

PROFESSIONAL DEVELOPMENT RESOURCE CENTER

The Upstate Region-all regions north of NYC

Universal Design for Learning in the Virtual Classroom

Presented by Diana Straut Measurement Incorporated dstraut@measinc.com April 27, 2020



Welcome

- Long Island (12)
- NYC (8)
- Upstate (10)

- Elementary Teachers (15)
- Middle School Teachers (5)
- High School Teachers(2)
- Supporting Multiple Grade Levels (8)

Non -Denominational/ Private/Christian/ Catholic/Islamic/ more...



Statement from Upstate PDRC

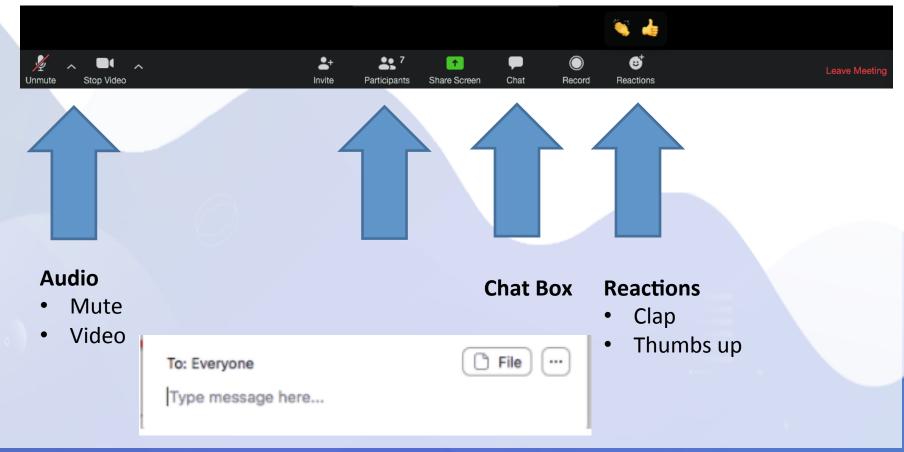
Upstate PDRC is offering training to build your knowledge base on using Zoom and Google Classroom Applications as tools to help you connect with your students.

We understand that these technologies have benefits and limitations, and we are not promoting these as sole source options for delivering remote education. We encourage each school to decide if and how the ideas shared today will serve your needs.

All questions about the use and appropriateness of Zoom, tools in G-suite, or any other technologies should be discussed with your school leadership.



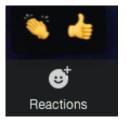
Toolbar Basics





Norms for Today's Session

- Participate
 - ✓ Chat box
 - ✓ Reactions
 - ✓ Polling
 - ✓ Breakout rooms
- Ask questions in the chat
- Take care of yourself
 - ✓ Break as needed





Objectives

 Review basic components of Universal Design for Learning.

 Explore strategies for applying UDL principles in the design and delivery of online or remote lessons.



Learning Path

Overview of UDL principles

Share examples of what each of the 3 principles looks like in practice:

REPRESENTATION

ACTION & EXPRESSION

ENGAGEMENT

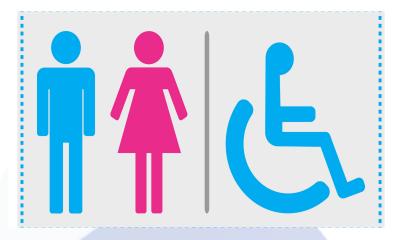
Application and share resources/ slides so you can expand your learning

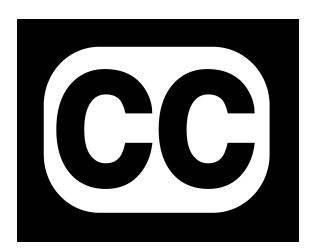
WHOLE

PART

WHOLE













Neuroscience

Architecture

Technology

Universal Design for Learning



Universal Design for Learning (UDL)

Set of principles that minimize barriers to learning and maximize students' access to curriculum.

UDL allows for multiple means of

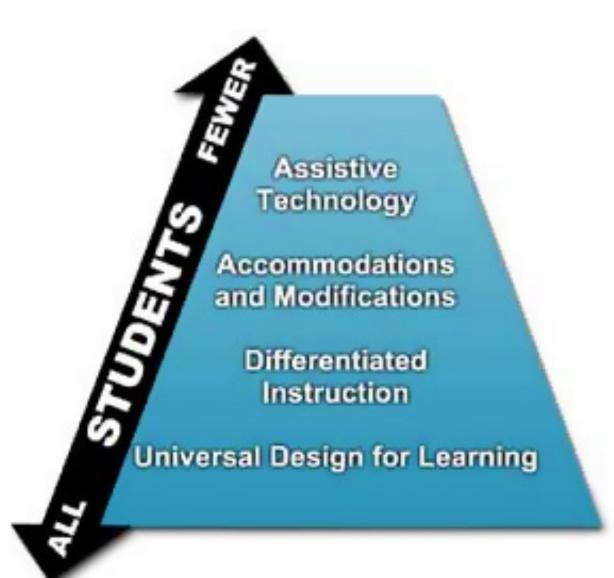
- »Representation
- »Action or expression
- *»Engagement*



"Options are essential to learning, because no single way of *presenting information*, no single way of responding to information, and no single way of *engaging students* will work across the *diversity of students* that populate our classrooms. Alternatives reduce barriers to learning for students with disabilities while enhancing learning opportunities for everyone."

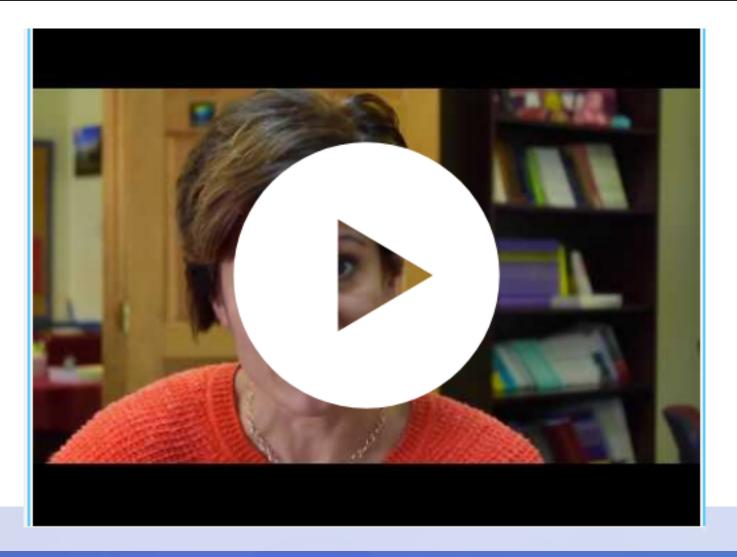
(David Gordon, CAST)







The dinner party analogy



Universal Design for Learning

Asks you to consider the question:

How can I structure this activity or information in ways that will make it accessible to the greatest possible number of individuals?



Learning Path

Overview of UDL principles

Share examples of what each of the *3 principles* looks like in practice:

REPRESENTATION

ACTION & EXPRESSION

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WHOLE

PART



3 Networks = 3 UDL Principles

UDL tip: This graphic offers information in text, visuals, & color.

Recognition Networks

The "what" of learning



How we gather facts and categorize what we see, hear, and read. Identifying letters, words, or an author's style are recognition tasks.



Present information and content in different ways

More ways to provide Multiple Means of Representation

Strategic Networks

The "how" of learning



Planning and performing tasks. How we organize and express our ideas. Writing an essay or solving a math problem are strategic tasks.



Differentiate the ways that students can express what they know

More ways to provide

Multiple Means of Action

and Expression

Affective Networks

The "why" of learning



How learners get engaged and stay motivated. How they are challenged, excited, or intereste These are affective dimensions.



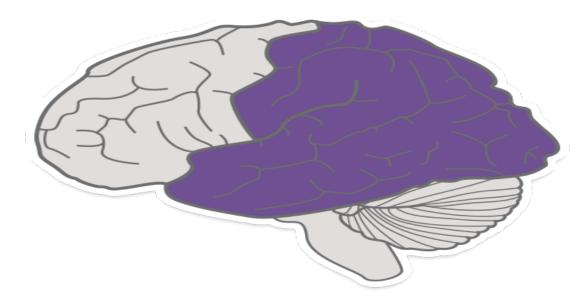
Stimulate interest and motivation for learning

More ways to provide Multiple Means of Engagement



Multiple Means of REPRESENTATION

THE WHAT OF LEARNING



Present information and content in different ways





Multiple Means of REPRESENTATION

presenting information and content in different ways

ELA Assignment

https://static1.squarespace.com/static/52eec360e4b0c81c80749630/t/5e6fdb1ff94824017e6b37f7/1584388897244/Coronavirus+lesson+plans_rev.pdf

✓ Find one example of Multiple Means Representation

Daily writing

Environments Utilizing Diffestive Designations of the wind the worpages (or more) a day in your writer's notebook, Learning Principies. Capturing your broughts, questions, comments, and concerns about the events that are unfolding. I want you to capture this history—your history—any way you'd like. Below are some suggestions for your daily writing, but you do not need to follow them. Feel free to generate your

Some possibilities for daily writing

- Capture how this virus has disrupted your school year—including sporting events, concerts, assemblies, dances.
- Discuss how your daily life has been disrupted.
- . Share the effect it has had on your friends and family.
- As we go into more social isolation, you might write reviews of movies, television shows, podcasts, video games to share with your classmates. We will create digital spaces on Schoology and Flipgrid to share this thinking (details to follow).
- Respond to any seed about the crisis you find interesting. A 'seed' can be an article, a
 broadcast, a Tedtalik, a tweet, a photograph, a podcast, a film, an Instagram (or another
 oriline) post, a TikTok video, a political cantono—anything that spurs some thinking about
 the crisis. This is much like the seed writing we do in class. You are encouraged to find
 your own seeds—whatever you think is worth writing about—but if you have trouble
 oettino started, our inority want or research to one or more of the following seeds:
 - Two Woman Fell Sick, One Survived <u>Two Women Fell Sick From the</u> Coronavirus. One Survived.
 - 25 conge that matter no
 - https://www.nytimes.com/interactive/2020/09/11/magazine/best-songs.html?actio neptick8module=morein/Spgtype=Article/Region=Footer/Saction=click8module=Morein/Section/Spgtype=Article/Region=Footer/Saction=click8module=Morein/Section/Spgtype=Article/Region=Footer/Saction=Collection=The %20New%12 0York%20Times%20Neagazine/Sover
 - Coronavirus explained in a TedTalk: <u>Coronavirus Is Our Future | Alanna Shaikh | TEDYSMI | </u>
 - Political cartoone: Corona New
- ✓ Suggest one change, adjustment, addition that would make this assignment more accessible to students? (think format or content)



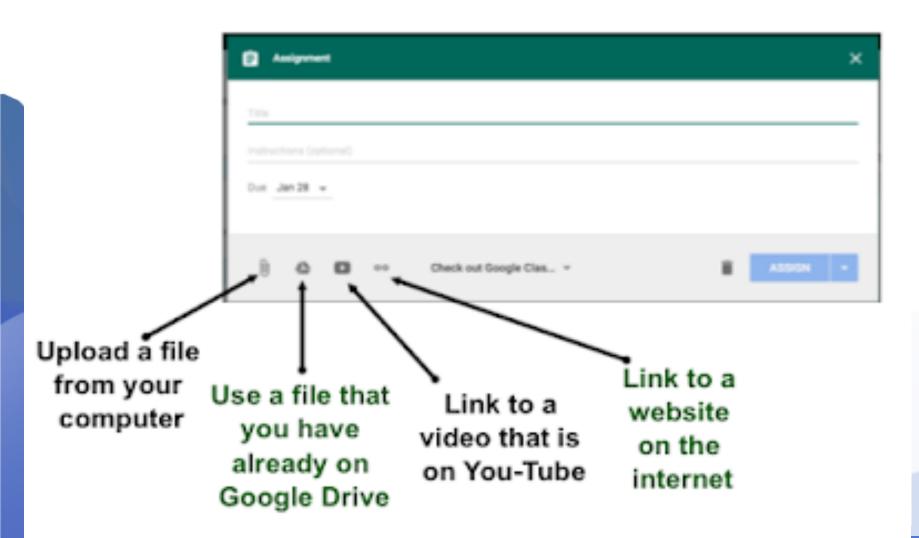
REPRESENTATION

is about giving access in the way you present material

Even if you just use a **MS word or Google document,** you can make use of **font Size**, color, tables and icons in a way that cues students to what is expected:

- This Week's Learning Target:
- ☐ Today's assignment:
- ♦ Assignments due next week:





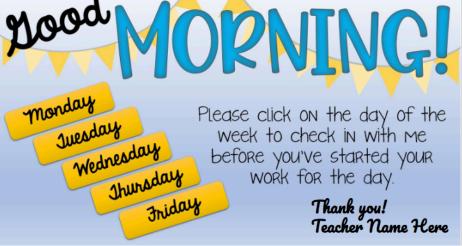


REPRESENTATION

includes giving access in the way you present material



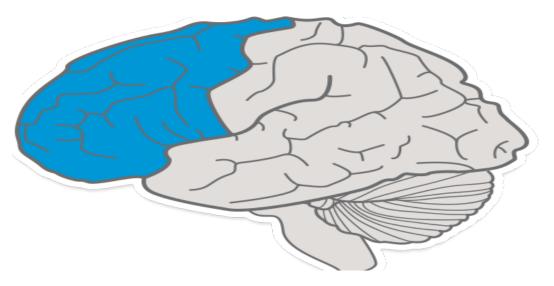
Slidesmania weekly planner template



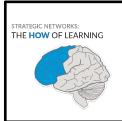


Multiple Means of ACTION AND EXPRESSION

THE **HOW** OF LEARNING



Provide options for the ways that students can express what they know



Multiple Means of ACTION and EXPRESSION

Learning Target:

Describe the journey of a red blood cell as it travels from the left atrium of the heart back to the same location.

Board game, dance, poem, song, story, slide show, graphic organizer/flow chart, comic strip, Flipgrid 'two voices' discussion, recorded audio response.





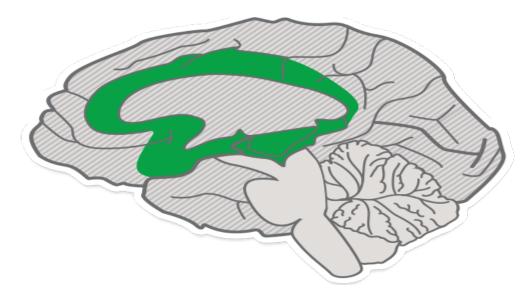
Multiple Means of ACTION and EXPRESSION

Considerations:

- ✓ Needs/preferences of the learners
- ✓ Linked or aligned outcomes
- ✓ Criteria/rubrics
- ✓ Grading/assessment/feedback loop

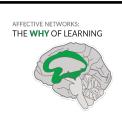


THE WHY OF LEARNING



Stimulate interest and motivation for learning



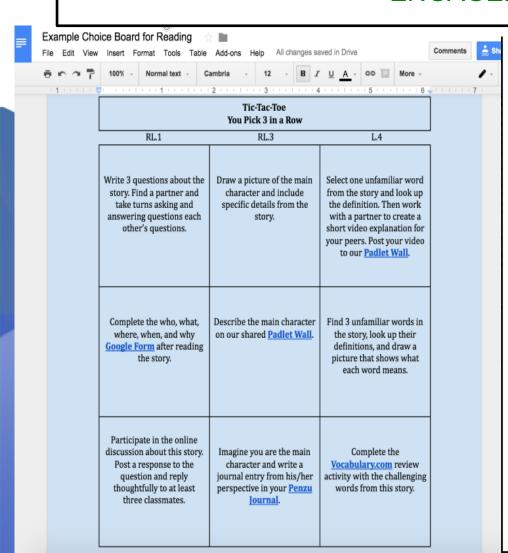


This looks like:

- ✓ Self-Directed or Self-Paced Learning
- ✓ Giving Students Choice And Control
- Creating weekly or standing assignments
- ✓ Low tech or no tech assignments









Vocabulary Word Study Choice Menu

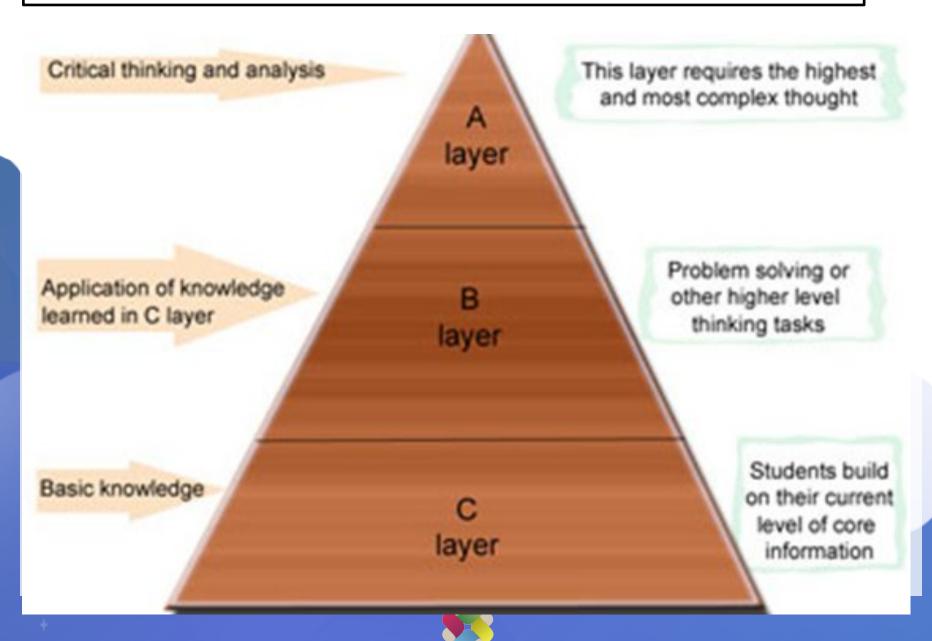


Lights, Camera, Action Find an adult and act out each of your words. See if they can guess which word you are acting out (be nice_give them your list!)	Word Web Complete a word web for 3 of your most challenging words.	Draw It! Draw a picture that represents each of your words.
Dictionary Dig See how fast you can look up each of your words in a dictionary and read the definition to an adult (you may use a standard or online dictionary)	Write It! Write sentences or a story using all of your words.	Concentration #1: Make concentration cards Concentration #2: Play your concentration game with an adult.
Crossword Make a crossword puzzle on puzzlemaker.com for someone to solve using all of your words (HINT: It is called Criss Cross)	Synonym/Antonym Write each of your words and a synonym and antonym for each.	Auestion It! Ask an adult or multiple adults what each of your words mean. See if they can give you a similar definitions in their own words:)

O THE TECHS TEACHER



Tiered Assignments and Layered Curriculum





NAME: _	
	PERIOD:
	7th Grade / Life Science

Cells and Microscopes Goal Sheet

Topic	Green	Blue	Black
Characteristics of Living Things	Student can identify and explain the six characteristics of living things.	Through observations, students will determine whether or not objects are living or not based on the characteristics of living things.	Students will create their own organism and explain why it is living using the six characteristics of living things.
Cells and Cell Organelles	Student's cell model has all parts of the cell labeled correctly and includes a key with the function of each organelle.	Student's cell model is unique and creative, has all parts of the cell labeled correctly and includes a key with the function of each organelle.	Student's cell model has all parts of the cell correctly labeled, and each organelle is represented by an object that matches that organelle's function.
Cell Processes	Student can define osmosis and diffusion and explain why they are important to cells.	Student can define osmosis and diffusion and explain how they worked in the osmosis and diffusion lab.	Students can design their own lab where the processes of osmosis and diffusion are clearly shown and explained.
Microscopes	Student can label each piece of a microscope.	Student can label and explain the function of each piece of a microscope.	Student can label and explain the function of each piece of a microscope and compute different magnifications.

Colors = increasing complexity



Red Blood Cell Cartoon

Single Assignment

Circulatory and Respiratory System Project

Green	Blue	Black
Draws a "far away" or "up-	Draws a "far away" or "up-	Draws an "up-close" cartoon
close" cartoon and describes	close" cartoon and describes	and describes the life of a red
the life of a red blood cell,	the life of a red blood cell,	blood cell, with characters,
using green level vocabulary	using blue vocabulary	using black level vocabulary

Goals:

- Student clearly communicates scientific processes with pictures.
- Student learns how a red blood cell moves through the body to supply cells with needed oxygen and remove waste products like carbon dioxide.
- Student learns the function of white blood cells and platelets in your circulatory system.

Project Vocabulary

Green Level Vocabulary	Blue Level Vocabulary	Black Level Vocabulary
Artery	Artery	Artery
Vein	Vein	Vein
Capillary	Capillary	Capillary
Right Atrium	Right Atrium	Right Atrium
Left Atrium	Left Atrium	Left Atrium
Right Ventricle	Right Ventricle	Right Ventricle
Left Ventricle	Left Ventricle	Left Ventricle
Red Bone Marrow	Red Bone Marrow	Red Bone Marrow
Valve	Valve	Valve
Oxygen	Oxygen	Oxygen
Carton Dioxide	Carbon Dioxide	Carbon Dioxide
Di n	Diffusion	Diffusion
	Platelets	Platelets
Cells	White Blood Cells	White Blood Cells
Clo	Clots	Clots
	Lungs	Lungs
	Pulmonary Artery	Pulmonary Artery
	Pulmonary Vein	Pulmonary Vein
	Cholesterol	Cholesterol
Criteria	Alveoli	Alveoli
		Aorta
· Ø	1	Nose
		Epiglottis
		Larynx
		Epiglottis Larynx Pharynx
		Trachea
		Bronchi

How I Will Grade Your Cartoon

When I grade your cartoon, I will be asking myself 2 main questions:

- 1. Do you understand how the circulatory system works?
- 2. Did you do a good job showing the processes you learned about with drawings?

Grading (Green, Blue, and Black!)

1. Do you understand how the circulatory system works?

a.	Is it clear which part of the circulatory system the red blood cell is in at all times?	No, Not really	Mostly	Yes, very much
b.	Is it clear that you understand the way oxygen and carbon dioxide are exchanged between capillaries and the lungs?	No, Not really	Mostly	Yes, very much
c.	Is it clear that you understand the way oxygen and carbon dioxide are exchanged between capillaries and our body cells?	No, Not really	Mostly	Yes, very much
d.	Have you used all of the vocabulary words in a way that proves you understand how they fit into the circulatory system?	No, not really	Mostly	Yes, very

2. Did you do an excellent job drawing the processes you learned about?

a.	Are your cartoon pictures attractively drawn and colored	No, not really	Mostly	Yes, very much
b.	Are your drawings large and simple enough to be understood quickly?	No, not really	Mostly	Yes, very much
c.	Do your drawings and captions make sense to they match)?	No, ally	Mostly	Yes, very much

themselves

Self assesment





ALL

Choose 2

Select 1 (or optional)

Multiple Means of **ENGAGEMENT**

	MENU	CONTR	ACT
--	-------------	-------	-----

given day.

MEN	NU CONTRACT	
"Proba	pability" Due:	
the due	oms in the main dish and the specified number of side dishes must be comple ue date. You may select among the side dishes and you may decide to do sor usserts items, as well.	te by ne of
D	Main Dishes (complete all)	
1	Complete the "meteorology simulation" on p. 88-89 of your textbook.	
2	Create a list of 10 pairs of events. 5 pairs should contain events that are <i>dependent</i> 5 pairs should contain events that are <i>independent</i> . Explain each classification.	nt;
3	Complete the "frequency table" assignment on p. 506-507 of your textbook.	
4	Examine the attached list of functions and determine which functions represent probability distributions.	
	Side Dishes (Select 2)	
1	Work with a partner to analyze the game of "Primarily Odd." See your teacher for game cubes and further instructions.	
2	Design a "game spinner" that has this probability distribution: $P(red) = 0.1$; $P(green) = 0.2$; $P(blue) = 0.3$; $P(yellow) = 0.4$.	
3	Suppose a dart lands on a dartboard made up of four concentric circles. For the center of the board (the "bull's eye"), r=1.5; the remaining rings have widths of 1.5. Use your understanding of area and probability to determine the probability of 1) hitting a "bull's eye" and 2) landing in the outermost ring.	
8	Desserts (Select 1)	
1	Figure the probability of "Murphy's Law" and make a case for whether or not it should indeed be a "law."	
2	Use a frequency table to chart the colors that your classmates wear for a week. Then, use probability to predict how many students will wear a certain color on a	



Managing Feedback and Accountability

Built in

to the assignment

(K. Gallagher lesson, choice boards or tiered assignments)

Managed in

Google Forms (Learning Contracts)

Digital Portfolios



Know your learners / Plan for predictable variability

Curriculum and Lesson Planning with UDL







ation

Expression

Multiple Means of

Engagement

Intentional design

possible

number of

individuals?

Adapted from Lynne Silcock and Linda Ojala - CORE Education





Breakout Room Discussion

UDL asks you to consider the question:

How can I structure this activity or information in ways that will make it accessible to the greatest possible number of individuals?



Breakout Room Discussion

- Think of something that you are currently teaching or plan to teach in the future.
- ➤ What is one change (*) you could make to your plans or materials that would make that lesson or unit more accessible to the greatest number of individuals?

(*) change: add, tweak, etc



Your Feedback Matters

 Please fill out the evaluation link in the chat box now, or ASAP.

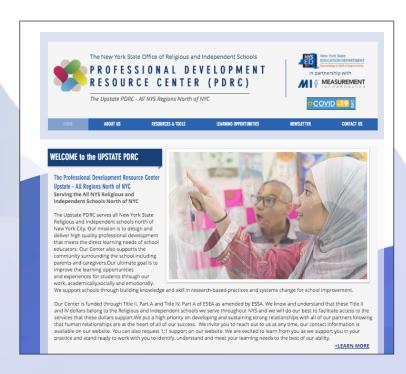
https://wh1.snapsurveys.com/s.asp?k=158687786361

 Watch for a follow up email with links to the evaluation as well as PPT slides and resources from this session.



Thank you for participating!

Visit our website & reach out for support!



https://www.nysed-soris-upstate-pdrc.org/





