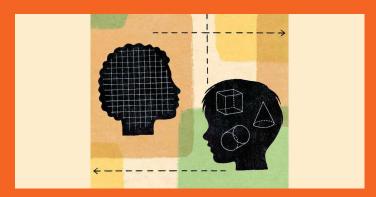
# Universal Design for Learning



Providing equal opportunity for all students to learn

## What is Universal Design for Learning (UDL)?

"Universal Design for Learning (UDL) is a framework to improve and optimise teaching and learning for all people based on scientific insights into how humans learn."

- The Center for Applied Special Technology CAST

## We are learning to:

Build a foundational understanding of Universal Design for Learning

# What I am looking for:

You will be able to identify how the three UDL guidelines can impact our learning environments

## Intro to UDL







Provide Multiple Means of Representation
Resourceful, knowledgeable learners



Provide Multiple Means of
Action & Expression
Strategic, goal-directed learners

## **UDL** Guidelines

The UDL guidelines offer a concrete suggestions for teachers to ensure that all learners can access and participate in meaningful, challenging learning opportunities. Based on three main principles, they demonstrate how to provide multiple means of:

- engagement recognising learners differ markedly in the ways in which they can be engaged or motivated to learn
- representation recognising learners differ in the ways that they
  perceive and comprehend information that is presented to them
- action and expression recognising learners differ in the ways that they can navigate a learning environment and express what they know.



### <u>engagement</u> – recognising learners differ markedly in the ways in which they can be engaged or motivated to learn

#### Optimize individual choice and autonomy by providing choice

- The context or content used for practicing and assessing skills
- The tools used for information gathering or production
- The color, design, or graphics of layouts, etc.
- Allow learners to participate in the design of classroom activities and academic tasks
- Involve learners, where possible, in setting their own personal academic and behavioral goals

#### Optimize relevance, value, and authenticity

- Vary activities and sources of information so that they can be:
  - o Personalized and contextualized to learners' lives
  - Culturally relevant and responsive
  - Socially relevant
  - Age and ability appropriate
  - Appropriate for different racial, cultural, ethnic, and gender groups

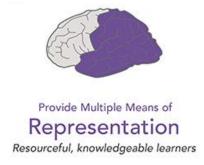


### engagement – recognising learners differ markedly in the ways in which they can be engaged or motivated to learn

- Design activities so that learning outcomes are authentic, communicate to real audiences, and reflect a purpose that is clear to the participants
- Invite personal response, evaluation and self-reflection to content and activities

#### Minimize threats and distractions

- Create an accepting and supportive classroom climate
- Vary the level of novelty or risk
  - Creation of class routines
  - Alerts and previews that can help learners anticipate and prepare for changes in activities, schedules, and novel events
- Vary the social demands required for learning or performance, the perceived level of support and protection and the requirements for public display and evaluation
- Involve all participants in whole class discussions through co-constructive activities



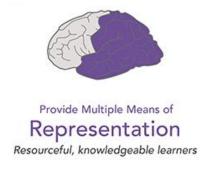
## <u>representation</u> – recognising learners differ in the ways that they perceive and comprehend information that is presented to them

#### Offer ways of customizing the display of information

- Display information in a flexible format so that the following perceptual features can be varied:
  - The size of text, images, graphs, tables, or other visual content
  - The contrast between background and text or image
  - The color used for information or emphasis
  - The volume or rate of speech or sound
  - The font used for print materials

#### Offer alternatives for auditory information

- Use text equivalents in the form of captions or automated speech-to-text (voice recognition) for spoken language
- Provide visual diagrams, charts, notations of music or sound
- Provide written transcripts for videos or auditory clips
- Use visual analogues to represent emphasis and prosody (e.g., emoticons, symbols, or images)
- Provide visual or tactile (e.g., vibrations) equivalents for sound effects or alerts



## <u>representation</u> – recognising learners differ in the ways that they perceive and comprehend information that is presented to them

#### Offer alternatives for visual information

Visual information can be quite dense, particularly with visual art, which can have multiple complex meanings and interpretations depending on contextual factors and the viewer's knowledge base. To ensure that all learners have equal access to information, it is essential to provide non-visual alternatives.

- Provide descriptions (text or spoken) for all images, graphics, video, or animations
- Use touch equivalents (tactile graphics or objects of reference) for key visuals that represent concepts
- Provide auditory cues for key concepts and transitions in visual information

Text is a special case of visual information. The transformation from text into audio is among the most easily accomplished methods for increasing accessibility.

- Allow for a competent aide, partner, or "intervener" to read text aloud
- Provide access to text-to-speech software



<u>action and expression</u> – recognising learners differ in the ways that they can navigate a learning environment and express what they know.

#### Provide options for physical action

- Optimising access to alternative tools, media, materials and technology
- Varying the methods and outcomes for response and navigation

#### Provide options for expression and communication

- Use multiple media for communication
  - Compose in multiple media such as text, speech, drawing, illustration, comics, storyboards, design, film, music, dance/movement, visual art, sculpture,
- Provide differentiated feedback (e.g., feedback that is accessible because it can be customized to individual learners)
- Provide differentiated models to emulate (i.e. models that demonstrate the same outcomes but use differing approaches, strategies, skills, etc



<u>action and expression</u> – recognising learners differ in the ways that they can navigate a learning environment and express what they know.

#### Provide options for executive functions

- Guide appropriate goal setting
  - Provide models or examples of the process and product of goal-setting
  - Provide guides and checklists for scaffolding goal-setting
  - Post goals, objectives, and schedules in an obvious place
- Support planning and strategy development
  - Embed prompts to "stop and think" before acting as well as adequate space
  - Embed prompts to "show and explain your work" (e.g., portfolio review, art critiques)
  - Provide checklists and project planning templates for understanding the problem, setting up prioritization, sequences, and schedules of steps
  - Provide guides for breaking long-term goals into reachable short-term objectives

## **UDL** and the NZC



## Why is UDL Valuable?

#### Enables equity in education

A foundation principle of *The New Zealand Curriculum* is inclusion: that no-one will be left out or discriminated against. That everyone will have access to learning in a way that works for them. It is a framework that enables equitable access and participation in education.

#### • Supports a shift in practice

The UDL framework supports teachers to make the shift from traditional models of education to approaches that value and are prepared for the variability all learners bring.

#### • Values and plans for diversity

Understanding and planning for the variability of learners matters. When we design learning environments proactively for variability, we anticipate and value the incredible strengths and diversity of all our learners (CAST 2018). UDL can help us do this.

#### Everyone benefits

When UDL is implemented intentionally across a school or Kāhui Ako it can bring coherence to teaching practices that are inclusive of all learners. This approach benefits everyone.

#### A culturally inclusive framework

UDL is focussed on ensuring all learners get a chance to learn in ways that work for them. It is about removing barriers and opening doors to learning. It is driven not only by the findings from neuroscience and educational research but by a vision for equity.

## Summary

#### The UDL framework helps us:

- Build our understanding of learner variability and its implications for teaching and learning
- Identify and remove barriers to learning hidden in the way we routinely do things
- Move away from random well-intentioned acts of inclusion
- Collaborate and work together using a shared language and evidenced-based approaches
- Guides deliberate coherent innovation in inclusive design
- Realise our vision for The New Zealand Curriculum and inclusive schools.

## **Sources**

<u>Universal Design for Learning | Inclusive Education</u>

<u>Universal Design for Learning | / Inclusive practice | / Teaching / enabling e-Learning</u>

**About Universal Design for Learning** 

**UDL Strategies**