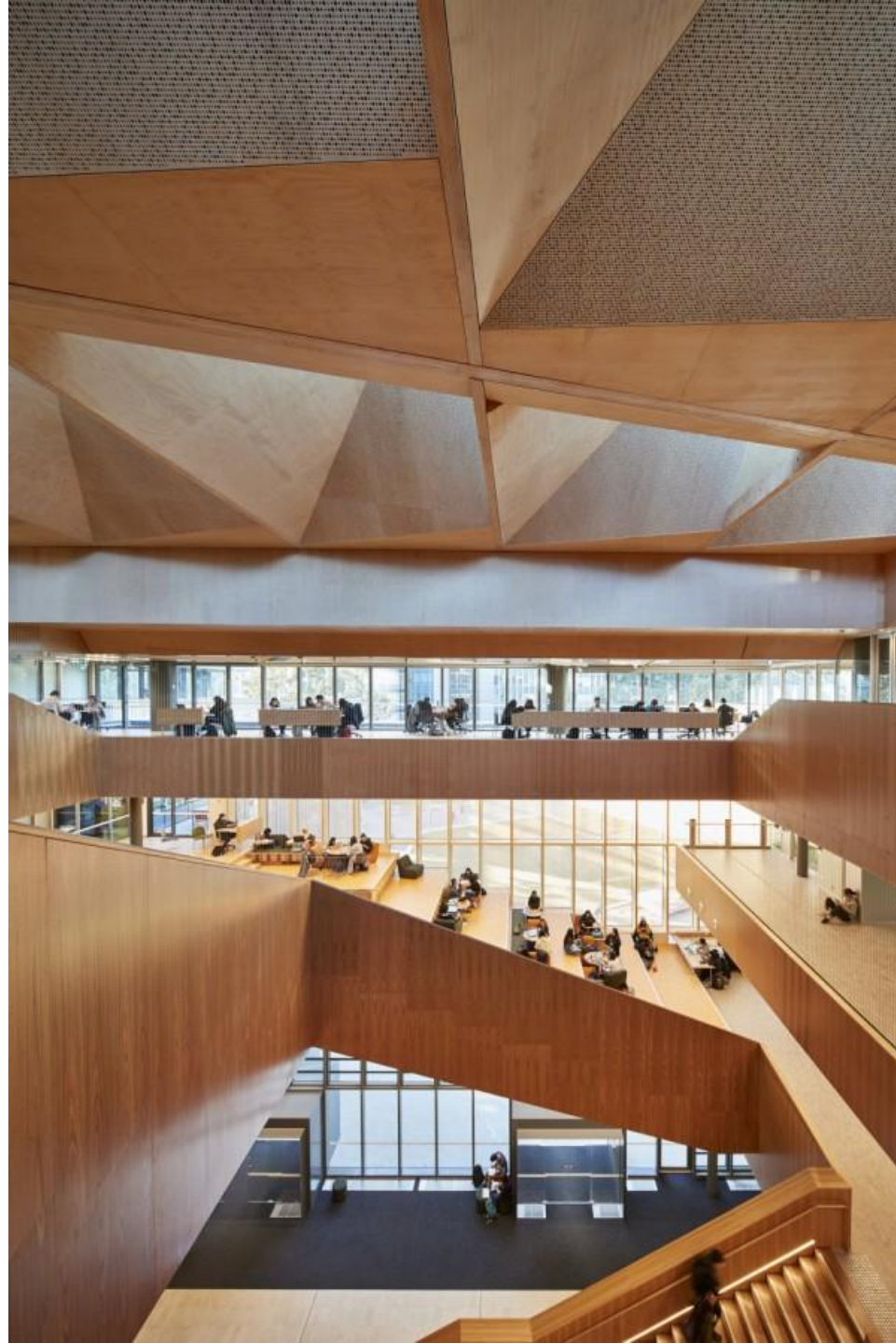


Designing online education that works for more/all students

Erin Leif and Laura Alfrey

Who are we?

- Erin Leif
 - Laura Alfrey
 - Christine Grove
 - Stella Laletas
 - Umesh Sharma
-
- Faculty of Education
at Monash University



Today

Background

Context

Practical and research-informed approaches for designing engaging and accessible online learning experiences

Background

The impact of online coach education on the inclusion and participation of individuals with ASD in sport

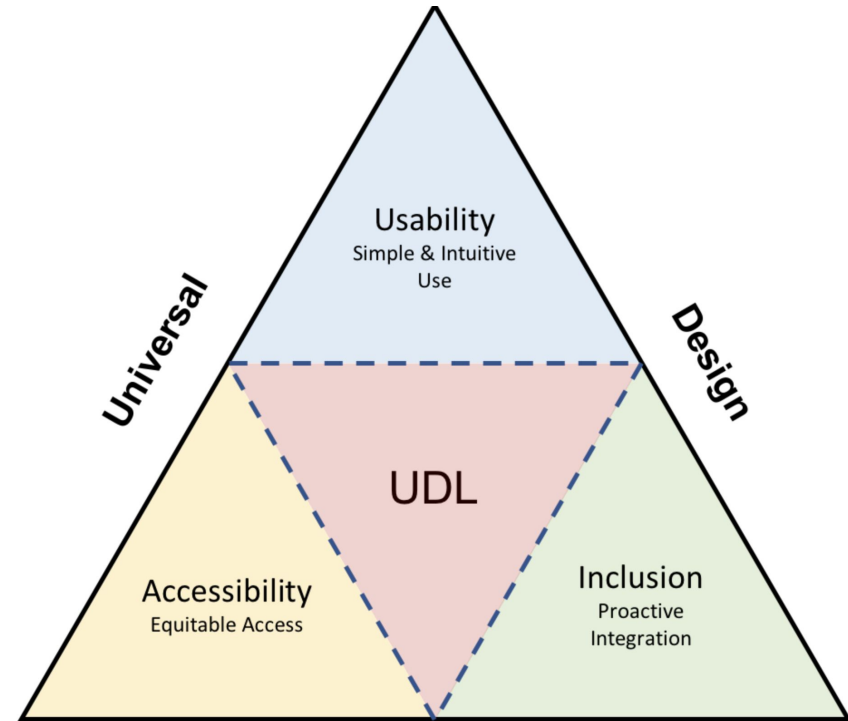
Quality Matters Continuing and Professional Education Rubric, Second Edition (www.qualitymatters.org)

Universal Design for Learning (UDL) Principles

Transgressive Concept of Inclusion (DeLuca, 2013)

Transgressive Inclusion (DeLuca)

- student diversity = generation of new knowledge
- stereotypic labelling of difference is limited
- provokes a multiplicity of practical and conceptual responses to inclusive education leading to more intentional practices, policies, curricula, and pedagogies.



Context

COVID-19 = rapid shift
online

Policy and legislative
requirements

Compounding existing
challenges in tertiary
education



Identified challenges

- Knowing where to get help or accommodations
- Problems with inaccessible technology
- Lack of personal relationships with lecturers
- Difficulty navigating the online learning environment
- Not knowing what to do each week – too unstructured
- Lack of opportunities to get to know classmates
- Feeling like course content lacks purpose or is not pitched at the right level

Online learning has left students dissatisfied

A The Age

Uni students with disabilities say remote learning must improve

University students with disabilities say they are struggling to access online resources and the problem has become worse since the rise of ...

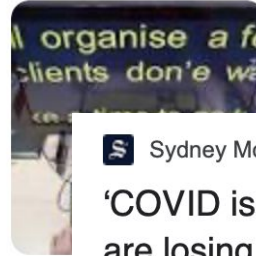
16 Aug 2020

U University World News

Faculty need policies for quality assurance of online learning

She said that, at her university, in addition to training and support for faculty, to transition online required something more. "We learned that you ...

1 day ago



S Sydney Morning Herald

'COVID is being used as an excuse': Sydney's uni students are losing patience with online learning

Universities are struggling to keep students engaged as they protest against ... and learning experience of Australian students," he told a Universities ... We are transitioning away from online, but it is going to be difficult to ...

4 weeks ago



LA LAist

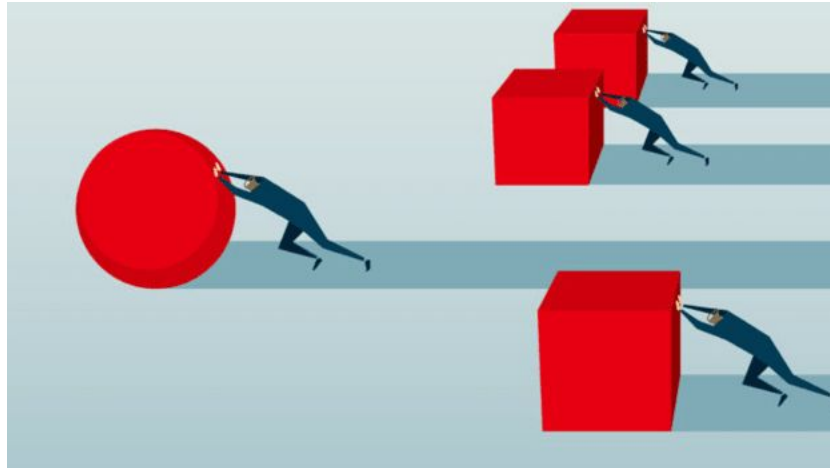
College Students Ask: What's Up With My 'Ghost Professor?'

California's regulations require distance learning instructors to have ... San Antonio College trains it's faculty in best practices to teach online.

2 weeks ago



Let's talk about how to overcome these challenges!



Step 1: Create a clear and consistent unit structure

MONASH University

EDF5684 - Concepts and principles of learning - S1 2021

Dashboard / My units / EDF5684 S1 2021

GETTING STARTED TEACHING TEAM READING LIST ANNOUNCEMENTS ASK A QUESTION LEARNING COMMUNITY MY GRADES STUDENT SUPPORT ACADEMIC LANGUAGE RESOURCES ACADEMIC INTEGRITY ONLINE MODULES ONLINE LEARNING SUPPORT

▶ Open all ▼ Close all

Instructions: Clicking on the section name will show / hide the section.

- ▶ Unit Information
- ▶ Assessment Information
- ▶ Online Tutorials - Information and Recordings (All Students)
- ▶ Week 1: Respondent Conditioning
 - ▶ **Restricted** Not available unless:
 - The activity **Getting Started** is marked complete
 - The activity **Teaching Team** is marked complete
- ▶ Week 2: Operant Conditioning
 - ▶ **Restricted** Not available unless:
 - The activity **Getting Started** is marked complete
 - The activity **Teaching Team** is marked complete
- ▶ Week 3: Positive Reinforcement
 - ▶ **Restricted** Available from 1 March 2021

Step 2: Ensure students are welcomed into the unit and are provided with an induction

▼ Unit Information

About the Unit

[Watch Me First!](#)

Please click here for a video tour of Moodle, which will provide you with an overview of how to navigate the Moodle site and find all the information you need to get started!

[Getting Started](#)

Please review all the information in this book before starting Week 1!

[Teaching Team](#)

[Digitised Reading List via Monash Library](#)

[Announcements](#)

A forum for news and announcements. Check here regularly.

The screenshot shows a Moodle course page for 'EDF5684 - Concepts and principles of learning - S2 2020'. The page has a dark header with the course title and a navigation menu with icons for 'STARTERS', 'TUTORIALS', 'ASSESSMENTS', 'HELP', 'LIBRARY', 'CONTACT', 'ABOUT', 'FAQ', 'HELP', 'LIBRARY', 'CONTACT', 'ABOUT', 'FAQ'. Below the navigation menu, there is a section titled 'Your progress' with a list of items: 'Unit Information', 'Assessment Information', 'Tutorials - Information and Recordings', 'Week 1: Respondent Conditioning', 'Week 2: Operant Conditioning', 'Week 3: Positive Reinforcement', 'Week 4: Positive Reinforcement'. At the bottom of the page, there is a video player with the title 'Video Tour of Moodle' and a play button icon.

Example - The Getting Started Book

Getting Started

Please review all the information in this book before starting Week 1!

◀ Previous: [Important Information About This Unit](#)

Next: [Learning Objectives for EDF5684](#) ▶

What Should You Be Doing Each Week?

Each week will provide a specific number of hours of direct instruction aligned to the [Behaviour Analyst Certification Board's 5th Edition Task List](#). Every activity can be completed on your own time. However, we will offer a synchronous online tutorial each week in the virtual classroom for online students who want live interaction with the teaching team, and an on-campus workshop for flexible students. To complete the activities for the week, please do the following:

- First, review the learning objectives for the week, along with the key terms and definitions and links to the BACB 5th Edition Task List
- Then, read the assigned chapters and articles (pre-class activities). This is part of your independent study time
- Next, complete the activities in the Learning Activities Book. This will include a mix of text content, video lectures, video clips, interactive knowledge checks, and links to online blogs, articles, and resources. Make sure you complete each knowledge check to 100% accuracy!
- Attend the 1 hour synchronous tutorial for the week (or watch the recording at a later date)
- Finally, review and complete the post class activity. This may involve participating in a discussion forum that is moderated by an instructor, or completing a post class quiz to at least 80% accuracy within a specified time limit (however, you have unlimited attempts to complete the quiz)

A note about discussion forums - In the past, students have generally reported that they dislike discussion forums. However, we want to ensure that you have the opportunity to engage with your classmates and instructors, even though the unit is largely online. The purpose of the discussion forums is to give you the opportunity to respond to a question, scenario, or problem that is directly related to the assessment task. Participating in the forums will help you formulate ideas around completing your assessment. In addition, you will have the opportunity to learn from your classmates and instructor, being reviewing their responses and feedback. Your responses in the forums are not marked, and they certainly don't have to be perfect! If you are unsure about your response or have questions, please say so! It is a great opportunity to solicit feedback from your peers, and we hope you find the activity enjoyable and beneficial.



Table of contents

- [Getting Started](#)
- [Important Information About This Unit](#)
- Weekly Tasks**
- [Learning Objectives for EDF5684](#)
- [Textbooks and Reading List](#)
- [Important Information About Being a Student of Behaviour Analysis](#)
- [Familiarise Yourself and Get Started!](#)

Example - Unit Level Learning Objectives

Learning Objectives for EDF5679

Upon successful completion of this unit, you should be able to:

1. Design and use the full range of functional assessment procedures
2. Organise, analyse, and interpret the results of functional behaviour assessments
3. Identify potential interventions based on assessment results and the best available scientific evidence
4. Recommend intervention goals and strategies based on such factors as client preferences, supporting environments, risks, constraints, and social validity
5. Make data-based decisions about the effectiveness of teaching and the need for teaching revision
6. Use procedures to promote maintenance and generalisation of behaviour change



Example - Last Page of the Getting Started Book

Getting Started



◀ Previous: [Textbooks and Reading List](#)

[Exit book](#) ▲

Familiarise Yourself

Now, it is time to explore the materials in this unit. In the upper-middle panel of your unit homepage, review the contents of each icon. More specifically, you should:

1. Read the [Announcements Forum](#) for any notices posted by your instructor.
2. Familiarise yourself with the [Teaching Team](#)
3. Read the “[Who Do I Ask?](#)” document for information about who to contact with questions and concerns about various aspects of the unit.
4. Make sure you can access the [Reading List](#), prepared by the library.
5. Check the [Ask a Question Forum](#), and post any questions you have throughout the semester here
6. Introduce yourself in the [Learning Community](#) forum
7. Begin working through the Week 1 content!

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[Getting Started](#)
[Important Information About This Unit](#)
[Weekly To-Do List](#)
[Unit Learning Objectives](#)
[Textbooks and Reading List](#)
[What Should I Do First?](#)

Example - The Learning Community Forum

Learning Community

Introduce Yourself!

 Settings ▾

Display replies in nested form ▾

Move this discussion to ... ▾

Move



Introduce Yourself!

by [Erin Leif](#) - Thursday, 4 February 2021, 4:32 PM

Hi everyone! Welcome to EDF5687! Take a moment to introduce yourself! Just for fun, it would be great if you could tell us if: you could travel anywhere in the world on an all-expenses paid trip, where would you go and why?

[Permalink](#) [Edit](#) [Delete](#) [Reply](#)



Re: Introduce Yourself!

by [Erin Leif](#) - Thursday, 4 February 2021, 4:33 PM

I'm Erin, and I'm your fearless course leader. If I could take a trip anywhere in the world right now, I would go to France. I pick France because (a) my good friend lives there, (b) I'm obsessed with neo-classical architecture, (c) I like wine, and (d) I've never been! I'm sure it would be very expensive though :)

[Permalink](#) [Show parent](#) [Edit](#) [Split](#) [Delete](#) [Reply](#)



Re: Introduce Yourself!

by [Tineke Sibbel](#) - Tuesday, 23 February 2021, 1:15 PM

Hi Everyone! I'm Tin. I will be taking the online tutorials for this unit. I look forward to 'meeting' you all!

I would love to go to Spain, I went a long time ago when I backpacked around Europe after I finished Uni, but I would like to go back and enjoy the tapas and delicious red wine :)

Step 3: Set up each week the same way

Week at a Glance

An FBA involves systematically analysing the relation, or interaction, between a person's behaviour and the environment. However, 'environment' is a broad term, and encompasses many things! Some aspects of the external environment are readily observable. We can easily look at the physical space that the person is in, the way others react to the behaviour of concern, the tasks and activities that are presented to the person, and the interaction between the person and others in the environment. However, we also must consider the person's internal environment, which is not directly observable. The internal environment includes biology, physiology, and private events like thoughts and emotions. This week, we will discuss how to consider aspects of the person's external and internal environments as part of the FBA process.

Learning objectives for this week



1. Describe three important considerations for assessing the environment, as part of a functional behaviour assessment
2. Describe two ways that biological or medical variables influence behaviour
3. Describe two ways that thoughts and emotions influence behaviour
4. Describe and provide examples of the eight components of the behaviour analytic problem solving model (BAPS)

Upon completion of this topic, you should be able to define the following terms:



1. Executive Skills
2. Context
3. Personal Characteristics
4. Skill Deficit
5. Motivating Operations
6. Sources of Reinforcement
7. Reinforcing Consequences
8. Parameters of Reinforcement

Example - List the pre-class activities

Pre-Class Activities

Please read the following before completing the class activities.

Primary Readings:

1. Steege, M. W., Pratt, J. L., Wickerd, G., Guare, R., & Watson, T. S. (2019). *Conducting school-based functional behavioral assessments: A practitioner's guide*. Guilford Publications.
 1. Chapter 7: Indirect Functional Behaviour Assessment
2. O'Neill, R. E., Albin, R. W., Horner, R. H., Storey, K., & Sprague, J. R. (2014). *Functional assessment and program development*. Nelson Education.
 1. Chapter 2: Functional Assessment and Analysis Strategies, pages 13-40
 2. Appendix B
 3. Appendix C



Supplemental Readings:

1. Fryling, M. J., & Baires, N. A. (2016). The practical importance of the distinction between open and closed-ended indirect assessments. *Behavior analysis in practice*, 9(2), 146-151.
2. Greene, R. W. (2016). *Lost & Found: Helping behaviorally challenging students*. Jossey-Bass
 1. Chapter 4: The Alsup
3. Ayre, K., & Krishnamoorthy, G. (2020). *Trauma informed behaviour support: a practical guide to developing resilient learners*. USQ Pressbooks, Toowoomba, Australia.
 1. Part 2 Section 1: Disruptive Student Behaviour
 2. Part 2 Section 2: Behaviourism and Applied Behaviour Analysis
 3. Part 2 Section 3: Positive Behaviour Support

Step 4: Align learning objectives to weekly learning activities

- Students are provided with a set of asynchronous online learning activities directly aligned to the weekly learning objectives
- Interactive lessons are meant to replicate the teaching methods that would commonly be delivered in a face-to-face classroom
- Consist of a series of video recorded lectures interspersed with active learning activities, presented to students in 'Books' divided into 'Chapters'

Example - Create your online class activities



Class Activities



Week 3 - Learning Activities Book



Knowledge Check #1: Purpose and Benefits of Indirect Assessments

i 34 of 38 attempted



Knowledge Check #2: Open- and Closed-Ended Indirect Assessments

i 33 of 38 attempted



FBA Toolkit - Record Review Forms



FBA Toolkit - Open-Ended Indirect Assessments



FBA Toolkit - Closed Ended Indirect Assessments

Example - The Learning Activities book

Week 3 - Learning Activities Book

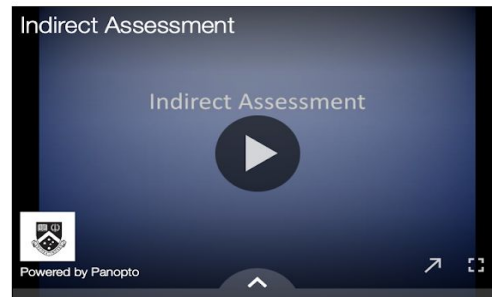
2. Learning Objective Two: Compare and contrast open- and closed-ended indirect assessments, and provide an example of each

Overview

Indirect assessments do not involve any direct observation of behaviour, take many forms including interviews, questionnaires, and records reviews, and result in reports regarding the variables responsible for behaviours of concern. Closed-ended indirect assessments, such as the Motivation Assessment Scale (Durand, & Crimmins, 1985), yield information regarding the possibility of behaviour maintenance via one of the three generic contingencies described above (they answer questions like, "Is the behavior maintained by attention?"). Closed-ended indirect functional assessments have been shown to be highly unreliable, and without adequate reliability, questions regarding their ability to accurately determine behavioural function are moot. Their use may be widespread, but their utility has never been adequately demonstrated. Open-ended indirect assessments (like interviews) can also identify generic controlling contingencies, but because they include questions like, "What do you do to calm your son when he engages in self-injury?" they also provide qualitatively rich information regarding unique variables which may be relevant to the maintenance of the behaviour of concern. These unique variables can then be evaluated further to demonstrate the relation between the behaviour of concern and some idiosyncratic event. For instance, in an open-ended interview to identify the function of pica (i.e., ingestion of inedible items) exhibited by an adolescent girl with autism, Piazza et al. (1998) discovered that this girl's parents often provided her with soft drink to encourage her to expel items she had just consumed (e.g., the car keys). The results of the open-ended interview informed the design of her unique analysis and treatment.

Videos

In this video, we will take a closer look at different types of open and closed-ended indirect assessments, and the pros and cons of these assessment formats:



Knowledge Checks

Please complete this short knowledge check to assess your understanding of open- and closed-ended indirect assessments:

Knowledge Check #2: [Open- and Closed-Ended Indirect Assessments](#)

Table of contents

1. Learning Objective One:
[Describe the purpose of an indirect assessment, and when it would be used](#)
2. Learning Objective Two:
Compare and contrast open- and closed-ended indirect assessments, and provide an example of each
3. Learning Objective Three:
[Interpret the results of common indirect assessments](#)

Example – Chapter titles

Week 3 - Learning Activities Book

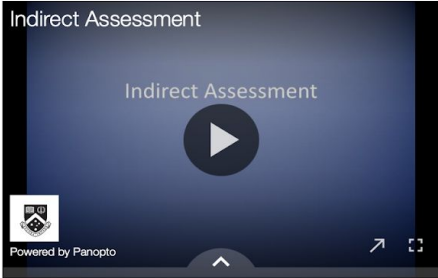
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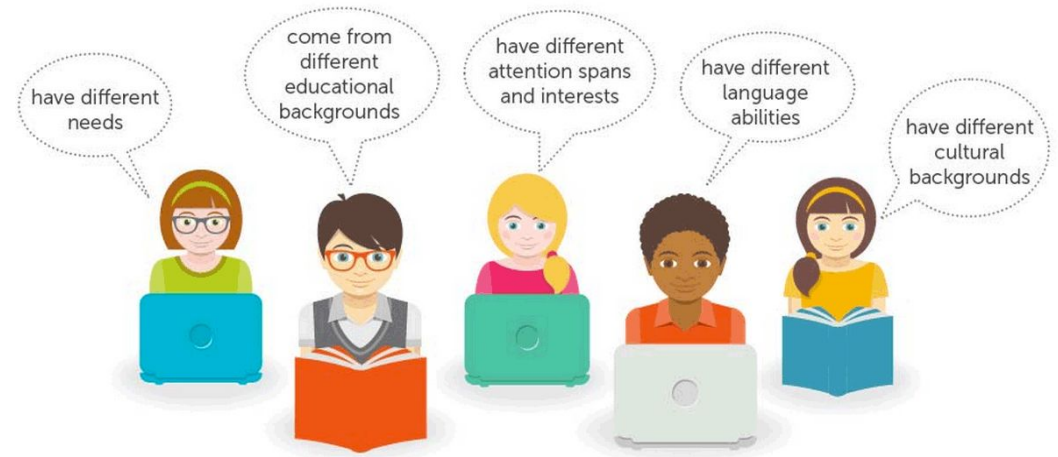
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Step 5: Create active student learning activities, using the principles of Universal Design for Learning!

- UDL is a way of thinking about teaching and learning that helps give all students an equal opportunity to succeed
- Offers flexibility in the ways students access material, engage with it and show what they know
- Developing Education this way helps all students, but it may be especially helpful for students with learning and thinking differences

WHY UNIVERSAL DESIGN FOR LEARNING?

Classrooms are filled with students who:



UDL is just an 'ed' thing...



UDL is not a special ed thing or even a general ed thing.

It's just an ed thing.

It is a way to connect every student to the learning experience, and a way at looking at learning that is fully inclusive and promotes success for all learners, regardless of ability.

Mike Marotta


Source: [Tips, tricks and tools to build your inclusive classroom through UDL ↗](#)

Principle of UDL #1

- Example:
 - A textbook chapter
 - A video lecture
 - A TED talk
 - A blog post
 - A graphic
 - A link to a website

Provide multiple means of
Representation →

Recognition Networks
The "WHAT" of learning



Principle of UDL #2

- Example:
 - A knowledge check
 - A quiz
 - A discussion forum activity
 - A reflection
 - A wiki activity
 - A group task
 - A component of the assessment task

Provide multiple means of
Engagement →

Affective Networks
The "WHY" of learning




Principle of UDL #3

- Example:
 - Writing
 - Talking
 - Practicing
 - Designing
 - Critically analyzing
 - Questioning
 - Reflecting
 - Linking

Provide multiple means of
Action & Expression →

Strategic Networks
The "HOW" of learning

A graphic with a blue header and a light gray footer. The header contains the text "Provide multiple means of Action & Expression" with a right-pointing arrow. The footer contains the text "Strategic Networks The 'HOW' of learning" and a stylized illustration of a human brain with the frontal lobe highlighted in blue.

Example – Constructive Alignment

Week 3 - Learning Activities Book



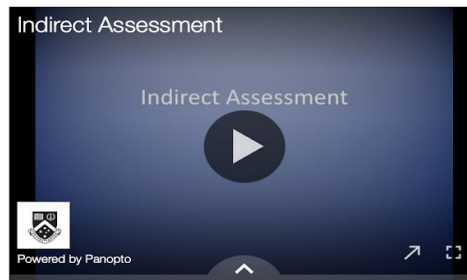
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Step 6: Engage with your students in multiple ways – synchronous online activities

- Weekly synchronous tutorials
 - We use polling and group discussion to provide students with the opportunity to actively respond and the teaching team with the opportunity to (a) gauge student understanding of the material and (b) present additional Education if needed

Step 6: Engage with your students in multiple ways – discussion forums

- Post-class discussion forums
 - (a) allow the teaching team to gauge understanding in students who may not have otherwise indicated that they were confused
 - (b) gives students the opportunity to teach material to each other, which requires that they define, synthesise, and relate the material that is being discussed
 - (c) gives students the opportunity to prepare for the assessment tasks

Step 6: Engage with your students in multiple ways – Moodle progress trackers

- Moodle analytics and completion settings on Moodle
 - We teach students how to use their Moodle ‘progress trackers’ to self-monitor their completion of the online learning activities on Moodle
 - We review the progress trackers at specific points throughout the semester, and check in on students who appear to be falling behind or who are not showing evidence of active engagement with the unit content

Step 7: Design with accessibility in mind from the start

- A few top tips
 - Ensure the navigation is logical
 - Use clear and descriptive section headers
 - Ensure images have alternative text
 - Ensure videos have captions/transcripts
 - Don't use text colour to convey meaning
 - Don't upload scanned documents. Do upload accessible word docs, PPT slide decks, and PDFs

Brickfield Accessibility Toolkit – Now available with Moodle!

- A Moodle plugin, that allows you to:
 - Detect and fix accessibility problems
 - Bulk update alt text, video captions, and missing text for weblinks
 - Provide accessible file formats
 - Fix issues with HTML tags
 - Run reports and gain insights
- <https://www.brickfield.ie/brickfield-accessibility-toolkit/>



THANK YOU

Questions?

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LAURA.ALFREY@MONASH.EDU @LauraAlfrey

