Universal Design for Learning in Technology
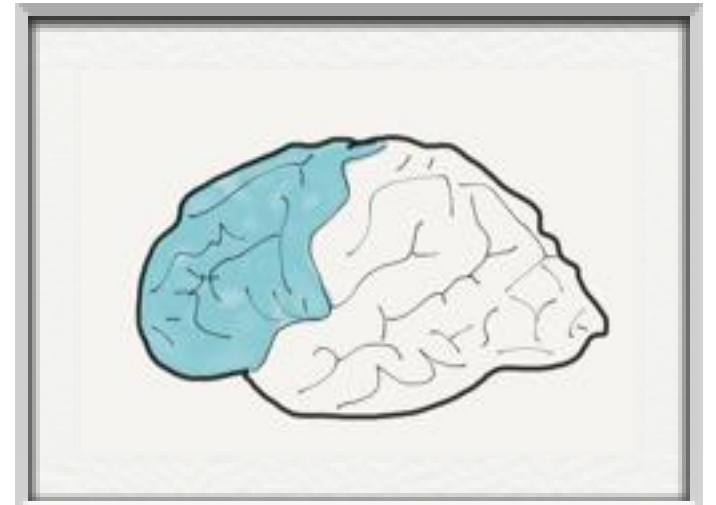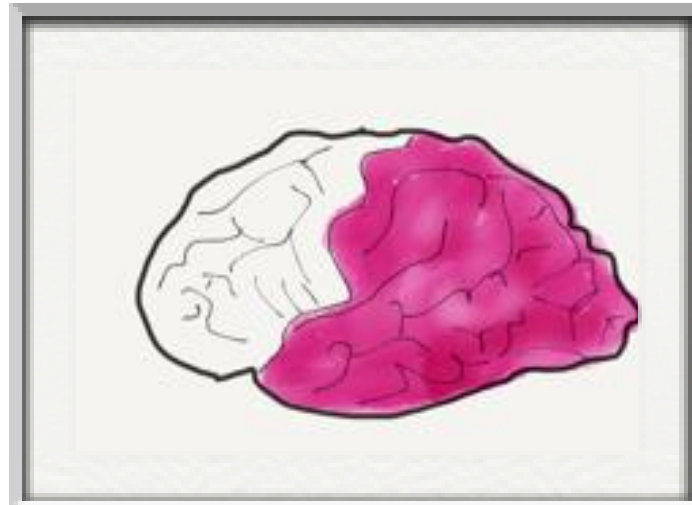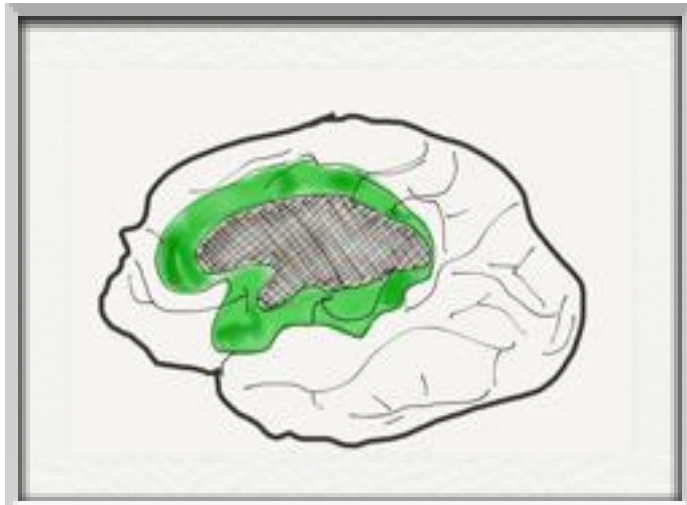
Acknowledgement: Chrissie Butler, Rebecca Early and Karen Shute
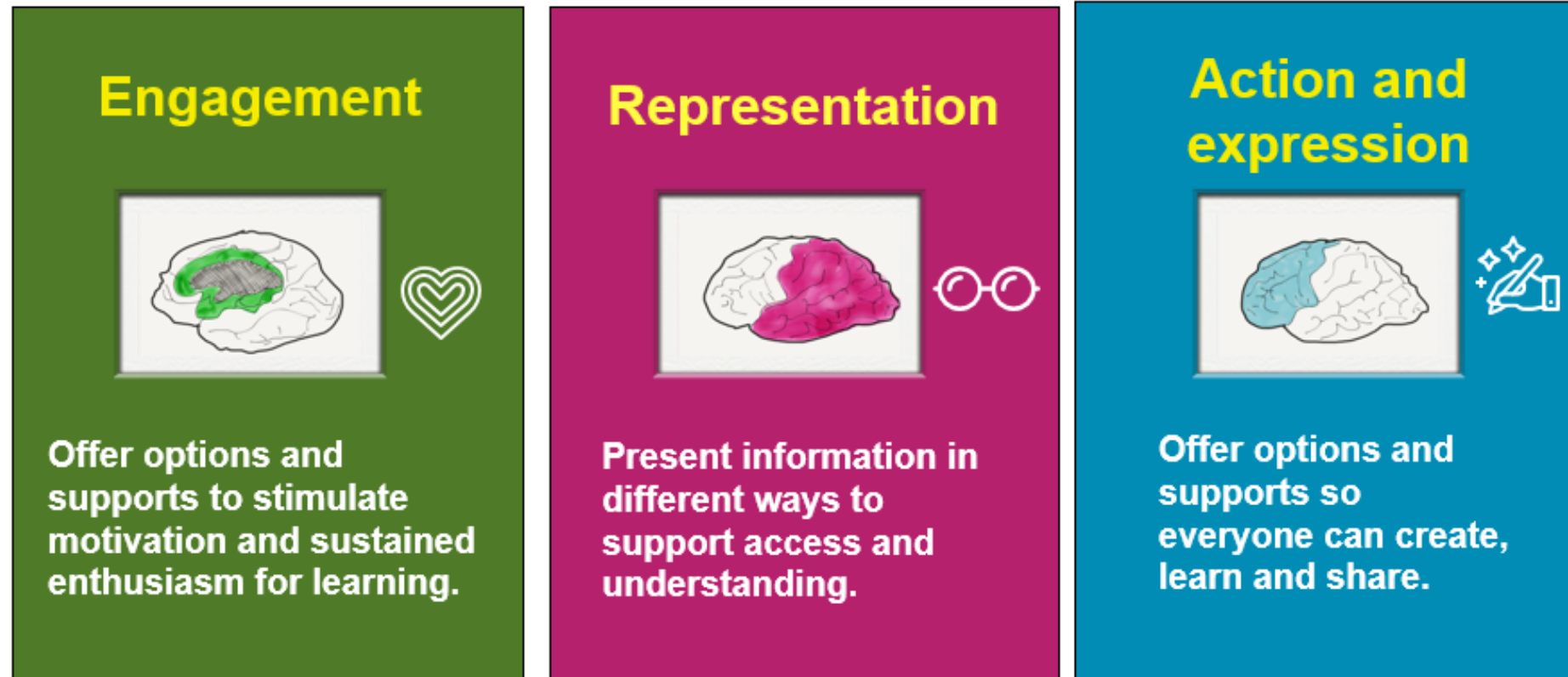**Facilitator**: Pip Osborne, NCEA Implementation Facilitator - Technology

- Universal Design for Learning is a **comprehensive framework** that helps us **design** for the **variability of humans** in any context.

- It particularly helps us **identify** and **minimise barriers** hidden in the design of an activity or experience.

UDL: What do we already know?

Planning for Diversity

Engagement

Offer options and supports to stimulate motivation and sustained enthusiasm for learning.

Representation

Present information in different ways to support access and understanding.

Action and expression

Offer options and supports so everyone can create, learn and share.

These three UDL principles highlight areas where we can remove or minimise barriers to learning and build in flexibility, universal supports and options from the outset.
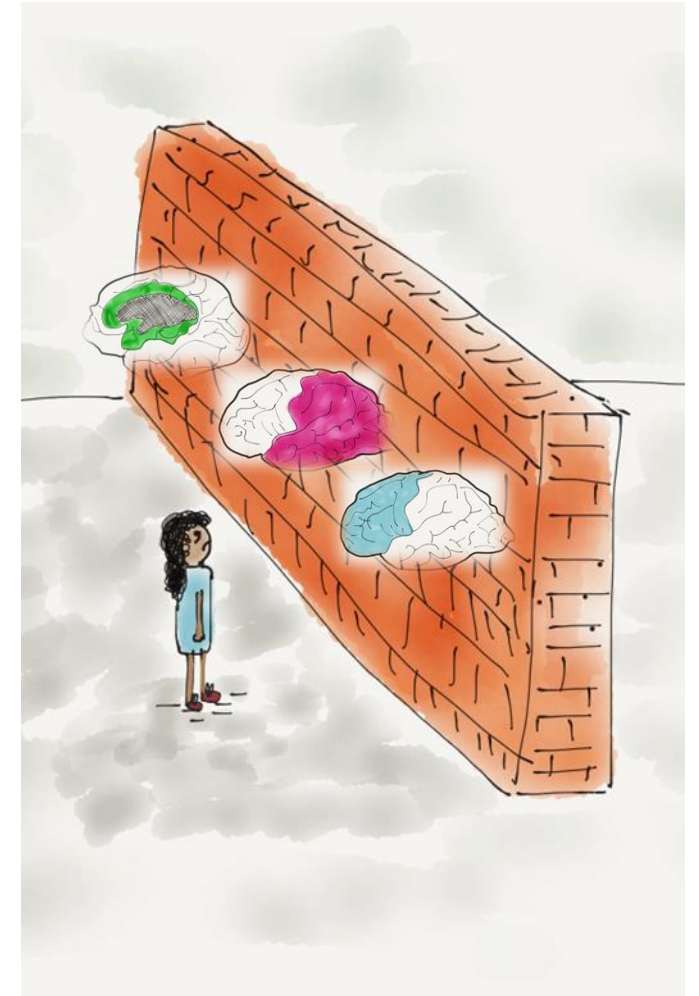
Why UDL?

Systematic and structured

Anticipates barriers related to how humans learn

Helps us design to minimise the barriers and build in flexible supports and options

People-first approach

Moral imperative

- *"The true measure of any society can be found in how it treats its most vulnerable members". Mahatma Ghandhi*

The stats don't lie...

- *Those under-served in Education are over-represented in:*

  - prison population (estimates 30-50% NZ)
  - unemployment rates
  - (5x more likely to be unemployed)
  - mental health rates

Who is everybody?

Migrant learners

Visual learners

Gifted and talented learners

Ākonga Māori

Learners with disabilities

Hearing-impaired learners

Pacific learners

Neurodiverse learners

Kinesthetic learners

#Everybody in, and nobody left out, by design

Te Tāhuhu o te Mātauranga
Ministry of Education

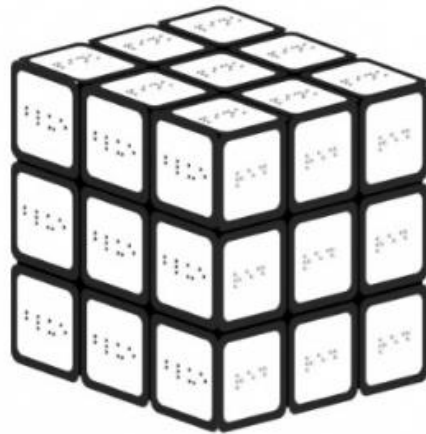# One size does not fit all

Universality

Rubik's Cube Classic
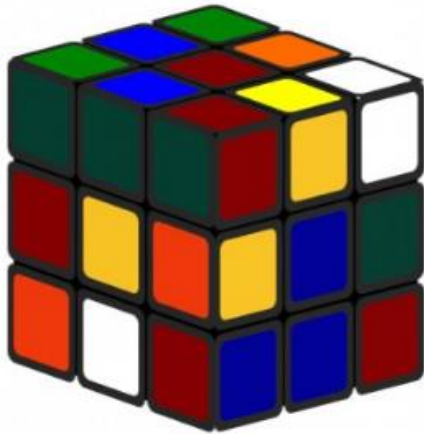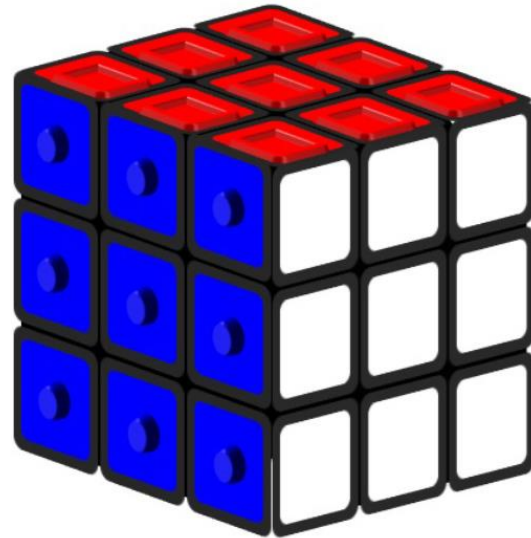

Rubik's Cube With Braille

Accessibility as an Afterthought: The Rubik's cube with Braille is a solution that is technically accessible because a blind student could use it. However, what if you wanted a version that would allow blind students and sighted students together?

Accessible design is better for everyone.

Universality

Rubik's Cube Touch

Applying Universal Design:

This Rubik's cube has both colors and textures. Both sighted and blind students could use the same device.

Accessible design is better for everyone.

Anticipating and identifying barriers

- Identify barriers to learning hidden in the design of teaching, learning and assessment in Teaching and Learning

- Anticipate barriers related to how humans learn

- How can we design learning experiences using the three UDL principles, to minimise the barriers and build in flexible supports and options?
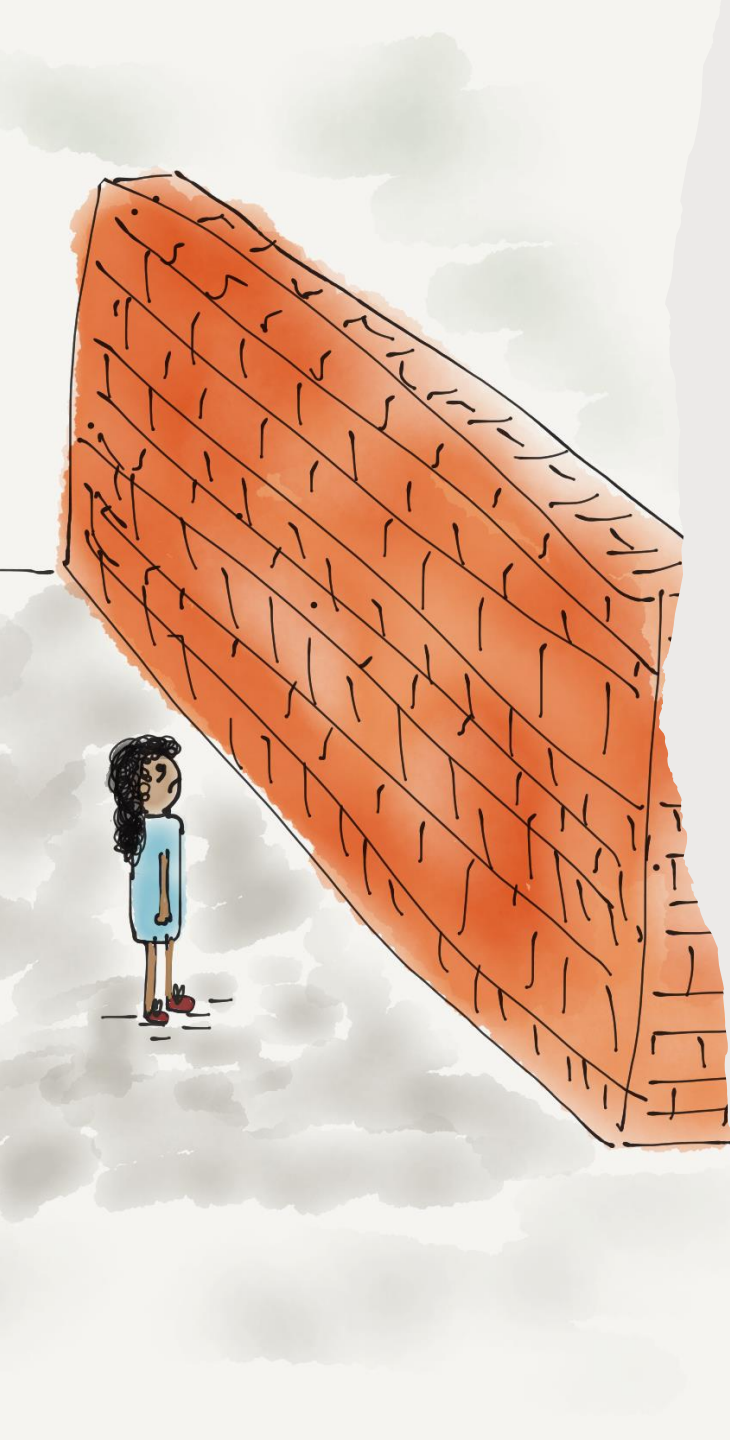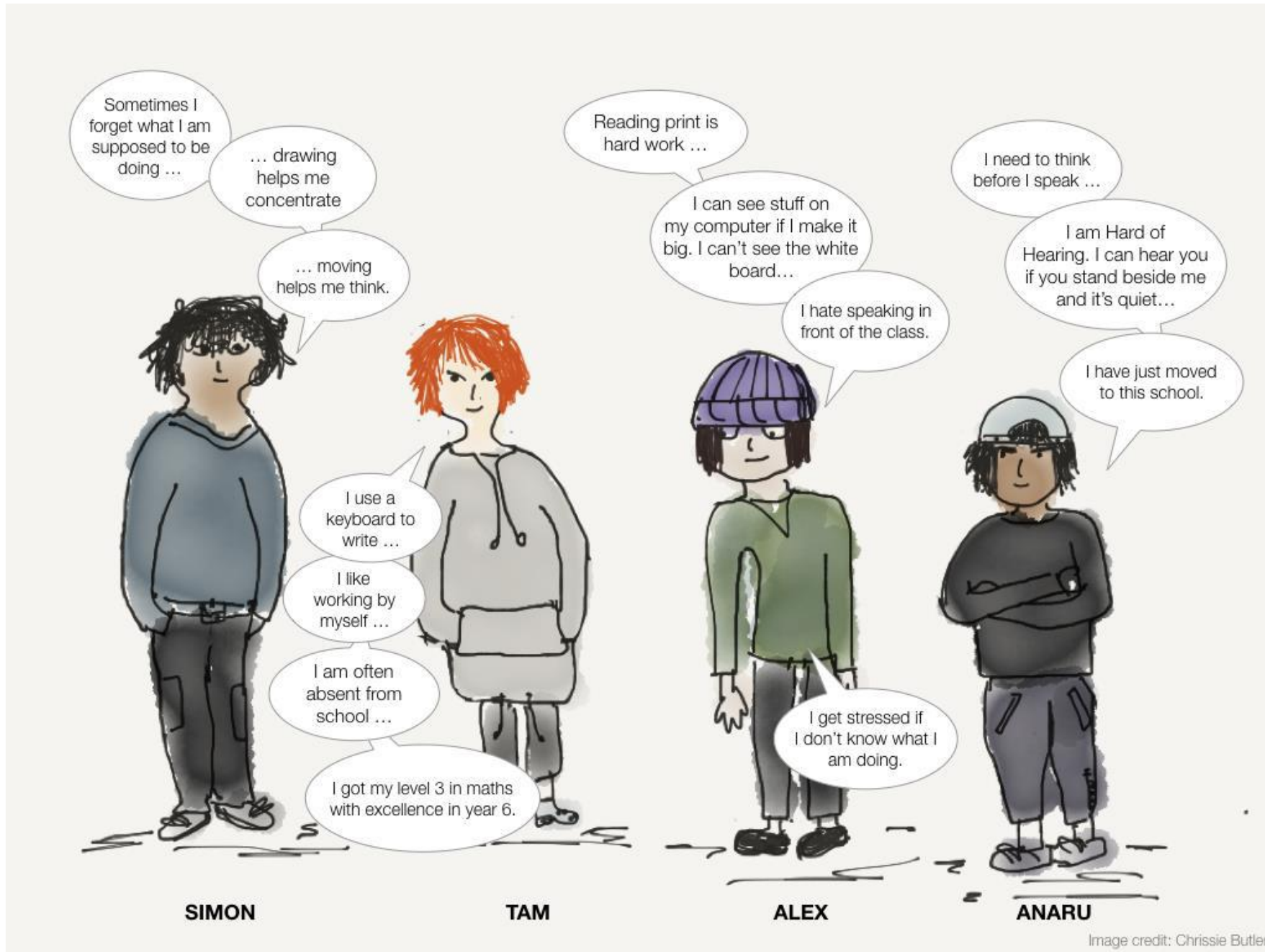
UDL: Thinking/Planning Cycle

Invaluable tool for Kaiako

Everybody in,

nobody left out,
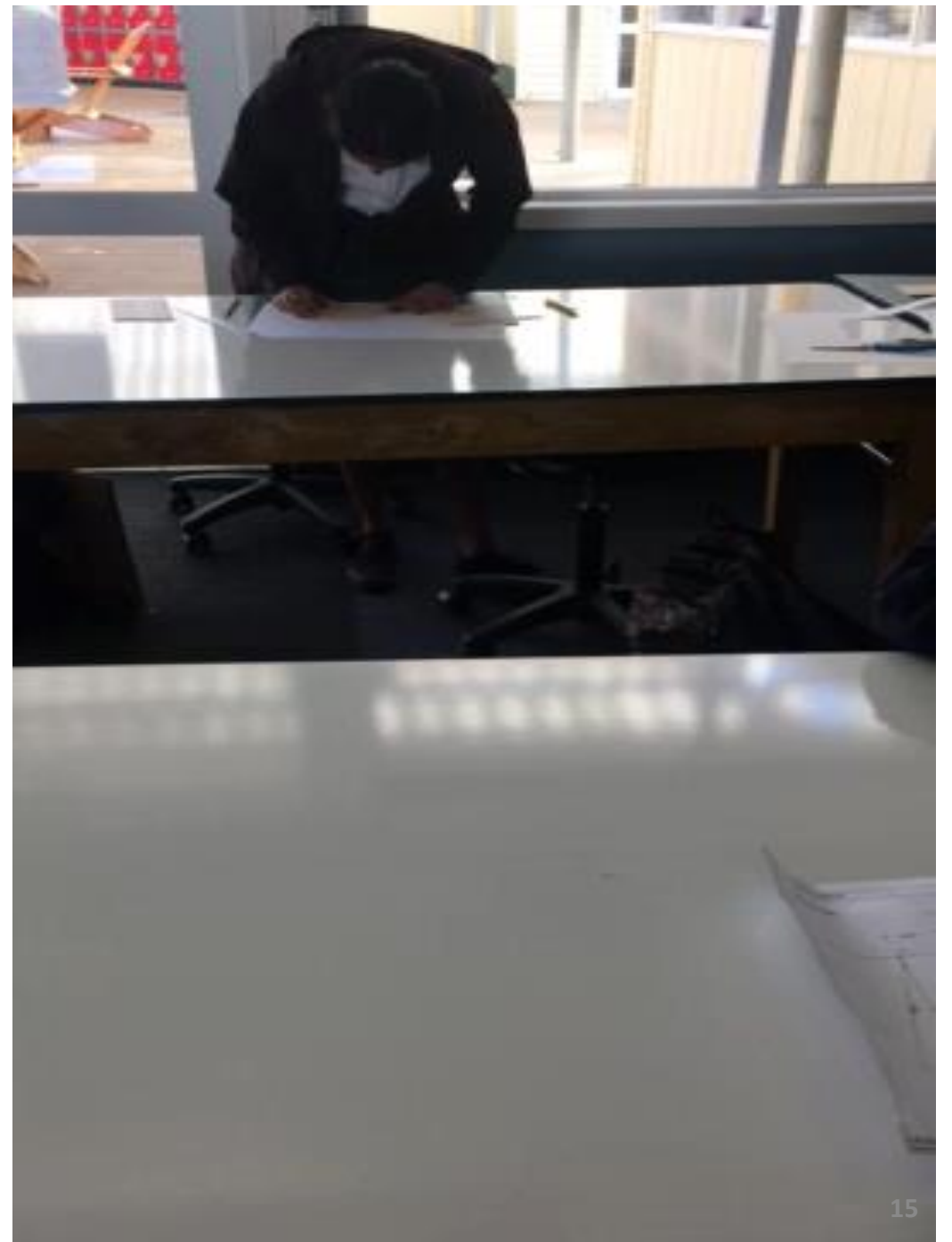
by design

How Inclusive is my Pedagogy?

How Inclusive is my Pedagogy?

This survey is designed to enable teachers to reflect on their teaching practice and to identify aspects for development. Please take some time to reflect on your teaching practice over the last week and then complete the survey.

Pedagogy	Seldom	Sometimes	Usually	Consistently
Learning Intention/Objective is visible at the start of the lesson				
There is an explicit link made between the LI/LO and real-life application				
Learning activities are varied and reflect various learning styles				
Lessons are well planned				
Students are included in the planning of lessons/units of work				
Lessons are structured logically and sequentially				
Oral instructions and reinforced with written instructions				
Learning is reviewed and re-capped regularly				
Students have opportunities to practise and repeat skills				
It is ok for students to make mistakes				
Mistakes are seen as opportunities to learn				
High expectations are explicitly communicated and modelled				

UDL in the classroom:
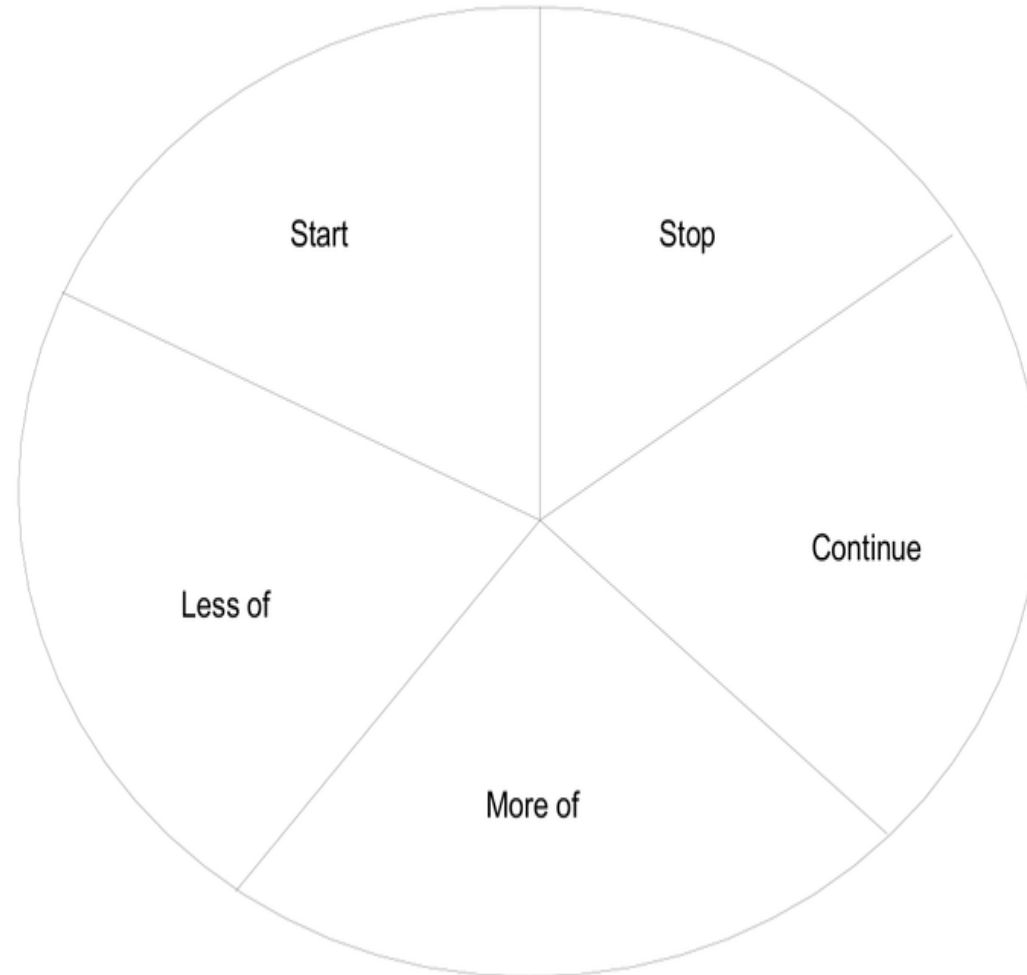
What does it look like in your context?

Everybody in, nobody left out, by design

How will you bottle up the greatness?

Where to from here?
Reflect on your approach to UDL

Ask yourself:
What will you start doing?
What will you stop doing?
What will you continue?
What will you do less of?
What will you do more of?

De-brief Wheel

Where to from here?

https://inclusive.tki.org.nz/guides/universal-design-for-learning/