

## Access Reboot – HEQCO Conference 2023 George Brown College

### Session Overview:

Technological change is happening at an accelerating pace, changing the way we work, learn, and engage with the world. This panel session will explore how institutions can use Universal Design for Learning (UDL), a framework to improve and optimize teaching and learning, to respond to and prepare for technological change. Attendees will learn about strategies for using UDL to embrace technological advancements and create a more accessible and inclusive learning environment for all students.

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## Agenda

AGENDA ITEM	TIME
<b>Welcome and Introductions</b>	<b>2:00pm</b>
<b>UDL at George Brown College</b>	<b>2:05pm</b>
<b>Different Perspectives on UDL and Technology: The Panel</b>	<b>2:25pm</b>
<b>Moderated Discussion</b>	<b>2:45pm</b>

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## Meet The Panel from George Brown College

- **Mandy Bonisteel** (speaker) - Professor
- **Dr. Sharmaine Itwaru** (speaker) - Professor
- **Danny Smith** (speaker) - Professor
- **Joanna Friend** (speaker) - Manager of Universal Design for Learning and Accessible Pedagogy
- **Susan Toews** (moderator) - Dean, Centre for Preparatory and Liberal Studies

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## Joanna Friend she/they

Manager of Universal Design for Learning  
and Accessible Pedagogy  
George Brown College

- An Introduction to Universal Design for Learning (UDL).
- The Evolution of GBC's UDL Certificate Course.
- UDL and Technological Change.

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## Universal Design for Learning (UDL)

“UDL addresses **learner variability** through **proactive, intentional design** of learning environments, curricula, technology and materials in order to meet the needs **of all learners**”.



Based on the science of learning



Designing to the 'edges', not the average



Reduce barriers proactively



Empower **all** students to become "expert learners"

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## The Universal Design for Learning Principles

AFFECTIVE NETWORKS:  
THE **WHY** OF LEARNING



### Engagement

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

RECOGNITION NETWORKS:  
THE **WHAT** OF LEARNING



### Representation

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

STRATEGIC NETWORKS:  
THE **HOW** OF LEARNING



### Action & Expression

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

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## How do you use Google Maps?

Best 22 min 23 min 1 hr 20 23 min

St. Clair West Subway Station, 370 St Clair Ave W

75 Lower Simcoe St, Toronto, ON M5J 3A8

Depart at 8:00 AM Fri, Nov 3

Send directions to your phone

Departure Time	Arrival Time	Duration
8:01 AM (Friday)	8:24 AM	23 min
8:04 AM (Friday)	8:27 AM	23 min
8:07 AM (Friday)	8:31 AM	24 min
8:11 AM (Friday)	8:34 AM	23 min

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## Three Essential Wisdoms of UDL



**1. Variability is the norm, not the exception.**



**2. UDL is a reflective practice.**



**3. Context always matters.**

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UDL Wisdom 1: Variability is the norm

## Variability is the norm

We all have jagged learning profiles – there is no average!

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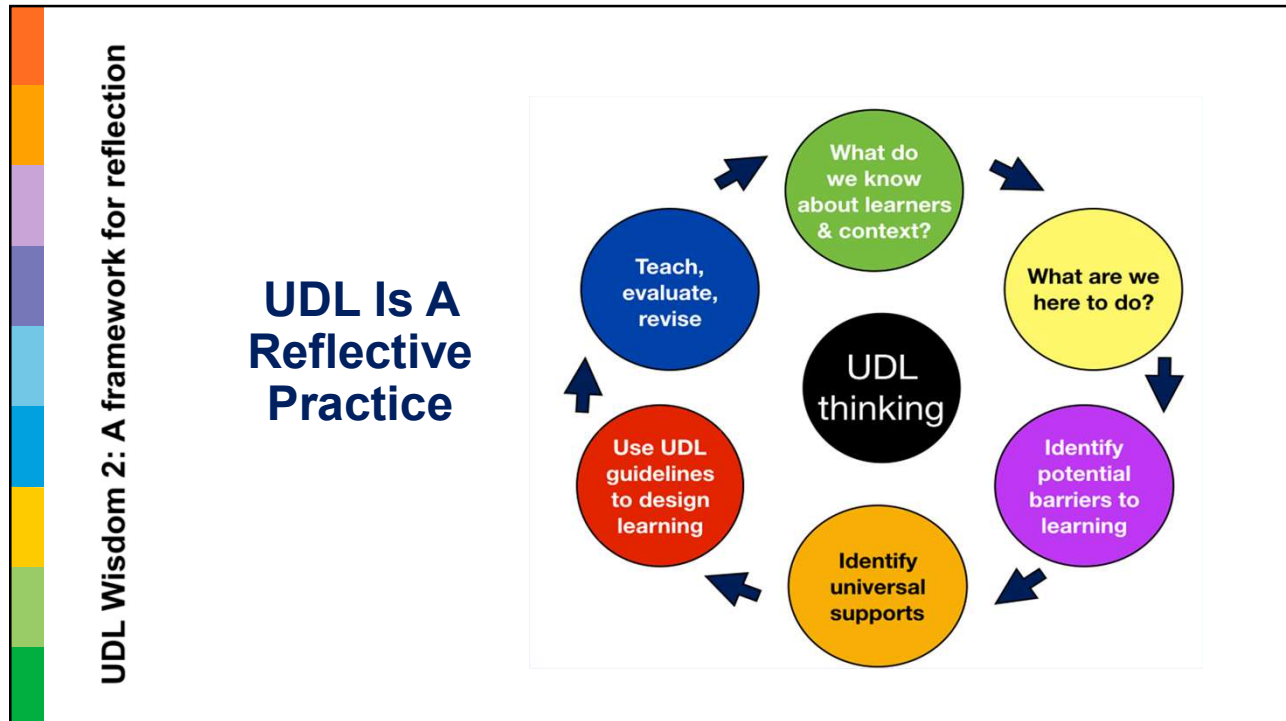
UDL Wisdom 1: Variability is the norm

## The Persona Spectrum

As captured by the persona spectrum mentioned in the Microsoft [Inclusive 101](#) design toolkit, disabilities can be permanent, temporary, or situational, and many times, they are not even visible.

	Permanent	Temporary	Situational
<b>Touch</b>	 One arm	 Arm injury	 New parent
<b>See</b>	 Blind	 Cataract	 Distracted driver
<b>Hear</b>	 Deaf	 Ear infection	 Bartender
<b>Speak</b>	 Non-verbal	 Laryngitis	 Heavy accent


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## UDL's Ultimate Goal: foster expert learners

UDL strives to create moments for learners to develop skills to become:

- ✓ Purposeful and motivated,
- ✓ Resourceful and knowledgeable, and
- ✓ Strategic and goal directed.

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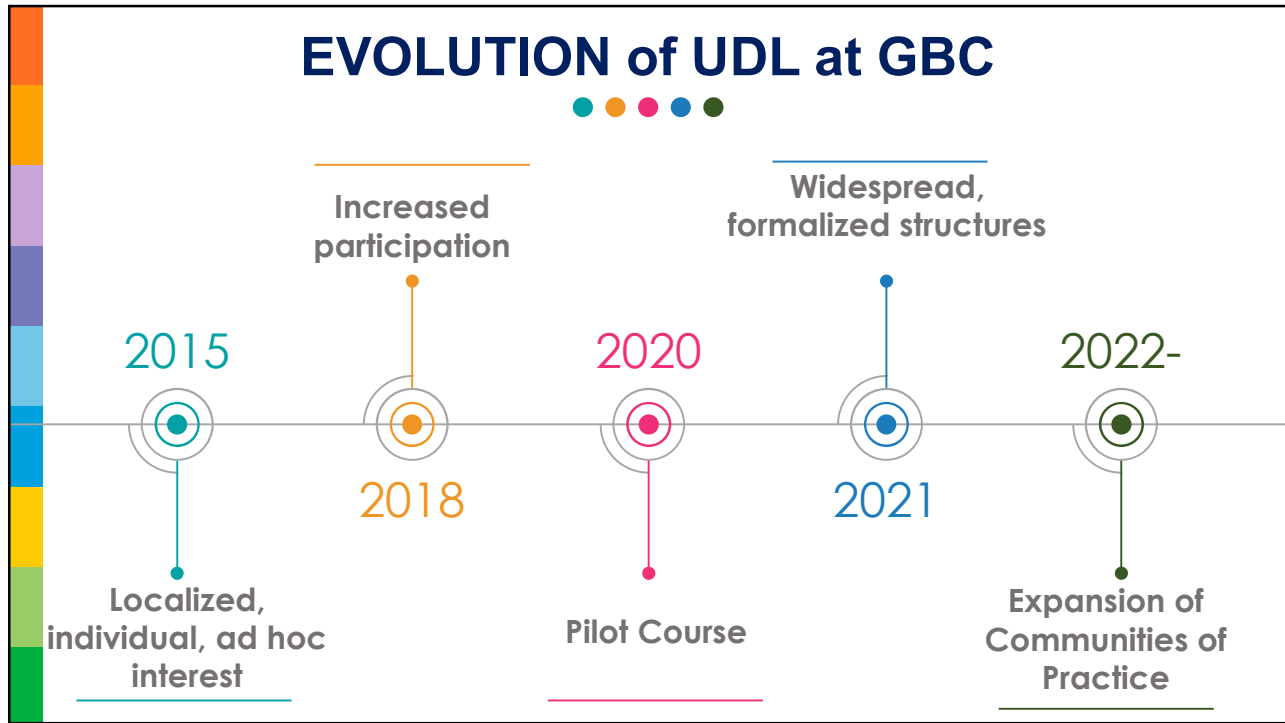


## Universal Design for Learning: Inspiring Equity and Inclusion in Higher Education

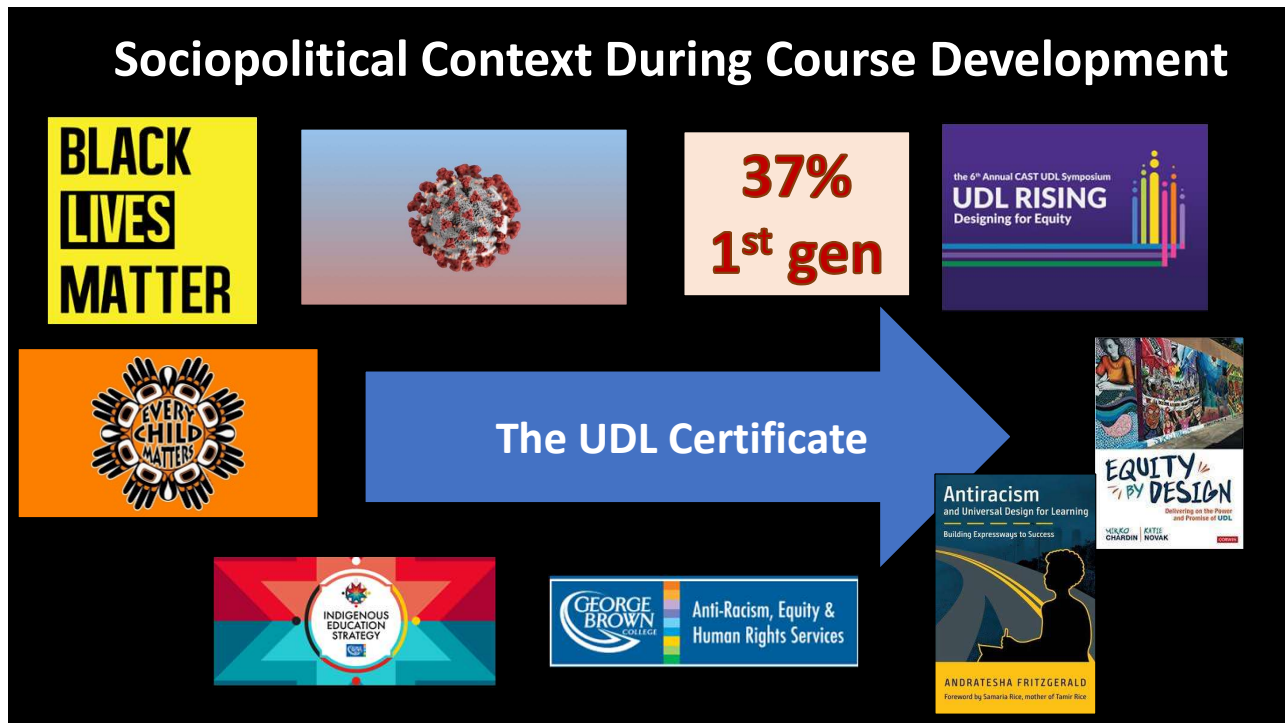
The evolution of George Brown College's UDL professional development course.

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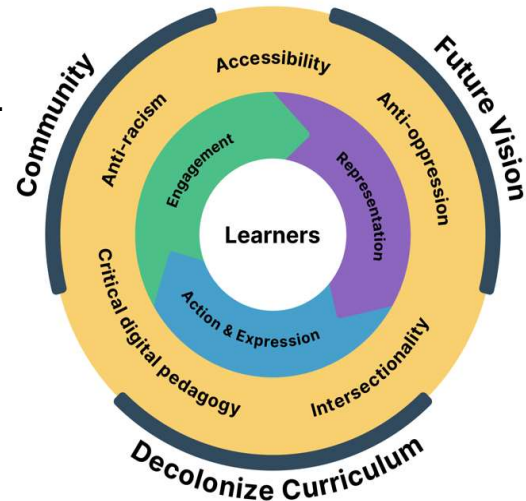


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## A Re-envisioned UDL Course

- ❖ Lateral Leadership Model. UDL & complimentary equity frameworks.
- ❖ Four asynchronous modules:
  - Introduction to UDL and Equity Frameworks.
  - The Engagement Principle.
  - The Representation Principle.
  - The Action and Expression Principle.
- ❖ Three synchronous webinars



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## UDL & Technological Change

Employing a UDL mindset can prime us to be more adaptable.

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## LMS Features Which Support UDL Principles

### Features that support Engagement

- Progress bars.
- Awards tool.
- Feedback can lead back to content areas

### Features that support Representation

- automated captioning w/editing capability.
- video and audio recording anywhere there is a content box.
- Can customize font style, size, colour

### Features that support Action & Expression

- Prompts to include Alt text.
- Has accessibility checker.
- Customize alert capabilities.
- Has analytics available to students to monitor their progress.

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## Essential For Some, Benefits so Many Others!

### Disability Drives Innovation

- Screen readers
- Speech-to-text, Siri, Alexa
- Predictive Text
- Audio Books
- Curb Cuts
- Accessible doors
- Ramps
- Utensils with widened handles
- Dishwasher drawers

Who were closed captions designed for?  
Who else benefits and uses them?

How does this apply to your practice?



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## UDL and the Potential of GenAI

- UDL was founded on the advances that technology can have in solving problems associated with learning.
- AI has the potential to take expert learning to a new level.



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## UDL & Evolving Instructor Identity

Dr. Sharmaine Itwaru  
School of ESL  
Centre for Preparatory and Liberal Studies  
George Brown College

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## UDL = Paradigm Shift

- Pandemic - forced changes in curriculum and pedagogy
- Inclusive learning – UDL Framing
  - Paradigm shift required - adopt UDL mindset – widen our lens of inclusivity
  - Embracing UDL principles as a philosophy is an instrument of **decolonizing curriculum and pedagogy**

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## Process of Decolonizing Practice

### Deconstructing

- traditional/western pedagogies
  - e.g., Anti-racist BUT heteronormative perspective



### Reconstructing

- decolonized pedagogies – UDL framing = multiple means of representation: presenting and teaching content in different ways

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<h2>My Evolving Instructor Identity</h2>	
WESTERN/TRADITIONAL COLONIZED PEDAGOGIES	DECOLONIZED PEDAGOGY
1. Hierarchical - vertical relationships are valued	Horizontal relationships are the focus
2. Prevailing epistemology: the instructor is the font of knowledge; lectures are commonplace	Knowledge is co-constructed; instructor is decentered; interactive classes with increased student input;
3. Instructors hold power over curriculum & grades	Empowerment is key; curriculum content is student-driven/negotiated; real-world relevance
4. Examples of experts, heroes, knowledge-holders are often Eurocentric/western; deficit perspective	Include other images, examples & voices of marginalized groups
5. The individual skills and group work focus – mastering competence i.e., presentations	The individual has accountability to the group i.e., group leaders and members – learning community
6. Value placed on vocal students – silence is seen as a weakness; students with privilege speak more	Value placed on students who can verbally communicate effectively – quality or quantity
7. Content is predominantly text-based	Content is presented for multiple means of engagement, representation UDL Principles designed for a range of accessibility

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<h2>Strategies</h2>	
Do not reproduce	
Deconstruct my language	Record yourself. Listen to how you phrase/word ideas. Does your language reinforce stereotypes? e.g., <i>white lies/blacklist</i>
Re-examine images used in slides	Google experiment: Google <i>intelligent/thinking</i> Be inclusive of as many groups as you can: reflecting diversity in race, religious/sexual orientations, physical size, age, disabilities etc. Record yourself/the class – Who do you allow to speak the most in class?
Use democratic principles in your lessons	Allow for student input on content, activities etc. and feedback during the course
Support practices that empower the student	e.g., student grade appeal; inviting student input on testing procedures

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## Artificial Intelligence, Anti-oppressive Practice, and Essential Employability Skills

Mandy Bonisteel she/her  
School of Liberal Arts and Sciences  
George Brown College

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### Understanding structural power: perspectives

- Educator Paulo Freire (1970): Uncritical models of education reinforce inequality.
- Philosopher Marshall McLuhan (1964): Technology shapes us.
- Physicist Ursula Franklin (1989 – 2012): Technology is never neutral because it is in the hands of the powerful and it promotes a culture of compliance.
- Godfather of AI Geoffrey Hinton (2023): Risks of AI must be considered as the technology evolves.
- George Brown College (2022): “The process of decolonizing the curriculum is an important step in creating a more equitable and inclusive learning environment and one that promotes critical thinking and challenges dominant narratives and power dynamics.”

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## AI Я US

- AI presents the new social norm that those with AI competency will have a greater chance of success.
- Educator Joseph Aoun: a necessary shift in education requires a melding of technical literacy, data literacy, and human literacy.

(from Robot-Proof: Higher Education in the Age of Artificial Intelligence, 2018)

**How can we support students to confidently demonstrate human literacy and value their agency as citizens?**

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## EES 1 COMMUNICATION:

Communicate clearly, concisely and correctly in the written, spoken and visual form that fulfills the purpose and meets the needs of the audience.

Action/ expression:

- The usual: Cover topic, add analysis, use correct grammar, (AI does this).
- What about adding: reflect and incorporate affective/positionality lens and acknowledges this in others 😊?

## CRITICAL THINKING AND BLOOM'S (?)

"What solutions can you propose to decrease pollution in urban areas?"  
(AI does)



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## Human outcomes 2023?

- Conversing meaningfully (using cultural literacy / AOP lens).
- Participate in psychological and emotional safety in various environments.
- Ethical literacy, judgment, and decision-making includes negotiation.
- Critical thinking is iterative.
- Problem solving includes systems thinking.
- Active Learning (self-reflection) supports creativity.
- Self-esteem and resilience.

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## Scaffolding human skills in online discussions

- 1) What stands out for you and why?
- 2) What were you thinking, feeling and/or how does this resonate with your social identity/culture (choose two)?
- 3) Given the above, how might this new learning change the way you think and act?
- 4) Ask a relevant clarification question of 2 peers.
- 5) Answer a question posed to you.
  - Active Learning (Kolb)
  - Mastery oriented feedback
  - "Ungrading"
  - All UDL principles

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# Implementation

Danny Smith he/him  
 School of Marketing  
 Centre for Business  
 George Brown College

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## My Practice and My Students

My practice is **guided** by:

- UDL, accessibility, and inclusivity

My practice is **influenced** by industry's use of technology

- Collaborative hybrid work environments
- Swift adoption of AI to perform tasks

And when students leave my course, I'd like them to have:

- Taken more **ownership** of their learning and be less dependent on me
- Learned ways to add **value** to technology
- Found their voice by identifying their **creativity, curiosity, and uniqueness**

"Our 🧑🏻 are  
 better than AI 🖥️."  
 - *student*

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## Examples of Tech in My Courses

### Facilitating Group Work:

#### Engagement: Foster collaboration and community (8.3)

- Students use Microsoft Teams' private channels for group work
- This collaborative workspace is supported with group contracts, opportunities for customization, and faculty feedback.

### Reading Word Documents:

- Offer ways of customizing the display of information (1.1)
- Students are encouraged in document headers to use Microsoft's Immersive reader to customize their reading experience.

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## Examples of Tech in My Courses (continued)

### Independent Project Planning:

#### Action & Expression: Support planning & Strategy Development (6.3)

- Students use AI tools to support their project planning including the development of checklists and timelines.

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