



Schedule

- ◆ Based on feedback from the class meetings, we are going to try alternating lectures and breakouts.
 - ❖ Today, Thursday – Full time in lecture (with a break)
 - ❖ Wednesday, Friday – Full time in breakout
- ◆ Topics:
 - ❖ Tuesday – Assessment
 - ❖ Wednesday – Worktime for year plans and rubrics
 - ❖ Thursday – Lesson Planning
 - ❖ Friday – Debrief PBL, Worktime for lesson planning

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Steps for Design

1. Find connections in your curriculum (*Integrated Curriculum*)
2. **Determine big ideas** (*Understanding By Design – Critical Thinking*)
3. **Turn them into questions, that students can inquire into** (*Inquiry*)
4. **Develop a rubric that allows for multimodal assessment and outlines the development on CONCEPTUAL understanding** (*Assessment For, Of, & As Learning*)
5. Design differentiated learning activities for students to engage in (*Differentiated Instruction*)



Grade 10 Big Ideas

- ◆ DNA is the basis for the diversity of living things.
- ◆ Worldviews lead to different perspectives and ideas about developments in Canadian society.
- ◆ Historical and contemporary injustices challenge the narrative and identity of Canada as an inclusive, multicultural society.
- ◆ People understand text differently depending on their worldviews and perspectives
- ◆ Representing and analyzing **situations** allows us to notice and wonder about relationships.

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Grade 3 Big Ideas

- ◆ Thermal energy can be produced and transferred.
- ◆ Indigenous knowledge is passed down through oral history, traditions, and collective memory.
- ◆ Learning about indigenous peoples nurtures multicultural awareness and respect for diversity.
- ◆ Language and story can be a source of creativity and joy.
- ◆ Stories and other texts help us learn about ourselves, our families, and our communities.
- ◆ Stories can be understood from different perspectives
- ◆ Regular increases and decreases in patterns can be identified and used to make generalizations.

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Big Ideas

Evolution by natural selection provides an explanation for the diversity and survival of living things.

Sample questions to support inquiry with students:

- Why do living things change over time?
- How do these changes affect biodiversity?

Big Questions

Learning Standards

Example 1: EXPLORATIONS IN SOCIAL STUDIES 11
(Political Studies, Genocide Studies, Philosophy) Grade 11

BRIEFING
COLUMBIA
Ministry of Education

BIG IDEAS

Understanding how political decisions and made is critical to being an informed and engaged citizen (from Political Studies 12).

The intentional destruction of peoples and their cultures is not inevitable, and such attempts can be disrupted and resisted (from Genocide Studies 12).

Examining questions in philosophy allows people to question their assumptions and better understand their own beliefs (from Philosophy 12).

If desired, select, adapt, or create another Big Idea you want students to understand.

Learning Standards

Curricular Competencies	Content
<p style="font-size: 0.7em; margin: 0;">Students are expected to be able to do the following:</p> <ul style="list-style-type: none"> • Use Social Studies inquiry processes and skills to ask questions; gather, interpret, and analyze ideas; and communicate findings and decisions: <p style="font-size: 0.7em; margin: 5px 0;">Key questions:</p> <ul style="list-style-type: none"> ◦ How does the media influence our understanding of current issues in local, regional, national, or global politics? (Political Studies 12) ◦ What evidence is used in war crime trials? Compare and contrast the evidence presented in two or more trials. Why aren't all perpetrators brought to justice? (Genocide Studies 12) ◦ Why do we exist? What is real? What is not? Is there something beyond reality? Do we have free will? What are time and space? (Philosophy 12) <ul style="list-style-type: none"> • Assess the significance of people, places, events, phenomena, ideas, or 	<p style="font-size: 0.7em; margin: 0;">Students are expected to know the following:</p> <ul style="list-style-type: none"> • current issues in local, regional, national, or global politics as represented in mass media (adapted from Political Studies 12). <p style="font-size: 0.7em; margin: 5px 0;">Sample topics:</p> <ul style="list-style-type: none"> ◦ current events ◦ fake news and post-truth ◦ authenticity of websites and other sources ◦ diverse forms of media ◦ freedom of the press and freedom of expression ◦ local news ◦ media ownership <ul style="list-style-type: none"> • recognition of and responses to genocide (from Genocide

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Assessment



Inclusive Assessment

- ◆ Assessment in a diverse classroom requires that we are very careful to assess what we intend to assess.
 - ❖ For instance, if we want to know what a student knows about the plant life cycle, and we give a written test, we may be assessing writing skills, not knowledge.
 - ❖ Therefore, we **MUST ASSESS IN MULTIPLE WAYS!**
- ◆ Don't punish students for not entering with prior knowledge and skills – **NO AVERAGING MARKS**



Step 4: Assessment & Evaluation

- ◆ Ask yourself
 - How will you know if students have achieved those competencies and understandings?***
- ◆ Know your goal – what does mastery look like?
Plan your assessment –
 - ❖ Formative: What kind of initial assessment, and ongoing assessment, can you do to see where your kids are at?
 - ❖ Summative: What kind of cumulative project / activities will you do at the end of the unit to assess mastery?



Rubrics

- ◆ Rubrics work well for assessing diverse learners, as they acknowledge a scope and sequence for learning that is developmental.
- ◆ Rubrics should be multi-modal – i.e. not specific to a format
- ◆ One rubric for the unit, NOT one for each activity



Bloom's Taxonomy

Creating: can the student create a new product or point of view?	assemble, construct, create, design, develop, formulate, write
Evaluating: can the student justify a stand or decision?	appraise, argue, defend, judge, select, support, value, evaluate
Analyzing: can the student distinguish between the different parts?	appraise, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test.
Applying: can the student use the information in a new way?	choose, demonstrate, dramatize, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write.
Understanding: can the student explain ideas or concepts?	classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase
Remembering: can the student recall or remember the information?	define, duplicate, list, memorize, recall, repeat, reproduce state



Curricular Competencies

	Begin	Approach	Fully	Exceeds
<ul style="list-style-type: none"> ◆ Questioning and Predicting ◆ Planning and conducting ◆ Processing and analyzing data ◆ Evaluating ◆ Applying and Innovating ◆ Communicating 	Recognizes that DNA impacts the diversity of living things	Explains how DNA impacts the diversity of living things	Evaluates how DNA impacts the diversity of living things	Designs an experiment related to DNA's impact on ...
	Conducts experiments following a template	Poses questions, makes simple predictions, observes outcomes	Proposes logical hypotheses, designs experiments using appropriate technologies, Reflects on methodologies	Connects scientific inquiry to local problems/issues, innovates, considers ethics

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Rubrics for Inclusive Classrooms

- ◆ K-7: Emerging and extending columns must be adjusted to be inclusive of all your learners
- ◆ Grades 8-12: Because courses are for credit, and the curriculum has become more complex, we add the access point column to provide goals for students with significant intellectual disabilities

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	Access Point	Emerging	Developing	Proficient	Extending
Disparities in power alter the balance of relationships between individuals and between societies	Describes events related to colonialism and imperialism (e.g. Indigenous people were forced off their land)	Describes power differentials on an individual and societal level	Explains the impact of power differentials on interpersonal relations, individually and collectively, including discriminatory policies and historical wrongs	Examines the significance of extreme power differentials, including rebellions, genocides, and the outcomes of colonialism for Indigenous peoples discriminatory policies and historical wrongs	Designs an awareness campaign related to issues of colonialism and power differentials, including discriminatory policies and historical wrongs based on ethics and human rights
	Describes differing perspectives related to a historical event	Recognizes the different perspectives on past or present people, places, issues, policies, or events by considering prevailing norms, values, worldviews, and beliefs	Describes the different perspectives on past or present people, places, issues, or events by considering prevailing norms, values, worldviews, and beliefs	Critically analyzes the different perspectives on past or present people, places, issues, or events by considering prevailing norms, values, worldviews, and beliefs	Creates a piece that proposes how a specific society would react to a person, issue, or event from a different period of time based on their own prevailing norms, values, worldviews, and beliefs.
Inquiry processes	Poses simple questions	Conducts inquiries, interprets information	Conducts inquiries, interprets information, evaluates sources for accuracy, relevance, and bias	Conducts inquiries, interprets information, evaluates sources for accuracy, relevance, and bias, and considers audiences when selecting response modalities	Poses sophisticated questions, analyzes and evaluates relevant sources and information, presents information in innovative ways
	*Marked against IEP	C-: 50-59	C+: 67-72 C: 60-66	B: 73-85	A: 86-100

Colin

- ◆ Colin is a student with both Down’s syndrome and an autism spectrum disorder. He has a moderate – severe intellectual disability.
- ◆ Colin is non-verbal. He communicates with gestures, facial expressions, grunts and sounds, and pictures. He has just begun to use an AAC system.

Look at the rubric – what would you need to adjust?

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	Access Point	Emerging	Developing	Proficient	Extending
Organisms are grouped based on common characteristics	Experience, categorize, and interpret data about organisms in the local environment	Consider the changes in knowledge over time related to taxonomies as tools and technologies have developed	Describe differing ways of categorizing living organisms, including Indigenous ways of knowing	Formulate physical or mental theoretical models to describe scientific categorization of living organisms	Express and reflect on a variety of experiences, perspectives, and worldviews through place related to organisms in the local environment
Scientific Processes: Questioning, & Predicting,	Poses questions, makes observations in familiar contexts.	Makes observations in familiar or unfamiliar contexts and identifies questions to answer or problems to solve.	Demonstrates sustained curiosity about a scientific topic, makes observations, identify questions for inquiry, make predictions about the findings of their inquiry	Formulates multiple hypotheses, uses "if...then thinking to make multiple possible predictions	Connects questions and predictions to other learning, experience of place
Scientific Processes: Planning & Conducting	Follows a template or instructions to observe	Follows a template or instructions to observe, conduct investigations	Follows a template or instructions to observe, conduct investigations safely, collects quantitative and qualitative data, and represents findings	Independently or collaboratively designs a range of investigations, collects data accurately and with precision, analyzes evidence suggests revisions	Considers ethics, social implications of scientific investigations and innovations
	*Marked against IEP	C-: 50-59	C+: 67-72 C: 60-66	B: 73-85	A: 86-100

	Access Point	Emerging	Developing	Proficient	Extending
Organisms are grouped based on common characteristics	Experience, and categorize and interpret data about organisms living and non-living things in the local environment	Consider the changes in knowledge over time related to taxonomies as tools and technologies have developed	Describe differing ways of categorizing living organisms, including Indigenous ways of knowing	Formulate physical or mental theoretical models to describe scientific categorization of living organisms	Express and reflect on a variety of experiences, perspectives, and worldviews through place related to organisms in the local environment
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Colin

Look for:

- student engagement**
- teacher involvement**
- peer interaction**
- same task different goal**



Diane

Diane is a gifted student with a passion for science. When her former grade one teacher asked her what she wanted to learn, she answered “about all the elements in the periodic table.” Throughout her school career she has excelled in local, national, and international exams and competitions. She is particularly interested in issues related to sustainability, and how science can play a role in healing the planet and conserving wildlife.

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	Access Point	Emerging	Developing	Proficient	Extending
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Scientific Processes: Planning & Conducting	Follows step by step instructions to observe	Follows a template or instructions to observe, conduct investigations	Follows a template or instructions to observe, conduct investigations safely, collects quantitative and qualitative data, and represents findings	Independently or collaboratively designs a range of investigations, collects data accurately and with precision, analyzes evidence suggests revisions	Considers ethics, social long term implications of scientific investigations and innovations on the health of their local environment (place)
	*Marked against IEP	C-: 50-59	C+: 67-72 C: 60-66	B: 73-85	A: 86-100



Josh

Josh is a student with a severe learning disability. He struggles with text based learning (i.e. reading and writing), but is interested in science. However, because some of his science classes in the past have been taught through text books and lecture, he has missed some significant portions of previous curriculum, and thus lacks some of the background knowledge others have, and at times disengages because he doesn't think he is capable of being successful.

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What Changes?

- ◆ Nothing...on the rubric
- ◆ What I do change is:
 - ❖ Formative assessment – find out what he knows and what he doesn't, and then pre-teach / review the pieces he will need
 - ❖ Instruction
 - Find out his interests, what works for him (modalities/preferred ways of learning),
 - Begin the unit with tasks that will give him some success and confidence
 - Introduce more challenging material through his preferred modalities, partner with a preferred classmate
 - Maintain high expectations!

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Building Rubrics

1. Put the Big Idea in the Proficient column
 - a. Add a verb from Bloom's to make it an outcome.
 - b. Look at curricular competencies and infuse them
2. Move to the first column, where will students start?
3. Fill in the second column – what do they need to be able to do to go from the start to fully meeting?
4. For the exceeds, be more vague – let kids take it deeper, be creative

Access	Emerging	Developing	Proficient	Extending
			Analyzes how healthy choices influence our physical, emotional, and mental well-being	
Identify and describe preferred types of physical activity			Analyzes how healthy choices influence our physical, emotional, and mental well-being	
Identify and describe preferred types of physical activity	Identify and describe preferred types of physical activity and strategies for maintaining well-being		Analyzes how healthy choices influence our physical, emotional, and mental well-being	
Identify and describe preferred types of physical activity	Identify and describe preferred types of physical activity and strategies for maintaining well-being	Assess influences on choices made related to nutrition, exercise, and mental health	Analyzes how healthy choices influence our physical, emotional, and mental well-being	
Identify and describe preferred types of physical activity	Identify and describe preferred types of physical activity and strategies for maintaining well-being	Assess influences on choices made related to nutrition, exercise, and mental health	Analyzes how healthy choices influence our physical, emotional, and mental well-being	Create and assess strategies for managing physical, emotional, and mental well-being

Access Point	Beginning	Approaching	Fully Meeting	Exceeding
			1. Social, ethical, and sustainability considerations impact design.	
3. Identifies potential uses	4. Identifies potential users and uses	5. Choose an idea to pursue, keeping other potentially viable ideas open	2. Critically analyze and prioritize competing factors, including social, ethical, and sustainability considerations, to meet community needs for preferred futures	6. Evaluate a variety of materials for effective use and potential for reuse, recycling, and biodegradability and prototype, making changes to tools, materials, and procedures as needed
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