February 21, 2023 Using Brain Science to Inspire and Motivate Education Staff

Viewer's Guide

This viewer's guide provides ideas for creating learning environments for all children from birth to age five. The reflection questions and activities will help you think about ways to support children's learning. Helpful resources can be found in the Resources section of this guide.

Webinar Objectives

- Discuss the connection between motivation and staff productivity
- Share strategies to engage and energize staff using brain science and motivation theories
- Review practical strategies that help education managers inspire and motivate their teams

Please take a moment to write down what you hope to learn during today's webinar.

The 5Rs for Early Learning Leaders



Effective early learning leaders:

- Build strong relationships with educational staff and use these relationships to build a unified culture, a workplace with trust, collaboration, and belonging.
- Inspire educational staff to meet program goals and objectives by providing reasons for policies and practices.
- Are **resourceful**, they use their knowledge, the expertise of education staff and families, and funding to support educators' professional development and growth.
- Engage in reflective dialogues to learn how staff, children, and families are doing.
- Create formal and informal opportunities to recognize big and small wins and encourage the hearts of
 educational staff.

Resources



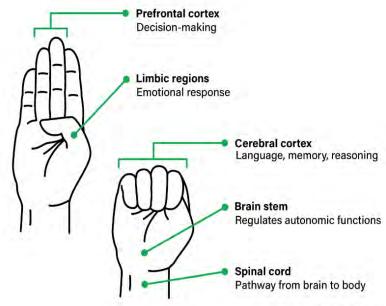
Provide responsive resources and varied, concrete presentation modalities

Translating theory to practice in doable chunks

Adult Learning and the Brain

Notes:

One way we can support staff motivation and learning is through understanding what each part of the brain's function is and what happens when we are overtaken by the emotional part of our brain. When this happens, we are not able to access our executive functioning—which includes focus, decision-making, reasoning, and impulse control. When we understand the scientific processes behind how our brains work, we can design training opportunities to help staff learn and benefit from new information and resources.



Credit; Dr. Dan Siegel

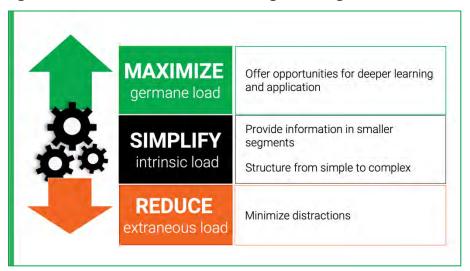
Hotes.				

Cognitive Load Theory

Intrinsic load: the work needed to make sense of the new information. Intrinsic load is influenced by the related long-term memory available to draw into learning new or novel information.

Extraneous load: elements of training that do not contribute to learning, or distract from understanding.

Germane load: the cognitive work needed to connect existing knowledge with new information.



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Cognitive Processing Strategies

7 plus or minus 2 Rule

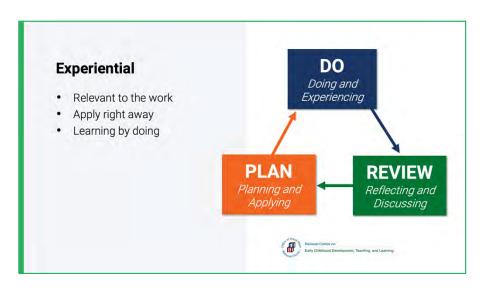
Used to define the limits of human memory. Short-term memory or working memory can store only about 5 to 9 pieces of new information, 5 when the information is complex, and 9 when it is simple.

Chunking

This strategy is used by the brain's short-term memory as a method for keeping groups of information accessible for easy recall.

We typically lose 80% of the knowledge we learn within a month. Spaced learning (repetition) reinforces learning and improves recall of information.

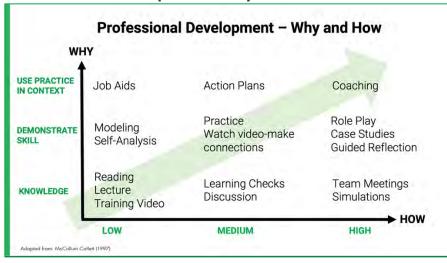
Experiential Learning



Notes:



Professional Development: Why and How



Notes:

Motivation



VIDEO: What is motivation? Types of Motivation: Intrinsic and Extrinsic

https://youtu.be/eNqJYIns4Rk

☐ Other:

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Examples of motivator	S:
INTRINSIC	EXTRINSIC
Learni	ing is an experience. Everything else is just information. – Albert Einstein
Notes:	Serotonia Pathways C
	O Popalmine Cortex Cortex
	Accuration VI. Nigra
	Preferental O Amygidala Raphe Nuclei O
	Center on the Developing Child To arrived university Communication and the Communicatio
	The Brain Circuits Underlying Motivation: An
	Interactive Graphic (harvard.edu)
Spaced Repetit	tion Activity Options
	I will:
	Revisit this webinar on PushPlay or when posted, on ECLKC
	☐ Review my notes in the Viewer's Guide
	☐ Use the resources in the Viewer's Guide, including the modules on cognitive load theory, to learn more and/or share with my team

Helpful Resources

ECLKC Resources

- Adult Learning Principles (included in Home Visitor Supervisors Handbook)
- The 5Rs for Early Learning Leaders Using Resources to Support Program Quality (webinar)

Brain Science Resources

- The Brain Circuits Underlying Motivation: An interactive graphic Harvard University Center on the
 Developing Child
 An interactive graphic explaining the neural pathway activities that are associated with motivation
- Want to Know What Your Brain Does When it Hears a Question? An article from the Columbia University Center for Decision Sciences provides additional information about the mere measurement effect.

Cognitive Load Theory - Pastel Education Modules

- 1. Introduction to Cognitive Load Module
- 2. What is Cognitive Load Theory?
- 3. Understanding Intrinsic Load
- 4. Controlling Intrinsic Load
- 5. Extraneous Load
- 6. Reducing Extraneous Load
- 7. Worked Examples
- 8. Germane Load
- 9. Promoting Germane Load
- 10. Applying Cognitive Load Theory

Online Communities

MyPeers: Education Leaders Community

https://eclkc.ohs.acf.hhs.gov/about-us/article/mypeers-collaborative-platform-early-care-education-community