

WE ARE ALL RELATED AUGMENTED REALITY GUIDE

Augmented reality as a learning resource for
Indigenous-settler relations



TEACHER HANDBOOK 2019

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Thank you,

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1 Link: <http://www.northernpublicaffairs.ca/index/volume-6-special-issue-2-connectivity-in-northern-indigenous-communities/we-are-all-related-using-augmented-reality-as-a-learning-resource-for-indigenous-settler-relations/>

2 Link: <https://creativecommons.org/licenses/by-nc/4.0/>

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INTRODUCTION : TEACHER HANDBOOK

As part of an Open Educational Resource (OER), this teacher handbook is intended to work hand-in-hand with the student guidebook to help direct discussions and activities. The We are All Related AR Guide was developed to support a team of Indigenous and settler partners in navigating the process of co-creating an augmented reality (AR) digital media project. It is designed for teachers and students working in partnership with Indigenous Knowledge Keepers, Elders, and storytellers. This teacher handbook explains the intent of each part of the student guidebook, suggests discussion points, and highlights activities and items of note.

The *We are All Related AR Guide* OER was developed for several audiences. A resource for collaborative story-making and relationship-building, it covers governance principles that aim to conduct projects in an appropriate and respectful way. It also provides information on the limitations and challenges of using technology in this way, including issues regarding the ownership, control, access and possession of digital stories. We envision many different creators taking up and using this resource, from youth recording stories with their grandmothers, to post-secondary educators, students and Knowledge Keepers working on a formal course project. We invite you to contact us to share your stories - and we would love to hear feedback on this OER!

This document is the Teacher Handbook - it accompanies the Student Guidebook, which is aimed at students and includes more detailed content and resources. While this curriculum package is designed as a team-based project involving a facilitator, individuals can also work through the materials by using both resources.

As a teacher/facilitator working through the We are All Related AR Guide with students, you will use an interactive learning process to explore Indigenous-settler relations through the co-creation of digital media content. While curriculum about the shared histories and present contexts of Indigenous and settler peoples has an important and necessary role, our goal for this project was different. We wanted to create a set of opportunities for teachers and students to work directly with Indigenous Knowledge Keepers and Elders in a creative, collaborative project. This orientation was designed to encourage relationship-building and ongoing dialogue and reflection about difficult questions. Through this 'learning by design' approach, we focused on outlining ways to practise successful Indigenous-settler relations.

This project blends community engagement with communication studies - an approach explored in a past graduate course in the MA in Community Engagement program at the Faculty of Extension in the University of Alberta. During that class students were tasked to create short videos highlighting community engagement initiatives undertaken by faculty researchers and their community partners. One team of students (Amanda Almond and Billy Smale)

decided to create a digital storytelling project focused on Treaty 6 Marker Bear sculptures carved by Stewart Steinbauer and located on University of Alberta campuses. You can view their video here¹:



This combination of community engagement and digital media production led to a subsequent project exploring the possibilities associated with an emerging digital medium: Augmented Reality (AR). Through layering digital content on 'real world' objects and scenes, AR offers a new way to create and share stories. A collaborative approach to AR design and content development could engage students in exploring Indigenous-settler relations through the AR story-making process, with the aim of co-creating content that centred Indigenous voices and perspectives. With this focus in mind, in 2017 we applied for a development grant from the Teaching and Learning Enhancement Fund at the University of Alberta (TLEF), and received support to develop a 'proof of concept'. Part of that project was an OER guide for teachers and students. The two OER guides (student guidebook and teacher handbook) are the result of that work.

This Teacher's Handbook is designed to walk you and your students through the process that our team developed for our proof of concept. Since First Nations, communities, stories and relationships are highly diverse, we cannot offer you a step-by-step instruction manual because this work must be grounded in trusting, reciprocal relationships that develop over time through repeated engagement and ongoing dialogue among partners. As well, First Nations and individuals are unique, with their own specific requirements and desires. Appropriate partnerships involve learning about and negotiating these areas together. For example, in this guide we will discuss the importance of following Saddle Lake Cree protocol in creating our AR story. However, we cannot advise what specific protocol you may need to follow in your project, because protocol can be different for different communities and purposes - and some partners may not in fact use protocol.

¹ <https://www.ualberta.ca/extension/sweetgrass>.

Your team's AR storytelling approach must be grounded in the relationship with the First Nation and individual(s) that you are co-creating the story with and the topic of the story you are trying to tell. With these contingencies in mind, this guide provides a series of considerations for teams to contemplate, discuss, and prepare for as they plan and create their AR stories.

As noted earlier, this Teacher Handbook provides a summary of aspects of the Student Guidebook, and is designed to accompany that resource. While there is some crossover and duplication of content, we tried to limit the length of this document. As you work through this document, refer to the Student Guidebook for more details, particularly with respect to content and resources.



The photo above is of Sweetgrass Bear, a Treaty 6 marker sculpture carved by Stewart Steinhauer from Saddle Lake Cree Nation. Sweetgrass Bear is located in the Enterprise Square building in amiskwaciwâskahikan (Edmonton, AB, Canada). The We are All Related AR prototype stories are activated by scanning parts of the Sweetgrass Bear sculpture, such as the pipe or the crossed feathers. You can view some of these different 'trigger images' in Appendix C: 'We Are All Related' AR Trigger Images. These images, once scanned using HP Reveal, will trigger AR content created by our team and by students in COMM 597.



Learning Objectives

By the time students have completed the We are All Related AR Guide OER, they should be able to:

- Demonstrate an understanding of the theoretical, conceptual and practical foundations of respectful relationship-building.
- Review contexts of settler colonialism, Indigenous societies and treaty relationships.
- Demonstrate familiarity with diverse perspectives and explore how they inform – explicitly and implicitly – the design and practice of community engagement.
- Differentiate between diverse forms and processes of engagement used by different communities and reflect on how power dynamics shape relationship-building.
- Practice reflective relationship-building and ‘emergent’ approaches to project planning and research.
- Review key debates and ethical considerations in the field of settler-Indigenous relationship-building.
- Analyse and utilize both Western and Indigenous approaches to knowledge and data stewardship.
- Participate in Indigenous protocols of knowledge stewardship.
- Assess the value and role of digital media in relationship-building.

- Demonstrate applications of storytelling through emerging digital media, including Augmented Reality and place-based storytelling.
- Design and present an Augmented Reality story through a systematic planning process using collaborative project management.

Organization of the Teacher Handbook

Sections in this handbook

This Teacher's Handbook reflects the four core sections of the student guidebook, each of which addresses a different step in the process of co-creating AR stories and exploring Indigenous-settler relations. We recognize that projects often develop in non-linear ways, and so present these sections as a series of guidelines and considerations rather than a fixed structure. The relationship that your team builds will best guide how this process can move forward in a good way.

1. **Exploring** - AR for Learning and Relationship-Building - This section provides you with an overview of the We are All Related AR Project, and introduces the concept and approach of co-creating augmented reality stories to build Indigenous-settler relations.
2. **Laying the Groundwork** - This section prepares readers to co-create an AR story. Topics include terminology, storytelling, relationship building, accountability, and governance.
3. **Creating the Story** - This section reviews the process of how to create an AR story and how to collaborate respectfully. It covers different types of AR content and story hosting platforms, and provides tips for recording your story.
4. **Sharing and Stewarding the Story** - This section provides information on how to share and steward (maintain and protect) your story. We'll discuss different approaches for managing and protecting digital content, including the OCAP® principles, copyright (and its limitations), and data preservation.

For each of the four sections above, we provide the following content in this Teacher Handbook:

- 1) Introduction and Learning Outcomes - Each section begins with a short orientation, which includes introductory material and learning outcomes.
- 2) Section Content with Discussion Questions and Activities

This summarizes the content for each section and includes discussion questions, reflection points, and activities to engage learners and build towards your AR story. It covers the main content of the student guide, and walks you through the process and decisions involved in co-creating an AR story.



3) Resources - We have included some sample resources that you can access to dig deeper into each topic. We include a few key resources in this Teacher Handbook; please refer to the Student Guidebook for further resources. The resources include:

-  *Reading resources*
-  *Viewing resources*
-  *Listening resources*
-  *Participatory resources*
-  *Information resources*
-  *University of Alberta resources*

4) We are All Related AR Prototype



This thread, marked with the bear icon, walks you through our experience of creating the We Are All Related AR demonstration stories in Summer/Fall 2018. This provides you with concrete examples of how we worked through different steps in the collaborative AR story co-creation process.

Batteries Not Included

It's true, we have not included batteries in the We are All Related AR Guide OER. We have also not included a set schedule for creating your AR story, or an indication of the time commitment required. That is because each AR story creation process - and the relationships that it is based in - will be unique. This kind of project requires flexibility and patience, and careful navigation through topics, considerations, and points for reflection. Each journey will be different and unique!

We note that we have not included a discussion of 3D modeling and animation AR story formats in this guide. This was a choice we made to keep the process and materials low-cost and accessible, based on presently-available technology.

Tell Us a Story

We invite you to use the We are All Related AR Guide OER to create and tell all kinds of AR stories. We hope you find this resource useful, and look forward to hearing your story!

If you have questions or feedback about these materials, please email us at:

sweetgrassAR@ualberta.ca

Our website is located at: www.SweetgrassAR.ca



SECTION 1: EXPLORING AR FOR LEARNING

AND RELATIONSHIP-BUILDING

Introduction

Students receive an orientation to the concept of co-creating augmented reality stories to build Indigenous-settler relations. Key considerations are introduced.

Learning Outcomes

- Demonstrate an understanding of Augmented Reality (AR) as an emerging form of digital media.
- Review the use of AR as a resource for learning and relationship-building.
- Review key steps in the collaborative development of an AR story.
- Design a plan for an AR story that includes a draft timeline and list of considerations.

Section Content with Discussion Questions and Activities

1.1 What is Augmented Reality (AR)?

Introduction to Augmented reality (AR) as a form of media that provides a digital content overlay over a “real-world” view of an object or scene. Provides rationale for why AR is well-suited for Indigenous digital storytelling, and introduces some challenges and potentially negative impacts of this emerging technology.

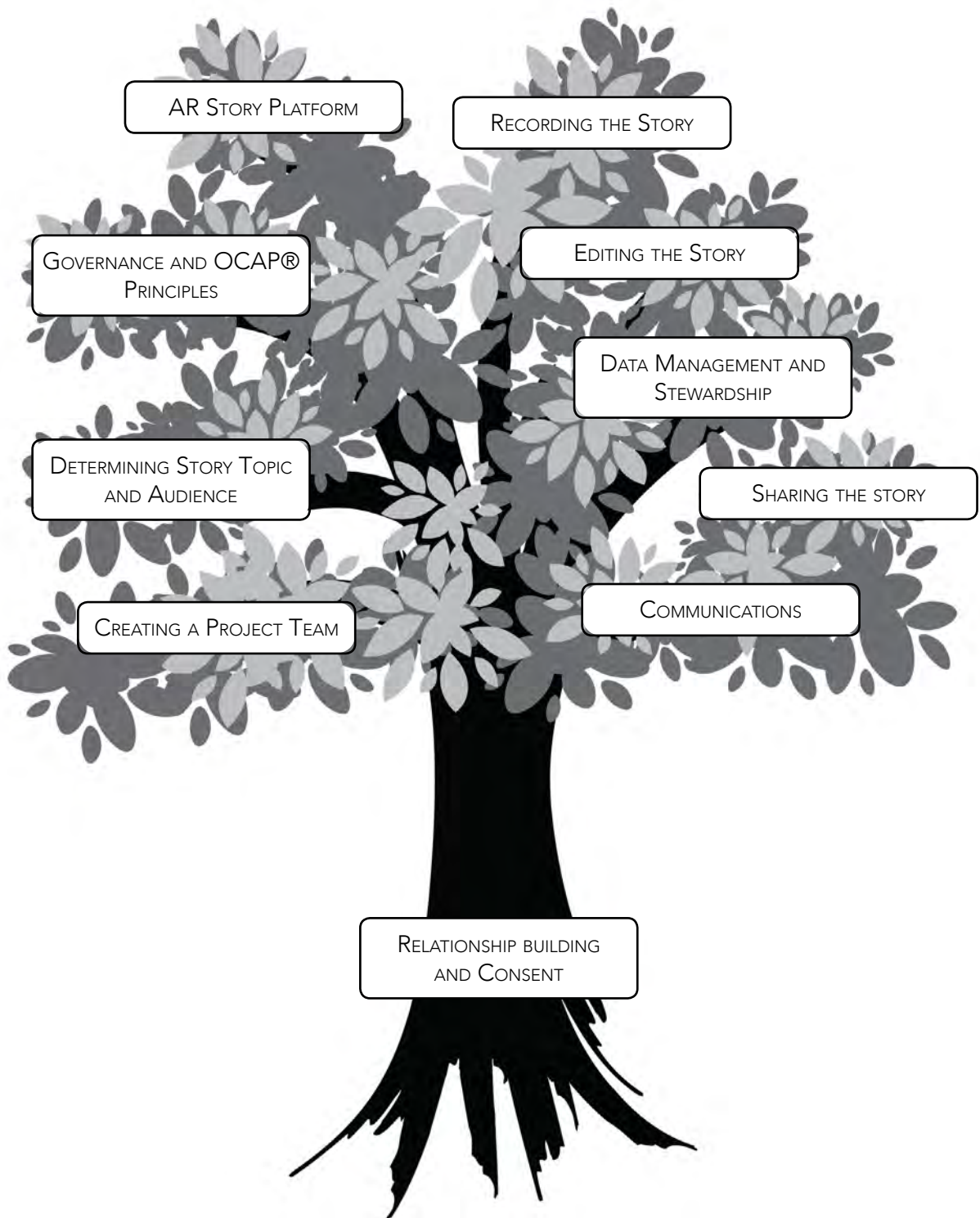
1.2 Why AR for Learning and Relationship-Building?

Introduces considerations to think about when co-creating AR stories in the context of Indigenous-settler relations. These include learning opportunities for teachers and students, as well as benefits for media producers.

1.3 Adapting the AR Story-Making Process

Describes our customizable AR story-making process, which can be adapted to fit the requirements of different user communities. We focus here on working with Indigenous Knowledge Keepers, Elders, or storytellers to co-create a publicly available digital story, for the purpose of building Indigenous-settler relationships and understanding. Stresses that the OER avoids a ‘checklist’ approach - instead focusing on intentional and collaborative relationship-building through a flexible process. Following this intention, we do not provide specific instructions. Decisions should emerge from discussions grounded in the relationship that participants develops over time.

We present a planning framework that consists of a series of considerations that project teams can work through. These considerations are summarized below, in Figure 1 and Table 1, and discussed in detail in this guide.



The Story Making Process

Key Considerations	Check-ins
Creating a Project Team	<ul style="list-style-type: none"> Relationship-building with an Indigenous Knowledge Keeper, storyteller, Elder or community interested in sharing a story through AR Follow any protocol and permissions required Reflect on your intentions in wanting to co-create an AR story Determine preferred methods for team communication (e.g. meetings, email, etc.), documentation, and decision-making
Determining a Story Topic and Audience	<ul style="list-style-type: none"> Follow the lead of Indigenous partners in determining an appropriate story to share, and access, such as who is permitted to view the final AR story
Consent	<ul style="list-style-type: none"> Consent should be continuous and ongoing
Governance and OCAP® Principles Ownership, Control, Access and Possession	<ul style="list-style-type: none"> How will you ensure that ownership of cultural content remains with the community? How will cultural content be accessed and by whom? What party will house and steward project data including cultural content? Begin planning early who will make decisions about these elements of the story and who will be responsible for project storage, maintenance and stewardship
AR Story Platform	<ul style="list-style-type: none"> Which AR platform will you use to share your story? What implications are there for cost, ownership of and access to content displayed on the AR platform, and other considerations?
Recording the Story	<ul style="list-style-type: none"> What format will your story be in (video, audio, images, animation)? What equipment do you need to record the story? What is your plan to prepare and record your story?
Editing the Story	<ul style="list-style-type: none"> How will the editing process be done in a collaborative way?
Data Management and Stewardship	<ul style="list-style-type: none"> Where will project materials be stored? Who will maintain the materials? Who will have access to the materials?
Communications	<ul style="list-style-type: none"> How will you share information about your AR story with others?

Discussion Questions for Students:

As students work through developing stories with an Elder or Knowledge Keeper, ask them to consider their own academic discipline-specific knowledge. How does it support Indigenous knowledge and ways of knowing?

Every university discipline (history, mathematics, languages, agriculture, the health sciences and so on) have things to learn from Indigenous knowledge keepers and storytellers. Encourage students to keep their eyes and heart open to those intersections and 'see' the connections.

1.4 ACTIVITY 1: Develop a draft timeline and list of considerations

Ask students build on the resources above to work in a team to develop a draft timeline and list of considerations for their AR project. Prompt them to think about the different elements they will need to plan for: logistical issues of time, resources, funding, equipment, meeting times, communication styles, project purpose and goals. This project management preparation creates a basis for future planning and development.

1.5 Guide Overview

Students receive an orientation to the format of the Student Guidebook.



SECTION 2: LAYING THE GROUNDWORK FOR CO-CREATING AR STORIES

This section orients learners to the implications of co-creating stories with Indigenous peoples, and introduces the “4 Rs” that can guide that work: respect, relevance, reciprocity, and responsibility. These concepts can also be applied to the co-creation of AR stories.

Learning Outcomes

- Demonstrate an understanding of the theoretical, conceptual and practical foundations of respectful relationship-building.
- Review contexts of settler colonialism, Indigenous societies and treaty relationships.
- Demonstrate familiarity with diverse perspectives and explore how they inform – explicitly and implicitly – the design and practice of community engagement.
- Differentiate between diverse forms and processes of engagement used by different communities and reflect on how power dynamics shape relationship-building.
- Practice reflective relationship-building and ‘emergent’ approaches to project planning and research.
- Review key debates and ethical considerations in the field of settler-Indigenous relationship-building.

Summary of Section Content with Discussion Questions and Activities

2.1 Terminology

Language is imperfect and always evolving. Names and terminology can adapt to recognize power dynamics and history, to reclaim terms and definitions used in diverse languages, and to be more inclusive and respectful. This section discusses two terms currently in use that are important to the goals and focus of this guide: “Indigenous” and “settler”.



*Talking about settler colonialism can be challenging and even intimidating. The Centre for Teaching and Learning at the University of Alberta offers the workshop *Approaching Difficult or Controversial Topics in the Classroom* that you may find useful: <https://www.ualberta.ca/centre-for-teaching-and-learning>*



Instructors Andrea Eidinger (Sessional Instructor, UBC) and Sarah York-Bertram (PhD Candidate, York University) offer educators “guidelines, resources, and frequently asked questions that are informed by anti-racist and decolonial approaches to teaching about settler colonialism in Canada” (n.p.) including an extensive reading list at: <http://www.unwrittenhistories.com/imagining-a-better-future-an-introduction-to-teaching-and-learning-about-settler-colonialism-in-canada/>

2.2 Whose Stories are Told

Settler colonialism in the territories currently known as Canada continues to impact what is known and recognized as truth, as well as the stories we share. This section provides some examples of this process.

2.3 ACTIVITY 2: Plan a literature review to guide your project

Have students develop a literature review plan of 5-10 sources, a short commentary on each, and an introduction to frame the materials within the context of the AR project. Encourage students to include oral and visual media to reflect and acknowledge different knowledge systems and expertise. This plan is a research foundation for the AR project.

Instruct students to highlight the points and issues most effective in summarizing their project with the intention to present a more in-depth analysis and discussion in the full literature review, which is developed after consulting with the project team.

2.4 Sharing Stories

This section discusses how sharing stories is a way to resist the suppression of history, knowledge, and culture. It describes how stories are used as a means to share experiences and knowledge, indicate relationships, and sustain culture - with a specific focus on Indigenous stories and storytellers.

Small Group Discussion:

Stories can share, teach, and entertain. Ask students: What roles have stories played in your life, and in your community?

Exploring storytelling through art:

Ask students to share a story of their own through art. Storytelling can be explored through filmmaking, photography, playwriting, creating a collage that shares a narrative, or other art forms.

2.5 Relationship Building

Stories and storytelling can express, build, and nurture life-long relationships. Maintaining good relations will play a vital role in the student work creating an AR story.



*Reserve 107: Reconciliation on the Prairies documentary*¹ (32 min, 33 second)

This film explores how an Indigenous and settler community came together after the realization that settlers had purchased and settled on reserve land that should not have been sold. The film touches on the meaning of the land to both communities, and their initial steps towards getting to know one another. The website includes a study guide.

¹ <https://www.reserve107thefilm.com/>

Relational Accountability - Relational accountability speaks to the responsibilities that we have to ourselves and to one another. In the context of this guide, it concerns our relationships as co-creators of digital AR stories.

Large or Small Group Discussion:

Ask students: What do you consider key elements of relationship building? How will you enact this in your project?

Reflection:

Ask students to imagine a filmmaker is creating a documentary about a story that is important to them; perhaps a film about something that happened to them or one of their family members. How would they want to work with the filmmaker? What might make them feel comfortable or uncomfortable about the experience?

Protocol and Gifts

For Indigenous peoples, gifts and/or protocol are an important way to connect and communicate with all our relations and participants in a good way. Not all Indigenous peoples use protocols, and so gifts can be used in some circumstances. Protocols are used to guide ethics and behaviour, and demonstrate respect. Protocol is context dependent: it varies according to where you are and who are you are engaging with.



Let's Find Out Podcast, Episode 9: A Lesson in Protocol ²[49 min, 55 sec.] Former Historian Laureate Chris Chang-Yen Phillips and Edmontonian Nathan Smith have a question about Indigenous foods. They consult CJSR's Jodi Stonehouse to learn about how to ask cultural questions respectfully and later meet with Elder Jim O'Chiese.

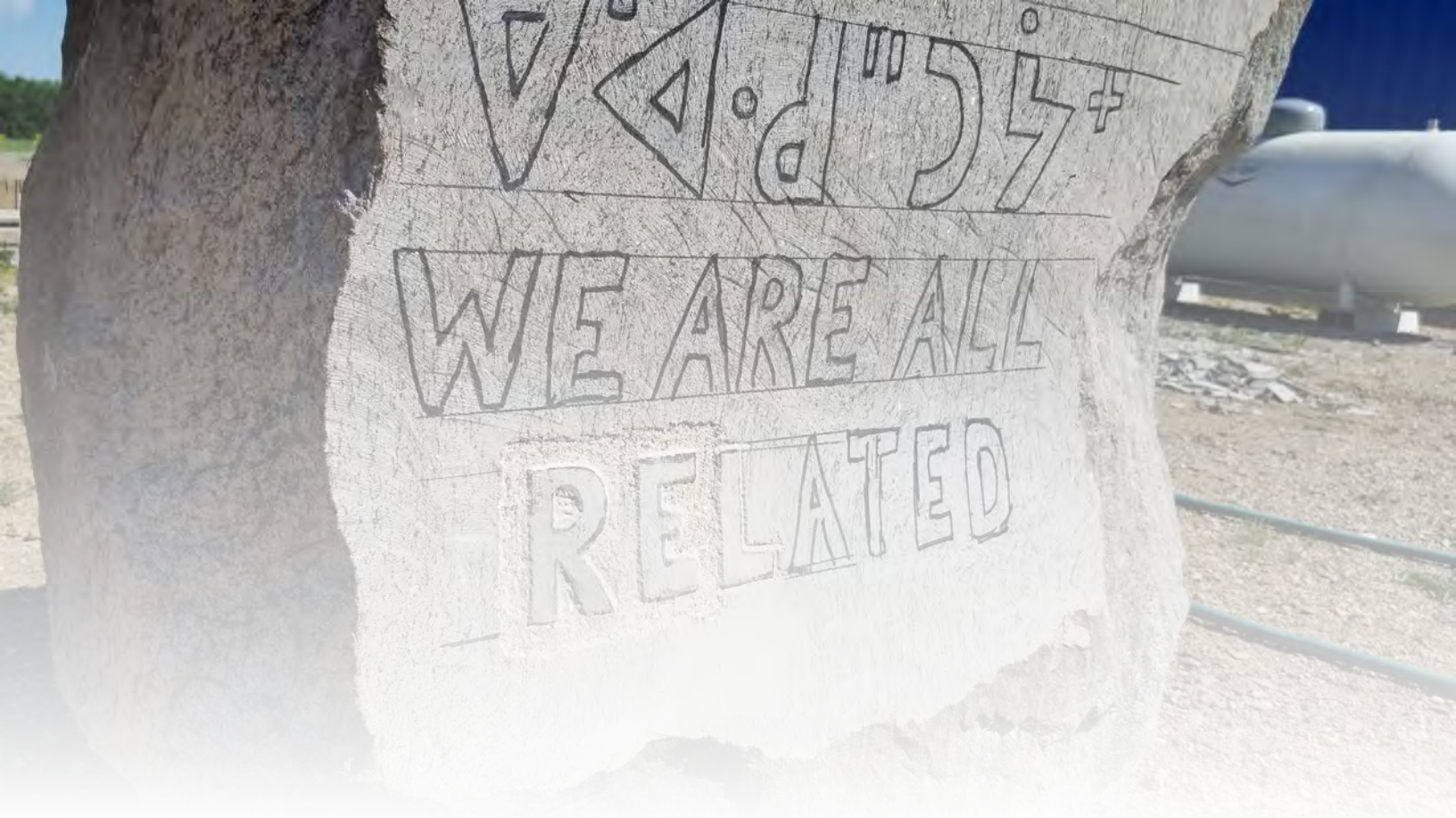
2.6 Accountability in Co-Creating Stories

A project team shares responsibility and accountability to a storyteller regarding how they and their story are portrayed. Communication and consent are essential to this process, and must be practiced in an ongoing way. Consent includes approval of ownership and access rules, such as how a final story is shared, and with whom.

Representation

Representation refers to the ways that Indigenous peoples have been and are portrayed in media such as literature, news, movies, and images. The ways that Indigenous peoples are represented can often be inaccurate, or rely on tropes or stereotypes. With collaboration and respectful practices, co-creating stories can help ensure stories are shared with proper consent, protocol, and representation.

² <https://letsfindoutpodcast.com/2017/05/04/episode-9-a-lesson-in-protocol-2/>



Reel Injun film ³ (1 hr 26 minutes)

Cree filmmaker Neil Diamond explores different ways that Indigenous peoples have been represented in film. These range from silent films starring Indigenous peoples to stereotypes with non-Indigenous movie stars, 'white saviour' narratives, and modern Indigenous filmmakers. Includes interviews with actors, activists and film historians.

Appropriation

When creating stories representing Indigenous cultures, there is a risk of appropriation. Cultural appropriation is when one culture takes material from another culture for their own purposes or benefit, frequently losing the cultural materials' context or significance in the process.



Cultural Appropriation v.s. Cultural Appreciation video (3m38s) ⁴

Rosanna Deerchild with CBC's *Unreserved* talks about halloween costumes and the difference between cultural appropriation and cultural appreciation.



Don't Cash Crop on My Cornrows ⁵ (4m29s)

Actress Amandla Stenberg discusses black culture and appropriation with a classmate for a history class, juxtapositioning the use of black culture in music and fashion with the Black Lives Matter movement.

³ <http://www.reelcanada.ca/film/reel-injun/>

⁴ <https://www.facebook.com/cbcunreserved/videos/1302918419732348/>

⁵ https://www.youtube.com/watch?v=O1KJRRSB_XA

Reflection - *Cultural appropriation is a complex and controversial topic. Ask students to consider where their own opinions lie on using materials from other cultures, and why they have those beliefs or opinions.*

Group or Class Discussion

Ask students: How might norms of sharing digital content (e.g. reposting images, sharing videos, or using content found online for other purposes) affect the risk of appropriation?

Intellectual Property Issues in Cultural Heritage (IPinCH)

IPinCH is an international interdisciplinary research project working to explore and facilitate fair and equitable exchanges of knowledge relating to heritage. The IPinCH website offers teaching resources, including university-level course syllabi and video presentations. The site also has an archive of "Appropriation (?) of the Month" articles, including a midterm and final exam exploring cultural appropriation.

2.7 Project Governance

For the purposes of creating an AR story, project governance refers to the responsibilities of each party involved in creating the story, and how decisions are made throughout the project. Governance considerations are ongoing and continuous throughout the project.

The application of OCAP® principles (Schnarch, 2004) are recommended for research with Indigenous peoples. First Nations developed these principles as a means to support self-determination in the pursuit and application of research. The OCAP® principles are: Ownership, Control, Access, and Possession.

These principles are significant for the AR story projects. Ask students to consider: Who will own the story? Make decisions about it? Decide who gets to access it? Store and maintain the digital content after the story is created?

2.8 ACTIVITY 3: Draft a governance agreement for your project

Students develop a list of considerations to shape the co-development of a governance framework. This is a "living document" to be continuously updated based on team input and developments during the course of the project and finalized once everyone in the team is in agreement with what it represents. We recommend students develop a series of questions that address issues such as purpose, duration, access, roles, feedback, public dissemination, rather than writing a completed agreement.

The following questions are provided as prompts you can provide for the students:

- Who are the parties involved?
- What is the purpose of creating the AR story for each party?
- What protocol is required?
- What institutional policies or permissions are required?
- How will the parties communicate and make decisions?
- Who will “own” and be responsible for the story, once created?
- How will you ensure the story doesn’t contribute to the extraction of Indigenous cultural content?
- Does the platform (website, app) you are using own the material once it’s uploaded?
- Who approves edits and the final version of the story?
- Where will the digital content associated with the project be stored, and for how long?
- How will other project materials, such as unedited video or audio, transcripts, and consent forms be stored, and for how long?
- Who will steward and maintain the story as technology evolves?
- Will there be any communications materials regarding the story? How will the team organize presentations or publications, for example? Who approves the content and how are questions of authorship addressed?

Appendix A provides a [Memorandum of Agreement framework](#)⁶ from the iPinch project that students can use as a starting point for this work.

2.9 Examples of Indigenous Digital Content

A list of examples of content that you may want to review with students.

2.10 ACTIVITY 4: Choose a topic for your AR story

Now that students have developed some background and planning resources (a literature review plan, governance framework and list of logistical considerations) they begin thinking about the topic to explore in their AR story. Emphasize to students that they are not expected to be experts in AR content production, and encourage them to experiment and innovate with AR storytelling.

Students will continue to research and develop their topics in more detail as they proceed through the guidebook. At this stage, have students work together to determine a general theme and brief story concept (150-200 words maximum). Students will workshop the concept throughout the story-making process and guide.

⁶ http://www.sfu.ca/ipinch/sites/default/files/resources/fact_sheets/ipinch_moa_factsheet_jan2015.pdf

SECTION 3: CREATING THE STORY

This section reviews how to create the AR story. We cover how to collaborate respectfully to create the story, introduce different types of AR content and story hosting platforms, and review the steps in recording the story.

Learning Outcomes

- Assess the value and role of digital media in relationship-building.
- Demonstrate applications of storytelling through emerging digital media, including Augmented Reality and place-based storytelling.
- Design and present an Augmented Reality story through a systematic planning process using collaborative project management.

Summary of Section Content with Discussion Questions and Activities

3.1 Co-Creating: Collaboration, Communication, and Consent

Collaboration sees each project partner and team member as an equal and valued contributor. Consent will likely be required on an ongoing basis for different pieces of the project as they emerge, and appropriate consent will need to be determined. This includes informing Chief and Council of the project, through a letter summarizing the project and any activities taking place in their territories.

3.2 ACTIVITY 5: Build a plan to manage ongoing communication and consent

Students should determine how they and other project partners will stay connected and communicate effectively. Use the following prompts as a basis for team discussion:

- **Real-time discussions** - *will your team meet in person, conference call, and/or video calls for real-time discussions?*
- **Email** - *what are the expectations of team members for responding to email*
- **Online collaboration tools** - *what are the group's preferences for online communication and documentation tools, such as Google apps or social media platforms? What are the group's requirements for accessibility and privacy when selecting those kinds of online communication platforms?*
- **Documentation** - *how will ideas and decisions such as meeting notes, task lists, and timelines be documented, shared, and stored?*
- **Decision-making** - *how will decisions be made? Decision-making can be challenging in collaborative projects.*



Consent around project decisions is multifaceted and ongoing. Provide students with the discussion prompts listed below, and have them spend some time discussing them as a team. Ask them to create a plan to guide ongoing check-ins and consent. Discussions about collaboration and consent tie in to issues of governance: decision-making, roles and responsibilities related to the production, archiving, and sharing of their AR story. Answers to these issues and prompts can be used to review and refine the project governance framework started in Activity 3.

- **Intention** - Why do you want to co-create and share a story? Who do you wish to share the story with? As the keeper of cultural knowledge, let the storyteller be your guide for which stories to share, and how. Do not assume all stories can be made public.
- **Ownership** - Who will own the AR story? How will you ensure cultural content continues to be owned by communities and/or Knowledge Keepers?
- **Protocol, Permissions, Ethics, and Other Requirements** - is protocol or ceremony required to share the story? Do you need to formally request a ceremony to document a story or teaching? If you work with a post-secondary institution and are conducting research, do you require ethics approval? Are you incorporating images or other materials from third-party sources, and if so, do you require copyright approval? Do you need to write a letter to Chief and Council to inform them (or in some cases, request permission) that you are doing work on their territories?

- **Recording** - How will you record your story? Through written description, audio, images, video, animation? Are there some things such as ceremony or protocol you should intentionally not record, or only record in certain media?
- **Data Management and Stewardship** - Where will the digital data be stored while you create the story, and afterwards? What is your plan for data stewardship - will you hold the digital data once the story has been edited, or will you turn it over to the Knowledge Keeper / Nation? How will the digital data be maintained and protected in the years to come?
- **Editing** - How will you edit your story? What software will you use? Will you edit all together as a group or will you have a group discussion to agree on how you would like to see the story and then have designated editor(s) prepare drafts for the group to review and approve?
- **Additional Content** - How will adding extra content such as text, photos, audio or video clips in your AR story be approved by project partners?
- **AR Platform** - where will you host your AR story? Are there any considerations of cost, ownership, and maintenance for the platform you selected? How about revenue generation and copyright?
- **Audience** - Will the story be shared with the public? Does it have conditions of use, and if yes, how will you address those?
- **Communications** - How will media, presentations, articles, and other communications materials be developed and authored? Who will approve communications materials? Have you secured permission to make these materials public?



As noted earlier, agreement on project background, approach, team roles and responsibilities are also captured using a Memorandum of Agreement.

Small Group Discussion or Individual Reflection

Ask students to discuss in a group, or spend some time reflecting on, their response to seeing these lists of planning considerations. Do they feel justified or are they overwhelming? Why do they think that they might feel that way? How will the students attend to all the considerations, particularly in a group context?

'Learn by Design'

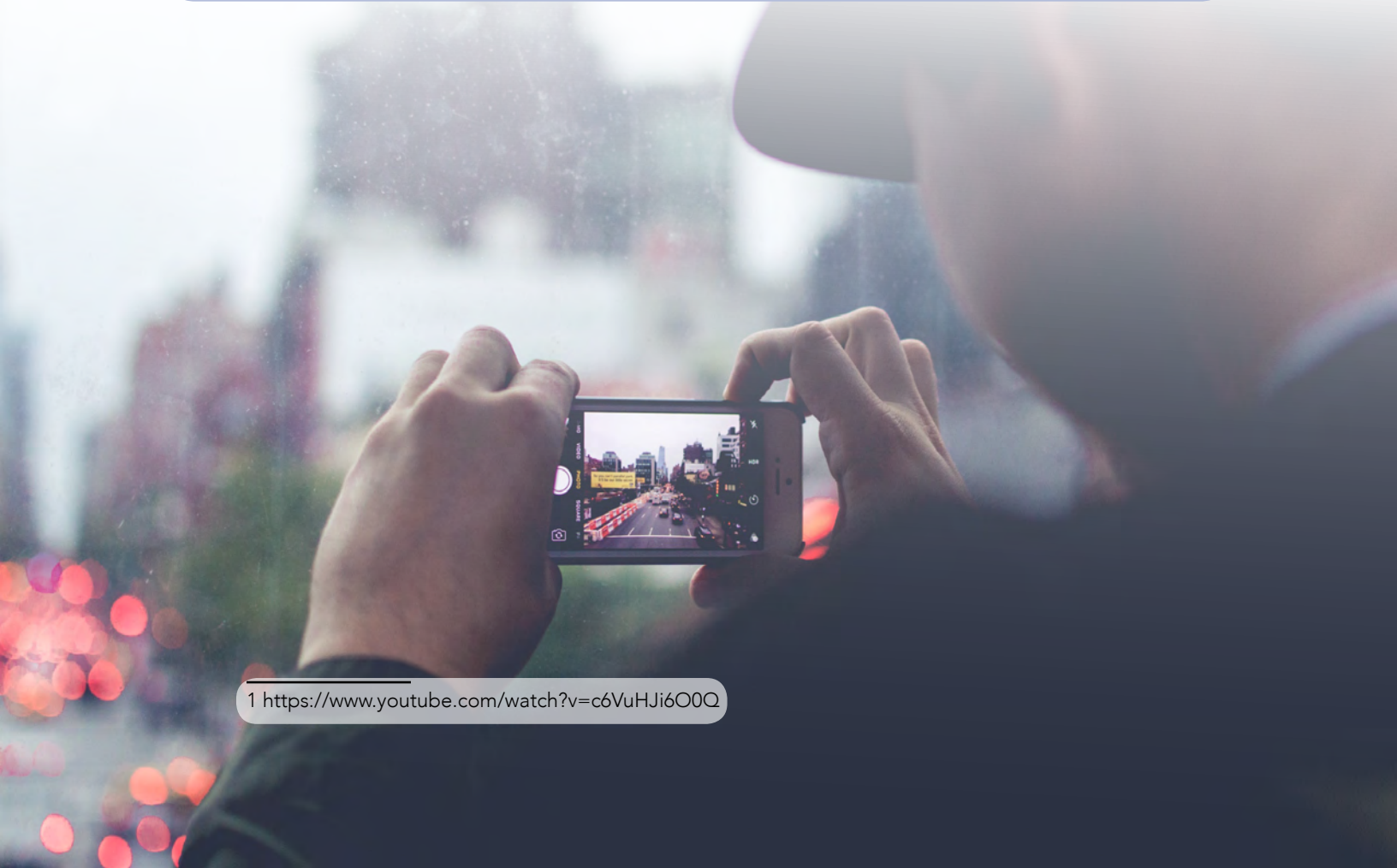
With a 'learn by design' approach, learning outcomes are achieved by moving through a process (Kalantzis & Cope, 2016). This project requires students to engage in and reflect on collaborative project planning, a skill they may or may not have in-depth experience in. Regular check-ins with students will both facilitate the learn-by-design approach, and identify any potential issues early on.



*Indigenous Arts Protocols*¹ (10m7s video)

This video, commissioned by the Ontario Arts Council, features Indigenous artists, Elders, and academics discussing cultural appropriation, protocol, and respectful relationships including reciprocity. A transcript of the video is available at <http://www.arts.on.ca/oac/media/oac/Video%20Transcripts/Indigenous-Arts-Protocols.pdf>

¹ <https://www.youtube.com/watch?v=c6VuHJi6O0Q>



3.3 Respectful Knowledge Sharing

A story co-creator's role requires diligent attention to many considerations and details. Access rules are an important consideration in this work; not all stories are meant to be recorded and openly shared. Certain ethics requirements may be necessary.

3.4 AR Basics and Types of AR Content

This section reviews types of AR, AR platforms, ways of activating AR content, and different forms of content (images, audio, video, animation, 3D modeling). A glossary of AR terms is provided in Appendix B of the Student Guidebook.

3.5 ACTIVITY 6: Develop an AR design concept and a list of interview questions

Building on the concept that students developed in Activity 1, they will develop an AR design concept for their stories, with reference to the resources and information discussed in this section. Students then share their revised concepts with their project team, encouraging questions and discussion. Use the below question prompts to guide the students in a discussion of their AR concept design:

- *What format would you like your story to be? Audio, video, text, images, or animation?*
- *What AR platform will you host your story on?*
- *Will your story be scripted or unscripted? This may depend on the desires of the Elders, Knowledge Keepers or storytellers you are working with.*
- *What research information can inform your story? How does your literature review support and inform your AR story?*
- *What source materials do you already have? What are the copyright and licensing requirements of those materials? What new materials will you need to create?*
- *Where, when and with who will you record?*
- *What equipment will you need? (A sample equipment and supplies list is provided at the end of this section.)*
- *Who will operate the equipment? Will one person be assigned a role (e.g. camera operator) for the entire project, or will team members switch roles occasionally?*

Next, have students prepare a list of questions to guide their story planning. Interviews are often used in documentary-style filmmaking or storytelling, and so we chose them as one approach to guide the AR storytelling. An interview guide can be helpful when interviewing to make sure students cover all the concepts and ideas they want to include. Students develop questions that encourage open answers, avoiding yes/no questions. If participants mention something intriguing, students can use a question prompt to discuss that idea, story, or concept further, being cautious of getting too far off-track.

The interview guide can be shared with interview participants beforehand so participants know what topics students would like to discuss. Students share their questions with their project team. The team reviews and comments on the questions with reference to the material and resources noted in this section. Encourage students to draw on their literature review to ensure that their questions build on research, and make sure to remind them to consider cultural and relational issues as well as information-gathering.

3.6 Creating Content for AR

This section provides information and resources that will help in students in their recording process. It assumes that they will be developing AR content using audio or video materials that are revealed through a trigger image or geographic location.

3.7 ACTIVITY 7: Use storytelling templates to plan your story

Building on their story concept and AR design, have students use some of the storytelling planning and templates provided below to plan out their stories.

Videos can be created with scripted and unscripted stories. The development of both kinds of stories can be supported through preparing a plan to guide your recording process.

For scripted stories it is helpful to prepare the following planning materials:

- Outline
 - Can break into acts (Act 1, Act 2, Act 3)
 - Create a beginning/introduction, middle, and end/conclusion
- Script
 - Written form of what happens on film
 - Includes Acts, Scenes, dialogue script
 - Audio and visual content is written in a script
- Storyboard
 - Visual representation of what happens on film - actors, backgrounds, camera angles
 - Good for sequences with lots of movement
 - Intro to Storyboarding by RocketJump Film School - <https://www.youtube.com/watch?v=RQsvhq28sOI>

For unscripted stories, rather than preparing dialogue and visuals to adhere to, the following planning tools are useful:

- Outline
 - Plan a beginning/introduction, middle, and end/conclusion
- Moodboard
 - Moodboard can be a series of image and or text. Use whatever you like to show others what your vision is for your idea.
 - Show images, scenery, colors, items; think of a moodboard as a collage of various images that give you inspiration.

Describe the type of look and feel you are trying to achieve.

Topman TV: Open Shot Moodboard - <https://www.youtube.com/watch?v=t4s3a7XdA1Y>

Links to storytelling templates that students can use are provided in the following Appendices in the Student Guidebook:

Appendix C: 'We Are All related' AR Trigger Images

Appendix D: Script and Storyboard Templates

Appendix E: We are All Related B-Roll Ideas

3.8 HP Reveal Tutorial

We present a tutorial for using HP Reveal, which is a commercial platform. While it has certain limitations with regards to ownership and control of the content published on it, it is free and easy to use. We therefore provide an overview - though we caution users to carefully consider what content they want to share on the HP Reveal Platform.



SECTION 4: SHARING AND STEWARDING THE STORY

This section provides an overview of what students need to know to share and steward your AR story. Stewardship refers to the care and protection of the story and project materials. We used the term stewardship because it refers not just to maintenance, but also to responsibility and protection. Stewardship is different from the way we tend to think about intellectual property in the Western sense, which derives from individual property rights rather than collective responsibilities.

Like other sections, we are unable to provide specific directions for the stewardship of stories, since the relationships guiding each project will be different. We can, however, review some key issues for students to contemplate, identify resources, and describe how we shared the We are All Related AR story.



Learning Outcomes

- Demonstrate familiarity with diverse approaches to data stewardship, copyright and intellectual property.
- Analyse and utilize both Western and Indigenous approaches to knowledge and data stewardship.
- Participate in Indigenous protocols of knowledge stewardship.

4.1 Who is Your Story for?

Ask students to carefully think about who their AR story is for. That purpose is critical to consider when planning to share a story. In Indigenous contexts, there may be certain conditions attached to stories. Student projects will require planning how to share the story (e.g. audio, visual, AR platform), and also planning how they will communicate with others about the story (e.g. social media, news releases, reports, articles).

4.2 Western and Indigenous Approaches to Ownership and Access

Sharing a co-created AR story based on Indigenous stories, particularly as a student or staff member of a post-secondary institution, means navigating both Indigenous and Western approaches to sharing knowledge.

4.3 OCAP® and Data Sovereignty

The OCAP® principles were articulated in response to a damaging history of research with Indigenous peoples, and while originally developed from a First Nations' perspective, the principles can be extended to other Indigenous contexts. For some, Indigenous data sovereignty has been a way of reclaiming the practise of gathering data to benefit Indigenous peoples.



*Understanding the First Nations Principles of OCAP®: Our Road Map to Information Governance*¹ (6 min, 21s)

This video from the First Nations Information Governance Centre provides an introduction to the FNIGC and the OCAP™ principles. A shorter video is available in the video description.

4.4 Intellectual Property Rights

While intellectual property rights are one option to protect Indigenous Knowledge, there are several barriers and limitations that we highlight in this section.

4.5 Copyright (and Its Limits)

Copyright is a western European idea originally created to protect writers. It has always celebrated and emphasized individual authors. This is problematic when the content is cultural and belongs collectively to a whole culture or Nation.

¹ <https://www.youtube.com/watch?v=y32aUFVfCM0>



*Copyright and Fair Use Animation*²

This animated video from Common Sense Media introduces copyright, fair use and creator rights in the context of online materials

Small Group Discussion or Individual Reflection

Ask students: What are your thoughts on the application of copyright or Creative Commons licensing for your story project?

Individual Activity

Ask students to find an image online that they think could be relevant to their AR story. Ask them: What is the image's copyright? Can you legally use it for your AR story? How?

4.6 ACTIVITY 8: Finalize the governance agreement for your project

Students revisit their project governance document, updating it to reflect the outcomes of discussions about this section's topics. We recommend that students create a Memorandum of Agreement (MOA) that is based on the iPinch template, and specific to their AR project.

The template should reflect the plans they have been developing as they have worked through the guidebook, their personal reflections, and specific points they have considered in collaboration with their project team.

The iPinch MOA template is available in the Student Workbook: Appendix A: Memorandum of Agreement Framework.

4.7 Traditional Knowledge Labels

Traditional Knowledge labels are an innovative approach to the digitization of Indigenous intellectual property and cultural heritage.



*Local Contexts Traditional Knowledge Labels*³ (2 min, 53s)

This video introduces the concepts of TK labels and their purpose.

Small Group Discussion or Individual Reflection

Ask students: Would Traditional Knowledge labels be useful for your AR story or related materials?

² <https://www.youtube.com/watch?v=suMza6Q8J08>

³ <https://vimeo.com/75449158#at=12>



4.8 Open Educational Resources

The use of OER in the context of Indigenous knowledge is complex. OER enables high levels of sharing, which can be a concern in the case of types of knowledge that often requires context, involves certain access and ownership rules, and are frequently appropriated. On the other hand, sharing traditional knowledge through OER also helps prevent the information from being restricted or copyrighted in ways that do not serve the First Nation that the knowledge originates from.

4.9 Digital Stewardship: Access Rights and Responsibilities

This concluding section discusses the stewardship, or care, of story and project materials. This requires both short-term and long-term planning and management.

Group Discussion or Individual Reflection

Ask students: What might your AR story and related materials require for security, preservation, and access in 1-2 years' time? Five years from now? Ten or more?

Activity Assignment

Have students listen to one of the 3 CBC Radio Unreserved podcasts below. Ask them: What themes are present that relate to the co-creation of AR stories, and the topics in these guidebooks?



Terabytes of testimony: Digital database of residential school stories opens to the public⁴



Video game aims to preserve water through traditional songs⁵



Indigenous virtual reality: An experiment in 'Indigenization of cyberspace'⁶

4 <http://www.cbc.ca/radio/unreserved/opportunities-for-reconciliation-pop-up-in-unexpected-places-1.3294030/terabytes-of-testimony-digital-database-of-residential-school-stories-opens-to-the-public-1.3296657>

5 <https://www.cbc.ca/radio/unreserved/imaginative-moving-beyond-the-hollywood-indian-1.3809142/video-game-aims-to-preserve-water-through-traditional-songs-1.3812162>

6 <https://www.cbc.ca/radio/unreserved/from-soapstone-carving-to-second-life-indigenous-peoples-in-quebec-embrace-tradition-and-technology-1.4645198/indigenous-virtual-reality-an-experiment-in-indigenization-of-cyberspace-1.4654306>

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