

Universal Design for Learning



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Williams Ledger Elementary, 2019

I have a presentation for you! What question do you want answered FIRST?

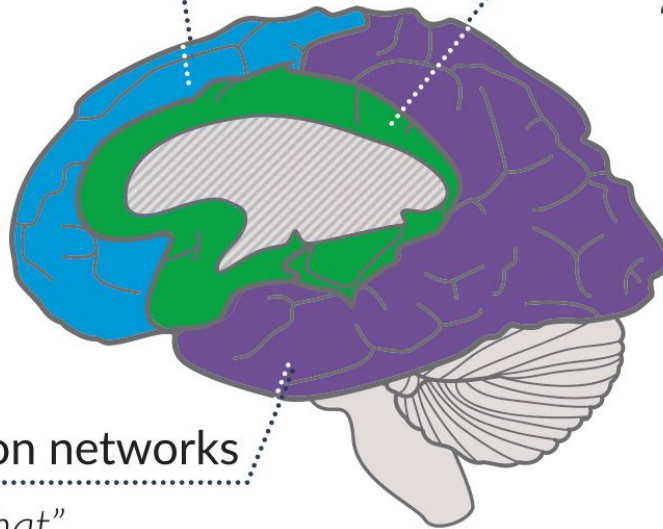
- WHAT am I going to learn?
- WHY do I need to learn it?
- HOW am I going to present it?

Strategic networks

"how"

Affective networks

"why"

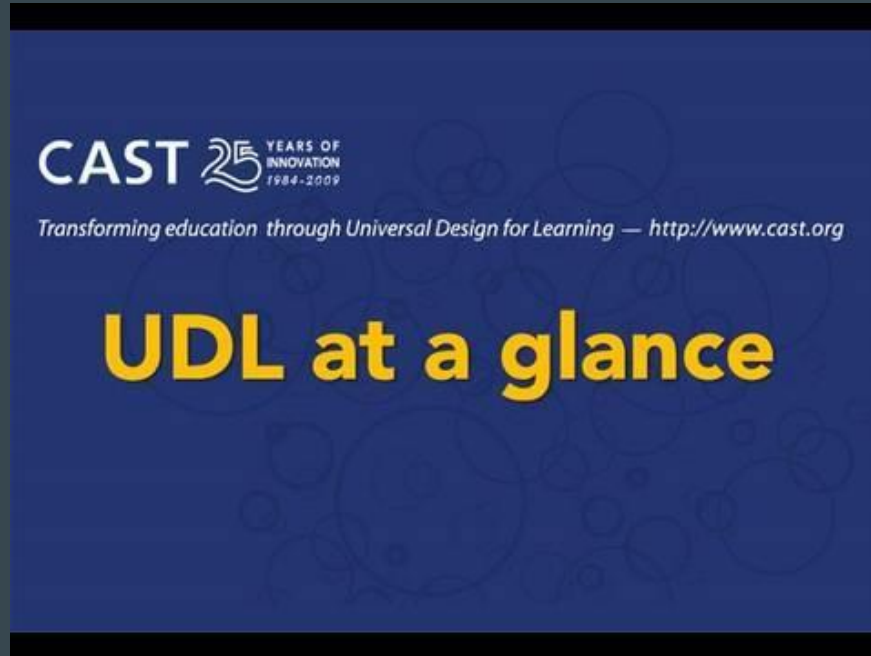


Recognition networks

"what"

“Research shows that the way people learn is as unique as their fingerprints.” -CAST

What is Universal Design for Learning (UDL)?



CAST (2010, January 6). UDL at a glance [Video]. Retrieved from <https://www.youtube.com/watch?v=bDvKnY0g6e4&feature=youtu.be>

“It turns out that if you design for those in the margins, your building works better for everyone.”

-CAST

The Three Networks

Recognition (the WHAT)

- Graphics/animations
- Videos
- Text
- Vocabulary

Consider how you can support what students already know.

RECOGNITION NETWORKS:
THE **WHAT** OF LEARNING



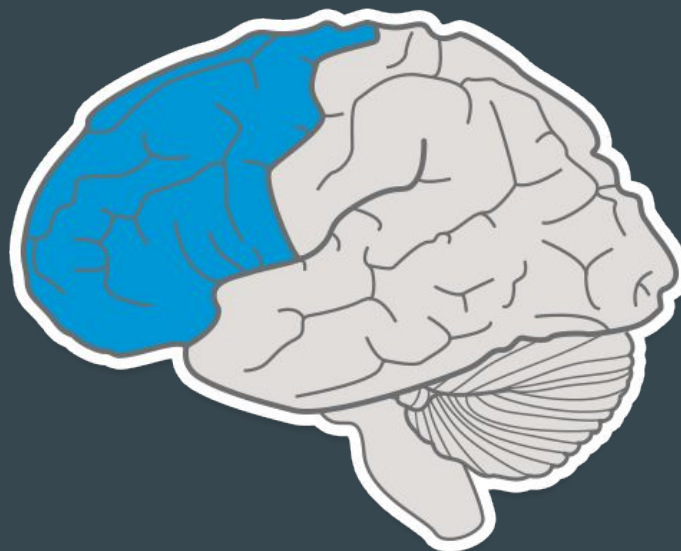
The Three Networks

Strategic (the HOW)

- Projects
- Writing
- Speaking
- Assistive technology
- Goal-setting

Consider how you can provide feedback and support.

STRATEGIC NETWORKS:
THE **HOW** OF LEARNING



The Three Networks

Engagement (the WHY)

- Choice
- Autonomy
- Collaboration
- Risks and mistakes
- Safe space

Consider how you can foster a love of learning.

AFFECTIVE NETWORKS:
THE **WHY** OF LEARNING



Let's look at a math example...

Learning goal: We are learning how to divide large numbers using an algorithm.

Success criteria:

- I can identify the dividend, divisor, and quotient.
- I can set up a long division strategy (standard algorithm or grid method).
- I can follow the steps divide, multiply, subtract, bring down/over accurately.

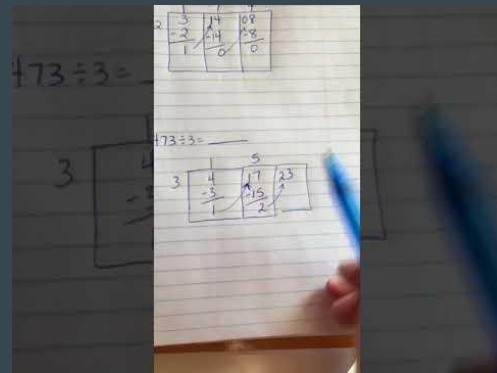
Long Division

Recognition (the WHAT)

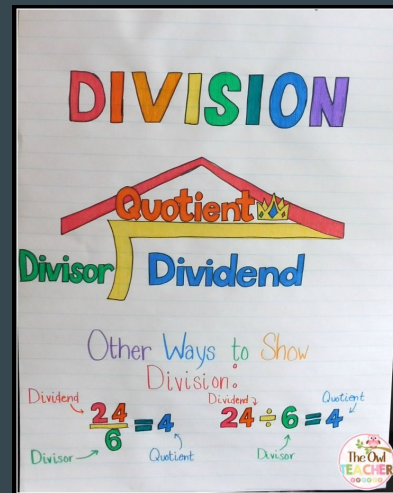
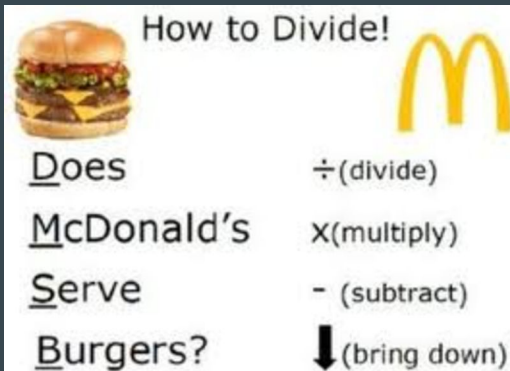
- Video of each strategy (always using subtitles)
- Steps glued in math journal with examples
- Clarify vocabulary and ways that a division problem can be written



Standard Algorithm



Grid Method



Long Division

Strategic (the HOW)

- Student choice in preferred strategy (standard algorithm or grid method)
- Using a template in a dry erase pocket or recording work with pencil and paper

LONG DIVISION STRATEGIES

	1	3	0	8
5	6	15	04	42
	-5	-15	-0	-40
	1	0	4	2

$6542 \div 5 = 1308 \text{ R}2$

42

$$\begin{array}{r} 3 \overline{) 126} \\ -12 \\ \hline 06 \\ -6 \\ \hline 0 \end{array}$$


Long Division

Engagement (the WHY)

- Provide a real-world word problem where division is used to find the answer
- Allow students to identify and correct a common mistake
- Authentic use of multiplication facts



Division Error Analysis
Look at this problem. Identify the error and describe it. Share a strategy this student could use to prevent the same error in the future. Then, solve the problem correctly.

$$\begin{array}{r} 22 \\ 4 \overline{) 808} \\ \underline{-8} \\ 008 \\ \underline{-8} \\ 0 \end{array}$$

Identify and Explain the Error	Rework the Problem
	Share a Strategy

Real Life Example

$$5 \overline{) 36,987}$$

If Janice has 5 years to repay a new car loan for \$36,987, how much will she need to pay each year?

Your turn!

Using the learning goal you brought, find 2-4 ways you can address each UDL network (strategic, affective, recognition).

- **WHAT** are your students learning?
 - Video
 - Text
 - Demonstration
- **HOW** can your students demonstrate their learning? Written
 - Write/tell
 - Show/create
- **WHY** are your students learning this?
 - Examples/application
 - Purpose of new skill

Represent your work in any way that works for YOU.

You may include writing, links, images, etc. Work independently or with your colleagues. Here's a suggestion for how to record the information...

TEKS, learning goal & success criteria	
Multiple ways to demonstrate WHAT students are learning (recognition network)	
Multiple ways to demonstrate WHY students are learning this (affective network)	
Multiple ways for HOW students may demonstrate their learning (strategic network)	

**In what ways was UDL used
in this presentation?**

For more information, visit...

<http://www.cast.org/our-work/about-udl.html#.Xdrw4-hKjIW>

<https://sites.google.com/site/udlguidelinesexamples/>

<https://udl-irn.org/>