Introduction to Universal Design for Learning

Actuarial Teaching Conference, Aug 9, 2022

Diana Skrzydlo, ASA

Department of Statistics and Actuarial Science





Outline

- What is UDL?
- Misconceptions about UDL
- Examples of UDL







Equality

Not everyone benefits from the same supports.









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.







UDL Principles

Multiple means of:

- Engagement
- Representation
- Action & Expression



udiguidelines.cast.org | 🐵 CAST, Inc. 2018 | Suggested Citation: CAST (2018). Universal design for learning guidelines version 2.2 [graphic organizer]. Wakefield, MA: Author.

Purposeful & Motivated

Resourceful & Knowledgeable

Strategic & Goal-Directed

Firm Goals, Flexible Means

- Too many options leads to choice paralysis
- Ensure all options are actually helping students achieve the learning outcomes
- Ensure students have the information to choose which options are best for them

Math Choice Board-Place Value

You can choose any 3 activities to complete a tic-tac-toe.

<u>Word Problems</u> A store has 310 pencils. They put the pencils in bundles of 10 to fit in pencil boxes. How many pencil boxes with 10 pencils will the store have? Show your work on your own paper.	<u>Creative</u> Using the tens and ones cubes make a picture on your paper. Outline what you have drawn. Count how many tens and ones you used. What is the total number you get?	<u>Writing Integration</u> Write a word problem using place value. Solve your word problem. Write out the steps it took to solve your word problem.
Write in Expanded Notation	Practice	Word Problems
Write the following numbers in	Practice counting by 10s. Start at	A store has 510 pieces of candy.
expanded notation.	495 and count by tens to 595. Write	They put the candy in bags of 10 to
Example: 312=300+10+2	all of your answers on your paper.	sell. How many bags of candy will the
129 387 704	Practice counting by 5s. Start at	store have? Show your work on your
987 620 456	340 and count by tens to 440. Write	own paper.
876 507 369	all of your answers on your paper.	
905 134 870		
What is the Value	Ordinal Numbers	What is the number?
Tell what the value of the red	Write the number that comes	Write the following numbers that
number is.	before, after, or between the	the expanded notation shows.
Example: 340 Answer: 4 tens=40	numbers listed.	400+50+7= 500+70+5=
129 387 704	304,, 306 415,, 417	200+40+4= 700+80+1=
987 620 456	135, 136,, 86, 87	100+0+5= 600+70+0=
876 507 369	, 456, 457, 900, 901	300+20+0= 800+40+7=
905 134 870	876,, 878 378, 379,	900+80+9= 300+0+8=

Standards: MCC2.NBT.1 , MCC2.NBT.2 , MCC2.NBT.3





Misconceptions about UDL

- Requires complete overhaul small changes can make a big impact
- Too much content to cover it's OK to teach a bit less at more depth
- Flexibility threatens rigour no it doesn't
- Doesn't work in Act Sci some ideas work for all disciplines
- Will reduce the number of accommodations it may but not the point
- Have to prepare students for real world real world has flexibility too
- Workload evaluate the impact on students/TAs/yourself to decide which UDL strategies to implement, doesn't have to be more work





Examples of UDL – In Classroom

- Make learning goals clear for each class, use signposting
- Think/write pair share
- Have students write in questions at end of lecture
- Student-created summary notes (provide template)
- Multiple options for participation marks
- Accessible videos (transcripts, captions)
- Invite students to discuss learning needs without disclosing disability





Examples of UDL – On Assignments

- Explain the purpose and learning outcomes of tasks
- Give choices of topic/format of deliverable
- Exemplars (not just one show variance), rubrics, or templates
- Revise & resubmit ("early bird") deadline
- Slip days
- OK to have some things marked for completion
- Get student comments on projects to improve for next time (what advice would you give a student doing this project?)





Key Takeaways

- Removing barriers to learning benefits everyone
- You don't have to do everything to make a difference
- Learning should be effortful, but because of the content, not because of admin/tech/bureaucracy







Interested in Learning More?

UDL guidelines - <u>udlguidelines.cast.org/</u>

Katie Novak – <u>novakeducation.com</u>

UDL where to start - <u>www.fulcrum.org/concern/file_sets/j3860906x?locale=en</u>



