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# FLO FRIDAY - UDL for Intentional Design

Hosted by Helena Prins, Advisor, BCcampus

Facilitator: Taruna Goel

Helena Prins

BCcampus

[hprins@bccampus.ca](mailto:hprins@bccampus.ca)

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Since time immemorial, the səliłwətaʔt təməx<sup>w</sup> (Tsleil-Waututh), Skwxwú7mesh-ulh Temíxw (Squamish), x<sup>w</sup>məθk<sup>w</sup>əyəm (Musqueam), WSÁNEĆ (Saanich), and the Esquimalt and Songhees Nations of the Lək<sup>w</sup>əŋən (Lekwungen) Peoples have walked gently on the unceded territories where we are grateful to live, work, and play. We are committed to building relationships with the first peoples here, based in honour and respect, and we thank them for their hospitality.





## Taruna Goel

Twitter: [@write2tg](https://twitter.com/write2tg)

LinkedIn: <https://www.linkedin.com/in/tarunagoel/>

Blog: <http://tarunagoel.blogspot.ca/>

Photography Page: <https://www.facebook.com/write2tg>

**“Choice Gives Voice”**  
- Andratesha Fritzgerald



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## Agenda

- Intentional design using UDL
- Applying UDL - Group Activity
- Reflection
- Next Steps

# Intentional Design



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# Universal Design

**“Universal Design is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.” - Ronald L. Mace**



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# Universal Design for Learning

**“Universal Design for Learning (UDL) is a framework to improve and optimize teaching and learning for all people based on scientific insights into how humans learn.” - David H. Rose, CAST**

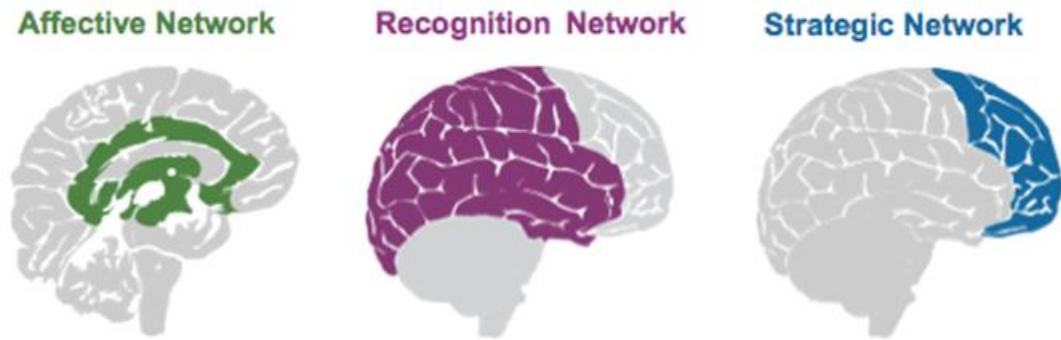


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# UDL Framework

## 3 Networks



## 3 Questions

WHY should learners engage with the training?	WHAT will help learners comprehend the information?	HOW will learners express what they know and what they have learned?
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## 3 Principles

- **Provide Multiple Means of Engagement**
- **Provide Multiple Means of Representation**
- **Provide Multiple Means of Action and Expression**

## Provide multiple means of Engagement

Affective Networks  
The "WHY" of Learning



## Provide multiple means of Representation

Recognition Networks  
The "WHAT" of Learning



## Provide multiple means of Action & Expression

Strategic Networks  
The "HOW" of Learning



Access

### Provide options for Recruiting Interest <sup>(7)</sup>

- Optimize individual choice and autonomy (7.1)
- Optimize relevance, value, and authenticity (7.2)
- Minimize threats and distractions (7.3)

### Provide options for Perception <sup>(1)</sup>

- 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 <sup>(4)</sup>

- 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 <sup>(8)</sup>

- 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 <sup>(2)</sup>

- 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 <sup>(5)</sup>

- 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 <sup>(9)</sup>

- 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 <sup>(3)</sup>

- 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 <sup>(6)</sup>

- 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



# Multiple Means of Engagement



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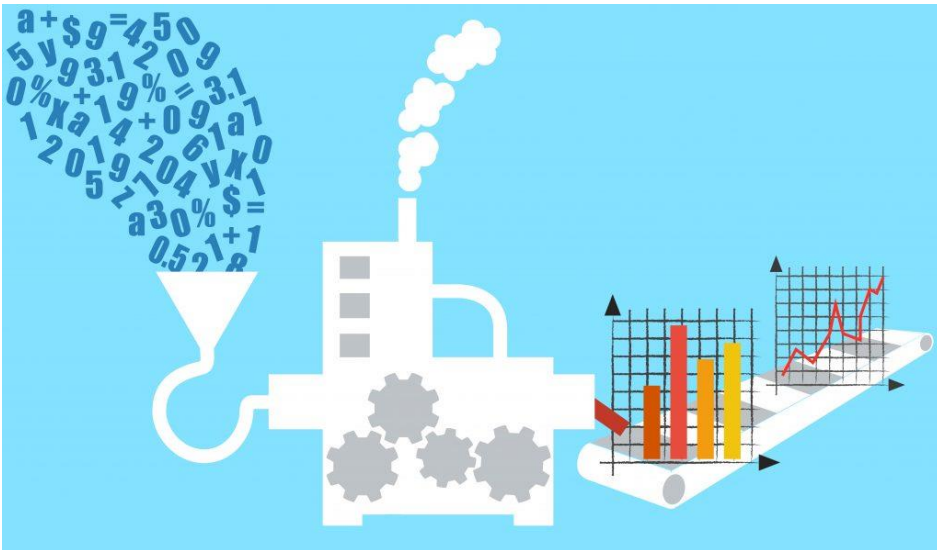
For purposeful, motivated learners, stimulate interest and motivation for learning.

- ☐ Provide options for recruiting interest
- ☐ Provide options for sustaining effort and persistence
- ☐ Provide options for self-regulation

# Examples

- ✓ Provide choice in setting personal goals and get learners to participate in the design of the training
- ✓ Make sure the goals are authentic and relevant
- ✓ Use real-life case studies and scenarios; make sure the activities can be personalized and contextualized
- ✓ Provide a safe learning environment where learners have a choice in the level of perceived challenge by changing the degree of complexity or difficulty
- ✓ Vary the level of engagement required by including self-paced tasks along with cooperative tasks
- ✓ Allow for active participation, experimentation and reflection
- ✓ Includes methods and practices to provide feedback that is frequent, timely, and specific
- ✓ Provide coaches or mentors and encourage critical reflection

# Multiple Means of Representation



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For resourceful, knowledgeable learners, present information and content in different ways.

- ☐ Provide options for perception
- ☐ Provide options for language, mathematical expression, and symbols
- ☐ Provide options for comprehension

# Examples

- ✓ Design accessible course materials
- ✓ Offer ways of customizing the display of information
- ✓ Provide visual diagrams, charts, notations of music or sound to support auditory content and information.
- ✓ Provide descriptions (text or spoken) for all images, graphics, video, or animations
- ✓ Illustrate through multiple media such as graphics, podcasts, videos, etc.
- ✓ Activate prior learning and make connections with new information
- ✓ Chunk information, progressively release information and use graphic organizers and concept maps
- ✓ Provide multiple entry points to a lesson and optional pathways through content



# Multiple Means of Action & Expression



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For strategic, goal-directed learners, differentiate the ways that students can express what they know.

- ❑ Provide options for physical action
- ❑ Provide options for expression and communication
- ❑ Provide options for executive functions

# Examples

- ✓ Allow multiple formats for demonstrating knowledge
- ✓ Incorporate a variety of assessment formats/ assessment strategies
- ✓ Provide scaffolding and gradually remove these scaffolds to increase independence and skills
- ✓ Provide differentiated feedback that is customized to individual learners
- ✓ Ask questions to guide self-reflection
- ✓ Provide opportunities for self-assessment
- ✓ Include coaching and mentoring activities that model thinking out loud and sharing your work

# Breakout Room Group Activity – Case Studies

Choose a case study and join a group:

- ❑ Case Study “A” – Trades Training (A-TT)
  - Join Group 1 OR Group 2
- ❑ Case Study “B” – High-Ed Humanities (B – HEH)
  - Join Group 3 OR Group 4
- ❑ Case Study “C” – Workplace Learning (C-WL)
  - Join Group 5 OR Group 6
- ❑ Case Study “D” – High-Ed STEM (D-HESTEM)
  - Join Group 7 OR Group 8
- ❑ Case Study “E” – K-12 Classroom (E-K12)
  - Join Group 9 OR Group 10

# Using Jamboard

The image displays three overlapping Jamboard screens, each with a toolbar on the left and a navigation bar at the top. The top screen, titled "FLO UDL Scenarios", shows a case study about André at the Community Education Department. The middle screen, titled "A-TT- Group 1", shows "Top 3 Barriers to Learning" with three numbered boxes (1, 2, 3) and a sticky note. The bottom screen, also titled "A-TT- Group 1", shows "Strategies to Provide Multiple Means of Engagement" with three numbered boxes (1, 2, 3) and a sticky note. The sticky notes on the middle and bottom screens provide instructions on how to use the sticky note feature.

**FLO UDL Scenarios**

UDL Case Study "A" – Trades Training

André works at the Community Education Department of a trades training organization. The organization supports community-based education and training specifically targeted to increase the participation of women in trades. Courses are delivered both on and off-site. André is the senior instructor and oversees the delivery of the Construction Foundation Program. He encourages women to enter the construction format with both in-classroom and on-the-job training. Candidates for the Construction Foundation program, candidates for the Training Authority and are ready to start work.

André has been asked to redesign one of the courses, "Equipment". The course introduces students to the equipment used by residential construction in the construction workplace. The course is designed by a Red Seal instructor. There are some practical, extensive, theoretical content, the instructor course hasn't been positive. The participants' gender roles and expectations and some of the women. Even though the content is relevant, it is challenging both for the instructor and the participants' understanding accurately and

This case study by Taruna Goel & Candace Cline is licensed under Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License

**A-TT- Group 1**

Top 3 Barriers to Learning

1. 2. 3.

Click the Sticky note option on the Toolbar (left) and type the text to describe a barrier to learning. Use 3 different sticky notes for the 3 barriers identified and stack them under 1, 2, and 3.

**A-TT- Group 1**

Strategies to Provide Multiple Means of Engagement

1. 2. 3.

Click the Sticky note option on the Toolbar (left) and type the text to describe a strategy that can be used to apply this UDL principle and stack each example under the labels 1, 2 and 3.



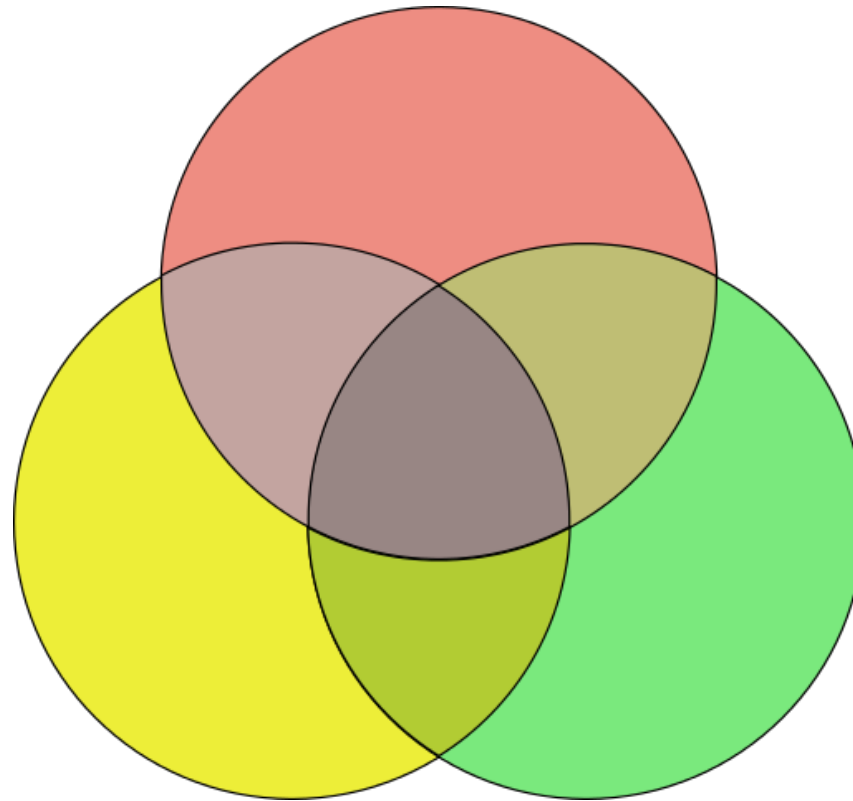
# Discussion



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- Provide Multiple Means of Engagement
- Provide Multiple Means of Representation
- Provide Multiple Means of Action and Expression

# Intersections of UDL



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# Summary & Next Steps

- Use the UDL Guidelines to intentionally design the goals, methods, and materials and assessments.
- Provide options for Engagement, Representation, and Action and Expression
  - Start with a **specific learning goal & identify barriers**
  - Use the **Plus One Approach**

**Minimize barriers; maximize learning.**



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**Taruna Goel**

Twitter: [@write2tg](https://twitter.com/write2tg)

LinkedIn: <https://www.linkedin.com/in/tarunagoel/>

Blog: <http://tarunagoel.blogspot.ca/>

# Thank you everyone!



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