# ACCESSIBLE DIGITAL LEARNING RESOURCES: A JURISDICTIONAL SCAN

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### INTRODUCTION

- Educational resources are one of fundamental components in the classroom as an addition to regular lectures to help students attain their learning outcomes.
- When certain groups of students struggle to understand or access such resources due to disability issues, they tend to lose track of their learning toward the expected goals

## DIGITAL LEARNING RESOURCES

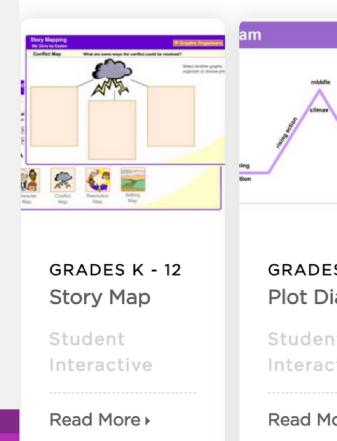
#### **Examples of the 175 objects:**

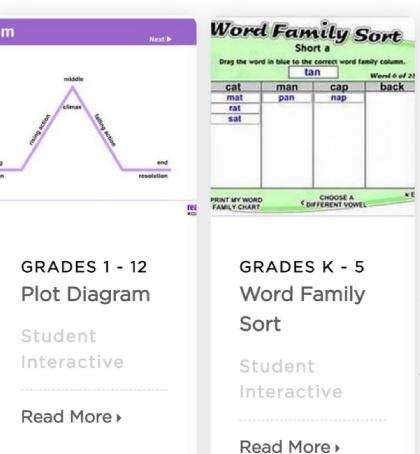
37. Albertosaurus (1884)

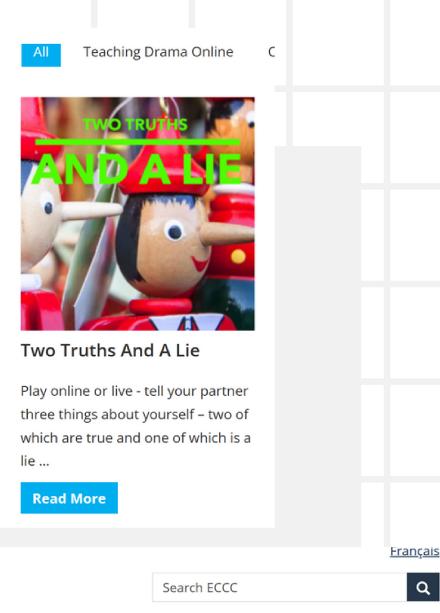
49. Yukon Gold Rush (1898)



Few dinosaurs Albertosaurus (r geologist Josep Red Deer River. chance find as discovery mark in this now fam





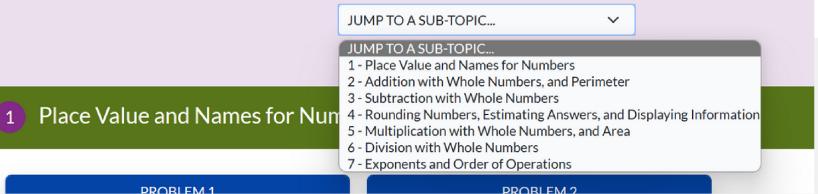


Math

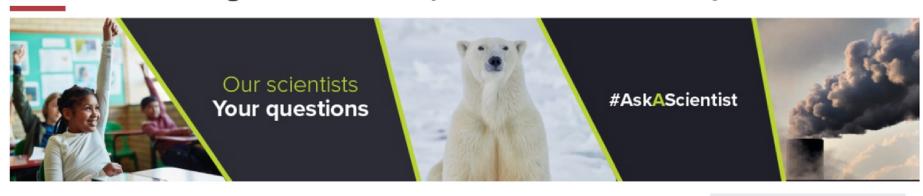
Search Math Topics

#### Prealgebra

#### Whole Numbers



#### Ask A Scientist: get answers to your environmental questions



Do you have a question on air pollution, weather, climate change, plastics, birds, butterflies, polar bears, caribou, or any other subjects? Environment and Climate Change









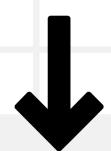
Q

## DISABILITIES?

- The type of disabilities includes impairment on visual (e.g., blindness), hearing (e.g., deafness), motor/physical (e.g., lost limb), and cognitive (e.g., learning disability, autism spectrum disorder).
  - Both temporary and permanent.
- With the widespread adoption of technology in education, accessible digital learning resources play a pivotal role in providing equal opportunities to students, regardless of their circumstances.

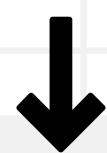
### ACCESSIBILITY?

the material can be acquired, engaged, and enjoyed by both students with- and without disability



#### THE OUTGOING ASPECT

aka content presentation
(e.g., non-technical wording,
age-appropriate content,
alternative format)



#### THE RECEIVING ASPECT

aka receiving and interaction (e.g., alternative navigation, adequate time, consistent understanding)

## GUIDELINES OF ACCESSIBLE DIGITAL LEARNING RESOURCES

- Ease of understanding
- Affordability
- Technological accommodation (assistive technology)
- Age and difference considerations in the development

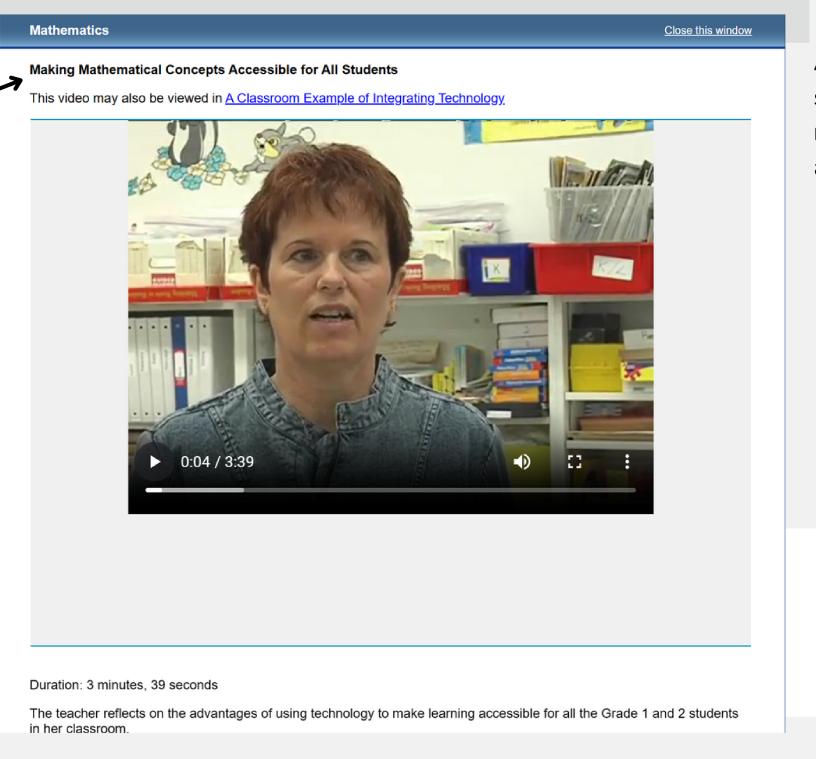
#### **CURRENT EFFORT IN CANADA**

- Alternative Education Resources Ontario (AERO)
- Accessible Resource Centre British Columbia (ARC-BC)
- Alberta?



there is no explicit guideline on the development of accessible of digital learning resources in general

#### WHAT WE HAVE SO FAR



Aimed for parents and teachers to teach students who have different levels of mathematics competency instead of accommodating students with disabilities

Last updated: June 30, 2007 | Copyright | Feedback

https://www.learnalberta.ca/content/meit/html/index.html?Page=21&standalone

#### THIS STUDY

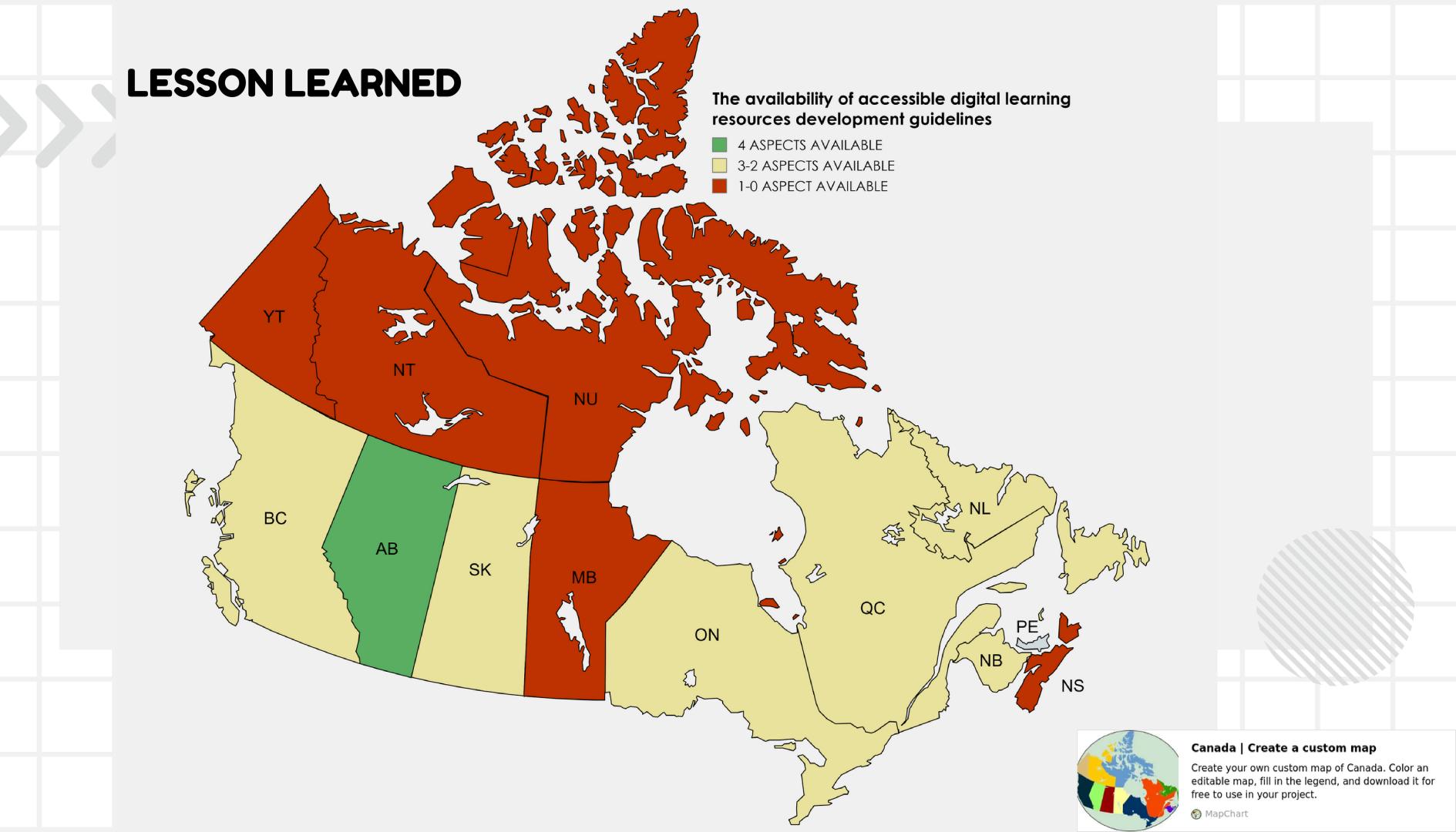
This shortage could result in different accommodation practices among school districts that could disrupt the learning process of students with disabilities

what are the current efforts to
establish the guideline for the
development of accessible digital
learning resources in K-12
education across Canada?

#### **SEARCH PROTOCOL**



- English data sources of provincial government, provincial institution websites, and online documents. For k-12 only.
- Search terms are "accessible learning resources AND [province name]", "online learning resources AND/OR [province name]", or "digital resources AND learning AND accessible AND [province name]".



## EXAMPLE OF RESOURCES OUTSIDE ALBERTA

#### Standards for Digital Learning Content in British Columbia



#### Assistive Technologies

What is Assistive Technology (AT)?

Assistive technology includes any equipment that is used to increase, maintain, or improve the functional capabilities of a student with an exceptionality. It can be high or low tech and is intended to promote greater independence. Examples of assistive technology include:

- switches
- · communication devices
- touch screens
- word prediction software



Recommendations to the Government of Nova Scotia on Accessibility Standards in Education:

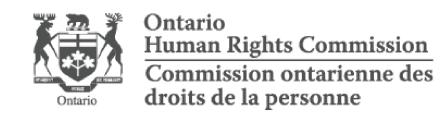
Phase 1



UNDERSTANDING ACCESSIBILITY

REFERENCE LIB

Accessibility in E-Learning



YOUR RIGHTS CODE GROUNDS SOCIAL AREAS EDUCATION

Home » Right to Read inquiry report » 11. Accommodations

#### Right to Read inquiry report

- Executive summary
- Executive summary audiobook
- 1. Introduction
- 2. Inquiry scope

11. Accommo

printer-friendly versio

Introduction

### Canada Student Grant for Students with Permanent Disabilities

#### Eligibility

You must have a persistent or prolonged disability. That restricts your ability to perform daily activities necessary to take part in:

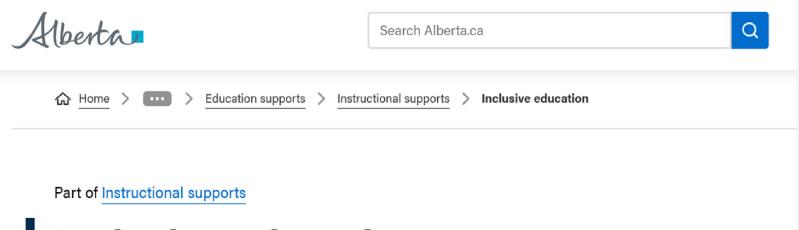
- studies at a post-secondary school level; or
- in the labour force.

Your functional limitation can be caused by a:

- physical impairment; or
- mental impairment.



## EXAMPLE OF RESOURCES IN ALBERTA



#### **Inclusive education**

Inclusion is a way of thinking and acting that demonstrates universal acceptance and promotes a sense of belonging for all learners.

Feb 01, 2023

## More funding for students with disabilities

Alberta's government is investing \$5 million to increase access to specialized supports and services to maintain an inclusive learning environment.



**OPEN EDUCATIONAL RESOURCES** 

**Starter Kit** 

## AREAS FOR IMPROVEMENT IN ALBERTA

Component of accessible digital learning resources	How can do better	
General	Centralization of the guideline to a single website.	
Ease of understanding	Examples or templates of universally designed digital learning resources.	
Technological accommodation	Examples of government-approved software such as NaturalReader.	
Consideration of age and difference in disabilities	Making condition-specific guidelines to each condition of the low incidence disabilities (e.g., significant cognitive impairment, multiple disabilities)	
Affordability	Funding allocation (political)	

### SUMMARY

- Most provinces have guidelines on the ease of understanding aspect and affordability aspect of digital learning resources.
- AB is the only province with recommendations on all four aspects.
- Findings from this jurisdictional scan could inform policy makers and educators of rooms for improvement in terms of accessible digital learning resource development.

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