



Master of Educational Technology Program



THE UNIVERSITY OF BRITISH COLUMBIA

Vancouver Campus

Master of Educational Technology

Intermediate Lesson Plan

Grade(s): 6 Date(s): beginning of the school year Duration: 180 minutes Lesson Topic/Title: Who lives in my community?

Subjects: ADST 6 and PHE 6 Number of Students: 24

Big Ideas:

- Design can be responsive to identified needs. (ADST 6)
- We experience many changes in our lives that influence how we see ourselves and others. (PHE 6)
- Learning about similarities and differences in individuals and groups influences community health. (PHE 6)
- Making can support exploration and expression of personal and community identities.
- Making can express issues related to bias, stereotypes, discrimination, privilege, and intersectionality, and through this expression we can begin to understand and address these issues.

Curricular Competencies:

- (ADST) Understand context, define, ideate, prototype to create a working concept that will solve a design problem.
- (ADST) Identify and use appropriate tools, technologies, and materials for production.

- (ADST) Decide on how and with whom to share their product.
- (PHE) Explore and describe how personal identities adapt and change in different settings and situations.
- (PHE) Explore strategies for promoting the health and well-being of the community.

Content Objectives

General Objectives:	Specific Objectives:
Computational Thinking (ADST) Computers and Communications Devices (ADST)	visual programming visual representations of problems and data strategies for identifying and troubleshooting simple hardware and software problems function of input and output devices, including 3D printing and adaptive technologies for those with special needs
consequences of bullying, stereotyping, and discrimination (PHE)	influences on individual identity, including sexual identity, gender, values, and beliefs

21st CENTURY COMPETENCIES: Which COMPETENCIES will be addressed and how? (from https://curriculum.gov.bc.ca/competencies)

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LEARNING GOAL(S) I can... I will....

I can understand and express who I am, who people in my community are, and how we relate.

I will explore, practice, and extend ways that people in my community express themselves through storytelling.

I will explore and express my perspectives and identity through making.

I will explore and support the diverse perspectives and identities of those who live in my community through making.

I will express issues related to bias, stereotypes, discrimination, privilege, and intersectionality through making, and understand that expression helps us begin to address these issues.

PRIOR KNOWLEDGE Prior to this lesson, students will be able to...

Have some knowledge of Design Thinking process, and be familiar with steps and <u>Design Thinking worksheet</u>

Have completed Lesson 1 - Who am I? to gain a sense of their own identity. In this lesson they will be connecting and relating their own identities with those of others who live in their community.

Will have completed the reflection worksheet (the one that will be used for Cumulative Task) for Lesson 1

Will have some understanding of bias, prejudice, stereotypes, privilege, and intersectionality in communities and the media through learning with this Digital Learning Resource

Will also have understanding of Indigenous music, art, and storytelling, and examples of what decolonization and antiracism through artistic expression can look like, through learning with the digital learning resources housed on this website

Students will have participated in <u>Indigenous games</u> as part of PE class

Ideally will have some knowledge of Scratch (this is only necessary if they choose an extension activity)

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?

This lesson facilitates students actively identifying and celebrating the diversity of their communities. The discussion activities and Padlets offer multiple means for students who do not feel comfortable speaking in front of the class to still contribute. The Makey Makeys are inclusive in terms of being safe, easy to start with, and not requiring specific language or technical knowledge to try. Additionally, each part of the lesson will emphasize the presence of multiple cultural perspectives in the community and the importance that all are heard and included. This will support students in understanding that our classroom culture values and respects everyone's contributions, and celebrates diversity.

• Consider what materials you will use

I will use Padlets, Makey Makeys, and some supportive crafting materials with the Makey Makeys to facilitate simple entry points as well as intersection with crafts (which may be less intimidating for some students)

• How will you ensure all voices are included and heard?

As mentioned above, the Padlet as well as the TPS aspect of the discussions and the accessibility of the Makey Makey activities will ensure that everyone can participate

• From what lens will the content be delivered?

The content will incorporate all lenses of the EDIDA framework.

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

The First People's Principles of Learning (FNESC, 2018) are enmeshed in this entire unit. Incorporating the design process for making is learning that actively "involves patience and time". In asking "Who lives in my community?" and requiring student storytelling and reflection, this lesson reinforces learning that is "holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place)", and that is "embedded in memory, history, and story". As well as implementing Indigenous ways of learning, the lessons will include Indigenous content in form of introducing new learning and referencing and connecting previous learning about Indigenous games, storytelling, art, and music.

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

I have incorporated Universal Design for Learning principles in this lesson to ensure that students can self-differentiate and accommodate the ways that they engage, represent, and express their learning with autonomy in an inclusive environment.

This will be demonstrated through multimodal options available to express learning through maker activities (they can draw, use music, speak, and use various materials to create artifact and reflect).

Makey Makeys (the main maker technology in this lesson) are a great example of a "low floor, high ceiling, no walls" tech activity. Students can immediately access through plug and play apps, or can extend to editing code or creating code to use them

Students will have the Option to work in partners or groups - social supports

Work can be completed in flexible spaces and time frame.

Accommodations: (PLEASE REFER TO THE INCLUSION GUIDE)

See above

MATERIALS:

iPads Makey Makeys conductive tape play dough

various arts and crafts materials (paper, scissors, markers, tape, pipe cleaners, lead pencils, other conductive odds and ends)

INTRODUCTION/MINDS-ON

Video: Don't Put People in Boxes (end at 3:51 as it starts going into religion non-neutrally)

Class Brainstorm Discussion (Think-Pair-Share)

- Who lives in my community?

CRITICAL GUIDING QUESTIONS:

- Who lives in my community?
- Where do we come from?
- When did we come here?
- What do we like to do?
- What is important to us?

- See what questions the students come up with, and supplement with the critical guiding questions in the right column.

Create a KWL chart to document responses and further questions

Everyone in our community has different experiences, needs, interests, and values. We all have different stories of our own to tell. Telling stories and listening to others' stories helps us learn about and understand each other.

There are many different ways to tell a story - we can speak, write, play, make music, or art, or tell stories in other ways. All of these Maker activities with help you tell stories in different ways.

We have learned that an important first step in the design process is emphasizing with users that the design is for. This includes thinking about thinking about what the user says, does, thinks, and feels. This will help us to consider what users' wants and needs are, what problems they may be dealing with, and how to solve this problem in a thoughtful, helpful, and useful way.

Tech demo: Do Makey Makey <u>banana piano</u> lesson together (plug and play app) to get a sense of basic functionality of tool.

The critical Think-Pair-Share question in the right column will get them thinking about ways that the Makey Makey can be symbolic of the multiple perspectives in their community, and how they might be able to creatively implement this idea in their maker provocations and challenge for this lesson.

- Where does everyone come together?
- How do we express ourselves and who we are?
- What are some needs and challenges in my community?
- Why do we "put people in boxes?"
- What are the effects of this?
- How do we fix this?

Think-Pair-Share: In what ways could the different alligator clips that we use to connect the Makey Makey represent diverse experiences and perspectives in our community? (Document ideas on KWL chart)

ACTION-LEARNING EXPERIENCES:

Each of these lessons will use the reflection <u>Padlet</u>, and <u>rubric</u> will be used after each lesson for ongoing assessment.

A) EXPERIENCE 1 (Provocation): Music

Website: <u>Drum for the Children</u> (discuss with students using critical guiding questions)

Video: Drum Circle with Wilson Bearhead

CRITICAL GUIDING QUESTIONS:

(most of these are designed to promote empathy for users/beneficiaries, supporting meaningful initiation of the <u>design</u> <u>planning sheet</u> for Maker Challenge 3)

 Have you ever made or played a drum? Alone or in a group? How did it feel? Video: <u>Drums across North and South America</u> (watch from 40:0-43:00 to get a sense of the diverse groups participating)

Music is a powerful unifier. People can come together to create, enjoy, and heal with music regardless of gender, age, cultural background, ethnicity, class, or ability. As we can see in the videos, Indigenous peoples have been coming together to make music as communities since time immemorial. Follow the directions on one of these links to make a song that could bring people together, or construct or code your ow Plug And Play Coding Apps For Kids - Makey Shopn idea.

Plug and Play: audio sampler, or another plug and play music app

Tool construction: pencil drawing or cardboard guitar

Coding: find a <u>sample from scratch</u> to share for demo/inspo

Extension: Make a video, poster, or other documentation of your maker process and product using the Camera on the iPad or another app

B) EXPERIENCE 2 (Provocation): Play

Another way that people in the community come together is through games - whether sports or games like chess, checkers, Minecraft, tag, games from other countries, or games from Canadian Indigenous cultures, many people from diverse backgrounds are united by a love of playing games. It is important to make games inclusive so that everyone has the chance to participate, play, and benefit.

Plug and Play: Use the Makey Makey as switch to play a game on one of the <u>plug and play game apps</u> (see section 2 of page)

Tool construction: build a unique and innovative game controller from the available materials to play one of the plug and play apps above. This should improve on the design of the traditional Makey Makey controller to maker it easier to use for someone in your community.

Coding: find a template online to modify, or code your own.

Extension: Make a video, poster, or other documentation of your maker process and product using the Camera on the iPad or another app

C) EXPERIENCE 3 (Maker Challenge): Storytelling

- is drumming culturally significant to Indigenous peoples in Canada?
- How is drumming significant to other cultures?
- How is drumming helping people in Canada heal from the trauma of residential schools?
- How has music helped you to express and heal?
- How can music to bring members of your community together for healing and expression?
- What are some of your favourite games we've played at school this year? Where did they come from? (students will reference some multicultural and Indigenous games that have been played in PE)
- What are some popular games that you see played in the media?
- Does everyone have equal chances to participate in play?
- What are some characteristics of games that seem to give people equal access to play?
- What are some important aspects of Indigenous storytelling? (from previous learning they should be able to reference and discuss oral

Further in person sharing of artifact with classmates and teacher for informal feedback (this will also happen on an ongoing basis throughout lesson organically) One final peer share and discussion of Padlet questions before individually submitting Padlet reflection
CONSOLIDATION/CONCLUSION:
Every community is full of people who have different stories of experiences from the past that have brought everyone to where they are now. Storytelling is a powerful tool for us to share, connect, and pay respect to one another. Tell a story of who lives in your community (or a story from your community) with the Makey Makey. Use the design planning sheet to plan before you begin. Remember to focus on empathy as your starting point, as you can not effectively make something to solve a problem or help someone without emphasizing first. Your story should incorporate multiple and diverse perspectives to authentically reflect the diversity in your community. You can use one of the following ideas as a starting point, or you can come up with an original idea of your own! Idea 1: storytelling through art Idea 2: storytelling through poetry Idea 3: storytelling through maps Extension: Make a video, poster, or other documentation of your maker process and product using the Camera on the iPad or another app

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

Formative: In person observation, ongoing teacher and peer feedback, self-reflection Padlet, and rubric.

What do I wonder?

EVALUATION OF THE LESSON

Ideally this lesson will impact students to start to think about not only those who live in their community, but of the different experiences that community members have. This will send them in the right direction to consider EDIDA frameworks and the need for innovative making to affect community change.

REFLECTION: can leave blank

1. Were my students successful in meeting the learning goals? How do I know?

I will determine this through observation during the lesson, student self assessment, and completion of the rubric.

2. Did my instructional decisions meet the needs of all students? If not, what are my next steps?

I will determine this through observation during the lesson, student self assessment, and completion of the rubric - most so through observation. If students do not have their needs accommodated, I will seek feedback from them and any supporting adults in the classroom to see how I can adjust the lesson to make it more inclusive.

3. What worked well? Why?

I will determine this through observation during the lesson, student self assessment, and completion of the rubric.

- 4. What will I do differently
 - a. When teaching this lesson again?
 - **b.** For the subsequent lesson?
- 5. What are the next steps for my professional learning?

Based on this reflection, I will tweak this lesson as needed and use that learning to inform and inspire future makerspace lesson planning.

This lesson plan was informed by the BC Curriculum