Universal Design
For
Learning

Riverside County SELPA

Why Universal Design for Learning?

Dinner Party and UDL

UDL	DIFFERENTIATION	TRADITIONAL EDUCATION
Proactive	Reactive	Static
Evaluates environment, classroom, culture	Evaluates the student	Evaluates the curriculum
Intentional	Cause/Effect	Follows script
Designs instruction prior to arrival of students	Retrofits instruction by providing accommodations	Teaches lesson and follows unit as designed
Focuses on Variability	Focuses on individual ability	Focuses on the "average" student
Plans for the Margins	Modifies to Individual Margins	Does not consider students in the Margins
Values Variety	Tries to bring all students into "normal"	Conforms to "normal"
Removes Barriers	Works around barriers	Ignores barriers

Start by embracing learner variability. There is no such thing as an "average" student. Every student has different strengths and weaknesses.

Low   Average   High

Factor 1
Factor 2
Factor 3
Factor 4
Factor 5
Factor 6

"Average" Student A

"Average" Student B

Factor 1
Factor 2
Factor 3
Factor 4
Factor 5
Factor 6
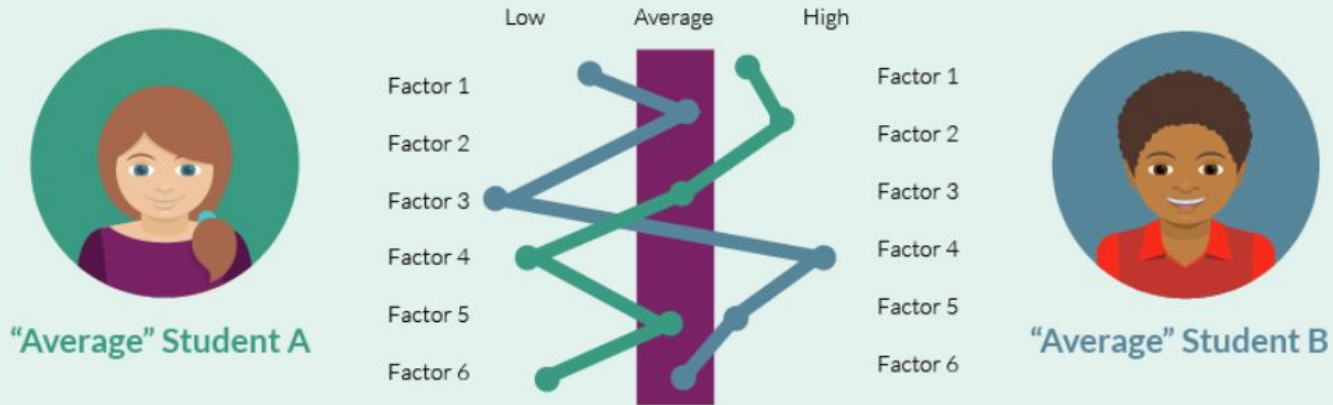
Todd Rose demonstrates student variability with the "Jaggedness Principle" in his book, "The End of Average"

What might the Disneyland Resort and Universal Design for Learning have in common?

Breaks Down Barriers

Equality, Equity & Expert Learning

Equality

Not everyone benefits from the same supports.

Equity

We can remove barriers by providing adequate supports based on variability.

Expert Learning

When we focus on individual needs, we not only promote equity, but also engagement and involvement.

Components of UDL

Universal Design for Learning Guidelines

Principles ⟹

- **Engagement**
- **Representation**
- **Action & Expression**

⟸ **Guidelines**

- **Recruiting Interest**
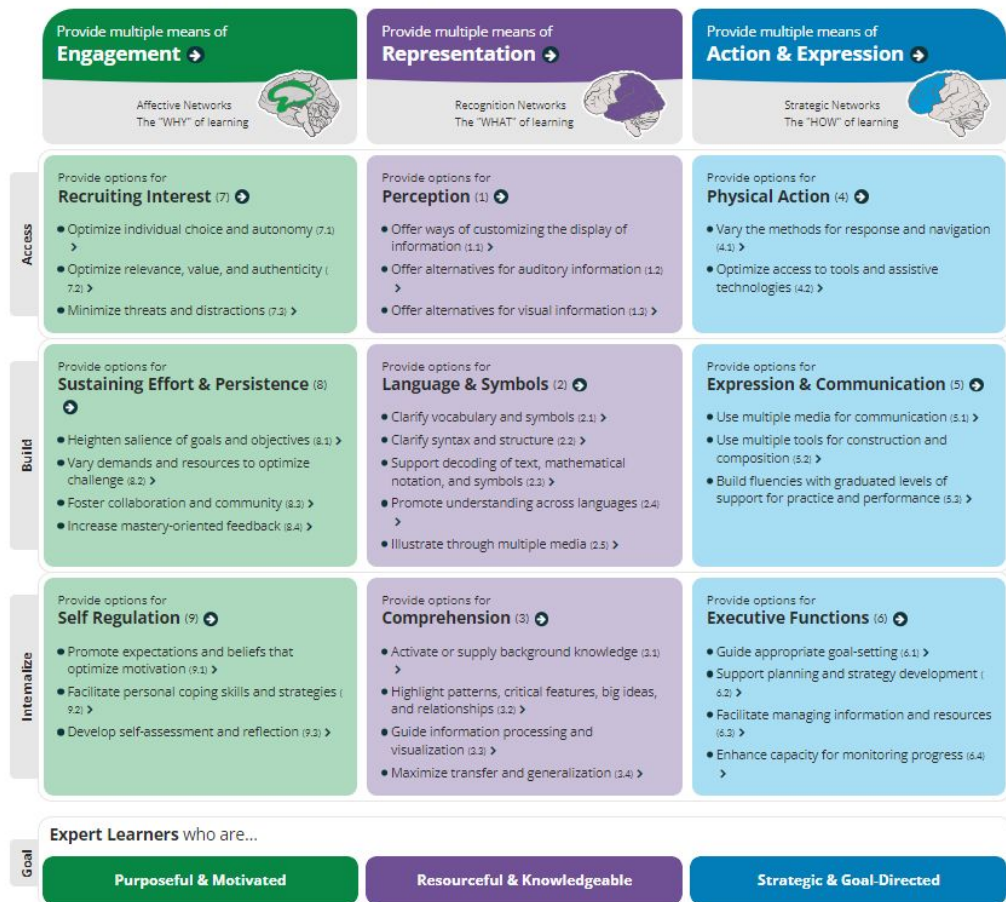- **Sustaining Effort & Persistence**
- **Self Regulation**
- **Perception**
- **Language & Symbols**
- **Comprehension**
- **Physical Action**
- **Expression & Communication**
- **Executive Functions**

Checkpoints ⟹

	Provide multiple means of **Engagement** →	Provide multiple means of **Representation** →	Provide multiple means of **Action & Expression** →
	Affective Networks — The "WHY" of learning	Recognition Networks — The "WHAT" of learning	Strategic Networks — The "HOW" of learning
Access	Provide options for **Recruiting Interest (7)** → • Optimize individual choice and autonomy (7.1) › • Optimize relevance, value, and authenticity (7.2) › • Minimize threats and distractions (7.3) ›	Provide options for **Perception (1)** → • Offer ways of customizing the display of information (1.1) › • Offer alternatives for auditory information (1.2) › • Offer alternatives for visual information (1.3) ›	Provide options for **Physical Action (4)** → • Vary the methods for response and navigation (4.1) › • Optimize access to tools and assistive technologies (4.2) ›
Build	Provide options for **Sustaining Effort & Persistence (8)** → • Heighten salience of goals and objectives (8.1) › • Vary demands and resources to optimize challenge (8.2) › • Foster collaboration and community (8.3) › • Increase mastery-oriented feedback (8.4) ›	Provide options for **Language & Symbols (2)** → • Clarify vocabulary and symbols (2.1) › • Clarify syntax and structure (2.2) › • Support decoding of text, mathematical notation, and symbols (2.3) › • Promote understanding across languages (2.4) › • Illustrate through multiple media (2.5) ›	Provide options for **Expression & Communication (5)** → • Use multiple media for communication (5.1) › • Use multiple tools for construction and composition (5.2) › • Build fluencies with graduated levels of support for practice and performance (5.3) ›
Internalize	Provide options for **Self Regulation (9)** → • Promote expectations and beliefs that optimize motivation (9.1) › • Facilitate personal coping skills and strategies (9.2) › • Develop self-assessment and reflection (9.3) ›	Provide options for **Comprehension (3)** → • Activate or supply background knowledge (3.1) › • Highlight patterns, critical features, big ideas, and relationships (3.2) › • Guide information processing and visualization (3.3) › • Maximize transfer and generalization (3.4) ›	Provide options for **Executive Functions (6)** → • Guide appropriate goal-setting (6.1) › • Support planning and strategy development (6.2) › • Facilitate managing information and resources (6.3) › • Enhance capacity for monitoring progress (6.4) ›
Goal	**Expert Learners** who are... **Purposeful & Motivated**	**Resourceful & Knowledgeable**	**Strategic & Goal-Directed**

The "Why" of Learning

Provide multiple means of
Engagement →

Affective Networks
The "WHY" of learning

The "What" of Learning

Provide multiple means of
Representation →

Recognition Networks
The "WHAT" of learning

The "How" of Learning
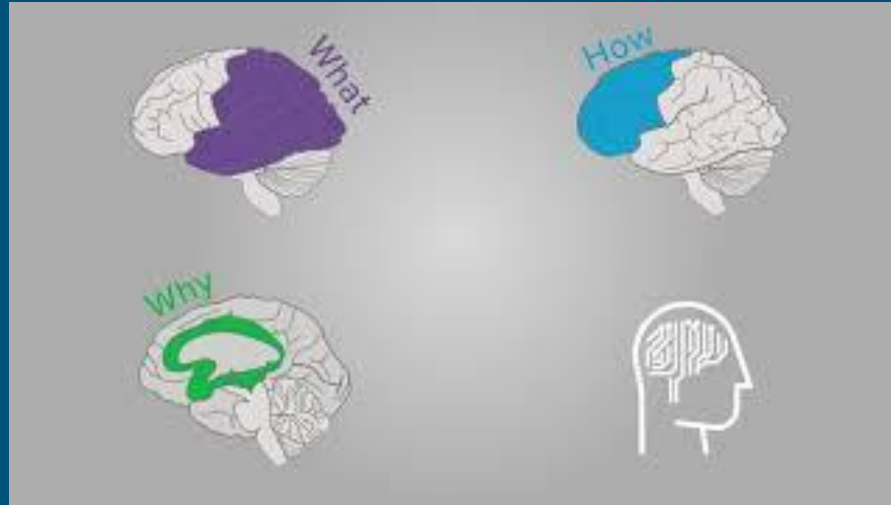

Provide multiple means of
Action & Expression →

Strategic Networks
The "HOW" of learning

Understanding
Universal Design for Learning

What are some tools we have access to in the classroom that might help us remove barriers to learning for our students?

Multiple means of **ENGAGEMENT**	Multiple means of **REPRESENTATION**	Multiple means of **ACTION & EXPRESSION**
The "why" of learning	The "what" of learning	The "how" of learning

IMPLEMENTATION TIPS

Allow students to make choices so they remain invested and engaged	Provide **visual, auditory, and digital materials** for each lesson	**Allow students to use technology, resources, and tools** to express knowledge, such as speech recognition software, dictionaries, graphic organizers, calculators, exemplars and so on
Explicitly tell students **why a lesson is relevant**	**Provide scaffolds** to support students with reading materials	
Offer students tips on **how to stay motivated**	Simplify **complicated instructions** and provide visuals to increase understanding	**Give students a choice in how they express what they know** or what they can do as evidence that can meet or exceed a standard
Provide a **variety of resources** to prevent frustration	**Offer visuals** like charts, pictures, movies, audio clips, and resources students can touch and manipulate	
Encourage students to **assess their own learning** using checklists and rubrics	**Model comprehension** strategies like note-taking, highlighting, monitoring, and asking questions	**Provide feedback while students work**
Provide **varying levels of challenge**		Have **students reflect on their own learning** and evaluate the choices they made to express knowledge
Offer opportunities for **consistent feedback** like self-reflection, peer review, and teacher feedback	Help students see how the **information is transferable** to other classes and lessons	Provide tips on how to stay organized

Enhances 21st Century Skills

| 21st Century Skills	UDL
Clear and Effective Communication • Task, purpose, audience • Effective, expressive, receptive	5. Provide options for expression and communication 7. Provide options for recruiting interest
Self-Direction • Set goals and make decisions • Persevere in challenging situations	6. Provide options for executive functions 8. Provide options for sustaining effort and persistence
Creative and Practical Problem Solving • Identify patterns and trends • Persist in solving problems/learn from failure	8. Provide options for sustaining effort and persistence 9. Provide options for self-regulation
Responsible and involved citizenship • Respect diversity and different points of view	7. Provide options for recruiting interest (minimize threats and distractions)
Informed and integrative thinking • Apply knowledge to "real life" • Develop and use models/tech to explain phenomena	1. Provide options for perception 2. Provide options for language, mathematical expressions, and symbols 3. Provide options for comprehension 4. Provide options for physical action

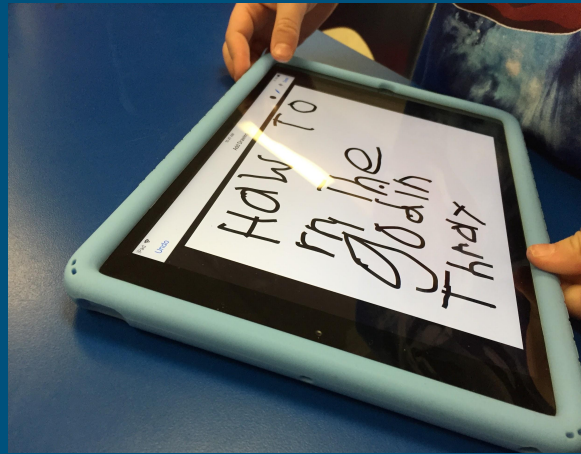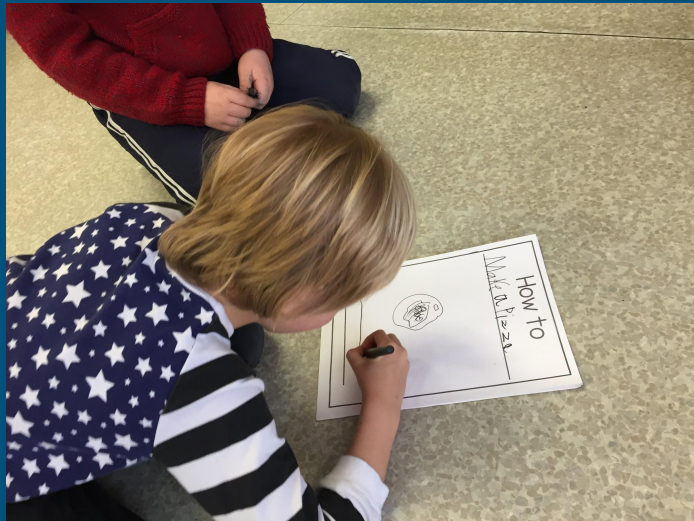What does UDL look like in the classroom?
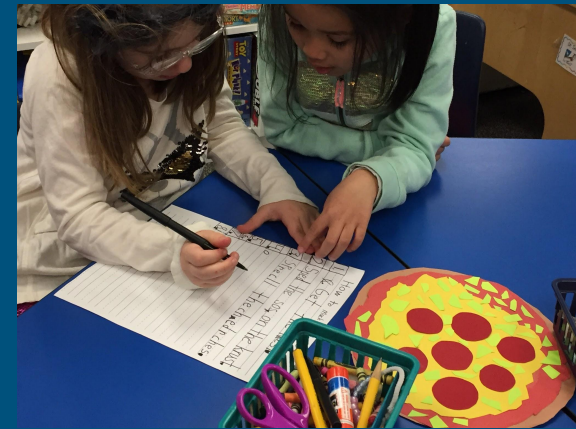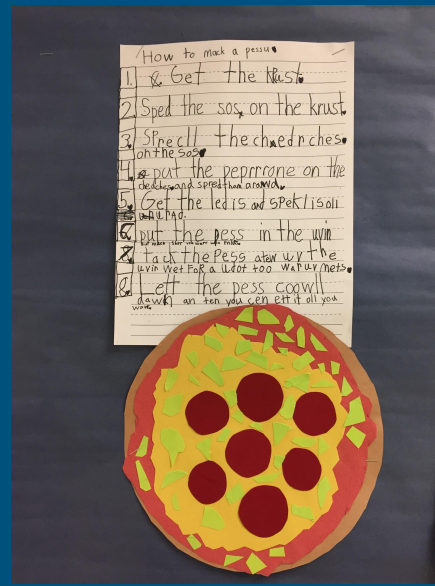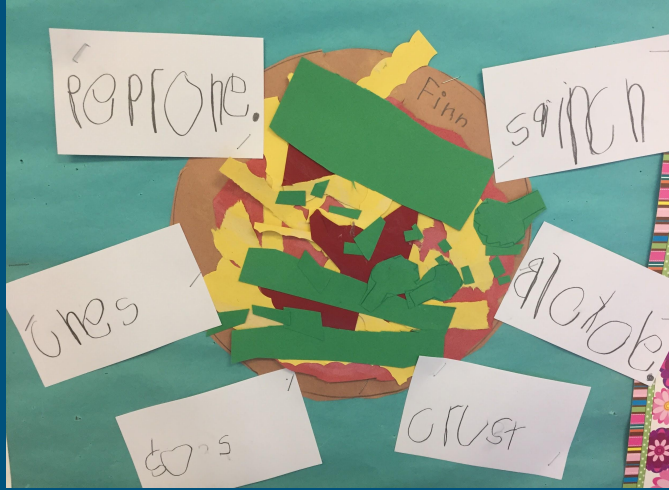
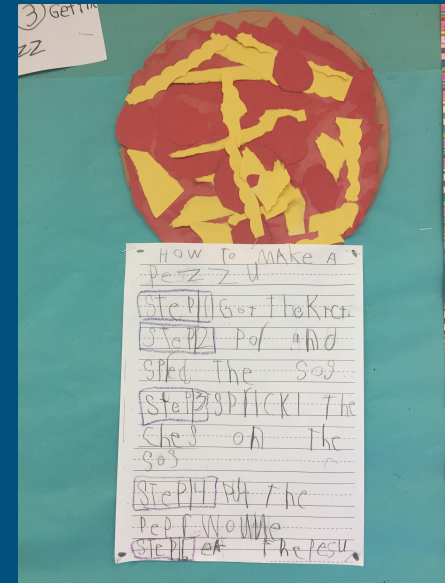Keeping the standard the same but allowing the children choose which way to demonstrate their understanding.
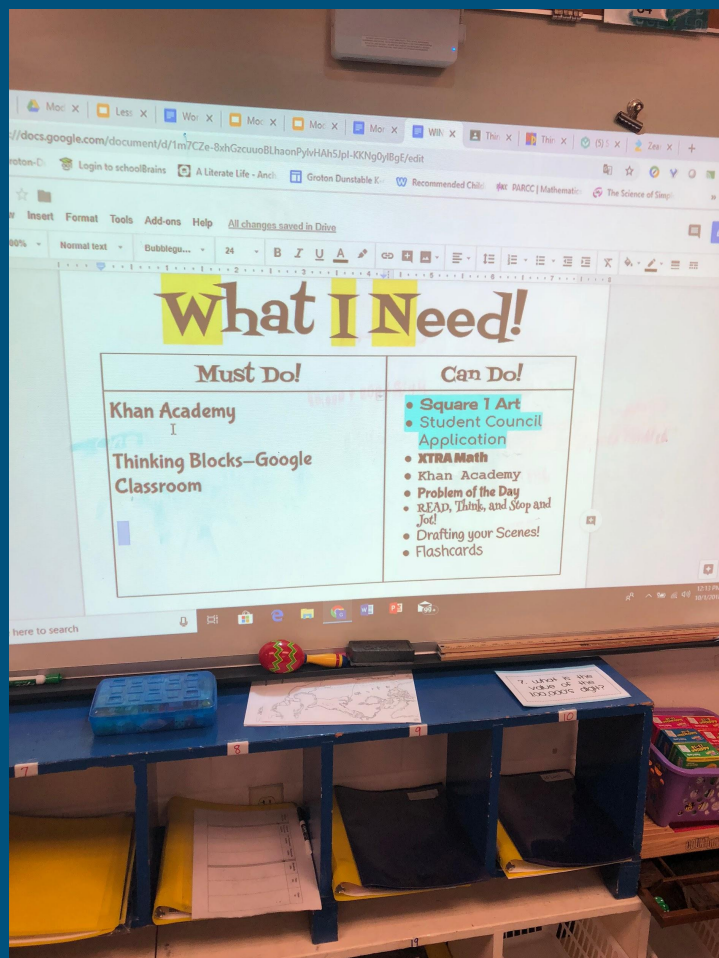
Rocking UDL in Writing
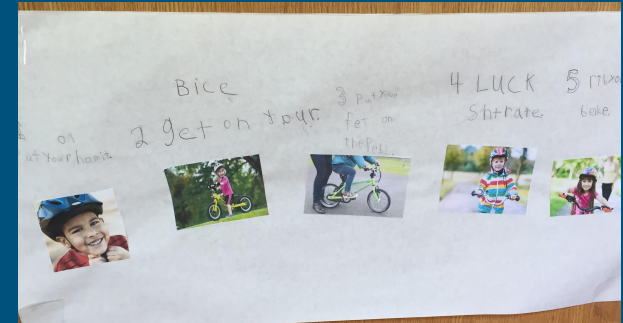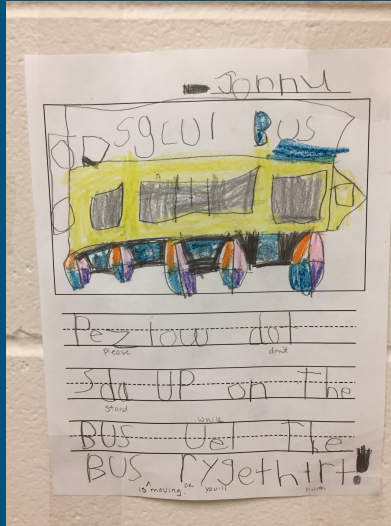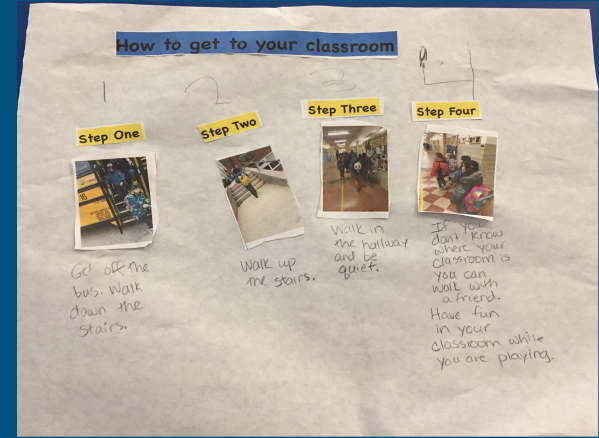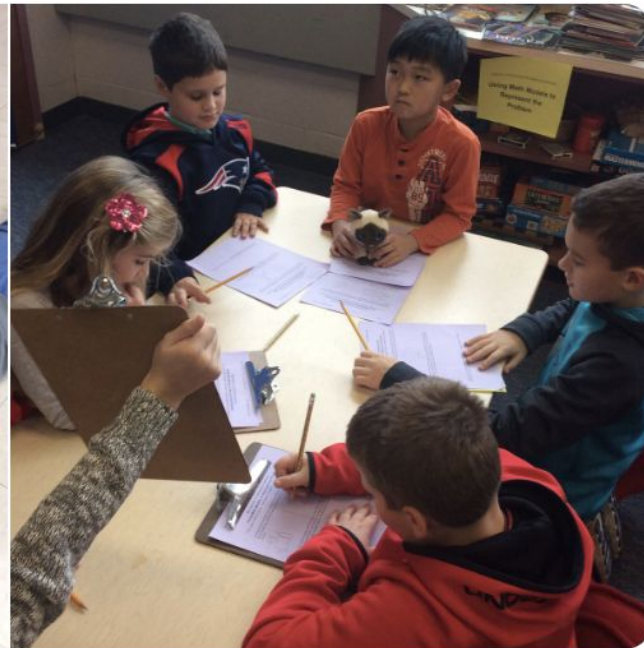
Engaged Learners With Amazing Results

Student-led, UDL aligned, **math** seminars as part of a Eureka **Math** lesson.
#gdrsdchat

UDL in Action

UDL in Action Focus Topics

1. How did Mr. Crouch's own experience as a student influence his decision to implement a UDL framework in the classroom?
2. How did he have to shift his own mindset when he moved towards a more universally designed atmosphere?
3. Who seemed to own the learning in Mr. Crouch's classroom?
4. What were some examples of the UDL Principles (Multiple Means of: Expression, Representation, and Action/Expression) did you see in Mr. Crouch's classroom?

UDL, Tier I, and "Self-Differentiation"

Four highly interrelated components comprise a universally designed, equitable, curriculum (academic, behavioral, social and emotional)

- **Goals:** Students set meaningful goals about how to meet the objective or standard.
- **Methods:** Not all students need to follow the same steps or the same strategies to learn the material or complete the same assessment.
- **Materials:** Not all students need the same materials, scaffolds, to reach the same objective.
- **Assessments:** Authentic assessments are personalized for students.

In an Effective Inclusive Classroom . . .

The educator will be . . .

- Providing options for student engagement, persistence, and self-regulation
- Conducting frequent checks for student understanding
- Providing clear academic objectives and behavioral expectations
- Providing frequent and varied feedback and positive reinforcements to student responses
- Collaborating actively when other adults are in the room
- Presenting curriculum content through multiple means and providing scaffolds and support for metacognitive processing
- Providing multiple and varied options for student communication and expression
- Modeling and reinforcing positive behavioral expectations
- Using data and student response to differentiate instruction and support

The student will be . . .

- Making connections between new content, prior knowledge, and real-world applications
- Engaging in learning through a variety of approaches and developmentally appropriate tasks with a variety of resources
- Demonstrating self-regulation strategies by monitoring his or her own thinking, setting goals, and monitoring and reflecting on progress
- Demonstrating autonomy and self-advocacy by choosing appropriate learning tools and supports
- Persevering on difficult tasks
- Making academic and behavioral corrections based on staff feedback and other evidence
- Using a variety of tools and means to demonstrate and communicate knowledge
- Collaborating with peers and demonstrating appropriate behavior during group and individual work

The classroom will . . .

- Support a variety of tasks and learning formats
- Provide positive reinforcement and motivators
- Clearly display expectations, rules, and routines
- Use clear and effective displays of information, tools, resources, prompts, etc.
- Support student use of resources and scaffolding
- Be safe and respectful of all cultures and backgrounds
- Be rich with connections to student experience and interest
- Be conducive to collaboration and group work
- Allow for smooth physical movement of students and educators
- Create a nonthreatening, positive, and academically rigorous atmosphere

Activating the Affective Network: Engagement & Common Warts

Standard: *Discuss and demonstrate the importance of preventing the transmission of germs, viruses, and bacteria.*

- Warts are caused by the DNA-containing human papillomavirus (HPV).
- We are in contact with warts every day.
- 80% of us will contract the common wart during our lives (pbs.org).
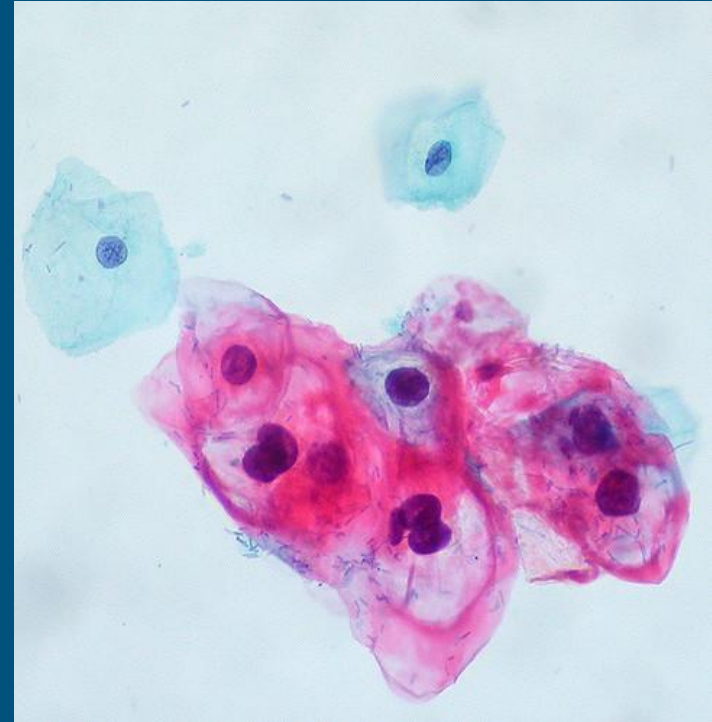
"This is lame. I won't get warts."

- Wart viruses are contagious. Warts can spread by contact with the wart or something that touched the wart.
- The entry site is often an area of recent injury. Incubation: 1-8 months.
- 80% of people will contract them....you're next.

You are more likely to get warts if you bite your nails or pick at hangnails; or have cuts or scrapes on your hands.

Virus + microabrasion + maceration = wart

Examine your hands and assign yourself a score based on the Likert scale below.

1	2	3	4	5
0 abrasions	1-2	3-4	> 4	macerated

Recognition Networks: Prevention & Treatment

- Avoid touching warts on others. Cover abrasions every day.
- Attack the virus! Hand sanitizer and washing your hands kills HPV.
- Normal laundering in warm water with detergent will take care of the virus on towels and clothing.
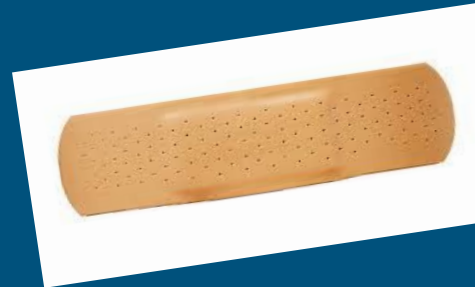
What do I do if I get them?

- University of Illinois, McKinley Health Center tells us – DUCT TAPE
- 2002 Study--Enrolled 61 people with common warts
- Half got liquid nitrogen--the others had the warts covered with duct tape for 2 months
- Measured complete resolution
- Response rate with nitrogen=60%
- Response rate with duct tape= 85%

Recognition Networks: Learn More About Warts

As groups, you have 20 minutes to build your understanding of how to prevent warts. There is a competitive partner quiz at the end of the 30 minutes with bragging rights and candy. Choose one or more of the following:

- ○ CDC handouts
- ○ Small group instruction with yours truly
- ○ Textbook chapter (note - quiz questions likely came from this bore fest)
- ○ Videos on Google Classroom
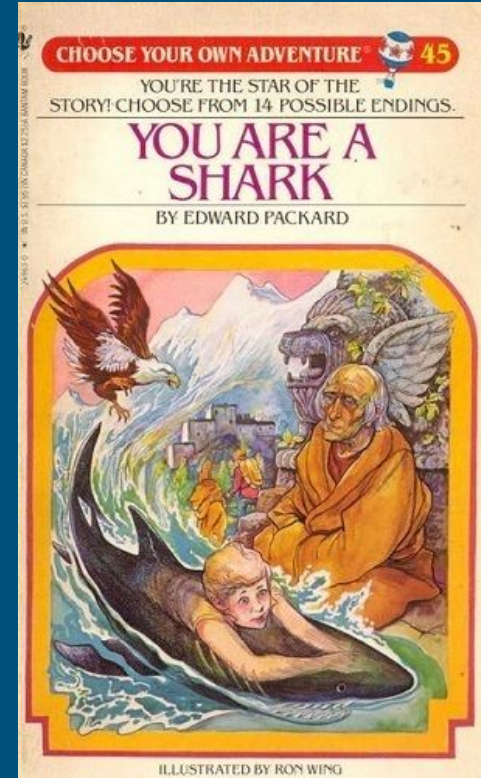
Activating the Strategic Network: Choice

1. Write a catchy poem or song about wart prevention and treatment.

2. Write a letter to a wart on your hand, apologizing for your lack of prevention. What should you have done? Maybe inform it of your plans to take it down with Duct tape.

3. Create a public service announcement about wart prevention with Novak's group.

4. Record a podcast or write a blog focused on your new understanding of wart prevention and treatment.

5. SUPER CHALLENGE: Write a letter to your dermatologist, cursing his insistence on the pricey and painful nitrogen freeze, when it is less effective than Duct tape. Be sure to use scientific language appropriate for a doctor.

What To Look For in UDL

Traditional HS ELA CFA	UDL Makeover: Read prompt aloud
Lord of the Flies Brief Write In Source #2, William Golding entertains the question of whether violent behavior is a product of innate evil, or influenced by the experiences of one's own upbringing. Explain why you agree or disagree. Provide two examples from this source to support your choice. Cite evidence and identify this source by title or number.	In Source #2, William Golding entertains the question of whether violent behavior is a product of innate evil, or influenced by the experiences of one's own upbringing. After reading or listening to the excerpt, select one or more of current event resources about individuals who have exhibited violent behavior (Newsela, news articles, videos, court documents, case studies, etc…). After reviewing the resources, explain your views on violent behavior in a short composition or blog, a short podcast, or other product where you cite evidence from Source #2 and the current event sources. As you work, you have the choice to use any annotation strategy, graphic organizer, Google Read and Write or other Google app, rubric, etc…

What To Look For in UDL

Traditional Math Prompt	UDL Makeover
The values in the table below represent Function B, which is a linear function. Function L is represented by the equation $y = 6x + 4$. Compare Functions B and L by determining which one has the greater rate of change and which one has the greater y-intercept. Explain why your answers are correct. *Show your work.*	- Provide students with graph paper so they have the ability to visualize. - Provide manipulatives so they could see the numerical change with numbers. - Give them a context. For example, this could be a bank account where they are saving for a plane ticket. - Provide math reference sheet to help students understand the format of the equation. - Provide an exemplar of a constructed response with good ways to explain their thinking. - Provide a word bank with: slope, rate of change, initial amount, etc...

The table in the image:

x	y
-3	-7
-1	-1
1	5
3	11

Four New Tools: Choose one! How can you use these tools in your practice to better understand UDL Guidelines?

- UDL Infographic
- UDL Flowchart
- UDL Progression Rubric
- UDL Implementation Rubric

Further Your Own UDL Learning

edutopia

OPEN ACCESS
Learning & Participation for ALL

Novak
EDUCATION

CAST

[UDL Resource Padlet](#)

What are you going to build?!

Lesson Plan

Staff Meeting

District Rollout

New Unit

Classroom

New Tool

Questions, thoughts, comments…