



An overview of the video entitled “Let’s not lose our bearings”

Déclic Techno-Sciences is a series linked to Natural Resources Canada offering information on scientific research and on the profession of a researcher. With each video, you will find pedagogical activities, proposed themes to explore, a table with topics explored in the video linked to the Québec Education Program, some definitions, complementary multimedia resources and the transcription of the video.

The video entitled “Let’s not lose our bearings”, which explains geological mapping and its importance for Natural Resources Canada, is rich in possibilities for in-class exploration. In the table below, you will find suggestions of avenues to delve into and pedagogical activities making this video a rich resource to explore.

Themes to explore	Avenues of exploration	Pedagogical Activities	Subject Areas		Subject-specific competencies (*)
			Primary Cycle Three	Secondary Cycle One	
Issues (1)					
Sustainable development (2)	What is sustainable development (take the apart and understand the concept)?	Can territory planning be done in a sustainable way?		•	1.1.a
	Are specific tools needed to conduct sustainable development?				1.1.b
	Is sustainable development possible?				1.1.c
	How can the two concepts be linked together?	3.1.a			
		Sustainable forests (3)			3.1.b
					3.1.c
					4.1
					4.2
Territory	Why map land?	Develop a vocabulary list	•		1.1.b
	How is a territory mapped?				1.1.c
		Territory planning, elements of mapping (8)			2.1.a
					2.1.b
					3.1.a
					3.1.b

Resources	What is a resource?				
	Is there something that can not be considered a resource? (identify resources)				
	Natural resources (classification of resources)				
	The concept of raw material				
	Resources development	Economic activities generated by natural resources (4)			

General Themes

Research	The effect of research training				
	Links between the private sector and the public sector				
Cartography	Different types of maps (5)	Develop a vocabulary list	•		1.1.b 1.1.c 2.1.a 2.1.b 3.1.a 3.1.b
	Different uses for maps (5)				
	Topographic maps (6) (9)	Territory planning, elements of mapping (8)			
		Can territory planning be done in a sustainable way?	•		1.1.a 1.1.b 1.1.c 3.1.a 3.1.b 3.1.c 4.1 4.2
	Different mediums for maps				

Specific Themes

Digital data	Coordinates				
	Photos (7)				
	Up-dating data				
	Data manipulation				
GPS	Concepts of latitude/longitude/altitude	Develop a vocabulary list	•		1.1.b
	Concepts linked to topography				1.1.c
	Concept of medium				2.1.a 2.1.b 3.1.a 3.1.b
	How does it work? (6)				
	Data transmission via satellite				
Professions (10)	Geomatics technician				
	Land surveyor (6)				

Subject Areas					
Subject Area		Subject		Subject-specific competencies	
1	Mathematics, Science & Technology	1.1	Science & Technology	1.1.a	To propose explanations for or solutions to scientific or technological problems
				1.1.b	To make the most of scientific and technological tools, objects and procedures
				1.1.c	To communicate in the languages used in science and technology
2	Social Sciences	2.1	Geography	2.1.a	To be open to the diversity of societies and their territories
				2.1.b	To understand the organisation of a society in its territory
3	Languages	3.1	English Language Arts	3.1.a	To read and listen to literary, popular and information-based texts
				3.1.b	To write self-expressive, narrative and information-based texts
				3.1.c	To use language to communicate and learn
Subject Areas					
Subject Area		Subject		Subject-specific competencies	
1	Mathematics, Science & Technology	1.1	Science & Technology	1.1.a	Seeks answers or solutions to scientific or technological problems
				1.1.b	Makes the most of his/her knowledge of science and technology
				1.1.c	Communicates in the languages used in science and technology
		1.2	Mathematics	1.2.a	Uses mathematical reasoning
				1.2.b	Communicates by using mathematical language
2	Social Sciences	2.1	Geography	2.1.a	Interprets a territorial issue
3	Languages	3.1	English Language Arts	3.1.a	Reads and listens to written, spoken and media texts
				3.1.b	Writes a variety of genres for personal and social purposes
				3.1.c	Uses language/talk to communicate and to learn
4	Personal Development			4.1	Concern for others and the environment
				4.2	Development of attitudes for their personal and social lives

Legend

- (1) Certain themes indicated as issues are not presented as such in the video, but the aim of the video enables some reflection on the subject.
 - (2) Information on sustainable development can be found on a website produced by Natural Resources Canada: http://www.nrcan-rncan.gc.ca/sd-dd/index_eng.html
 - (3) This educative activity which applies the concept of sustainable forest harvesting was developed by Natural Resources Canada and is available at the following website <http://ecosys.cfl.scf.nrcan.gc.ca/education/projet-project-g-eng.asp>
 - (4) This educative activity was developed by Natural Resources Canada and is available at http://atlas.nrcan.gc.ca/site/english/learningresources/lesson_plans/elementary_school/nfld_es.html/document_view
 - (5) Detailed information on this topic can be found on Natural Resources Canada web site at http://atlas.nrcan.gc.ca/site/english/learningresources/cartocorner/maps.html/document_view and information on mapping terminology at http://maps.nrcan.gc.ca/topo101/terms_e.php as well as standards and specifications at http://maps.nrcan.gc.ca/cartospecs/index_e.php
 - (6) Information on land surveying, GPS and topographic maps can be found on Natural Resources Canada site at http://www.geod.nrcan.gc.ca/edu/index_e.php
 - (7) Information on air photos or aerial photography (principles, technical concepts and air photo interpretation as well as a few sample air photos) is available on Natural Resources Canada site at http://airphotos.nrcan.gc.ca/photos101/index_e.php
 - (8) This educative activity was developed by Natural Resources Canada and is available at http://atlas.nrcan.gc.ca/site/english/learningresources/lesson_plans/elementary_school/qc_es.html/document_view
 - (9) Information on topographic maps can be found on Natural Resources Canada site at http://maps.nrcan.gc.ca/topo_e.php
 - (10) Details about the profession are not explained. What is presented is a meeting with someone who works in this profession.
- (*) Links to the Québec Education Program