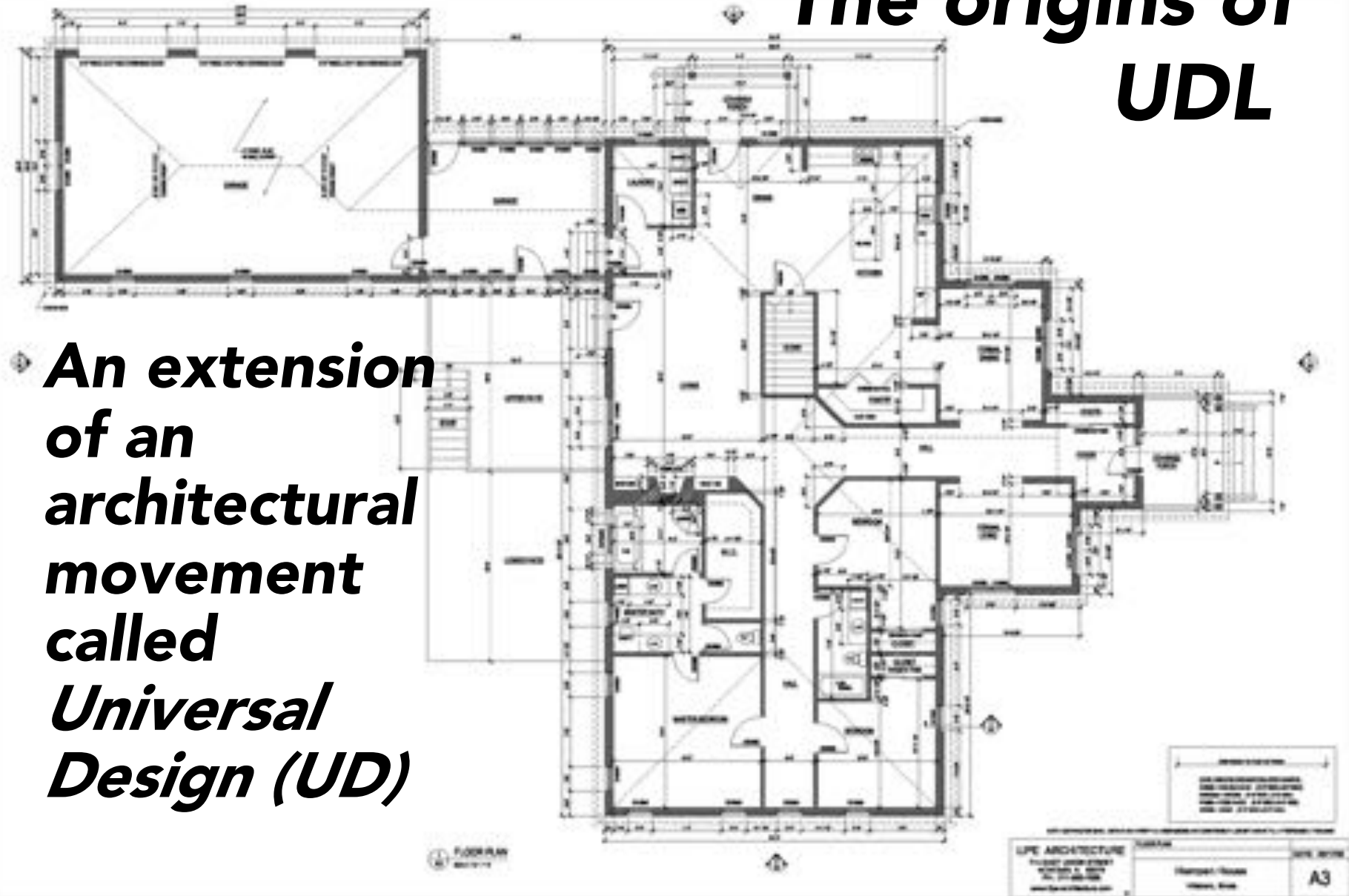
Universal Design for Learning (UDL)



What is UDL?

- An educational approach that aims to increase **access to learning** by reducing physical, cognitive, organizational and other **barriers**.

The origins of UDL



**An extension
of an
architectural
movement
called
*Universal
Design (UD)***

***“Consider the needs of the
broadest possible range of users
from the beginning.”***



-Ron Mace, pioneer and visionary of Universal Design



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Universal Design in the classroom means....

- *Flexible* learning experiences that can meet the needs of many learners.
- *No retrofitting*. Designing accessible experiences from the beginning...

***Why does UDL make sense in our secondary schools?
Because its proactive, not reactive!***

Shift



***Current models of adaptation means that we
need to accommodate and manage a
significant range of
individualized adaptations
In our classrooms (reactive model).***

***A shift to a more proactive model will benefit
all.***

How to design accessible learning experiences

Four considerations for accessible learning

Think about:

1. Instructional design
2. Reducing barriers
3. Flexible teaching and learning experiences
4. Active learning

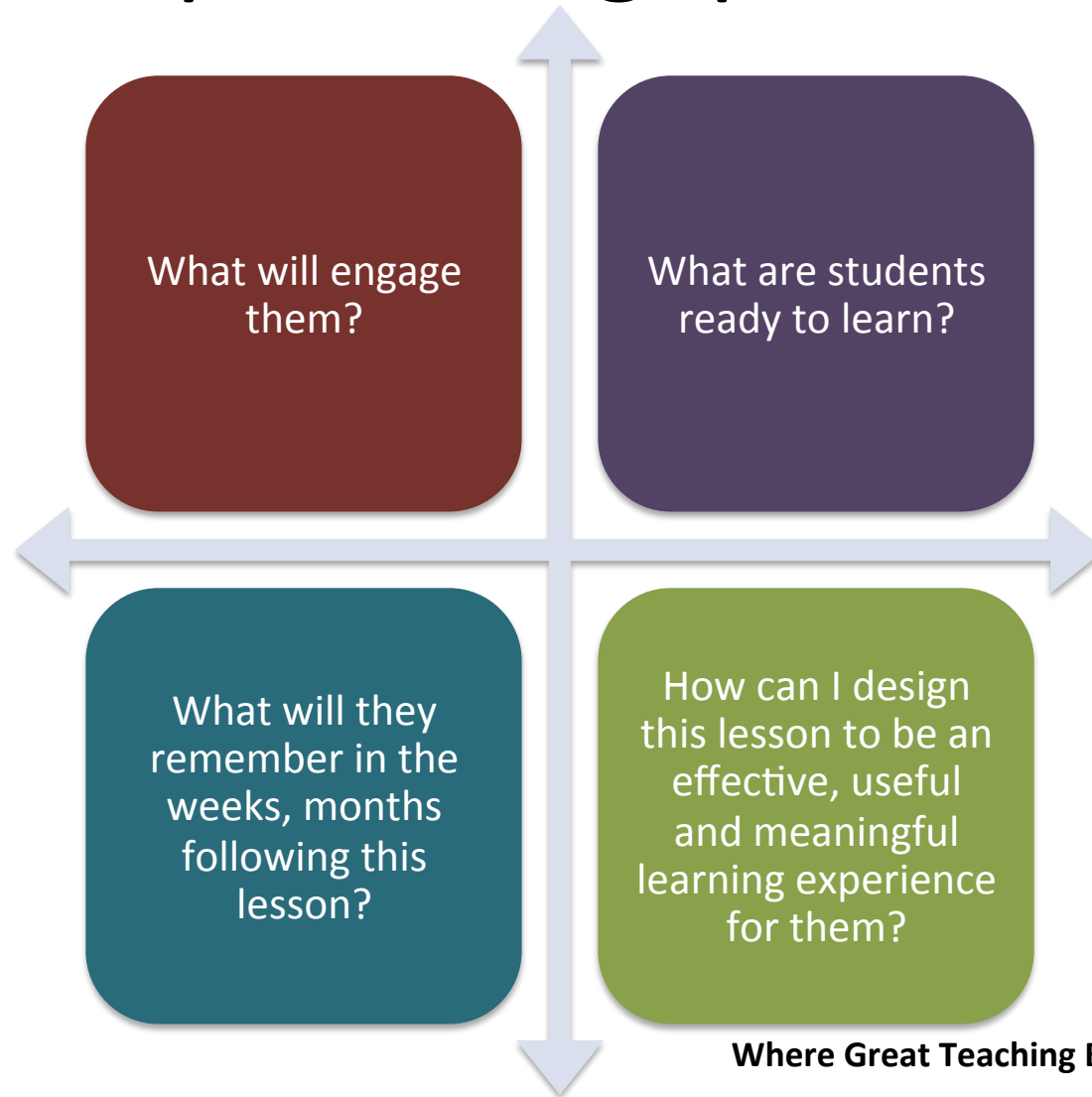
An underwater photograph looking up towards the surface of the ocean. Sunlight rays are visible filtering through the water, creating a bright, shimmering effect at the top. The water is a deep blue color with some ripples and bubbles visible.

instructional design

The "deep work" of teaching

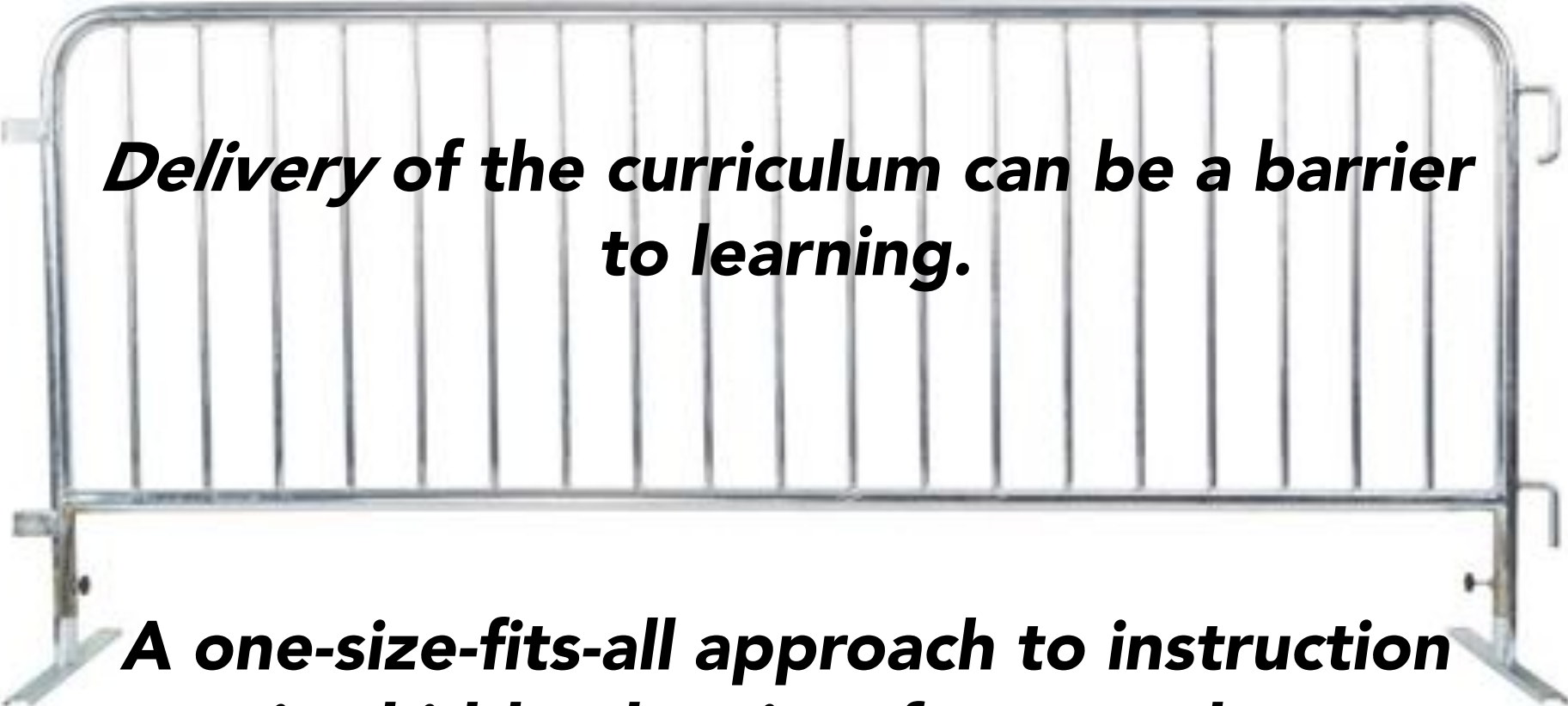
***"What will students be learning today
and how will they learn it?"***

Deep learning questions



Where Great Teaching Begins (Reeves, A.) 2011

Reducing barriers

A silver metal crowd control barrier with vertical bars, standing upright. The text is overlaid on the barrier.

Delivery of the curriculum can be a barrier to learning.

A one-size-fits-all approach to instruction contains hidden barriers for many learners.

***What are barriers that
your students have
encountered?***



Flexible teaching and learning practices

1. How we present information to our students (INPUT or representation)
2. How we allow our students to **express themselves** (OUTPUT or expression)
3. How we **engage** our students-**highly relevant for secondary students**

Representation of content

“Learners differ in the ways that they perceive and comprehend information that is presented to them.”

CAST, 2012

***How do you represent
information/concepts
in different ways?***

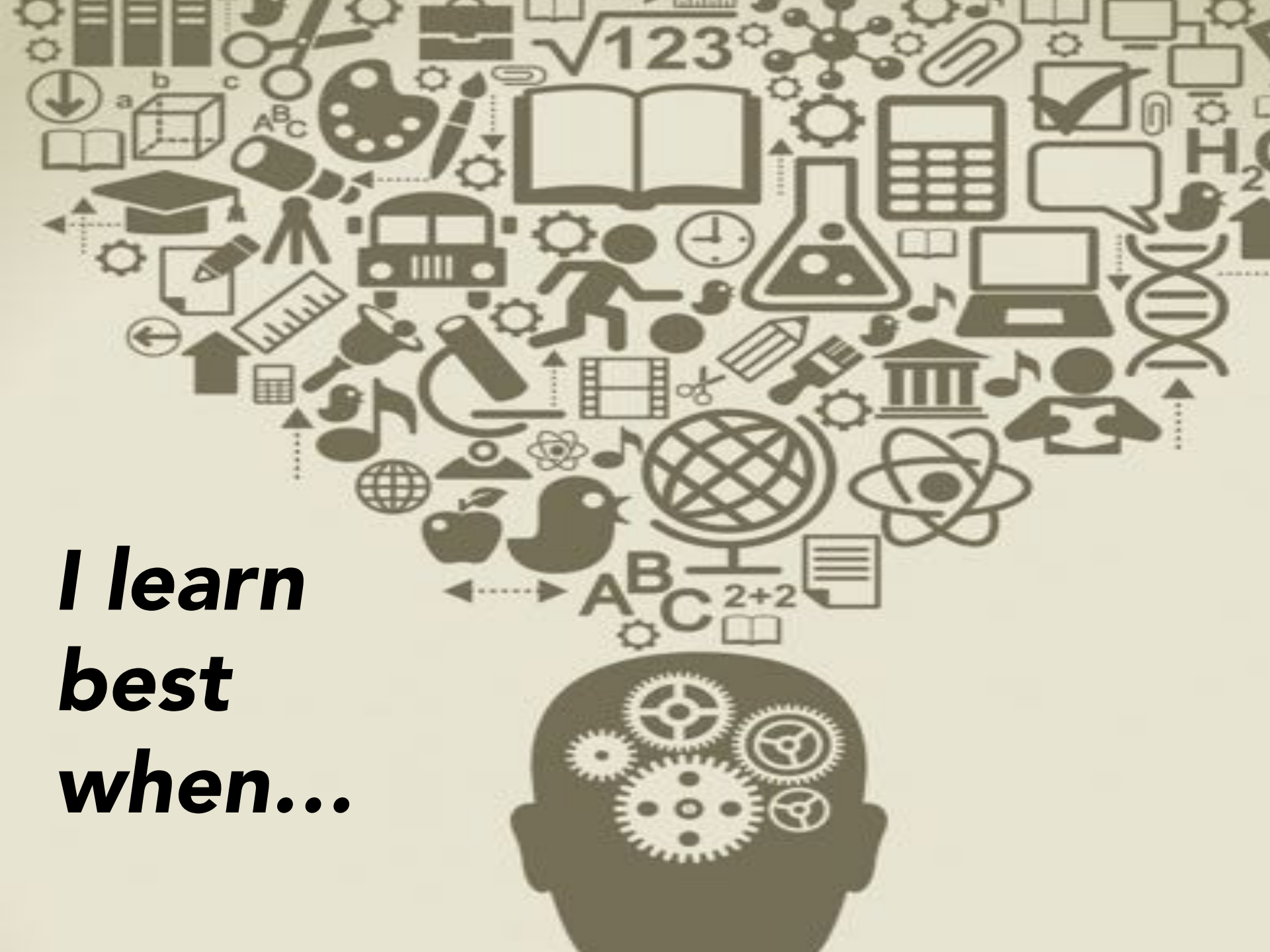


Learning takes different kinds of exposure.

Each way of presenting a concept shapes student understanding.



***I learn
best
when...***



Active learning

Active learning means that *the mind* is actively engaged. Its defining characteristic is that *students are dynamic participants in their learning* and that they are reflecting on and monitoring both the processes and the results of their learning.

(Barkley, 2010)



To sum up...

- Learning is not a “spectator sport.”

(Chickering & Gamson, 1987)

- Our most common method of delivery (auditory information) isn't enough.

Why auditory-based learning doesn't work for all....

- Our brain is not a recorder.



This is our brain on learning...

Have I heard this
information before?

Where does this
information fit? What
can I do with it?

Constant processing and questioning of information!

Can I assume this is the same
idea I had yesterday or last
month or last year?

This compares to...

Our brains do a better job of learning if we are allowed to discuss with others and if we are invited to ask questions.



Research says...

Learning should be largely a social, collaborative experience. Articulating and sharing ideas and responding to others' reactions improves thinking and deepens understanding.



"Learning can't be swallowed whole.

To retain what has been taught, students must chew on it."

Silberman, M. (1996)

How do you get students to “figure it out” without telling them the answer?



Questioning

Muddiest Point

**Visuals and
concept
mapping**



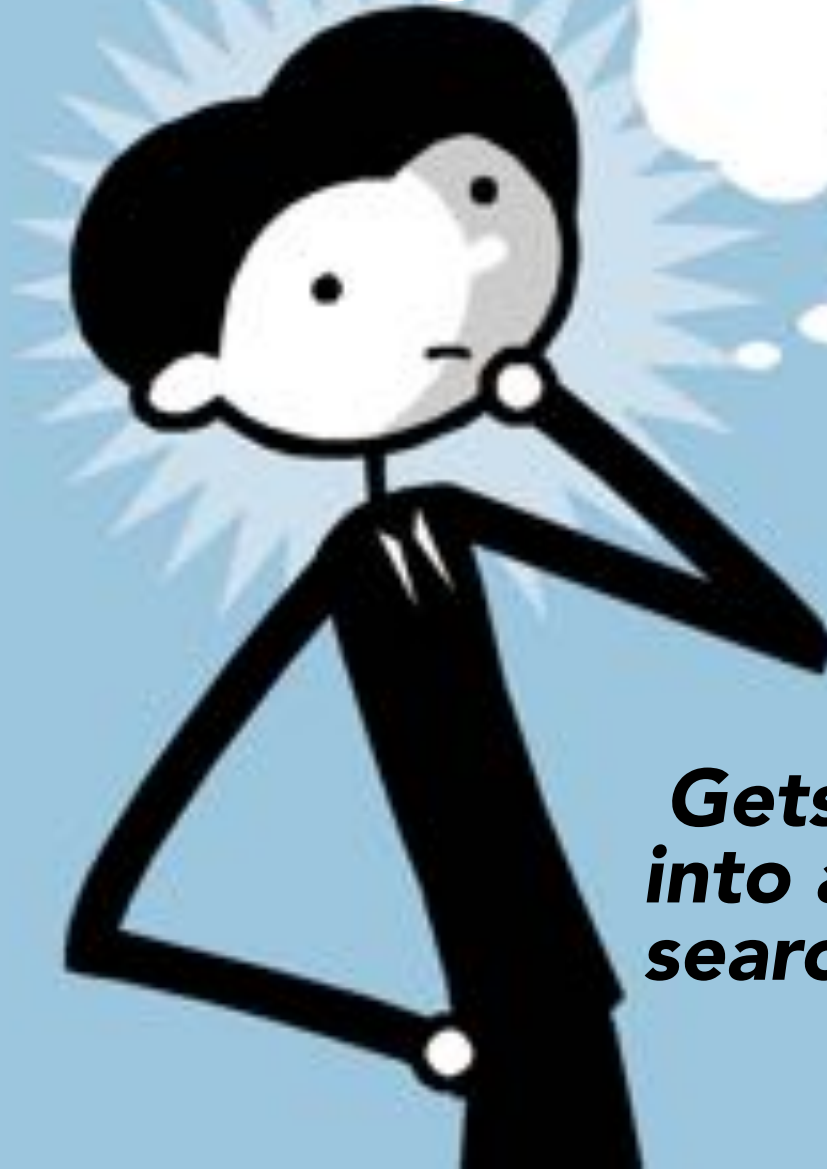
Where do I
start?

Write Around the Room

***Active learning
strategies to
support UDL***

Think-Pair-Share

Questioning



***Gets students
into active,
searching mode***

Does anyone have any questions?



Questions that encourage inquiry & allow students to demonstrate understanding

- Explain the way to...
- How is this different then...
- Why is it necessary to do this...?
- Could you give me an example of...?
- How could I use this idea in real-life?



Think-pair-share

What are the advantages and disadvantages of using the internet for research?



Activating and building background knowledge



***Background knowledge
is a repository of
memories, experiences,
and facts.***

Why is activating background information important?

- When information is provided in isolation and not connected to existing knowledge, it is forgotten and deemed unimportant.
- When students are actively building their background knowledge, learning becomes more accessible and they are more likely to experience success.

(Marzano, 2004).

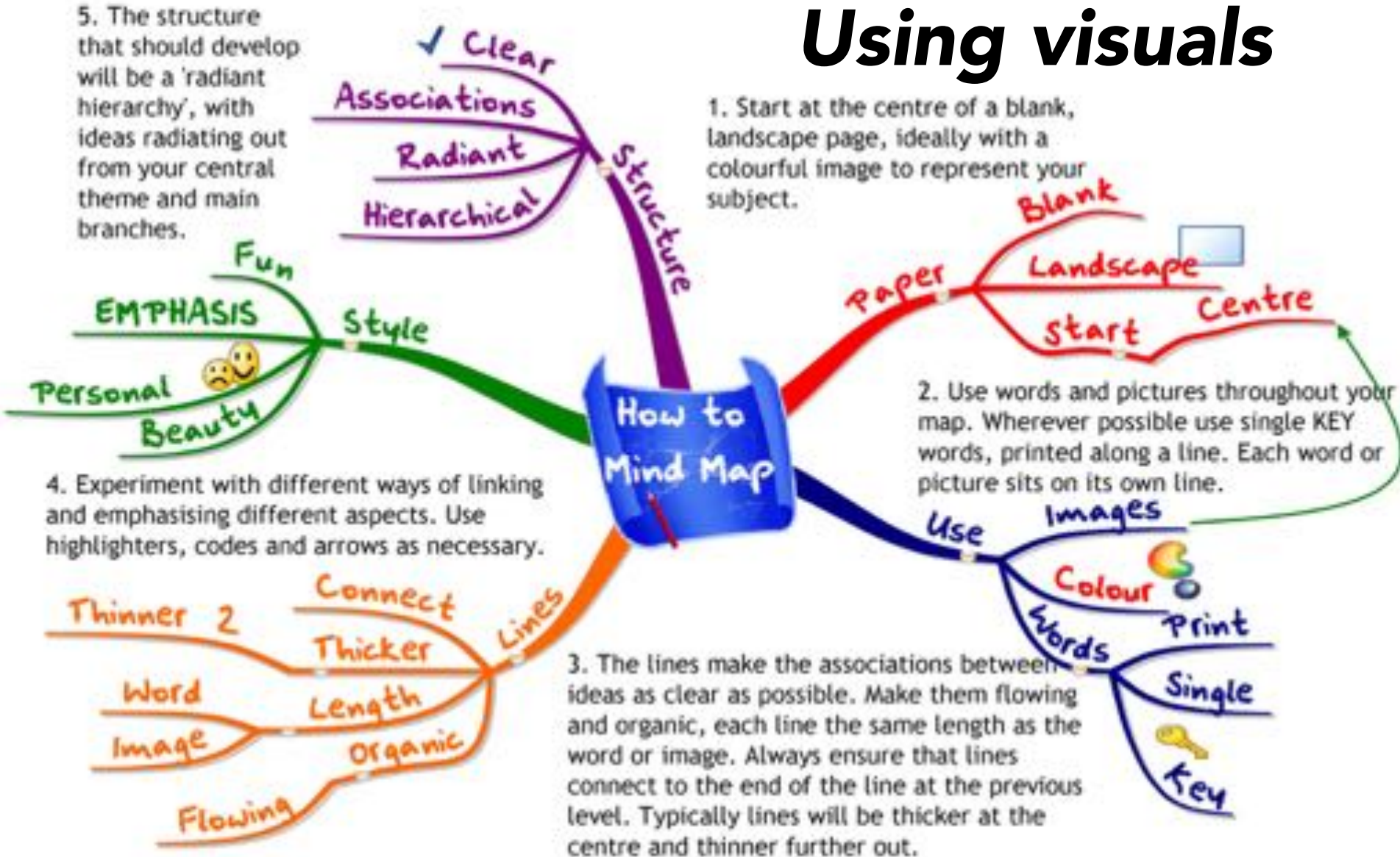
Write Around the Room




Online learning

- What is online learning?
- Would you like to take a course online and why/why not?
- What are the benefits of online learning?
- What are some of the challenges of online learning?

Using visuals





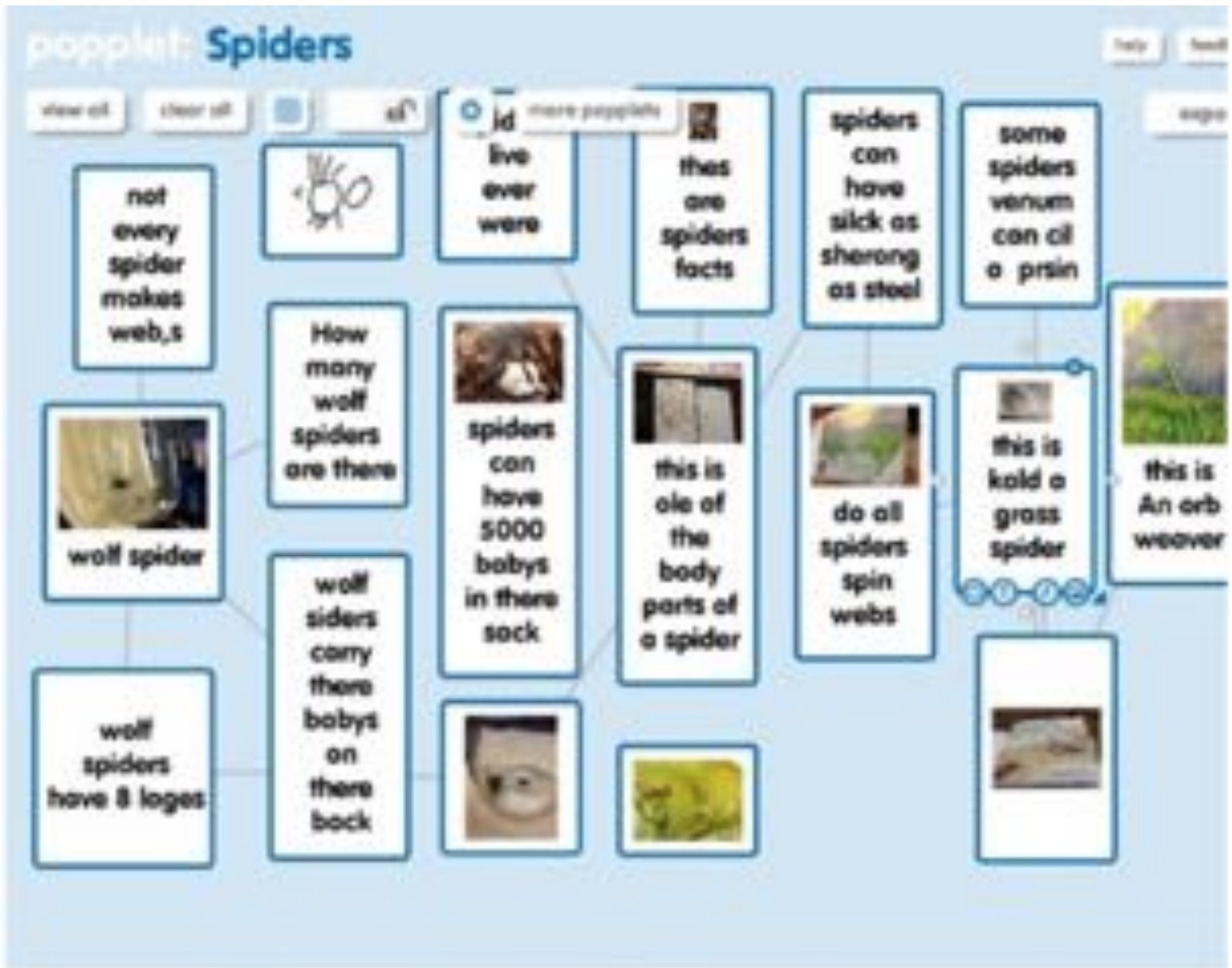
***Pictures and visuals
attract attention like
magnets.***



***What is
terminal
velocity?***

Is hockey “Canada’s game”?





Ask students to identify their “muddiest point”



***“Reflecting back to
move forward”***

***Students who recognize where
their understanding is “muddy”
are also better positioned to
direct their learning to remedy
this.***

What was your muddiest point so far?



Resources

- Where Great Teaching Begins: Planning for Student Thinking and Learning. Reeves, A. (2011). ASCD.
- Active Learning: 101 Strategies to Teach Any Subject. Silberman, M. (1996). Pearson.
- 41 Active Learning Strategies for the Inclusive Classroom (grades 6-12). Casale-Giannola, D. & Schwartz-Green, L. (2012). Corwin Press.

Thank you!



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