Self guided tool for redesigning classroom activities for accessibility

Shaya Golparian, PhD. Educational Developer, CTLT UBC-V

Presentation Outline:

Context

Resource content Design

Resource Objective

Pedagogical Foundation for the Resource

Active Learning Techniques Sections

WordPress Design for Accessibility

Context

- Work with 25-30 departments on UBC-V campus to design and implement discipline specific Training for their TAs.
- Train and support GSFs to lead workshops such as ISWs and TA training
- Need for resources for TAs to be able to 1. make participatory learning activities more accessible, and 2. to fully engage students with accommodation needs in participatory activities such as group discussions.

Resource Objective

- Describe underpinning pedagogical practices that contribute to the design of more accessible active learning techniques.
- Offer a process for modifying and redesigning active learning techniques in order to remove barriers to participation and accommodate learners with disabilities or mental health needs.

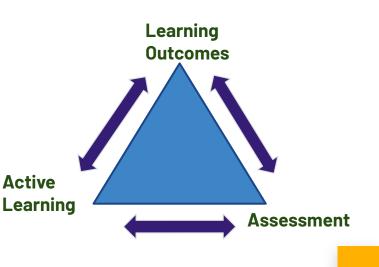


Pedagogical Foundation

This project draws on the alignment theory to:

1. emphasize that addressing barriers caused by misalignment is the first step in increasing accessibility.

2. propose a **redesign process**.



Active Learning Techniques



















Active Learning Technique Example



Think, Pair and Share

Before You Start:

Before reviewing the Optimization and Redesign sections for ideas about making changes to your activity, review the Activity Meta-objectives section and make sure the meta objectives of the activity you have chosen (in this case, Think, Pair, Share) are well aligned with the learning outcome of your lesson, and that the activity was, in the first place, the best choice for supporting your students in accomplishing your lesson outcome(s).

Activity Description	+
Activity Meta-Objectives	+
Optimizing for Accessibility	+
Redesign Process Guide	+
An example of applying this process	+
Vour Feedback	+

Activity Description

Think, Pair, Share (TPS) is an experiential learning activity that starts by allowing an individual to selfreflect and respond to a question, or explore something by themselves before pairing up with someone else to discuss their reflections/discoveries. When in pairs, the two individuals can either just share their reflections and responses or also find similarities and differences in their reflections, or work together on a follow up question drawing on their initial reflections. Then the pair is invited to share their findings with all the students in class either verbally or in written format.

Activity Meta-Objectives

Activity Description

Activity Meta-Objectives

What is the activity good at accomplishing and how does it accomplish that?

Below is a list of some of the things you can accomplish with your students using this active learning technique. Before making changes to the technique, check (and add to) all that the TPS activity is contributing to your students' learning experience and make sure you maintain those through the changes that you are making.

- Validate, engage and build on students' prior knowledge, personal experiences, and stories (through guided self-reflection).
- Promote a higher level of involvement and participation by creating space for individual reflection

Optimizing for Accessibility

Incorporating 3 UDL principles into the design of the activity to make it more accessible.

Optimizing for Accessibility

Provide multiple means of Provide multiple means of Provide multiple means of **Representation** Action & Expression Engagement 🔊 Affective Networks **Recognition Networks** Strategic Networks The "WHY" of learning The "WHAT" of learning The "HOW" of learning Provide more than Engage student **Deliver** instructions one option for prior knowledge both orally and in participation. • Be transparent writing i.e.: In group about the outcome Distribute discussion of activities resources prior to assign a note Structure the class taker role. activity

Active Learning Techniques - Section 2 Example

Optimizing for Accessibility

Think/Solo Reflection:

- Ensure that the question you are providing is clear, properly scaffolded, and that students have any necessary prerequisite information they need to engage with the question.
- Provide the reflection question both orally *and* in written format (If possible, provide the question to students in advance)
- Specify how much time students will be spending on reflection.
- Check in to see if the majority of the students are ready to move to the next part of the activity before moving on.

Pair Work:

• Have a plan for how you are pairing up students (i.e.: Pair up with the person sitting next to you; put place cards on the tables to assign seats for more intentional pairing of students)

Redesigning for Accomodation:

Redesign Process Guide

An example of applying this process

Redesigning for Accomodation:

Redesign Process Guide

Introducing a 3 step process for redesigning the activity to support students with accommodation needs without eliminating the essential aspect of the activity.

- Identify essential components
- Identify obstacles
- redesign to remove obstacles

Redesigning for Accomodation:

Redesign Process Guide

An example of applying this process

Uses a sample scenario to offer an example of applying the 3 step process to the redesign of a participatory learning activity.

An example of applying this process

Using activity meta objectives to redesign for temporary accommodation:

Below is *an example* of a redesigned Think, Pair, Share activity while maintaining the activity's meta objectives. I encourage you to engage in the same process to redesign this activity for other accommodation needs.

This redesign removes the need to speak in order to engage with the activity, which can be more accessible for students with a speech disability, certain social anxieties, or who need more time to process and plan responses before sharing them, as well as many other students. It also may prove less accessible for students who might take more time with reading, or have a visual impairment, among others.

Process:

Here is how to do Think, Pair, Share in a written format:

WordPress design for accessibility

- Amount of **text** on each page
- Removing possible Screen Reader barriers
 - Button animations
 - Embedded PPT slides
 - Tables
- Captions & Alt text for images
- Attention to use of **colors for coding information**
- Consistent **use of headings**

Summary

This project seeks to improve accessibility for active learning by:

- Increasing accessibility through alignment
- Identifying core needs met by learning activities
- Guiding a redesign process that preserves the core features of the activity while incorporation specific accommodations for disabilities.

Through this project, I hope to support instructors in continuing to use active learning in contexts with wide accessibility needs.



QR Code for the Website

Here is the link to the website:

https://blogs.ubc.ca/accessibl eactivelearning/



Acknowledgements

- The members of the initial group for the pedagogical foundation that informed the design of this project.
- The UDL Fellowship Program at UBC
- Student Feedback