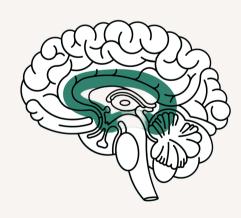
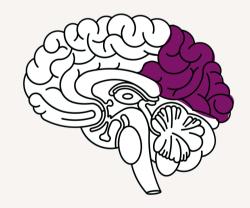
The Brain Networks of UDL?

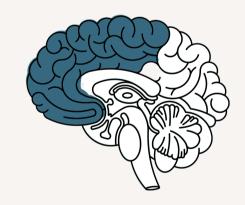
In the past decade, there have been unprecedented ways to examine the living brain and to better understand what happens during learning. Universal Design for Learning (UDL) was inspired by such advances in cognitive neuroscience research and offers a framework that integrates what we know about the learning brain to inform the design of environments that support all learners.



Engagement (the why of learning, which aligns with affective networks):
interest, effort and persistence, and self regulation

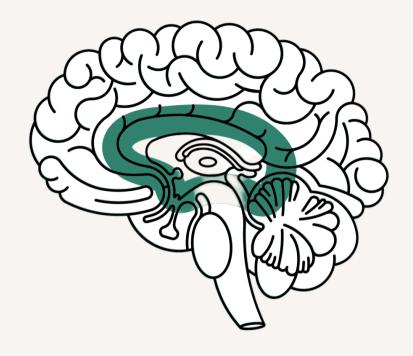


Representation (the what of learning, which aligns with recognition networks): perception, language and symbols, and comprehension



Action & Expression (the how of learning, which aligns with strategic networks): physical action, expression and communication, and executive function

The WHY of Learning

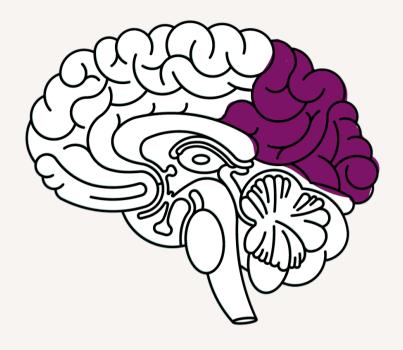


ACTIVE NETWORKS

Provide multiple means of engagement by:

- Allowing students to make choices so they remain invested and engaged
- Explaining why a lesson is relevant
- Providing a variety of resources to prevent frustration
- offering opportunities for consistent feedback, e.g., selfreflection, peer review, and teacher feedback.

The WHAT of Learning

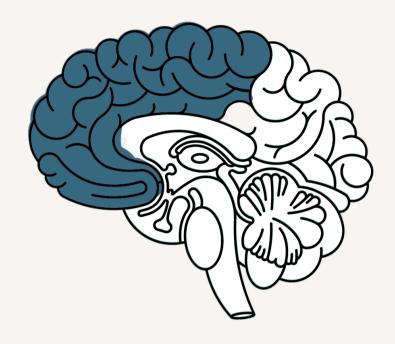


REPRESENTATION NETWORKS

Provide multiple means of representation by:

- providing students visual, auditory, and digital materials for each lesson
- modeling comprehension strategies e.g., note-taking, highlighting, asking clarifying questions, etc.
- Providing scaffolds to support students with reading materials
- breaking down multi-step or difficult instructions and providing visuals to support understanding.

The HOW of Learning?



STRATEGIC NETWORKS

Provide multiple means of <u>how students will</u> <u>demonstrate their learning</u> by:

- allowing students to use technology, resources and tools to express knowledge.
- giving students a choice in how they express what they know or what they can do as evidence that can meet or exceed the standard.
- having students reflect on their own learning and evaluate the choices they made to express knowledge.