



Master of Educational Technology

Primary/Junior/Intermediate/Senior Lesson Planning Template

Grade(s): 9-12	Date(s):	Duration: 2 x 80 min	Lesson Topic/Title: Reflect
Subjects: ADST 9	Number of Students: 20-30		
Big Ideas: <ul style="list-style-type: none">- Social justice (EDIDA) frameworks along with design learning can be used to address real-world social, ethical, and sustainability issues.			
Curricular Competencies: <ul style="list-style-type: none">- Demonstrate their product to potential users, providing a rationale for the selected solution, modifications, and procedures, using appropriate terminology (BC ADST 9 curriculum, 2018).- Critically evaluate the success of their product, and explain how their design ideas contribute to the individual, family, community, and/or environment (BC ADST 9 curriculum, 2018).			
Content Objectives			
General Objectives:		Specific Objectives:	

<p>Students will share with classmates the problem/challenge they addressed, the solution produced to address the problem/challenge, and the iterative process that they took to arrive at that solution.</p>	<p><u>Sharing</u>: Students will critically reflect on their design thinking and processes, and evaluate their ability to work effectively both as individuals and collaboratively in a group, including their ability to share and maintain an efficient cooperative workspace (BC ADST 9 curriculum, 2018).</p>
<p>21st CENTURY COMPETENCIES: <i>Which COMPETENCIES will be addressed and how?</i> Critical thinking and Problem Solving/Creativity and Innovation/Collaboration/Communication/Global Citizenship/Metacognition and Reflection</p> <p><u>Critical thinking and problem-solving</u> - Students will need to think critically about the success of their product with respect to the end user's needs and potential experiences with the product. <u>Creativity and innovation</u> - Students will need to create a display (digital or physical) that highlights the steps taken from the liberatory design cycle in a way that is engaging and outlines the consideration for the end user's needs. <u>Collaboration</u> - This display will be produced collaboratively with members of the group who worked on the overarching project throughout this unit. <u>Communication</u> - Intra- and inter-group communication will need to take place in order to produce the display and to communicate its central message to other classmates. <u>Global citizenship</u> - The needs of the end user will be considered throughout the overarching project as well as this display challenge. Both assignments are designed to provide opportunities for students to build empathy. <u>Metacognition and reflection</u> - Students will need to think about their thinking process throughout the overarching assignment. The display will communicate to other classmates the thinking and reflection that was done throughout the overarching challenge by the group members, including all steps/lessons.</p>	
<p>LEARNING GOAL(S) I can... I will....</p> <p>I can communicate to others how the liberatory cycle can be used to understand the context of others' needs, empathic with the needs of others, determine what solutions could be created to address those needs, use an iterative design cycle to prototype and test multiple iterations while understanding the strengths and weaknesses of the design, and lastly what thinking processes and considerations were needed throughout this process.</p> <p>I will produce either a process journal, a poster, an interactive website, or another suitable method (as discussed and approved by the teacher) to communicate the information listed above.</p> <p>I will consider in my presentation what could be done with the product that I have created to share it with the world in a way that promotes the aspects of the EDIDA framework.</p>	
<p>PRIOR KNOWLEDGE <i>Prior to this lesson, students will be able to...</i></p>	

By this lesson, students should be familiar with the previous 6 aspects of the liberatory design cycle as seen in lessons 1 through 6. They should also have developed a fairly intuitive feel for how these aspects are not a perfectly straight line or circular path, but often involve flowing back and forth through the various elements of the cycle to meet the needs of the end user.

Equity, Diversity, Inclusion, Decolonization, Anti-Racism (EDIDA) Frameworks-

Considerations:

- *How are you going to ensure that this lesson utilizes the EDIDA frameworks to create an inclusive space for your students?*

Throughout every lesson of this unit, the main focus was on addressing the needs of others. This may have been about lowering barriers for those who have a physical disability through the use of makersmakingchange.com or something similar. This may also have been about creating an awareness campaign for a social justice or environmental issue that is of particular importance to a student. In either case, by using the liberatory design cycle, students needed to consider their own context as well as the context of others in order to work towards improving the lives of others to promote the aspects of the EDIDA frameworks. The final challenge is a summary of the work that students have done throughout this unit and students will be required to reflect on how this process has shaped their understanding of the needs of others by looking at what they have done through the lens of the EDIDA frameworks. They will also need to be able to explain to others what they have learned about themselves and the affected party (individual, communities, environment) thus requiring a level of metacognition which is aimed to reinforce their understanding of these social issues.

- *Consider what materials you will use.*

The challenge for this lesson is a presentation of their learning journey throughout this unit. As such, students will have the option to create a learning or process journal, poster presentation, video journal, website, or something else of the student's choice with teacher approval. The materials needed will likely be simply a device such as a laptop or tablet as well as various options for software if students are choosing to create a digital representation. If students are making a physical artifact for this challenge, then the materials will most likely be low-tech such as poster paper and related drawing materials, printers, etc. They may need a phone or video camera for a video journal. In any case, the material used will not be excessive.

- *How will you ensure all voices are included and heard?*

This challenge will occur in the same groups that they worked in when creating their overarching unit project. If making a process journal or website, all students will be expected to contribute to the journal to describe the lessons that they have learned along the way. For poster presentations or video journals, it should be made clear which students played which role in the creation of those objects.

- *From what lens will the content be delivered?*

The content will be delivered through the lens of the EDIDA framework for consideration of the needs of the end user. The overarching unit project was delivered through the lens of the liberatory design cycle and so that should be described by students for this final challenge.

- *How will you present and implement the content in a way that is culturally responsive and relevant?*

Because the students have used the liberatory design cycle throughout this unit, which emphasizes reflecting on the students' positionalities and the context of the end users, this will be culturally responsive and relevant. The final challenge demands students to reflect on how this process has shaped their understanding of the needs of others and how making can be a culturally responsive and relevant vehicle for developing those skills of empathy and for improving the lives of others.

DIFFERENTIATED INSTRUCTION *What will I do to assist and/or differentiate instruction for individual learners? (Materials, Delivery, Outcome)*

This final challenge will allow students to choose from a variety of different methods for demonstrating their learning, allowing for student voice and differentiation from the initial setup. Because students will be working in small groups, they will be encouraged to consider the strengths of individuals in their groups and will be in communication with the teacher to ensure that work is being completed within the group in equitable ways. For example, if students are working on a poster presentation and one group member has challenges with physical dexterity, then that group member could use voice-to-text software to produce written elements that could be printed out and glued to the poster by other members.

Accommodations: (PLEASE REFER TO THE INCLUSION GUIDE)

See the "Differentiated Instruction" section above. Accommodations should not be necessary due to the group nature of the assignment. Being in an inclusive group allows for some members to forego elements that would normally require accommodations as the other group members can complete those elements, allowing the students with physical or mental impairments to contribute in other meaningful ways.

MATERIALS:

Electronic device such as laptop or tablet, a variety of software options depending on student/group needs, poster-making materials, video equipment such as cell phone or video camera and editing software.

INTRODUCTION/MINDS-ON

Students will be asked to complete a think-pair-share where they will need to think of and then share an example of a product, service, or environment that they feel is inclusive and explain why.

CRITICAL GUIDING QUESTIONS:

What does inclusive design look like in a practical context?

<p>ACTION-LEARNING EXPERIENCES:</p> <p>A) EXPERIENCE 1 (Provocation/Challenge)</p> <p>After watching this ((116) Designing for a more equitable world Antionette Carroll - YouTube) think about which step of the liberating design cycle (choose a problem, notice the context, empathize with the users, define, ideate, prototype, test, and reflect) is the most important when trying to improve the wellbeing of individuals, communities, and yourself. Do the answers change if you are thinking about individuals, communities, or yourself? Be sure that you can justify your answer as we will share it with the class.</p> <p>B) EXPERIENCE 2 (Provocation/Challenge)</p> <p>Produce either a process journal, a poster, an interactive website, or other suitable method (as discussed and approved by the teacher) to communicate the following information:</p> <p>How the liberatory design cycle can be used to understand the context of others' needs, How the liberatory design cycle can be used to build empathy for the needs of others, How the liberatory design cycle can be used to determine what solutions could be created to address those needs, How the liberatory design cycle can use an iterative design cycle to prototype and test multiple iterations while understanding the strengths and weaknesses of the design, What thinking processes and considerations were needed throughout this process, What are the next steps that can be taken to share this product/solution with others to advance the EDIDA framework?</p>	<p>CRITICAL GUIDING QUESTIONS:</p> <p>How does the liberatory design cycle lead to a more equitable, diverse, inclusive, de-colonized, and anti-racist world?</p> <p>How has this process shaped the students positively in a way that deepens their understanding of the needs of others and how the liberatory design cycle can be a vehicle for positive change in the world?</p>
<p>CONSOLIDATION/CONCLUSION:</p> <p>Students will share with the various presenters of other groups the strengths and areas for development in their design and their plans for the next steps. Students will take meaningful action to advance those next steps. This could be mailing their completed product to the end users by creating a physical object and sharing it on sites such as Thingiverse so that others can use their product. If an advocacy campaign was what the students produced, then they could speak with the school administration to obtain approval for displaying their presentation around the school, etc.</p>	<p>CRITICAL GUIDING QUESTIONS:</p> <p>How can the students' products be shared in meaningful ways that improve the well-being of others?</p>

ASSESSMENT (STRATEGIES, TOOLS) - DIAGNOSTIC, FORMATIVE, SUMMATIVE

This challenge/assignment is a summatively assessed piece that acts as the capstone of the unit of work. The assessment would be completed using a rubric (attached as separate file).

REFERENCES:

BC applied design, skills, and technologies 9 curriculum. (2018). Province of British Columbia.

<https://curriculum.gov.bc.ca/curriculum/adst/9/core>