Universal Design for Learning Co-Designing Your Classroom

Munster Technological University January 11, 2022

Slides

Introductions & Goals

- Examine UDL as a learning designer
- Identify what co-design is and how it can support engagement
- Demonstrate how we can use UDL to support co-design
- Share ideas and learn together - through breakout sessions



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Current Learning Environment



Consider:

- The current learning environment
- The goals we have for this session
- Your role in teaching/learning
- The pain points you are currently running into in your classroom
- Any challenges your learning community is facing



Set your learning goal for today.



What does it mean to Design Learning?

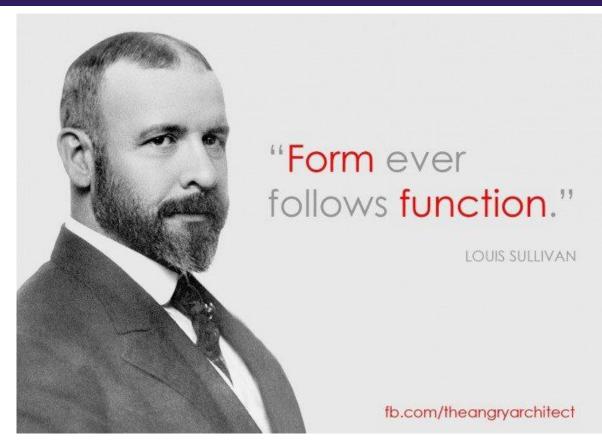
What does it mean to be a learning designer?

A design is a plan for:

- The construction of an object or system
- Or the implementation of an activity or process
- Design exists to solve problems

Designers

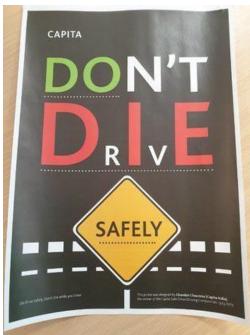
- Rely on data
- They focus on how it works
- They don't blame the user (in fact they rely on the user's experience to drive decision making)

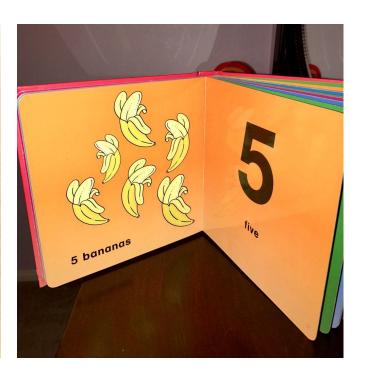




Bad Design







Designers know: Inclusion drives innovation

As you watch responding to one of the following prompts in the chat:

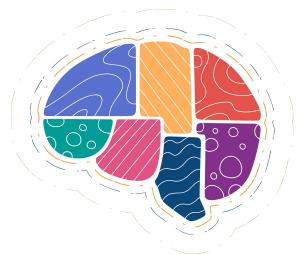
- Now I wonder...
- I agree/disagree with...
- A question I have is...
- This reminds me of...



Video describing <u>FlyEase</u> <u>FlyEase Debate</u>

Universal Design for Learning

UDL is a **flexible** framework (based on science and research) that educators can use to **proactively design** learning (curriculum, environments, materials) to increase success for **all** students.



The Barrier is in the Environment

The barrier is in the environment, not the learner.



Variability is the norm

Variability is the norm.



We can design for variability

Variability is predictable in learning and can be designed for.



9 Guidelines Design components

31 Checkpoints Specific practices

The Universal Design for Learning Guidelines

Provide multiple means of **Engagement**

> Affective Networks The "WHY" of Learning

Provide multiple means of Representation

> Recognition Networks The "WHAT" of Learning

CAST Until learning has no limits

Provide multiple means of **Action & Expression**

> Strategic Networks The "HOW" of Learning

Provide options for **Recruiting Interest**

- · Optimize individual choice and autonomy
- . Optimize relevance, value, and authenticity
- · Minimize threats and distractions

Provide options for

Perception

- . Offer ways of customizing the display of information
- · Offer alternatives for auditory information
- · Offer alternatives for visual information

Provide options for **Physical Action**

- . Vary the methods for response and navigation
- · Optimize access to tools and assistive technologies

Provide options for

Sustaining Effort & Persistence

- . Heighten salience of goals and objectives
- . Vary demands and resources to optimize challenge
- · Foster collaboration and community
- · Increase mastery-oriented feedback

Provide options for

Language & Symbols

- * Clarify vocabulary and symbols
- . Clarify syntax and structure
- . Support decoding of text, mathematical notation,
- · Promote understanding across languages
- . Illustrate through multiple media

Provide options for

Expression & Communication

- * Use multiple media for communication
- . Use multiple tools for construction and composition
- . Build fluencies with graduated levels of support for practice and performance

Provide options for **Self Regulation**

- . Promote expectations and beliefs that optimize motivation
- · Facilitate personal coping skills and strategies
- . Develop self-assessment and reflection

Provide options for

Comprehension

- · Activate or supply background knowledge
- . Highlight patterns, critical features, big ideas,
- · Guide information processing and visualization
- · Maximize transfer and generalization

Provide options for

Executive Functions

- · Guide appropriate goal-setting
- . Support planning and strategy development
- · Facilitate managing information and resources
- . Enhance capacity for monitoring progress

Expert learners who are...

Purposeful & Motivated

Resourceful & Knowledgeable

Strategic & Goal-Directed

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Reflect on UDL

In the chat:

Share one thing you have you learned so far (today) that you would share with a colleague?

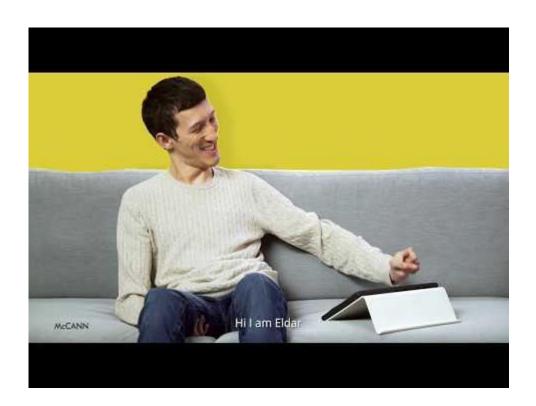
(Consider Jo Rushworth's Presentation on being a UDL Champion.)



Let's Talk About Co-Design

Building Relationships

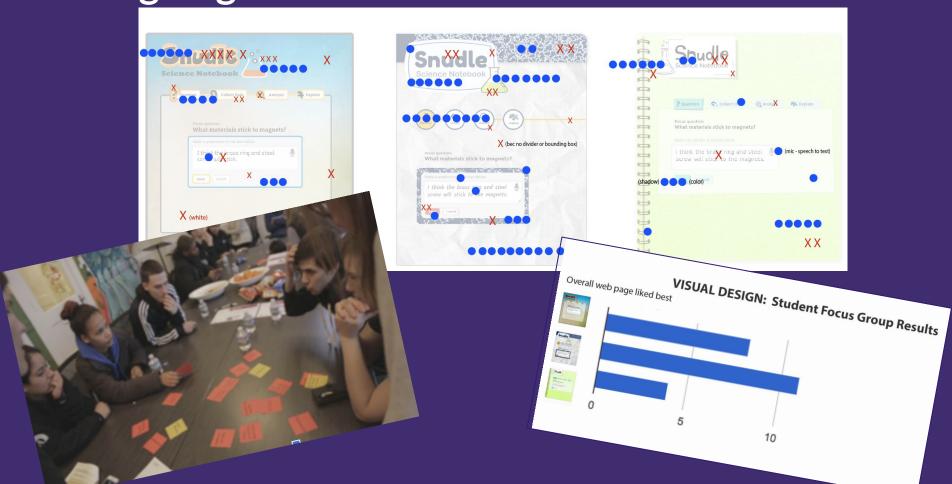
How co-design make the participants feel?



What is co-design in the classroom and how does it work?

- 1. The act of creating with stakeholders
- Use a design mindset
 (gather data, don't blame the user, etc.)
- 3. Be curious
- 4. Give choice and a voice in the process

Co-designing with students



Co-design builds learner agency ...

The feeling that a learner can independently:

- Make their own choices;
- Share their experiences and beliefs;
- Are valued in the learning environment



Using co-design facilitates learner agency by:

- Placing emphasis on: Skills, values and attitudes vs. Knowledge (Ontario Ministry of Education, 2013)
- Providing experiences of agency: it is not enough to instill a sense of agency – we must create real opportunities for students to exercise agency – acquire control (Mercer-Mapstone & Bovill, 2019)
- Empowering learners to lead their own learning (Robinson, 2014)
- Acknowledging that learning is messy and models how to make sense of learning through collaboration (Breen and Littlejohn, 2000)
- (whole class co-design) Enhancing inclusion through the proactive engagement of all (Bryson et al., 2015)
- Trusting and respecting one another builds positive relationships within the educational learning community (between peers and teacher) (Bovill, 2019)

Where do you see supports for co-design in the UDL framework?

Examine the **UDL** Guidelines

Together discuss which checkpoints from the UDL Guidelines support co-design?

Of these checkpoints, which ones are you already using?

Which ones might be useful to try in the future?



Discussion

Ways to Co-Design Your Classroom

Engage Learners as Course (Co-)Designers

Mountaineering example: Ask students to image themselves as "co-navigators" of the course (Huxham et al., 2015)

Examples:

- Using key themes and concepts from the class ask students to design group projects (Cook-Sather et al., 2014); have students select which assignments they wish to complete
- Assign each student to create a study guide for the course and then share and evaluate the study guides as a group
- Assign note takers, share notes with the entire class
- Share overarching themes of the course and ask students to provide feedback on the social justice issues they would like to investigate that relate to those themes (Bovil, 2014)

Co-Design Rubrics

Three essential features

- 1. Evaluation criterion
- 2. Quality descriptions
- 3. Scoring strategy or scale

Generic Essay	Subject content	awareness of issues	critical thinking	Takes a position
EXCELLENT A (85 - 100) A Markedly Exceptional Performance	a comprehensive grasp of the subject matter is demonstrated, including an in-depth understanding of the relevant concepts, theories, and issues related to the topic addressed	an awareness of differing viewpoints is demonstrated and a rigorous assessment of these undertaken where relevant	an ability to think critically is demonstrated in the analysis, synthesis and evaluation of relevant information	a thoughtful statement of position is presented and defended through logical arguments and carefully selected supportive detail; the arguments presented build to a consistent conclusion
SUPERIOR B (70 - 84) Clearly Above Average Performance	a thorough grasp of the subject matter is demonstrated	an awareness of differing viewpoints is demonstrated and an assessment of these attempted where relevant	the paper goes beyond description to interpretation, analysis, synthesis and evaluation	a position is adopted and logically argued; appropriate supporting detail is supplied
SATISFACTORY C (55 - 69) A Fully Competent Paper	a basic grasp of the subject matter is demonstrated	asserts viewpoint without acknowledging alternative viewpoints	accurate information incorporating relevant sources and references is conveyed	a position is adopted and logically argued

Ways to co-design rubrics? (1)

1. Start with a complete draft

- a. Leave room for changes
- b. Leave room for clarifications
- c. Allow them to improve the rubric
- d. Done as a large group

2. Start with a partial draft

- a. This way students aren't overwhelmed creating the entire rubric
- b. Complete some of the cells and ask students to complete the missing components
- c. Use groups
- d. Use a shared Google Doc

Ways to co-design rubrics? (2)

1. Try a progressive Model

- a. Divide the work of the rubric among grounds
- b. Each group completes one dimension of the rubric
- c. Come together and discuss as a whole

2. Start with a learning outcome

- a. Communicate the learning outcomes
- b. Students define all the dimensions and complete the rubric

Reflection on Co-Designing

Would this work in your classroom/context? Why or why not?

Do you already do this? Tell us about how it works for you.

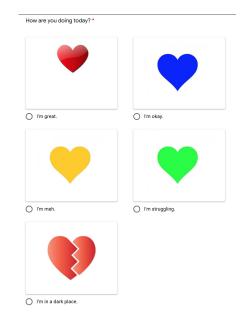
What resonates for you?

Use Self-Reflection as a Co-Design Tool

"When students say they don't have any questions, that's probably the time they have the most questions and probably don't understand. We just don't want to tell you in front of the class."

 Student feedback to the question: What should I know to make my classes better next semester?

Design Options for Asking Questions



Ways to Increase Self-Reflection

Provide scaffolding

- 1. Remembering: What did I do during...?
- 2. Understanding: What was important about what I learned today?
- 3. Applying: How can I use what I learned today?
- 4. Analyzing: Do I see any patterns in what I did today?
- 5. Evaluating: What did I learn about my strengths and where could I improve?
- 6. Creating: What concrete steps could I take to overcome my challenges?



2017

Impacts of Self-Reflection

- Learners who took self-assessment quizzes regularly had higher final exam scores than others who did not. Also, they were more satisfied with the course than others and regularly had a higher degree of perceived learning (Ozarslan and Ozan, 2016).
- The rate of turning things in (and obtaining feedback) is connected directly to student satisfaction (Gray and DiLoreto, 2016).
- Students' perceptions about the ability of the course to build "one's own general capacity for academic success" influences how students perceive their own learning (Mbarika, et al., 2003)

Emphasize the skill of self-knowledge

"Equipping young people to understand themselves, both as individuals and as members of complex, rapidly changing societies, is, or should be, one of the most important of educational aims, and logically should be so for all future citizens in democratic countries" (Beck, 2013).



Reflection on Co-Designing

Would this work in your classroom/context? Why or why not?

Do you already do this? Tell us about how it works for you.

What resonates for you?

Co-Design with Peers

The process is basically the same. The goal, or purpose of the co-design may vary.

- 1. The act of creating with stakeholders
- Use a design mindset (gather data, don't blame the user, etc.)
- 3. Be curious
- 4. Share choice and a voice in the process

Co-designing with peers



Consider co-designing on co-designing

The difference:

Working with colleagues

- Share common goal
- Need for consistency across courses, etc.
- Problem solving and learning from one another
- Divide and conquer the workload

Process supports in co-design

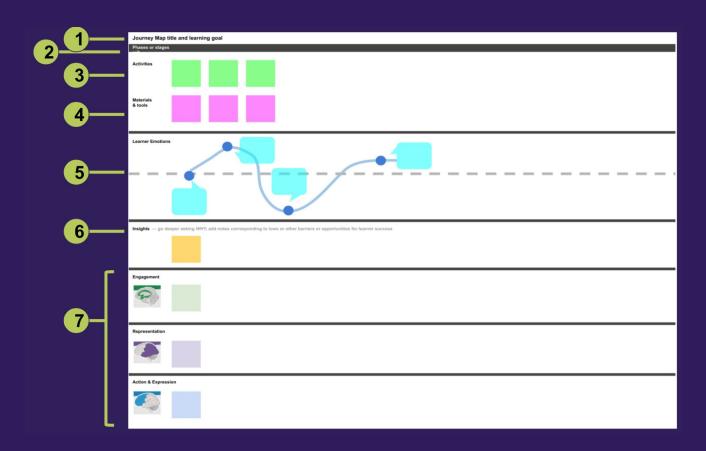
Identify a goal or problem:

- 1. Lesson design
- 2. Common construct
- 3. Misconceptions students may have

Brainstorm, using "ground rules" as you would in co-design with students

- 1. No wrong answers, be open to ideas
- 2. Share the "stage", establish ground rules
- Consensus build
- 4. Recognize need for adjustments to meet the needs of a particular class/individual

Consider <u>Journey</u> Mapping to plan, project, and then reflect on a unit or lesson together and work out the challenges, or high and low points



Journey Mapping -2



- 1. Learning goal
- 2. Phases
- 3. Activities
- 4. Materials and tools
- 5. Learner emotions, annotated
- 6. Insights
- 7. Solutions (UDL principles: Engagement, Representation, and action & Expression)

Tools to support co-design

Consider using devices that all can see and contribute, as well as store and share:

- Whiteboard
- Google Docs shared and collaborative working space
- Your Learning Management System
- Journey Mapping (see resources)
- Other (help add to our list)

Discuss Co-Design

Share the ways you currently incorporate co-design in your classroom? Describe how and why you use co-design.



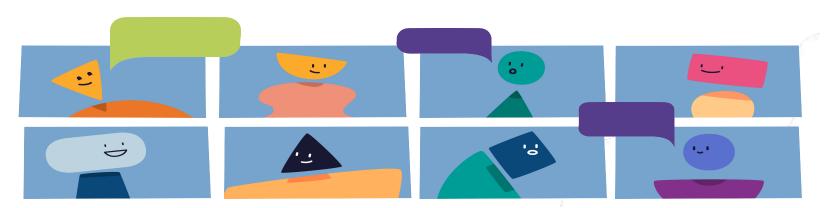
Or

Describe how might you envision using co-design in your classroom?

How can you use the UDL framework to support the use of co-design?

Final Thoughts

- 1. In the chat share one strategy from today's session you can incorporate into your teaching practice tomorrow.
- 2. Share your experience in this session through our feedback survey.



Please reach out if you have questions or would like more information

Thank you!



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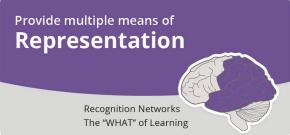
Resources

References

- Breen, M. P., & Littlejohn, A. (2000). The practicalities of negotiation. In M. P. Breen & A. Littlejohn (Eds.), Classroom decision-making: negotiation and process syllabuses in practice (pp. 272–295). Cambridge: Cambridge University Press.
- Bovill, C. (2019). Co-creation in learning and teaching: the case for a while-class approach in higher education. Higher Education https://link.springer.com/content/pdf/10.1007/s10734-019-00453-w.pdf Accessed 18 October 2020
- Bryson, C., Furlonger, R., & Rinaldo-Langridge, F. (2015). A critical consideration of, and research
 agenda for, the approach of 'students as partners'. Paper presentation, International Conference
 on Improving University Teaching, Ljubljana, Slovenia, 15-17 July
- Ontario Ministry of Education. (2013). Creating Pathways to Success: An Education and Career/Life Planning Program for Ontario Schools. Toronto, ON: Queen's Printer.
- Mercer-Mapstone, L., & Bovill, C. (2019). Equity and diversity in institutional approaches to student- staff partnership schemes in higher education. Studies in Higher Education https://www.tandfonline.com/doi/abs/10.1080/03075079.2019.1620721. Accessed 13 July 2019.
- Robinson, C. (2014). Children, their voices and their experiences of school: What does the
 evidence tell us? Cambridge Primary Review Trust.
 https://cprtrust.org.uk/wp-content/uploads/2014/12/FINAL-VERSION-Carol-Robinson-Childre
 n-their-Voices-and-their-Experiences-of-School.pdf. Accessed on 20 November 2021.

Universal Design for Learning (UDL)





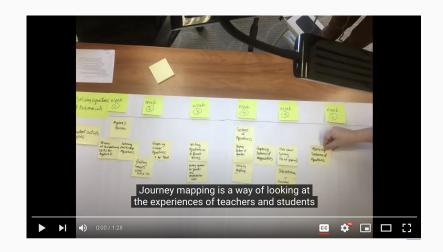


http://udlguidelines.cast.org/

Journey Map resources

Download printable template (PDF): bit.lv

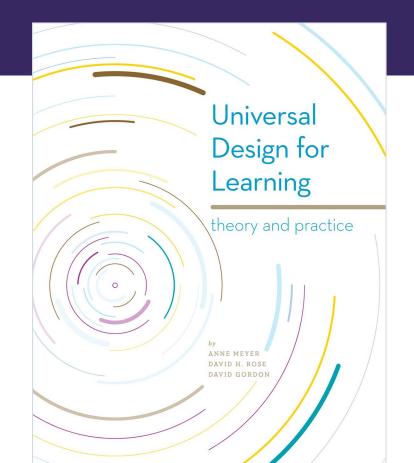
- Video: Reflecting on Teaching Through Journey
 Mapping
 https://www.youtube.com/watch?v=kZA5nB4pPj8
- Beyond Rubrics. (n.d.). Retrieved October 29, 2019, from https://makered.org/beyondrubrics
- Marquez, J. J., Downey, A., & Clement, R. (2015).
 Walking a mile in the user's shoes: Customer journey mapping as a method to understanding the user experience. Internet Reference Services
 Quarterly, 20(3-4), 135-150



UDL: Theory & Practice

Meyer, Rose & Gordon (2014)







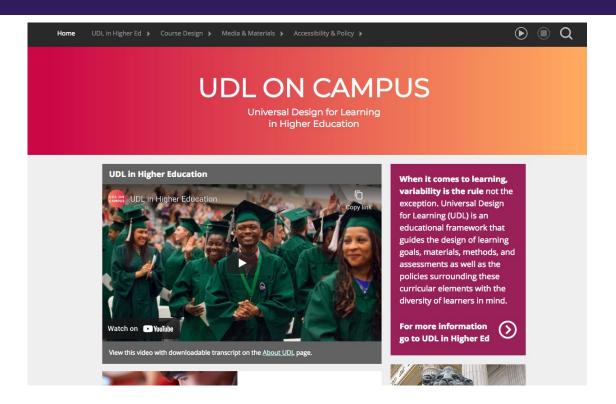
Additional Resources

- CTE Learn: 150+ online courses covering a range of topics, including teaching CTE remotely, and are self-paced. Each course takes approximately 4 hours to complete
- High-quality Teaching in CTE
 Post-COVID: Resources, advice, links, suggestions gathered and compiled by ACTE.
- Article on teaching <u>Remote Work Skills</u> through CTE programs.
- Step-by-step <u>guide</u> to converting in-person CTE Lessons to online lessons.

Universally Designed Assessments



UDL on Campus



UDLoncampus.org