Canadians' Perspectives on Climate Change & Education: 2022
Manitoba Provincial Report

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To view the National Report visit:
LSF-LST.ca/research-policy/survey

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Learning for a Sustainable Future (LSF) is a Canadian charity, founded in 1991, whose mission is to promote, through education, the knowledge, skills, values, perspectives, and practices essential to a sustainable future.

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Section 1: Introduction

Climate Change and Education Context

Climate change is one of the most complex and wide-reaching challenges facing humankind today. According to a 2022 report published by the Intergovernmental Panel on Climate Change (IPCC), the planet has already passed a number of crucial tipping points, and some effects of climate change are already irreversible. Canada has seen a significant increase in climate-related disasters over the past decade and urgent action is necessary using the best data available to ensure that Canadians will successfully adapt and prosper.

Climate Change Education and Policy

The important contribution of the education sector in responding to climate change is recognized globally. According to UNESCO, 95 percent of the 194 reporting countries have included climate change education as part of their national action plans on climate change. However, this pledge has not yet resulted in subsequent curriculum change, as almost half of the curriculum frameworks from 100 countries contain no climate change content, and furthermore, implementation is not consistent. Across Canada, only 6 of 13 provinces and territories have included climate and sustainability in their curricular documents or education policy. In addition, provincial curriculum seldom emphasizes climate change's current and projected impact, mitigation and adaptation strategies, and the scientific consensus on climate science.

Impacts on Youth and the Significance of Youth Action

It is essential to provide youth with accurate scientific knowledge and strategies to address climate change to promote a sustainable mindset and build a climate-resilient socioeconomic system. Integrating climate education across subjects and tying together inequality, citizenship, Indigenous stewardship and discussions of systematic change will foster an informed citizenry and empower students to use their voices and advocate for change in their communities. Engaging youth in environmental issues within their communities is but one starting point to further encourage them to undertake collective action through policy, activism, and network building. Yet youth cannot tackle the climate crisis on their own – they require the commitment of previous generations to right cumulative wrongs and change the course of the future. Formal and informal education of all Canadians is key to achieving success in the fight against climate change.

Survey Background

As the effects of climate change become increasingly more severe, the sense of urgency to act to mitigate and adapt to climate change is also mounting. Moving Canada toward resiliency and adaptability for climate impacts today and in the future will require support, education, and action at all levels of Canadian society.

The report *Canadians' Perspectives on Climate Change & Education: 2022* provides results from a national climate change education survey undertaken by Learning for a Sustainable Future (LSF) and Leger Research Intelligence Group. The survey gathered data from across Canada on different groups' knowledge of climate change and its risks, and their views on the role of schools in climate change education.

This *Manitoba Provincial Report* provides the highlights from the full national report and gives additional results based on further analysis of Manitoba data. The findings presented here help to gain an understanding of trends over time and current perspectives of educators, students, parents and the general public in 2022. With this knowledge, recommendations based on evidence can be made to fill in gaps, promote strengths, and address misperceptions in order to implement the most effective strategies to support all Canadians in their efforts to combat climate change.

Acknowledgements

We recognize that the lands we live, work, teach and learn from are the traditional territories of Indigenous peoples and that all Canadians benefit from this land. We recognize the importance of Indigenous perspectives and connections to land and place as we work towards reconciliation to address the Calls to Action of the Truth and Reconciliation Commission.

This survey is a follow-up to a climate change education survey that was undertaken in 2019 by Dr. Ellen Field at Lakehead University (with funding from SSHRC), Learning for a Sustainable Future and Leger. The 2022 survey design and data analysis was led by Pamela Schwartzberg, Learning for a Sustainable Future President and CEO; Jennifer Stevens, LSF Manager of Learning, Research and Communication, and LSF consultants Dr. Karen Acton and Dr. Susan Elliott. Leger Research Intelligence Group provided data collection and analysis. Elaine Rubinoff, LSF Director of Programs, and Samantha Gawron, Manager of Programs, Engagement & Development provided survey promotion.

Thank you to the Canadian Teachers' Federation and many other teacher organizations, as well as LSF's communication partners for circulating the survey to their members. We would also like to thank the 406 educators, 1,373 parents, 1,208 students and 1,290 members of the general public who participated in the Leger panel, and the 1,237 educators, 462 parents, 586 students and 391 members of the general public who participated through the open survey link on the LSF site.

We would like to thank the Government of Canada for their financial support.

Methodology

Population Segmentation

For this survey, the following populations were identified:

- Educators – public and private K-12/cégep teachers, educational assistants, department heads, curriculum leads and curriculum consultants, vice-principals, principals, and district leaders
- Students – includes current students from grades 7 to 12/cégep
- Parents – includes parents of students in K-12/cégep
- General Public – includes participants who do not identify as educators, students, or parents.

Recruitment Procedures

Leger Research Intelligence Group provided data collection and analysis on behalf of Learning for a Sustainable Future (LSF). Leger panelists received an email invitation to complete the survey with a unique link for each respondent. All respondents from the Leger panel (LEO) are referred to as "panel". From the Leger Web Survey, a total of 4,035 Canadians were surveyed in English and French. This report contains the results for the "panel" data.

Due to the limits of the LEO platform to survey the desired 1000 educators, the survey relied on a multi-sampling approach where additional responses were collected through convenience and snowball sampling through an open survey link hosted on LSF's website. Many teacher affiliations and education-related organizations assisted with the promotion of the survey through their provincial and territorial networks.

Data Collection and Analysis

As part of the analysis process, the data are weighted by age, gender and province (based on Statistics Canada proportions) to ensure that data are representative of the Canadian public and reflective of Canadian opinion. Demographic data is presented in its unweighted form.

From the sample that was collected through the LSF open-link, a total of 2,461 completed surveys were received from November 9, 2021 to March 6, 2022. The supplemental open-link data was used where Leger panel data was insufficient, and was thus only needed to augment the educator respondent data for SK, MB and ATL in the provincial reports.

See the methodology section of the full national report for further details.

2022 Demographics

Manitoba Respondent Groups

51
*19
103
75
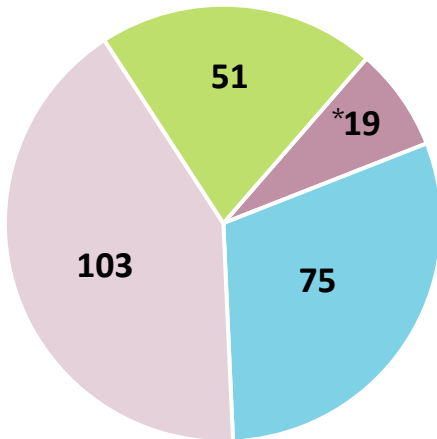
National Respondent Groups

1290
406
1208
1373
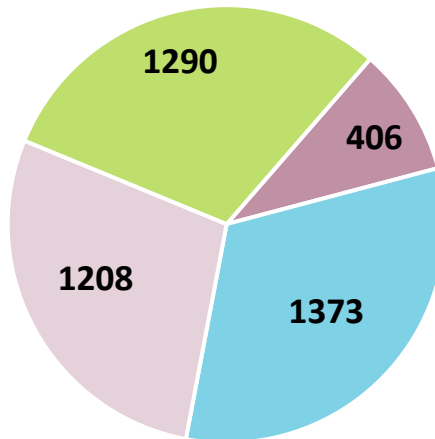
* A sample size of 19 educators was insufficient for data analysis, thus for this report, open-link data of 257 MB educator responses was used.

■ Educator ■ Parent ■ Student ■ General Public

National Respondents by Province/Region

ATL
7%

300

BC
13%

QC
29%

1168

514

467

AB
12%

217

SK
5%

241

MB
6%

ON
25%

1025
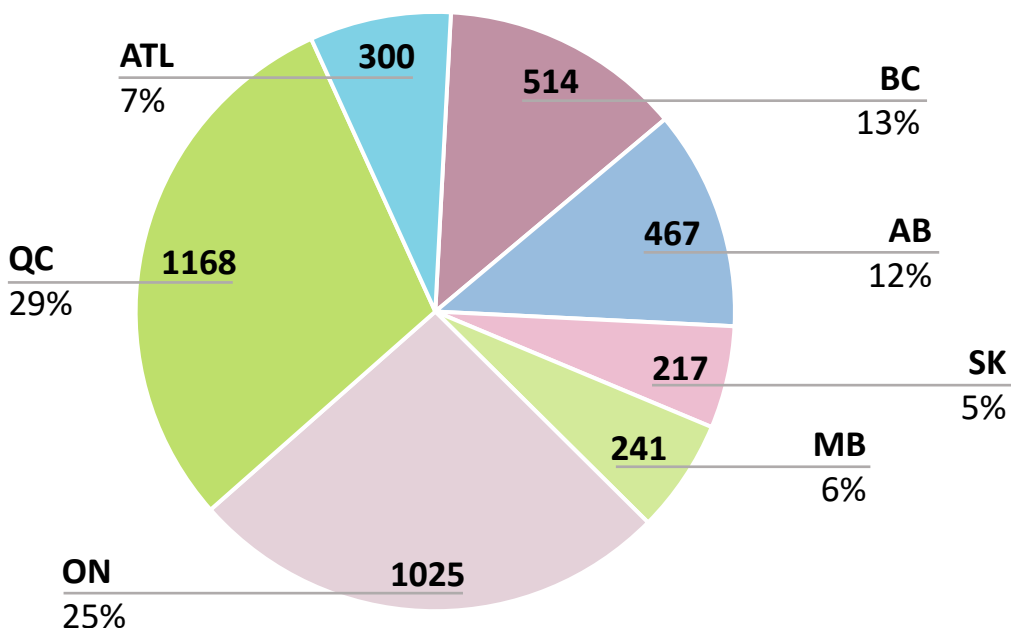
2022 Manitoba Demographics

Total

Age
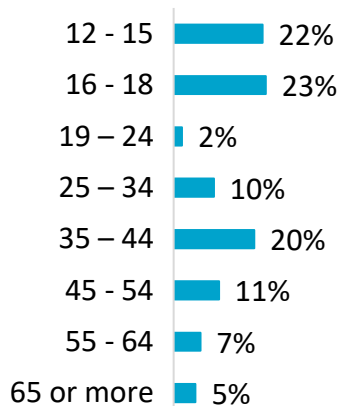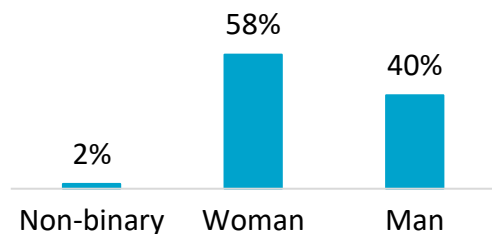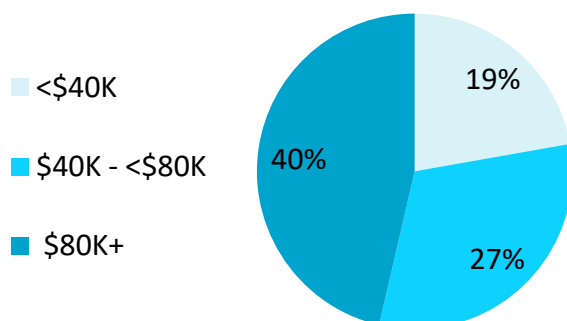
12 - 15	22%
16 - 18	23%
19 – 24	2%
25 – 34	10%
35 – 44	20%
45 - 54	11%
55 - 64	7%
65 or more	5%

Gender

Non-binary	Woman	Man
2%	58%	40%

Household Income

- <$40K — 19%
- $40K - <$80K — 27%
- $80K+ — 40%

Education Level

Less than grade 10	18%
Grade 10 – 12/cégep	40%
Undergraduate	12%
University degree	17%
Graduate certificate	7%
Graduate degree	6%

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Section 2: What has changed since 2019?

Overall Climate Change Knowledge

Respondents were asked 10 climate change questions early in the survey, to test their knowledge and understanding. Each question had a correct answer. The number of correct responses per respondent group and province/region are shown on the following slide, and responses from selected questions are shown on subsequent slides. Below are the 10 questions respondents were asked, with the answers in bold:

B1. Do you think climate change is…
- a. **Caused mostly by human activities**
- b. Caused mostly by natural changes in the environment
- c. About equally caused by both human activities and natural changes
- d. Not happening
- e. Don't know
- f. Other (please specify)

B2. Which comes closest to your own view?
- a. **Most climate scientists think climate change is happening**
- b. Most climate scientists do not think climate change is happening
- c. There is a lot of disagreement among climate scientists about whether climate change is happening or not
- d. Don't know enough to say

B3. Climate change is caused by….
- a. Emissions from nuclear power plants
- b. Thinning of the ozone layer
- c. Particulate air pollution
- d. **Carbon dioxide and other greenhouse gases**
- e. Industrial chemicals
- f. Natural variability
- g. Unsure

B4. The main process behind climate change is…
- a. Letting more of the sun's heat into the Earth's atmosphere through a thinner ozone layer
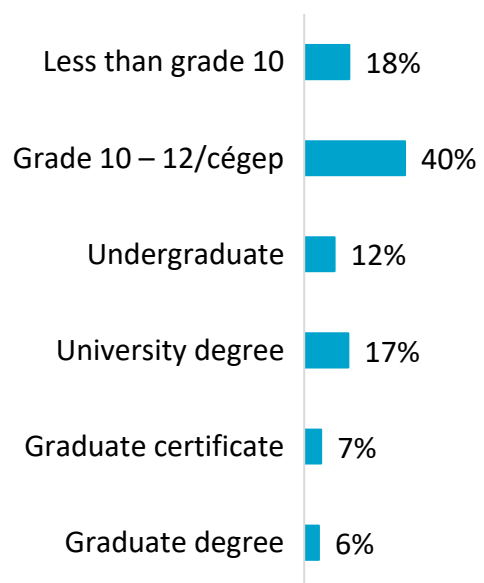- b. **An increase in gases in the Earth's atmosphere that trap heat**
- c. An increase in solar activity
- d. Particulate pollution in the air reflecting heat back to Earth
- e. Unsure

B5. Canada, as an Arctic nation, is particularly affected by the impacts of climate change
- a. **True**
- b. False
- c. Unsure

B6. Canada's average temperature has _____ since 1948.
- a. Decreased by 1 – 1.5 degrees Celsius
- b. Decreased by 1 – 0.5 degrees Celsius
- c. Decreased by 0.5 – 0 degrees Celsius
- d. Stayed the same
- e. Increased by 0 – 0.5 degrees Celsius
- f. Increased by 0.5 – 1 degrees Celsius
- g. **Increased by 1 – 1.5 degrees Celsius**
- h. Unsure

B7. What sector is currently the largest greenhouse gas emitter in Canada?
- a. Agriculture
- b. Heavy industry
- c. Electricity
- d. Buildings
- e. **Oil and gas**
- f. **Transportation**
- g. Waste
- h. Unsure

B8. In the next 20 years, Canadian winters are predicted to be colder and to have more snow.
- a. True
- b. **False**
- c. Unsure

B9. At what minimum temperature change does scientific consensus predict global warming will result in major consequences to health, livelihoods, food security, water supply, and economic growth?
- a. 0 degrees Celsius
- b. 0.5 degrees Celsius
- c. 1 degree Celsius
- d. **1.5 degrees Celsius**
- e. 2 degrees Celsius
- f. 2.5 degrees Celsius
- g. Don't know

B10. What do countries need to do in order to ensure temperatures stay within the range that the Earth system can tolerate?
- a. Significantly increase emissions
- b. Moderately Increase emissions
- c. Do nothing
- d. Moderately decrease emissions
- e. **Significantly decrease emissions**
- f. **Move to net zero emissions** Don't know

Overall Climate Change Knowledge

Total Correct Answers

Year	0-4 correct	5-7 correct	8-10 correct
2022	33%	46%	21%
2019	43%	43%	14%

■ 0-4 correct   ■ 5-7 correct   ■ 8-10 correct

Total Correct Answers – Respondent Group

Group	Year	0-4 correct	5-7 correct	8-10 correct
Educator	2022	28%	40%	33%
Educator	2019	44%	46%	10%
Parent	2022	37%	44%	19%
Parent	2019	46%	42%	12%
Student	2022	35%	47%	19%
Student	2019	45%	45%	10%
General Public	2022	33%	47%	20%
General Public	2019	41%	43%	16%

2022: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
2019: *n*=2,191 (Educator=111, Parent=571, Student=486, General Public=908)

Overall climate change knowledge has increased since 2019, as more Canadians passed the 10 question climate change test embedded in the survey (67% passed in 2022 vs. 57% 2019).

Furthermore, significantly more educators passed with over 80% in 2022 vs. 2019 (33% vs. 10%), as did parents (19% vs. 12%), students (19% vs. 10%), and the general public (20% vs. 16%).

Total Correct Answers – Province/Region

Region	Year	0-4 correct	5-7 correct	8-10 correct
BC	2022	33%	48%	19%
BC	2019	37%	50%	13%
AB	2022	41%	45%	15%
AB	2019	60%	28%	12%
SK	2022	40%	48%	12%
SK	2019	65%	31%	5%
MB	2022	33%	46%	21%
MB	2019	48%	46%	6%
ON	2022	34%	44%	22%
ON	2019	46%	41%	13%
QC	2022	26%	49%	25%
QC	2019	29%	51%	20%
ATL	2022	37%	42%	21%
ATL	2019	39%	50%	10%

Climate change knowledge has also increased regionally across Canada with the majority showing improvement on the climate change knowledge test. Significantly fewer failed in AB, SK, MB and ON.

Furthermore, significantly more respondents were able to answer 8 or more questions correctly in BC SK, MB, ON, QC and in ATL. While AB and SK have improved, their scores remain lower than the rest of Canada.

2022: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)
2019: *n*=2,191 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=814, ATL.=118)

Do you think climate change is...

Total

2022 54% | 35%
2019 46% | 41%

0%   50%   100%

- ■ Caused mostly by human activities *(correct)*
- ■ Caused mostly by natural changes in the environment
- ■ About equally caused by both human activities and natural changes
- ■ Not happening
- ■ Don't know

Respondent Group

Educator
2022 57% | 35%
2019 60% | 32%

Parent
2022 55% | 35%
2019 43% | 42%

Student
2022 60% | 29%
2019 54% | 33%

General Public
2022 52% | 35%
2019 46% | 41%

0%   50%   100%

2022: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
2019: *n*=2,188 (Educator=111, Parent=571, Student=484, General Public=907)

A majority of respondents were correct in their thinking that climate change is caused mostly by human activities. More respondents in 2022 answered correctly (54%) than in 2019 (46%), which is fairly consistent across most respondent groups. Parents showed the largest gains (55% in 2022 vs. 43% in 2019). However, slightly fewer educators answered correctly in 2022 (57%) than in 2019 (60%).

Notably, a proportion (35%) still think climate change is equally caused by both human activities and natural changes, although this number has decreased since 2019 (41%).

Caused mostly by human activities *(correct)*			
Province	**2019**	**2022**	**(+/-)**
BC	47%	59%	+12
AB	28%	40%	+12
SK	29%	41%	+12
MB	39%	50%	+11
ON	46%	55%	+9
QC	57%	60%	+3
ATL	51%	44%	-7

The percentage of respondents who were able to answer this question correctly in 2022 increased across all regions compared to 2019, other than in ATL.

Correct responses increased from +3 percentage points in QC to +12 percentage points in BC, AB, and SK between 2019 and 2022.

2022: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)
2019: *n*=2,188 (BC=196, AB=160, SK=73, MB=70, ON=748, QC=812, ATL.=118)

Which comes closest to your own view?
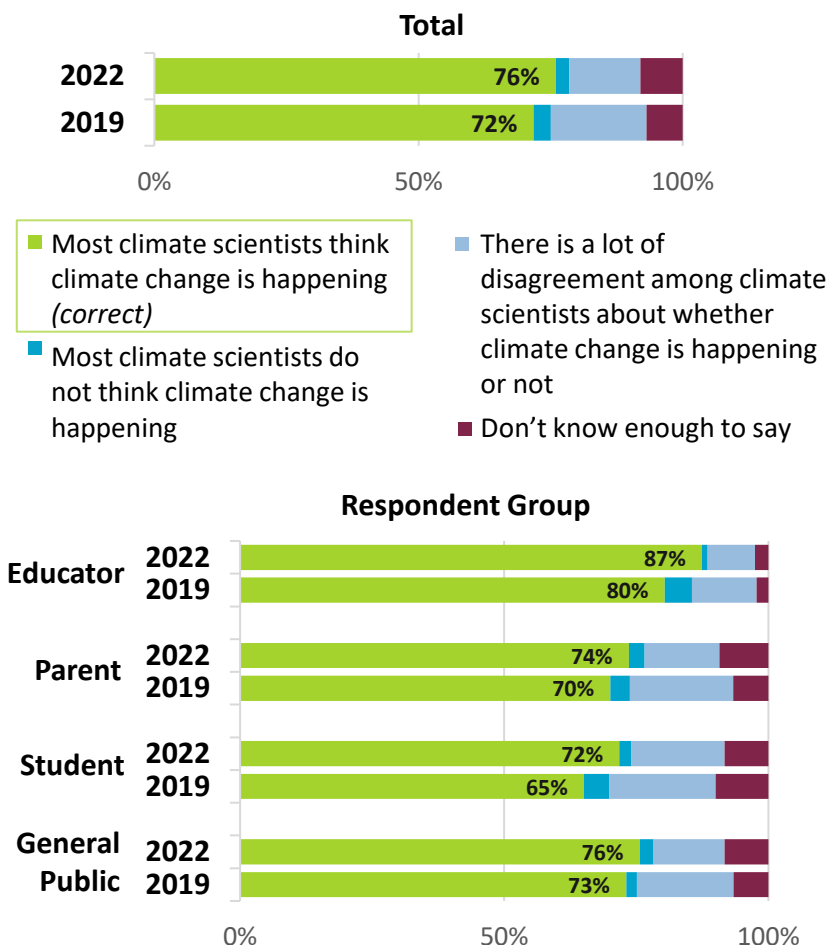
Total

2022 — 76%
2019 — 72%

0%   50%   100%

- ■ (green) Most climate scientists think climate change is happening *(correct)*
- ■ (teal) Most climate scientists do not think climate change is happening
- ■ (light blue) There is a lot of disagreement among climate scientists about whether climate change is happening or not
- ■ (dark red) Don't know enough to say

Respondent Group

Educator	2022	87%
	2019	80%
Parent	2022	74%
	2019	70%
Student	2022	72%
	2019	65%
General Public	2022	76%
	2019	73%

0%   50%   100%

2022: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
2019: *n*=2,189 (Educator=110, Parent=571, Student=486, General Public=907)

A majority of respondents hold the correct belief that most climate scientists think climate change is happening. Slightly more respondents hold this view in 2022 (76%) than did in 2019 (72%).

Similarly, more respondents from each respondent group in 2022 hold this view, than did in 2019. The largest increase in correct responses from 2019 to 2022 was seen in educators and students, with an increase of +7 percentage points.

	Most climate scientists think climate change is happening (correct)		
Province	2019	2022	(+/-)
BC	78%	79%	+1
AB	61%	73%	+12
SK	52%	73%	+21
MB	70%	70%	-
ON	70%	76%	+6
QC	81%	77%	-4
ATL	67%	77%	+10

The percentage of respondents who were able to answer this question correctly in 2022 increased across all regions compared to 2019, except for QC, which decreased by 4 percentage points, and MB which stayed consistent with 2019 answers.

Correct responses increased from +1 percentage points in BC to +21 percentage points SK.
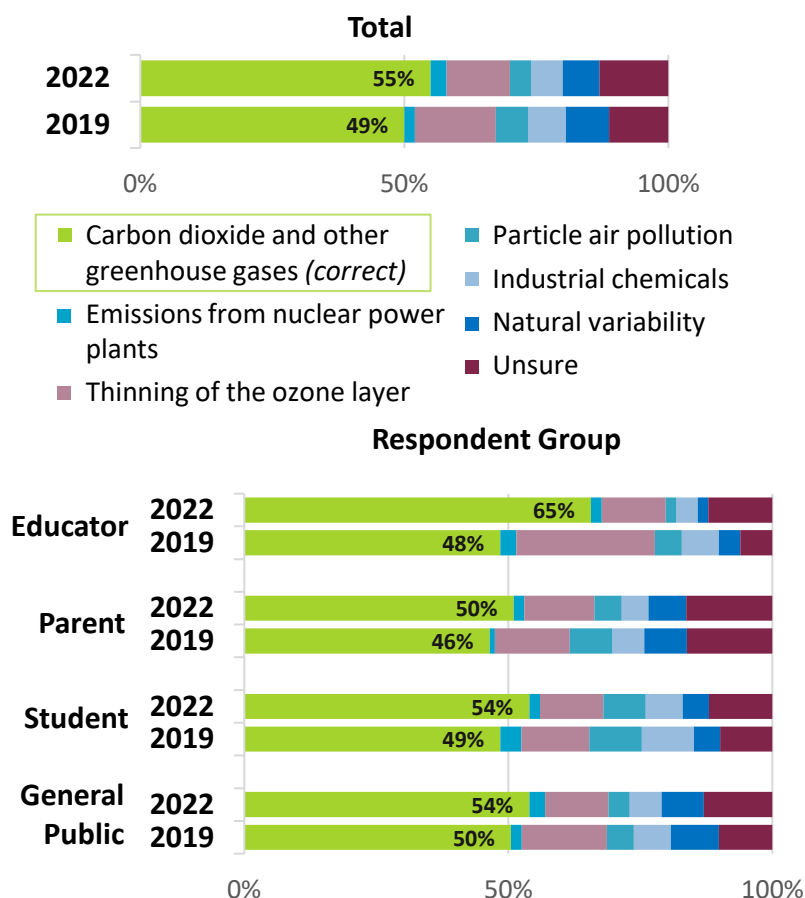
2022: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)
2019: *n*=2,188 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=812, ATL.=118)

Climate change is caused by...

Total

- Carbon dioxide and other greenhouse gases *(correct)*
- Emissions from nuclear power plants
- Thinning of the ozone layer
- Particle air pollution
- Industrial chemicals
- Natural variability
- Unsure

Respondent Group

2022: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
2019: *n*=2,191 (Educator=111, Parent=571, Student=486, General Public=908)

In terms of understanding the scientific causes of climate change, just over half (55%) of respondents in 2022 answered correctly, that carbon dioxide and other greenhouse gases are the primary cause of climate change, compared with less than half (49%) in 2019.

Educators showed the largest increase in correct answers to this question (65% vs. 48%). Parents remained the most 'unsure' with only half choosing the correct response.

Province	Carbon Dioxide and other greenhouse gases *(correct)*		
	2019	2022	(+/-)
BC	52%	58%	+6
AB	44%	48%	+4
SK	34%	52%	+18
MB	49%	60%	+11
ON	48%	52%	+4
QC	55%	64%	+9
ATL	49%	46%	-3

The percentage of correct answers to the cause of climate change increased for respondents in all provinces aside from those in ATL.

SK had the largest increase in correct responses from 2019 to 2022, with significantly more respondents in SK answering this question correctly in 2022 (52%) than in 2019 (34%).

2022: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)
2019: *n*=2,190 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=814, ATL.=118)

The main process behind climate change is...

Total

2022	45%
2019	42%

0%   50%   100%

- ■ An increase in gases in the Earth's atmosphere that trap heat *(correct)*
- ■ Letting more of the sun's heat into the Earth's atmosphere through a thinner ozone layer
- ■ An increase in solar activity
- ■ Particulate pollution in the air reflecting heat back to Earth
- ■ Unsure

Respondent Group

Educator	2022	58%
	2019	37%
Parent	2022	45%
	2019	43%
Student	2022	47%
	2019	42%
General Public	2022	44%
	2019	42%

0%   50%   100%

2022: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
2019: *n*=2,184 (Educator=110, Parent=571, Student=486, General Public=903)

Less than half of all respondents were able to answer correctly that the main process behind climate change is an increase in gases in the Earth's atmosphere that trap heat. The percent of correct answers increased slightly from 2019 (42%) to 2022 (45%).

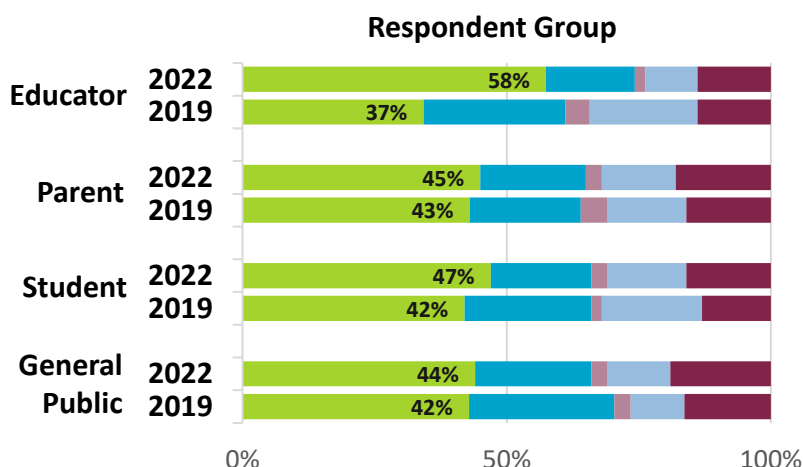While all respondent groups showed gains in answering correctly in 2022, educators showed the most improvement in understanding the main process behind climate change (58% in 2022 vs. 37% in 2019).

	An increase in gases in the Earth's atmosphere that trap heat *(correct)*		
Province	**2019**	**2022**	**(+/-)**
BC	48%	45%	-3
AB	43%	45%	+2
SK	25%	38%	+13
MB	38%	43%	+5
ON	41%	44%	+3
QC	46%	51%	+5
ATL	39%	42%	+3

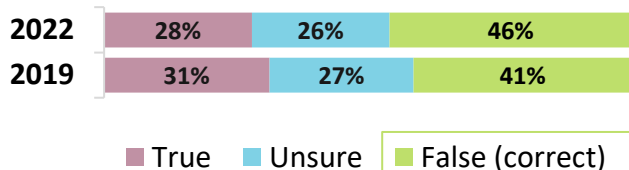The percentage of respondents who answered this climate change question correctly increased for respondents in all provinces aside from those in BC.

Correct responses increased from +2 percentage points in AB to +13 percentage points in SK between 2019 and 2022.
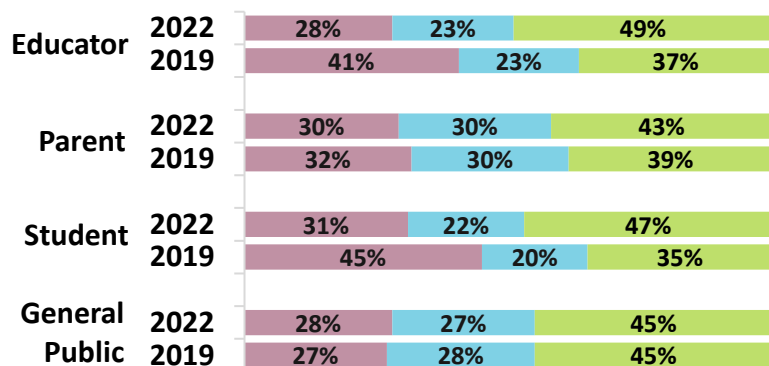
2022: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)
2019: *n*=2,184 (BC=195, AB=160, SK=73, MB=69, ON=748, QC=810, ATL.=118)

In the next 20 years, Canadian winters are predicted to be colder and to have more snow

Total

2022	28%	26%	46%
2019	31%	27%	41%

■ True ■ Unsure ■ False (correct)

Respondent Group

Educator
- 2022: 28% / 23% / 49%
- 2019: 41% / 23% / 37%

Parent
- 2022: 30% / 30% / 43%
- 2019: 32% / 30% / 39%

Student
- 2022: 31% / 22% / 47%
- 2019: 45% / 20% / 35%

General Public
- 2022: 28% / 27% / 45%
- 2019: 27% / 28% / 45%

2022: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
2019: *n*=2,190 (Educator=111, Parent=571, Student=486, General Public=907)

	False (correct)		
Province	**2019**	**2022**	**(+/-)**
BC	38%	37%	-1
AB	43%	42%	-1
SK	37%	42%	+5
MB	35%	42%	+7
ON	41%	43%	+2
QC	45%	58%	+13
ATL	41%	48%	+7

2022: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)
2019: *n*=2,187 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=813, ATL.=118)

When asked if in the next 20 years, Canadian winters are predicted to be colder and to have more snow, less than half of all respondents answered correctly that the statement was false. Slightly more respondents in 2022 (46%) answered correctly than did in 2019 (41%). Over one-quarter of all respondents remained unsure.

Correct responses increased across all respondent groups other than in the general public, where correct responses stayed consistent between 2022 and 2019 (45%). Significantly more students and educators correctly answered that this question in 2022 (both groups up by 12 percentage points).

The percentage of correct responses increased across all regions other than BC and AB where correct responses in these two provinces each dropped by 1 percentage point from 2019 to 2022.

Correct responses increased from +2 percentage points in ON to +13 in QC from 2019 to 2022.

What do countries need to do in order to ensure temperatures stay within a tolerable range?

Total | % Correct

	Total		% Correct
2022	41%	34%	75%
2019	50%	36%	73%

■ Significantly Decrease Emissions
■ Move to Net Zero Emissions

% Correct (Significantly decrease emissions **or** move to net zero emissions)

When asked what countries need to do to ensure temperatures stay within a tolerable range, about three-quarters of respondents were able to answer correctly, that countries should either significantly decrease emissions or move to net zero emissions. Responses were similar but slightly improved in 2022 (75%) compared to 2019 (73%).

Correct responses increased across all respondent groups other than the general public, where correct responses stayed consistent between 2022 and 2019 (74%). Students had the largest increase in correct responses from 2019 (65%) to 2022 (76%).

Respondent Group | % Correct

		Respondent Group		% Correct
Educator	2022	41%	38%	79%
	2019	53%	42%	76%
Parent	2022	45%	31%	76%
	2019	51%	36%	73%
Student	2022	45%	30%	76%
	2019	46%	31%	65%
General Public	2022	40%	34%	74%
	2019	51%	36%	74%

2022: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
2019: *n*=2,189 (Educator=111, Parent=571, Student=486, General Public=906)

% Correct (Significantly decrease emissions **or** move to net zero emissions)			
Province	**2019**	**2022**	**(+/-)**
BC	71%	76%	+5
AB	64%	65%	+1
SK	60%	70%	+10
MB	74%	66%	-8
ON	74%	76%	+2
QC	82%	78%	-4
ATL	68%	75%	+7

The percentage of correct responses varied across all province/regions from 2019 to 2022. Most had an increase in correct responses, however in MB and QC correct responses decreased by -8 to -4 percentage points, respectively.

Correct responses increased from +1 percentage points in AB to +10 in SK from 2019 to 2022.

2022: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)
2019: *n*=2,188 (BC=196, AB=160, SK=73, MB=70, ON=748, QC=812, ATL.=118)

How well-informed do you feel you are about climate change?

Total

Year	Informed (NET)	Don't know	Uninformed (NET)
2022	55%		43%
2019	51%		48%

Legend: ■ Informed (NET) ■ Don't know ■ Uninformed (NET)

Respondent Group

Group	Year	Informed (NET)	Uninformed (NET)
Educator	2022	58%	40%
Educator	2019	63%	36%
Parent	2022	49%	48%
Parent	2019	42%	57%
Student	2022	58%	38%
Student	2019	50%	48%
General Public	2022	55%	43%
General Public	2019	54%	45%

2022: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
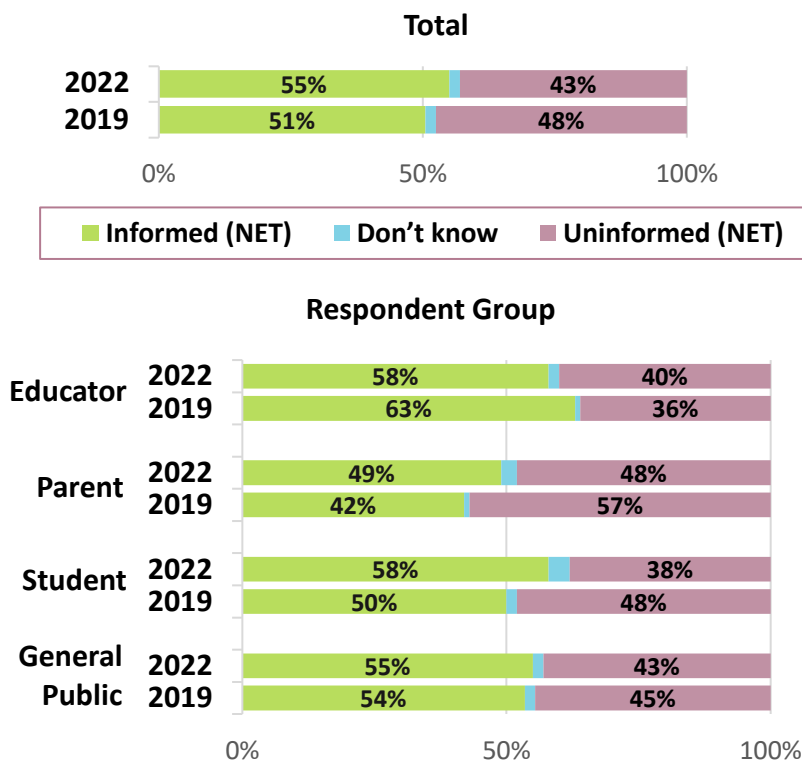2019: *n*=2,188 (Educator=110, Parent=571, Student=485, General Public=907)

Most respondents (55%) in 2022 felt they were well-informed (very well-informed/fairly well-informed) about climate change, more than in 2019 (51%).

Parents (49%), students (58%), and the general public (55%) indicated feeling more well-informed in 2022 than in 2019 (42%, 50%, 54%, respectively).

Educators were the only group to feel less informed in 2022 than in 2019 (58% vs. 63% in 2019).

Province/Region

Region	Year	Informed (NET)	Uninformed (NET)
BC	2022	57%	38%
BC	2019	50%	49%
AB	2022	56%	42%
AB	2019	52%	47%
SK	2022	61%	38%
SK	2019	40%	57%
MB	2022	56%	42%
MB	2019	58%	42%
ON	2022	56%	42%
ON	2019	54%	44%
QC	2022	53%	45%
QC	2019	48%	50%
ATL	2022	47%	51%
ATL	2019	38%	60%

2022: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)
2019: *n*=2,188 (BC=196, AB=159, SK=73, MB=70, ON=748, QC=813, ATL.=118)

All respondents in provinces across Canada, other than in MB, indicated feeling more well-informed in 2022 than in 2019.

Those in SK felt the most well-informed (61%) in 2022, a significant increase from 2019 (40%). Residents in ATL felt the least well-informed (47%) in 2022, however still notably more than in 2019 (38%)

Climate change education should be a high priority for schooling

Agree (NET)– Total

2022 67%
2019 59%

Agree (NET)– Respondent Group

Educator 68% / 70%
Parent 64% / 53%
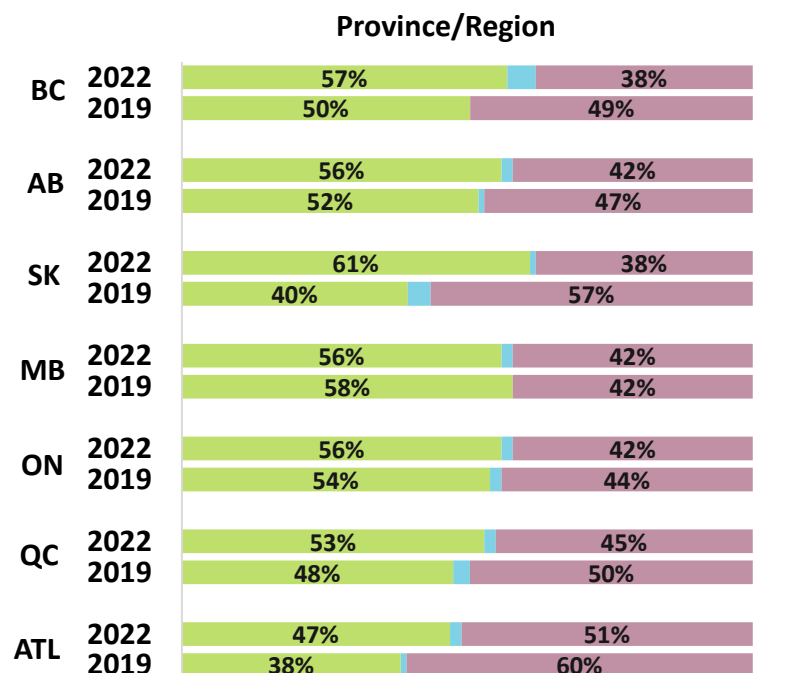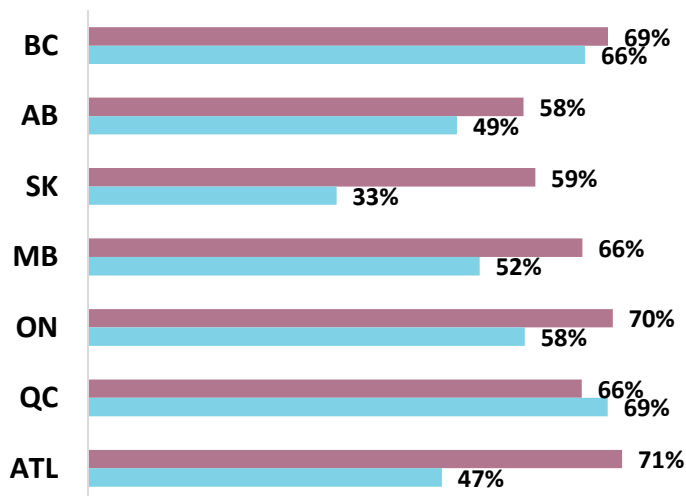**Student** 66% / 57%
General Public 67% / 60%

2022: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
2019: *n*=2,179 (Educator=111, Parent=570, Student=479, General Public=906)

■ 2022
■ 2019

Agree (NET)- Province/Region

BC 69% / 66%
AB 58% / 49%
SK 59% / 33%
MB 66% / 52%
ON 70% / 58%
QC 66% / 69%
ATL 71% / 47%

Education is becoming a higher priority for Canadians. When asked if climate change should be a high priority for schooling, more respondents agreed in 2022 (67%) than in 2019 (59%).

Parents (64% vs. 53%), Students (66% vs. 57%) and the general public (67% vs. 60%) agreed significantly more in 2022 than they did in 2019.

Similarly, when asked if climate change education should be a high priority for schooling, a majority of respondents in 2022 across all regions in Canada agreed. Those in AB (58% vs. 49%), SK (59% vs. 33%), MB (66% vs. 52%), ON (70% vs. 58%), and those in ATL (71% vs. 47%) agreed significantly more than they did in 2019.

Notably, QC is the only region that decreased in agreement from 2019 to 2022.

In 2022, respondents in AB (58%) and SK (59%) agreed less than other provinces.

2022: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)
2019: *n*=2,179 (BC=196, AB=160, SK=73, MB=70, ON=743, QC=809, ATL.=117)

**Section 3: What do Canadians think of Climate Change in 2022?**

- **Part 1: Knowledge Questions**
- **Part 2: Effects and Action**
- **Part 3: Climate Change Education**
- **Part 4: Teaching Climate Change**

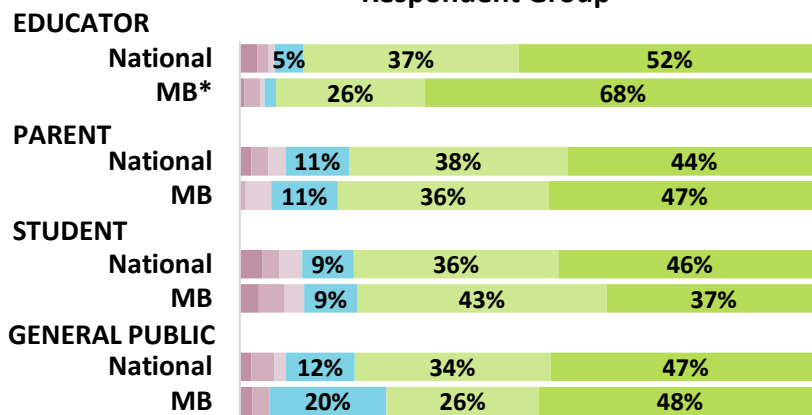## Part 1: Climate Change Perspectives and Knowledge

Part 1 assesses respondent knowledge, understanding, and perspectives on the cause, impact, and reality of climate change.

I am certain that climate change is happening.
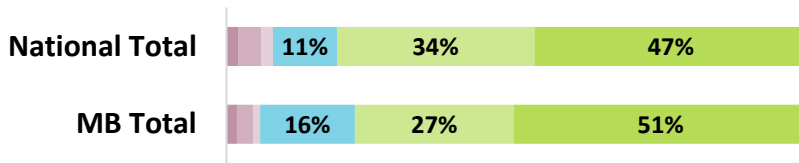
National Total	11%	34%	47%
MB Total	16%	27%	51%

- ■ Don't know
- ■ Strongly disagree
- ■ Disagree
- ■ Neither agree nor disagree
- ■ Agree
- ■ Strongly agree

Respondent Group

EDUCATOR
National	5%	37%	52%
MB*		26%	68%

PARENT
National	11%	38%	44%
MB	11%	36%	47%

STUDENT
National	9%	36%	46%
MB	9%	43%	37%

GENERAL PUBLIC
National	12%	34%	47%
MB	20%	26%	48%

National: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
MB: *Educator=257, Parent=75, Student=103, General Public=51
Responses 4% or less not labelled

When asked if they "are certain that climate change is happening", respondents overwhelmingly agree with this statement nationally (81%) and in MB* (78%).

Responses among parents, students, and members of the general public from MB are fairly consistent with responses nationally. An interesting difference can be noted in student responses where students in Manitoba are much less likely to agree (37%) compared to the national average (46%).

MB* educator data is from open-source data, thus caution should be taken to not directly compare it to the Lager-panel national educator data.

Province/Region - % Agree
(Strongly Agree/Agree)

79% 78% 82% 78% 81% 85% 80%
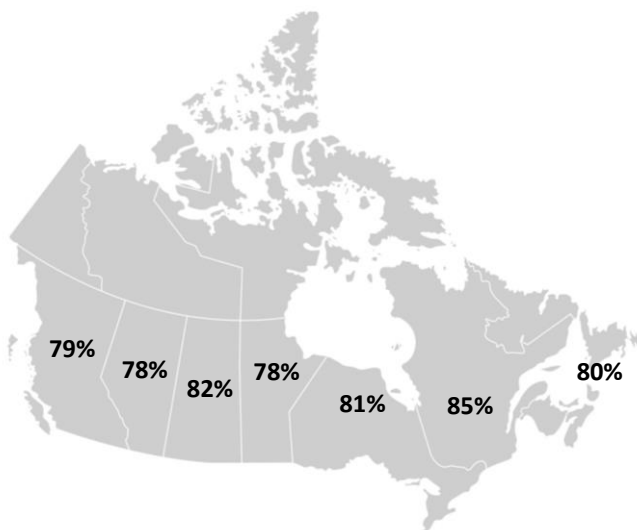
Provinces across Canada are in similar agreement, with a majority being certain that climate change is happening.

Regional agreement ranges from 85% in QC to 78% in AB and MB.

National: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)

We are experiencing a climate emergency

National Total — 6% 14% 38% 34%

MB Total — 6% 8% 46% 33%

- ■ Don't know
- ■ Strongly disagree
- ■ Disagree
- ■ Neither agree nor disagree
- ■ Agree
- ■ Strongly agree

Respondent Group

EDUCATOR
National — 10% 42% 40%
MB* — 33% 55%

PARENT
National — 8% 14% 38% 33%
MB — 8% 12% 39% 36%

STUDENT
National — 7% 13% 41% 31%
MB — 16% 18% 32% 28%

GENERAL PUBLIC
National — 6% 14% 38% 34%
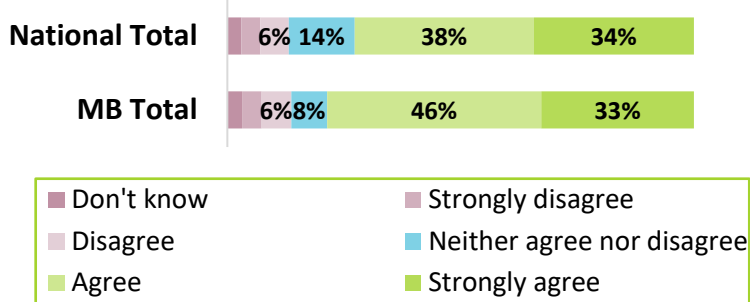**MB** — 6% 6% 50% 30%

National: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
MB: *Educator=257, Parent=75, Student=103, General Public=51
Responses 5% or less not labelled.

A large majority of Canadians believe that the climate change situation we are facing is extremely urgent. Close to three quarters of respondents nationally (73%) were in agreement that we are currently experiencing a climate emergency, even higher agreement was seen in MB (79%).

Students in MB were significantly less likely to agree we are experiencing a climate emergency than students nationally (60% vs. 72%), whereas the general public was more likely to agree in MB (80% vs. 72%).

MB* educator data is from open-source data, thus caution should be taken to not directly compare it to the Lager-panel national educator data.

Province/Region - % Agree
(Strongly Agree/Agree)

77% 60% 72% 79% 74% 77% 67%
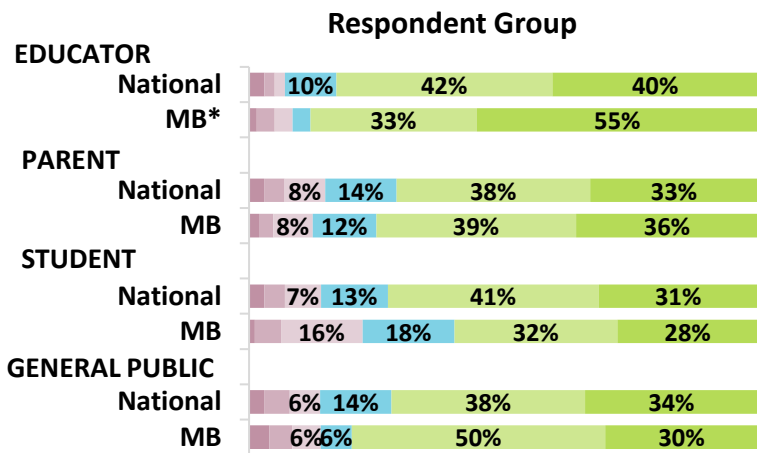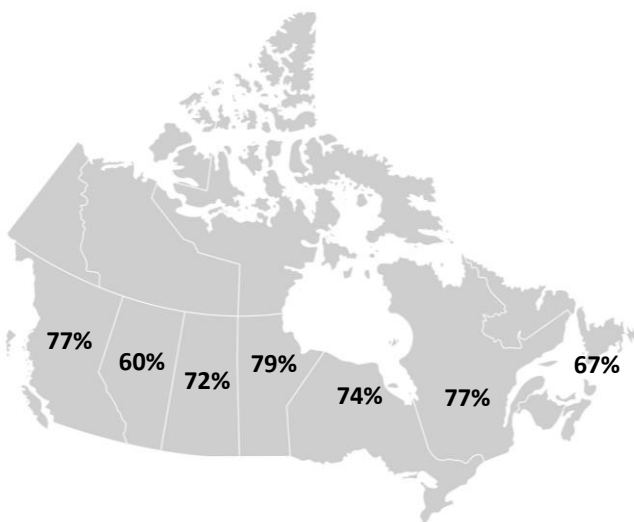
Respondents in MB had the highest level of agreement overall (79%). On the other side of the spectrum, AB had the lowest agreement (60%), followed by ATL (67%) and SK (72). BC (77%), QC (77%) and ON (74%) had slightly higher levels of agreement overall.

National: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)
* Indicates rounding

Do you think climate change is...

National Total	54%	8%	35%
MB Total	50%	12%	33%

Legend:
- Caused mostly by human activities *(correct)*
- Caused mostly by natural changes in the environment
- About equally caused by both human activities and natural changes
- Not happening
- Don't know
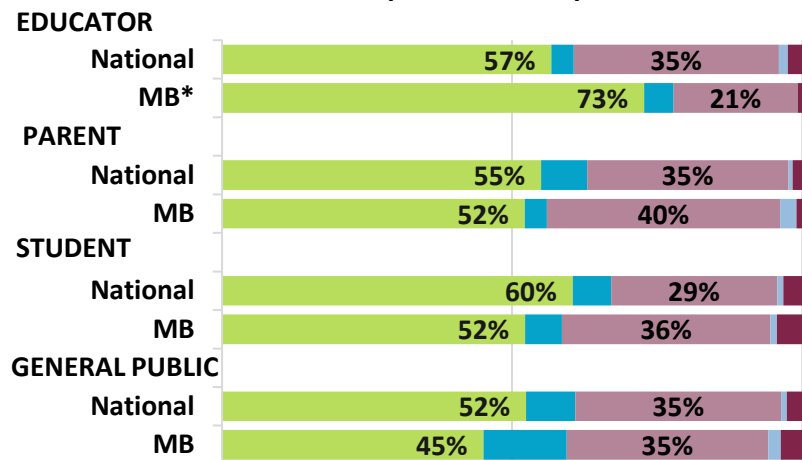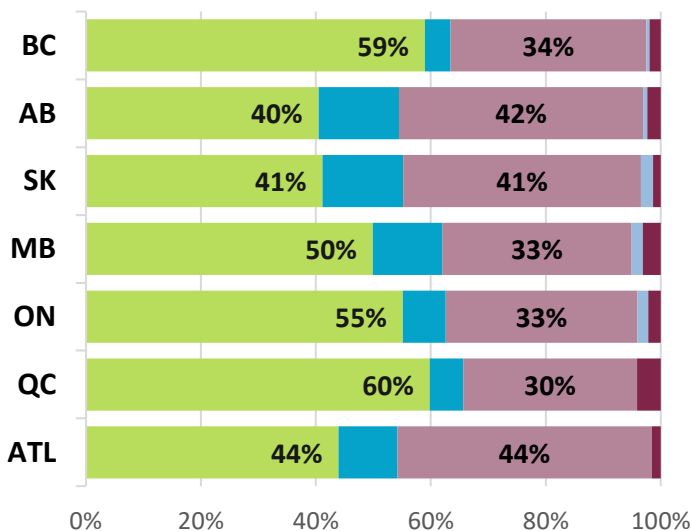
When asked in the survey whether climate change is human-caused, 54% of respondents nationally answered correctly. Similarly, 50% of respondents in MB answered correctly. Around one third of respondents in both MB and nationally believe that climate change is "equally caused by both human activities and natural changes" (33% vs. 35%).

Across respondent groups (parents, students and the general public), nationally there is higher agreement that climate change is human caused. The difference is particularly pronounced among students (60% nationally vs. 52% in MB) and the general public (52% nationally vs. 45% in MB).

Respondent Group

EDUCATOR
- National: 57% | 35%
- MB*: 73% | 21%

PARENT
- National: 55% | 35%
- MB: 52% | 40%

STUDENT
- National: 60% | 29%
- MB: 52% | 36%

GENERAL PUBLIC
- National: 52% | 35%
- MB: 45% | 35%

National: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
MB: *Educator=257, Parent=75, Student=103, General Public=51

MB* educator data is from open-source data, thus caution should be taken to not directly compare it to the Lager-panel national educator data.
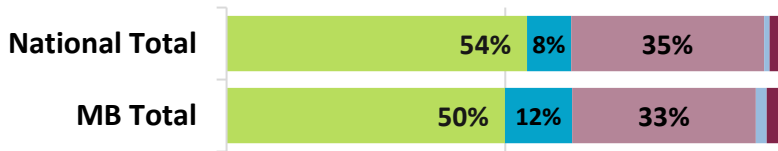
Province/Region

- BC: 59% | 34%
- AB: 40% | 42%
- SK: 41% | 41%
- MB: 50% | 33%
- ON: 55% | 33%
- QC: 60% | 30%
- ATL: 44% | 44%

(Axis: 0% 20% 40% 60% 80% 100%)

The understanding and acceptance that climate change is human-caused, varies across regions. Those in BC (59%), ON (55%), and QC (60%) understand and agree that climate change is mostly caused by human activities, more than those in AB (40%), SK (41%), ATL (44%), and MB (50%).

Similarly, a notable percentage of respondents across all regions indicated that climate change is equally caused by both human activities and natural changes.

National: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)

Climate change is caused by...

National Total 55% | 12% | 13%
MB Total 60% | 8% | 15%

Legend:
- ■ Carbon dioxide and other greenhouse gases *(correct)*
- ■ Emissions from nuclear power plants
- ■ Thinning of the ozone layer
- ■ Particle air pollution
- ■ Industrial chemicals
- ■ Natural variability
- ■ Unsure

Respondent Group

EDUCATOR
National 65% | 12% | 12%
MB* 69% | 8% | 9%

PARENT
National 50% | 13% | 16%
MB 55% | 11% | 16%

STUDENT
National 54% | 12% | 12%
MB 56% | 11% | 14%

GENERAL PUBLIC
National 54% | 12% | 13%
MB 59% | 7% | 17%

National: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
MB: *Educator=257, Parent=75, Student=103, General Public=51

Province/Region

BC 58%
AB 48%
SK 52%
MB 60%
ON 52%
QC 64%
ATL 46%
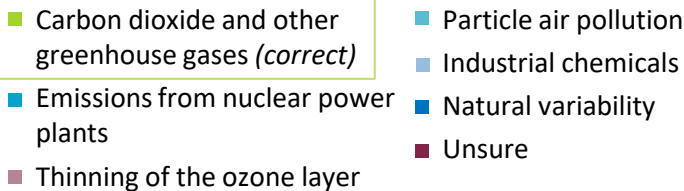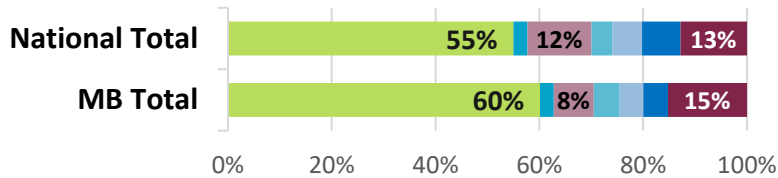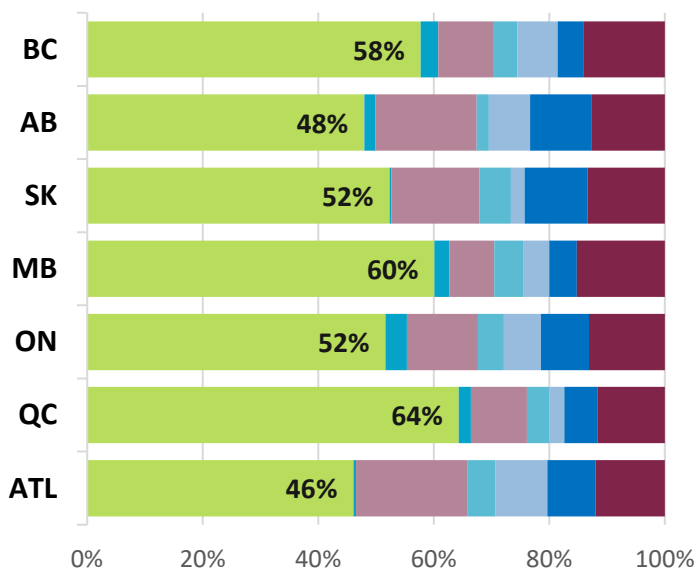
National: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)

In terms of understanding the scientific causes of climate change, just over half of respondents nationally (55%) answered correctly, that carbon dioxide and other greenhouse gases are the primary cause of climate change. Similarly, 60% of respondents in MB answered correctly.

However, a notable portion of respondents were 'unsure' of the cause of climate change (13% nationally, 15% in MB) or believed that climate change is caused by the thinning of the ozone layer (12% nationally and 8% in MB).

Trends are similar among respondent groups nationally and in MB. Parents in MB were slightly more likely to answer correctly (55% vs. 50%).

MB* educator data is from open-source data, thus caution should be taken to not directly compare it to the Lager-panel national educator data.

Across provinces, there is a variation in the knowledge that carbon dioxide and other greenhouse gases are the principal cause of climate change. MB scored well relative to the other provinces (60%), only outperformed by QC (64%).

A notable portion of respondents on average, are unsure of the cause of climate change or responded that climate change is caused by the thinning of the ozone layer.

Number of correct answers to knowledge statements

National Total	21%	46%	33%
MB Total	21%	46%	33%

Legend: ■ 8-10 correct ■ 5-7 correct ■ 0-4 correct

Respondent Group

EDUCATOR			
National	33%	40%	28%
MB*	36%	46%	18%
PARENT			
National	19%	44%	37%
MB	29%	40%	32%
STUDENT			
National	19%	47%	35%
MB	6%	48%	45%
GENERAL PUBLIC			
National	20%	47%	33%
MB	16%	49%	35%

National: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
MB: *Educator=257, Parent=75, Student=103, General Public=51

On average, 67% of respondents both nationally and in MB were able to answer 5 or more climate change knowledge questions correctly.

Students in MB were significantly less likely than students nationally to have answered 5 or more knowledge questions correctly (55% vs. 65%). On the flip side, parents in MB were much more likely to score over 80% (29% vs. 19%).

MB* educator data is from open-source data, thus caution should be taken to not directly compare it to the Lager-panel national educator data.
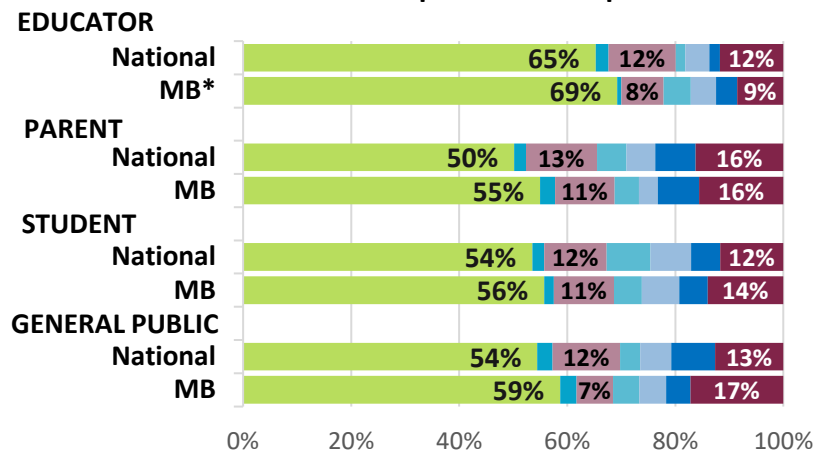
Province/Region

BC	19%	48%	33%
AB	15%	45%	41%
SK	12%	48%	40%
MB	21%	46%	33%
ON	22%	44%	34%
QC	25%	49%	26%
ATL	21%	42%	37%

National: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)
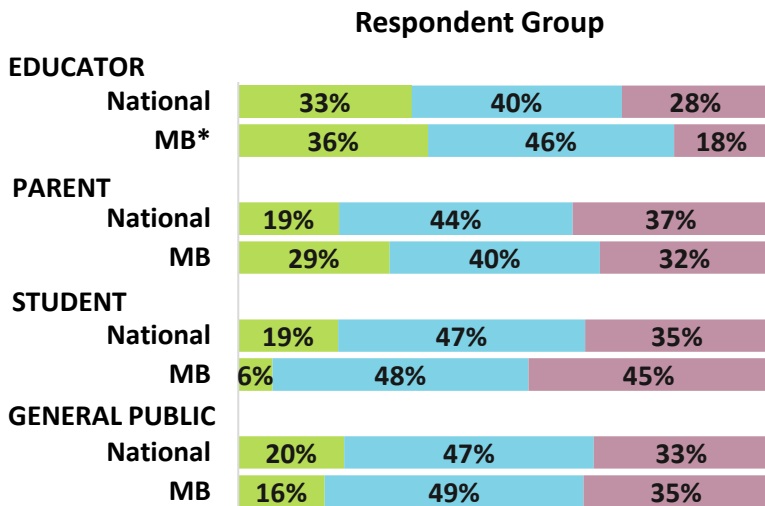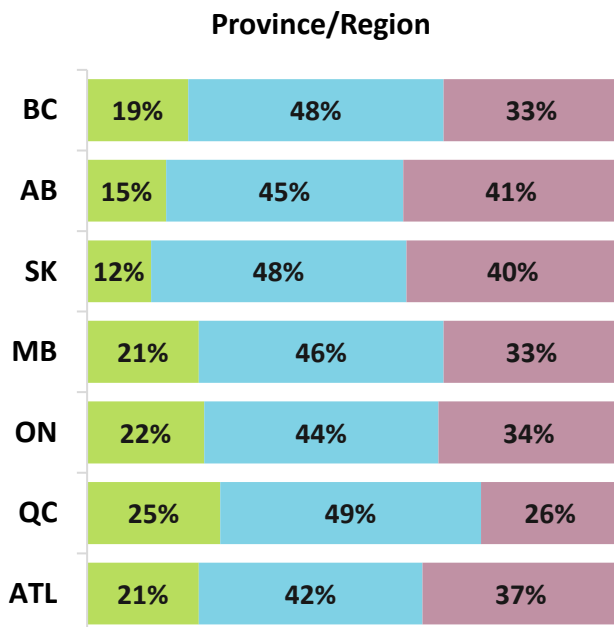
Provinces ranged between a 60% (AB and SK) to 74% (QC) success rate in answering 5 or more of the knowledge statements correctly. MB scored in the middle at 67%.

For the over 80% success rate, QC scored the highest with 25% of respondents getting 8 to 10 questions correct, followed closely by ON (22%). AB (15%) and SK (12%) had the fewest residents answering 8 or more questions correctly

How much information do you feel you need about climate change to form an opinion?

National Total	80% / 17%
MB Total	80% / 14%
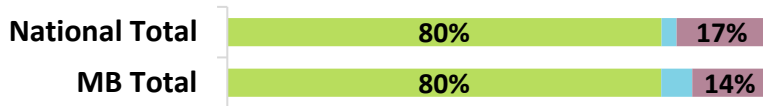
Legend:
- Need more information (NET)
- Don't know
- Do not need more information

Respondent Group
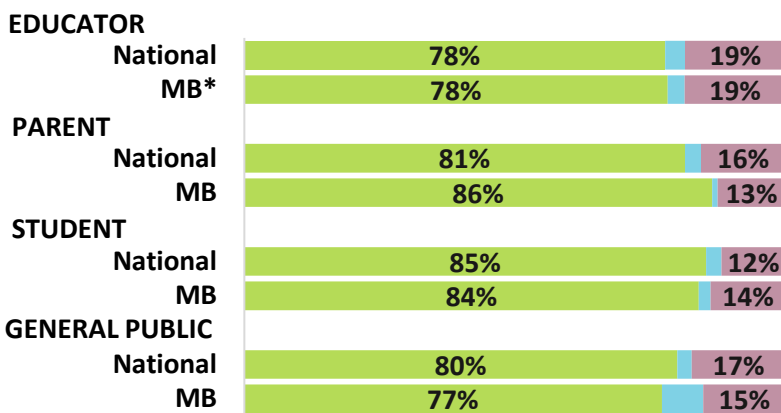
EDUCATOR
- National: 78% / 19%
- MB*: 78% / 19%

PARENT
- National: 81% / 16%
- MB: 86% / 13%

STUDENT
- National: 85% / 12%
- MB: 84% / 14%

GENERAL PUBLIC
- National: 80% / 17%
- MB: 77% / 15%

National: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
MB: *Educator=257, Parent=75, Student=103, General Public=51)
Responses 8% or less not labelled.

Province/Region

Region	Need more info	Do not need more info
BC	77%	18%
AB	76%	20%
SK	84%	12%
MB	80%	14%
ON	79%	19%
QC	86%	12%
ATL	81%	17%

National: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)
Responses 6% or less not labelled.

A large majority of Canadians (nationally and in MB) would like more information about climate change. 80% of respondents nationally and in MB indicate they feel they need more information (a lot more, some more, a little more) about climate change to form a firm opinion.

Responses from parents, students, and members of the general public in MB are consistent with responses nationally.

MB* educator data is from open-source data, thus caution should be taken to not directly compare it to the Lager-panel national educator data.
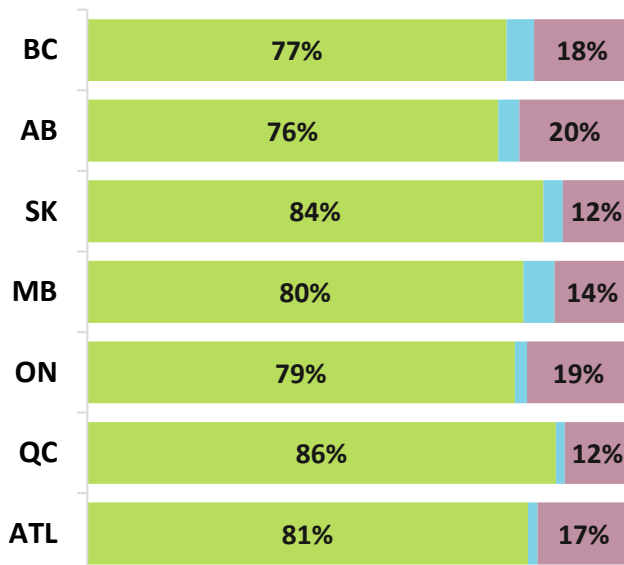
Respondents in all provinces across Canada indicate they feel they need more information about climate change to form a firm opinion.

Respondents in QC are significantly more likely to indicate they need more information (86%), compared to respondents living in BC (77%), AB (76%), and ON (79%). MB fell in the middle of the other provinces at 80%.

Which of the following do you use to inform yourself about climate change?

2022 Total

Television News Programs

National: **51%**

MB: **46%**

Newspaper/Online News Websites

National: **47%**

MB: **44%**
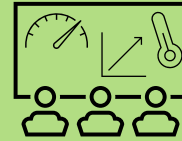
Documentaries or Movies

National: **42%**

MB: **28%**

NET Social Media (YouTube, Facebook, Instagram, TikTok, Twitter)

National: **35%**

MB: **33%**

Conversing with Friends/Family

National: **35%**

MB: **29%**

Radio News Programs

National: **22%**

MB: **21%**

When asked which sources respondents use most to inform themselves about climate change, 51% of respondents nationally and 46% in MB indicated television news programs, followed by Newspaper/Online News Websites (47% vs. 44%). Respondents in MB are less likely to get their information through documentaries or movies (42% vs. 28%) and conversations with friends and family compared to the national average (29% vs. 35%).

Students nationally and in MB are most likely to use various social media platforms to inform themselves about climate change. Members of the general public nationally, are more likely than those in MB to watch documentaries or movies to inform themselves (42% vs. 26%). Using social media platforms is most common in BC. Television news programs are significantly more common in BC, ON, and QC than in AB while documentaries or movies are significantly more common in BC, AB, ON, and QC than in MB. *(Data shown on next page.)*

National Total: *n*=4,035
MB Total: *n*=241
Top 6 responses shown.

Which of the following do you use to inform yourself about climate change?

PART 2: Climate Change Effects and Actions

Respondent Group

Sources of Information	Educators		Parents		Students		General Public	
	Nat.	MB*	Nat.	MB	Nat.	MB	Nat.	MB
Television news programs	56%	60%	44%	39%	31%	29%	54%	48%
Newspaper and/or online news websites	56%	70%	50%	58%	33%	33%	48%	42%
Documentaries or movies	44%	64%	44%	44%	34%	31%	42%	26%
NET Social Media (YouTube, Facebook, Instagram, TikTok, and Twitter)	35%	52%	36%	31%	51%	42%	33%	31%
Conversations with friends and family	33%	58%	34%	40%	43%	39%	34%	23%
Radio news programs	32%	44%	23%	21%	13%	9%	22%	21%

National: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
MB: *Educator=257, Parent=75, Student=103, General Public=51

Province/Region

Sources of Information	BC	AB	SK	MB	ON	QC	ATL
Television news programs	51%	36%	46%	46%	53%	58%	52%
Newspaper and/or online news websites	49%	45%	53%	44%	47%	50%	38%
Documentaries or movies	46%	44%	40%	28%	40%	43%	43%
NET Social Media (YouTube, Facebook, Instagram, TikTok, and Twitter)	42%	32%	32%	33%	36%	32%	30%
Conversations with friends and family	38%	37%	42%	29%	36%	28%	38%
Radio news programs	19%	20%	22%	21%	19%	29%	20%

National: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)
Top 6 responses shown.

Part 2: Climate Change Effects and Actions

Part 2 highlights respondent knowledge, understanding, and perspective on the impact of climate change and actions that can be taken.

I have personally experienced the effects of climate change

National Total	7% 9%	17%	31%	28%	8%
MB Total	14%	34%	34%	11%	

Legend:
- ■ Don't know
- ■ Disagree
- ■ Agree
- ■ Strongly disagree
- ■ Neither agree nor disagree
- ■ Strongly agree

Respondent Group

EDUCATOR
National	12%	17%	24%	33%	10%
MB*	8%	18%	44%	21%	

PARENT
National	6% 9%	19%	26%	31%	10%
MB	17%	26%	34%	15%	

STUDENT
National	12% 8%	21%	27%	24%	8%
MB	12% 8%	18%	39%	19%	

GENERAL PUBLIC
National	6% 9%	17%	33%	27%	8%
MB	10%	38%	35%	12%	

National: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
MB: *n*=241 (*Educator=257, Parent=75, Student=103, General Public=51)
Responses 5% or less not labelled

Province/Region - % Agree
(Strongly Agree/Agree)

Map values: 51%, 36%, 34%, 46%, 36%, 23%, 38%

36% of respondents nationally and significantly more in MB (46%) agree that they have personally experienced the effects of climate change.

There are some key differences between MB respondent groups and the national average. First, students were less likely to agree in MB compared to nationally (24% vs. 32%). The general public in MB was much less likely to disagree with this statement (26% vs. 12%).

MB* educator data is from open-source data, thus caution should be taken to not directly compare it to the Lager-panel national educator data.

Regionally, with regards to having personally experienced the effects of climate change, respondents in BC (51%) and MB (46%) agree the most.

Those living in QC are less likely to agree (23%).

National: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)
* Indicates rounding

Which of the following statements comes closest to your personal view?

National Total	13%	44%	31%	6%
MB Total	9%	57%	19%	7%	7%

- Humans can reduce climate change and we are going to do so successfully
- Humans could reduce climate change but it's unclear at this point whether we will do what's needed
- Humans could reduce climate change, but people aren't willing to change their behaviour so we're not going to
- Humans can't reduce climate change
- Climate Change isn't happening
- Don't know

Respondent Group

EDUCATOR

National	7%	53%	32%	
MB*	8%	58%	28%	

PARENT

National	11%	46%	31%	
MB	10%	56%	26%	

STUDENT

National	11%	39%	37%	
MB	12%	43%	33%	8%

GENERAL PUBLIC

National	14%	43%	30%	6%
MB	8%	57%	16%	8%	9%

National: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
MB: *Educator=257, Parent=75, Student=103, General Public=51
Responses 5% or less not labelled

Province/Region

BC	9%	44%	34%	6%	5%
AB	13%	45%	27%	8%	6%
SK	14%	44%	28%	6%	5%
MB	9%	57%	19%	7%	7%
ON	12%	44%	32%	5%	5%
QC	20%	40%	32%		
ATL	6%	54%	26%	7%	8%

National: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)
Responses 4% or less not labelled

Over two-in-five (44%) respondents nationally and significantly more in MB (57%) have the personal view that humans could reduce climate change but that it is unclear at this point whether we will do what is needed. This personal view is followed by the view held by less than one-third (31%) of respondents nationally and significantly less in MB (19%) who believe that humans could reduce climate change, but that people aren't willing to change their behaviours so we aren't going to.
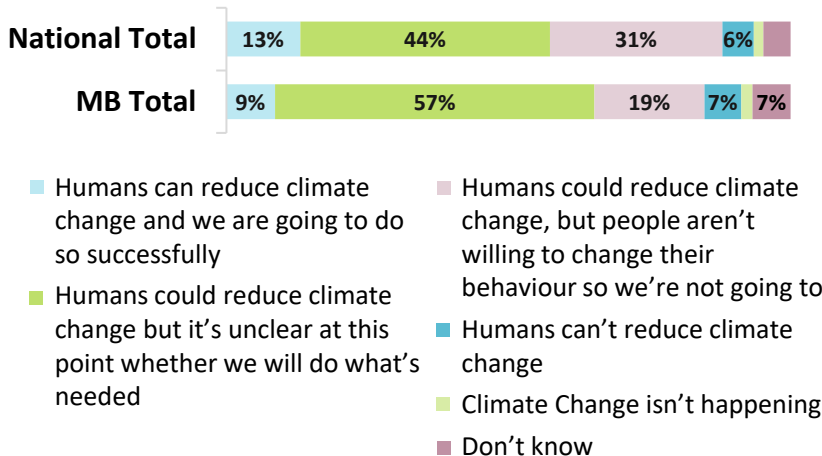
Members of the general public in MB are significantly more likely than those nationally to believe humans could reduce climate change but that it is unclear at this point whether we will do what is needed (57% vs. 43%). Fewer parents in MB believe that we will not reduce climate change because people aren't willing to change their behaviour (26% vs. 31%).

MB* educator data is from open-source data, thus caution should be taken to not directly compare it to the Lager-panel national educator data.
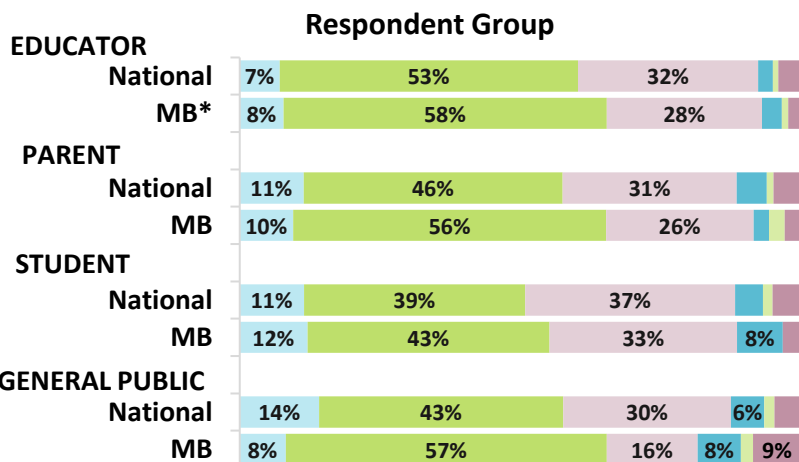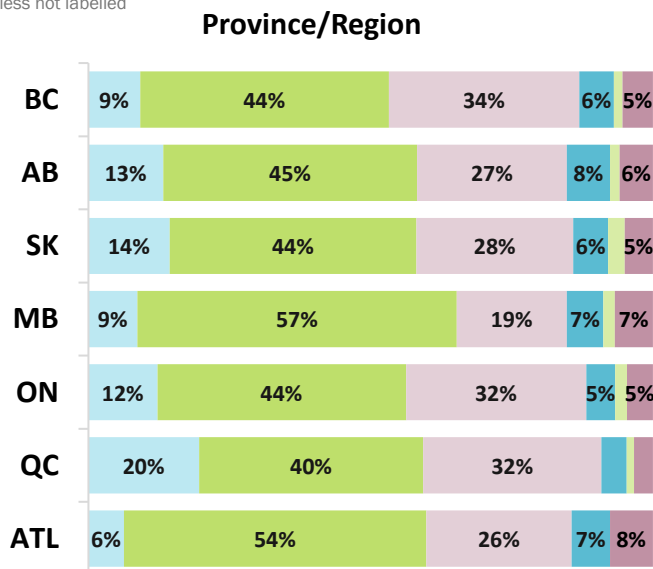
Those in MB (57%) are significantly more likely to believe that humans could reduce climate change but that it is unclear whether we will do what is needed than those in QC (40%).

Those in BC (34%), ON (32%), and QC (32%) are significantly more likely to believe that humans could reduce climate change, but that people aren't willing to change their behaviours so we aren't going to compared to people in MB (19%).

Would you be willing to change your life to help reduce the effects of climate change?

National Total — A lot 24% | Some 48% | A little 16% | Not at all 6% | Don't know 6%

MB Total — A lot 23% | Some 36% | A little 23% | Not at all 6% | Don't know 12%

Legend: ■ A lot ■ Some ■ A little ■ Not at all ■ Don't know

Respondent Group

EDUCATOR
- National: A lot 25% | Some 58% | A little 9% | Don't know 6%
- MB*: A lot 40% | Some 51%

PARENT
- National: A lot 25% | Some 45% | A little 19%
- MB: A lot 31% | Some 39% | A little 14% | Don't know 11%

STUDENT
- National: A lot 25% | Some 43% | A little 21%
- MB: A lot 21% | Some 38% | A little 29% | Not at all 7%

GENERAL PUBLIC
- National: A lot 23% | Some 47% | A little 16% | Not at all 6% | Don't know 7%
- MB: A lot 22% | Some 30% | A little 26% | Not at all 7% | Don't know 15%

National: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
MB: *Educator=257, Parent=75, Student=103, General Public=51
Responses 5% or less not labelled.

A large majority of respondents nationally (72%) and significantly less in MB (59%) would be willing to change their life either a lot or somewhat to help reduce the effects of climate change. Only 6% nationally and in MB are not at all willing to change their life at school, work, or home.

Members of the general public in MB are significantly less likely to be willing to change their lives to help reduce the effects of climate change compared to members of the general public nationally (52% vs. 71%). Students in MB were also less willing than the national average (59% in MB vs. 68% nationally).
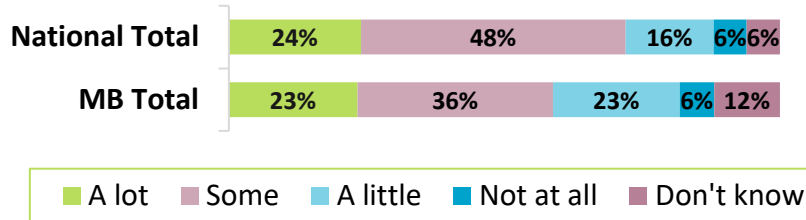
MB* educator data is from open-source data, thus caution should be taken to not directly compare it to the Lager-panel national educator data.

Province/Region

- **BC**: A lot 31% | Some 41% | A little 14% | Not at all 6% | Don't know 8%
- **AB**: A lot 15% | Some 48% | A little 24% | Not at all 7% | Don't know 6%
- **SK**: A lot 25% | Some 48% | A little 15% | Don't know 7%
- **MB**: A lot 23% | Some 36% | A little 23% | Not at all 6% | Don't know 12%
- **ON**: A lot 24% | Some 47% | A little 16% | Not at all 7% | Don't know 6%
- **QC**: A lot 25% | Some 54% | A little 14%
- **ATL**: A lot 24% | Some 47% | A little 15% | Don't know 9%

National: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)
Responses 5% or less not labelled.
* Indicates rounding

A large majority of respondents across various provinces in Canada are also willing to take some action to help reduce the effects of climate change, ranging from 54% in QC to 36% in MB.

Those in BC (31%), were more willing to take "a lot" of action than those in other provinces, especially compared to AB (15%).

New technologies can solve climate change without individuals having to make big changes in their lives

National Total	9%	13%	27%	23%	21%	7%
MB Total	13%	10%	28%	23%	16%	10%

Legend:
- ■ Don't know
- ■ Strongly disagree
- ■ Disagree
- ■ Neither agree nor disagree
- ■ Agree
- ■ Strongly agree

Respondent Group

EDUCATOR
National	9%	14%	28%	19%	25%	5%
MB*	7%	16%	33%	21%	16%	8%

PARENT
National	8%	13%	27%	23%	21%	7%
MB	8%	13%	25%	29%	21%	5%

STUDENT
National	10%	11%	23%	23%	24%	8%
MB	14%	7%	21%	24%	31%	4%

GENERAL PUBLIC
National	9%	14%	27%	23%	21%	7%
MB	15%	10%	24%	25%	14%	12%

National: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
MB: *Educator=257, Parent=75, Student=103, General Public=51

Few respondents nationally (28%) and in MB (26%) agree that new technologies can solve climate change without individuals having to make big changes in their lives. 40% of respondents nationally and 38% in MB disagree with this statement.

Agreement among parents, students, and members of the general public in MB are generally consistent with national responses; very few differences can be seen across the board.
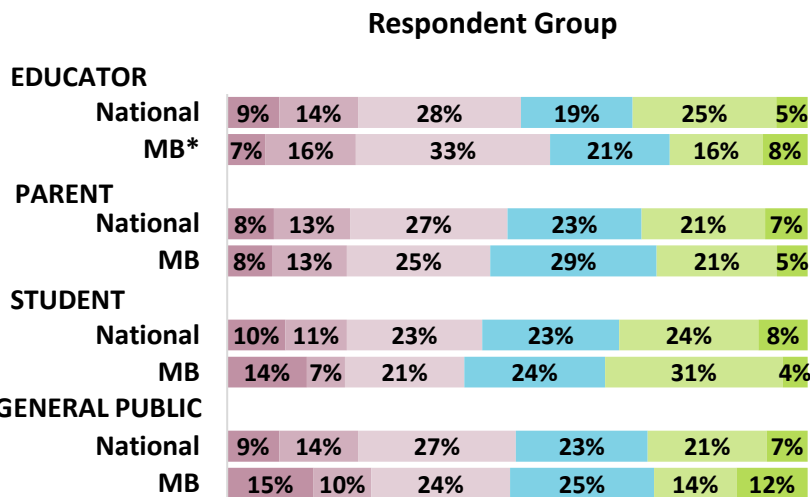
MB* educator data is from open-source data, thus caution should be taken to not directly compare it to the Lager-panel national educator data.

Province/Region - % Agree
(Strongly Agree/Agree)

Map values: 23%, 40%, 28%, 26%, 31%, 24%, 23%
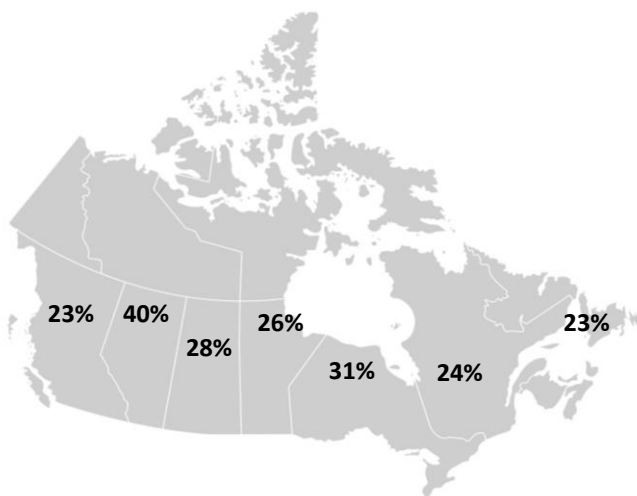
Regionally, respondents differed in their belief that new technologies can solve climate change.

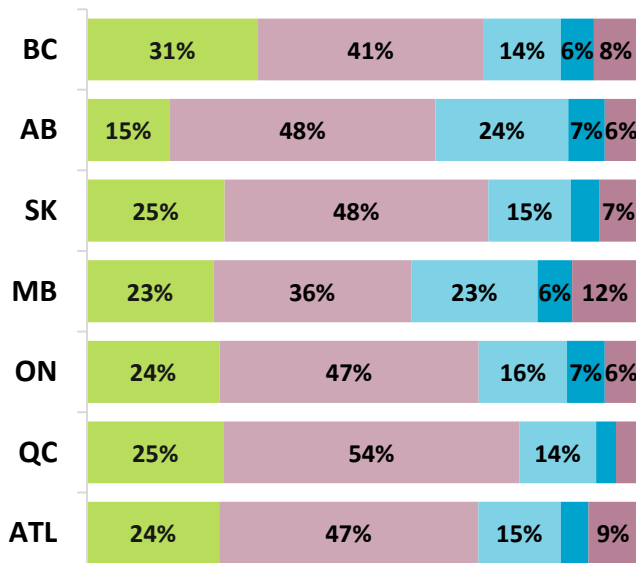Those living in AB (40%) were significantly more likely to believe in technology as a solution without sacrifices needing to be made, than those in BC (23%), ATL (23%), QC (24%), and MB (26%).

National: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL=300)

Personal actions are important, but systemic change is required to address climate challenges

National Total / MB Total

	Don't know	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
National Total				12%	37%	41%
MB Total	10%			14%	31%	42%

Legend:
- Don't know
- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

Respondent Group

EDUCATOR
- National: 33% Agree, 51% Strongly agree
- MB*: 29% Agree, 61% Strongly agree

PARENT
- National: 9% (Neither), 42% Agree, 40% Strongly agree
- MB: 37% Agree, 49% Strongly agree

STUDENT
- National: 7%, 10%, 40% Agree, 37% Strongly agree
- MB: 7%, 14%, 45% Agree, 27% Strongly agree

GENERAL PUBLIC
- National: 13%, 37% Agree, 41% Strongly agree
- MB: 12%, 18%, 32% Agree, 37% Strongly agree

National: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
MB: *Educator=257, Parent=75, Student=103, General Public=51
Responses less than 5% not labelled.
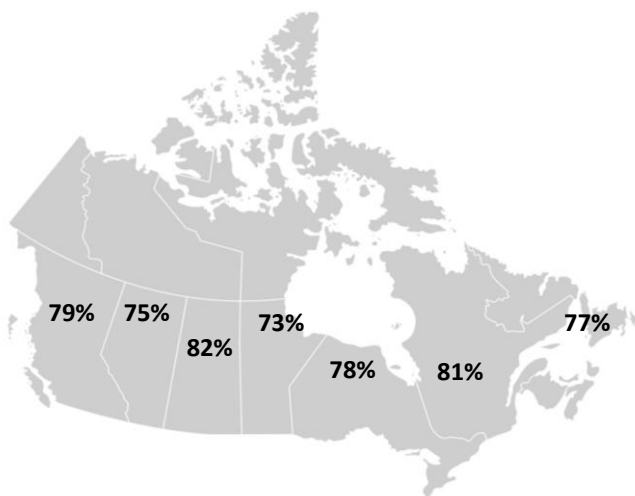
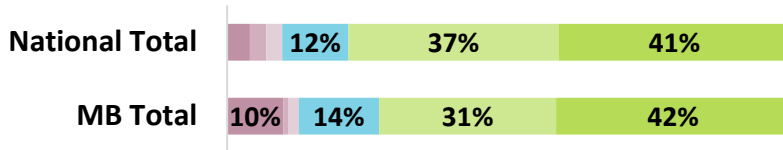Most respondents feel individual efforts must be supported by a whole-system response to mitigate the effects of rising temperatures. A majority of respondents (78% nationally and 73% in MB) agreed that while personal actions are important, systemic change is required to address climate challenges.

Parents in MB are more likely to strongly agree with this statement (49% in MB vs. 40% nationally), and the MB general public is much less likely to agree overall (strongly agree/agree) compared to the national average (69% in MB vs. 78% nationally).

MB* educator data is from open-source data, thus caution should be taken to not directly compare it to the Lager-panel national educator data.

Province/Region - % Agree
(Strongly Agree/Agree)

- 79%
- 75%
- 82%
- 73%
- 77%
- 78%
- 81%

Similarly, respondents across the provinces in Canada agreed that systemic change is needed.

Agreement ranged from 82% in SK to 73% in MB.

National: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)

The government is doing a good job in their actions to address climate change

National Total	16%	30%	31%	15%
MB Total	18%	37%	30%	10%

- ■ Don't know
- ■ Strongly disagree
- ■ Disagree
- ■ Neither agree nor disagree
- ■ Agree
- ■ Strongly agree

Respondent Group

EDUCATOR
National	7%	15%	36%	26%	14%
MB*	28%		40%	18%	11%

PARENT
National	7%	16%	30%	31%	13%
MB	6%	15%	36%	27%	12%

STUDENT
National	10%	17%	29%	29%	12%
MB	12%	13%	29%	34%	10%

GENERAL PUBLIC
National	17%	30%	31%	16%
MB	20%	36%	30%	10%

National: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
MB: *Educator=257, Parent=75, Student=103, General Public=51
Responses 5% or less not labelled.

Manitobans, like most other Canadians, are not satisfied with the actions the government is taking to mitigate the effects of a warming planet. Very few respondents (17% nationally and even less in MB, 13%) agreed that the government is doing a good job in their actions to address climate change.

Agreement among parents, and students in MB was fairly consistent with national responses. The general public in Manitoba was more likely to disagree with this statement (56% in MB vs. 47% nationally)

MB* educator data is from open-source data, thus caution should be taken to not directly compare it to the Lager-panel national educator data.

Province/Region - % Agree
(Strongly Agree/Agree)

Map of Canada showing % Agree by region:
- 20%
- 15%
- 14%
- 13%
- 18%
- 17%
- 17%
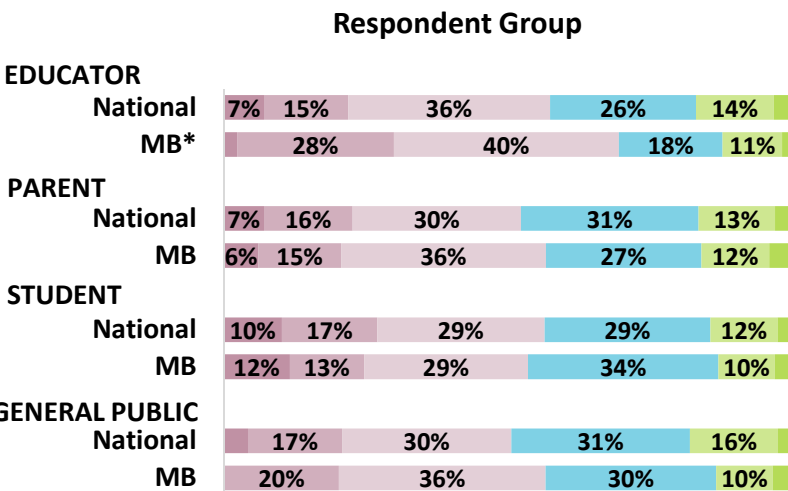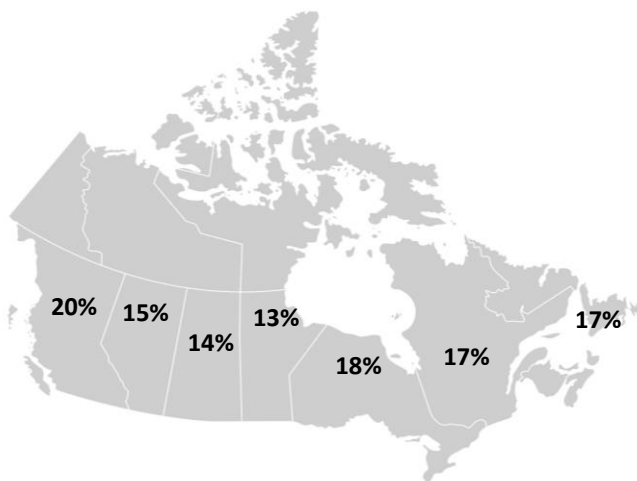
Similarly, there are few respondents across Canada who agree the government is doing a good job. Regional responses range from 13% agreement in MB to 20% in BC.

National: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)

Please elaborate on what you feel needs to be done to address climate change

Survey respondents were given the opportunity to answer this open-ended question in their own words. Out of the survey population, 158 individuals from MB chose to answer this optional question.

The results were coded and grouped according to themes. The 5 most common themes are shown below, and indicate suggestions for countries leading by example, government regulation, and cooperation among industries, among other suggestions to address climate change.

1

Countries leading by example/Making countries accountable
22%

"All countries must stand together and make a concerted effort to address and minimize climate change." (Member of the General Public)

2

Government legislation/regulations/action
18%

"I think governments need to take action. Perhaps create systems or initiatives (ex. a compost collection system for people living in apartments/do not have a composter, (re)planting trees and creating more green spaces, giving incentive for people to take care of the environment, etc.)" (Student)

3

Cooperation/responsibility from industries/companies
10%

"I think bigger companies and industries need to take more action, which will also encourage everyone else to change their impact on climate change." (Student)

4

Better collaboration from all parties to become united
10%

"We all need to come together, and all do our part." (Student)

5

Reduce consumption of products/reduce waste
9%

"We need to change our ideas about consuming." (Parent)

"Finding ways of collecting and recycling all wasteful products." (Parent)

The work and voices of young people can inspire important climate action
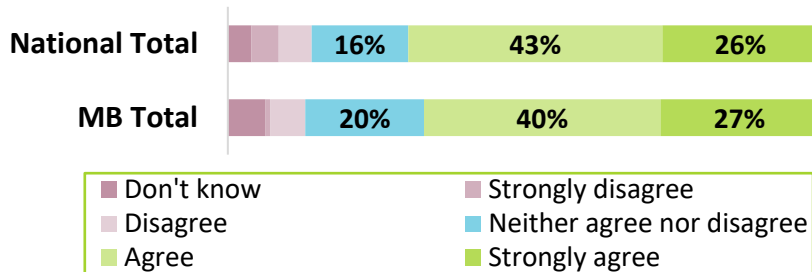
Respondent	Don't know / Strongly disagree / Disagree	Neither agree nor disagree	Agree	Strongly agree
National Total		16%	43%	26%
MB Total		20%	40%	27%

Legend:
- ■ Don't know
- ■ Strongly disagree
- ■ Disagree
- ■ Neither agree nor disagree
- ■ Agree
- ■ Strongly agree

Respondent Group

EDUCATOR
	Neither	Agree	Strongly agree
National	13%	42%	34%
MB*	9%	35%	52%

PARENT
	Neither	Agree	Strongly agree
National	16%	45%	26%
MB	19%	36%	32%

STUDENT
	Neither	Agree	Strongly agree
National	15%	44%	28%
MB	18%	46%	23%

GENERAL PUBLIC
		Neither	Agree	Strongly agree
National		17%	43%	26%
MB	8% 7%	22%	41%	22%

National: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
MB: *Educator=257, Parent=75, Student=103, General Public=51
Responses less than 6% not labelled.
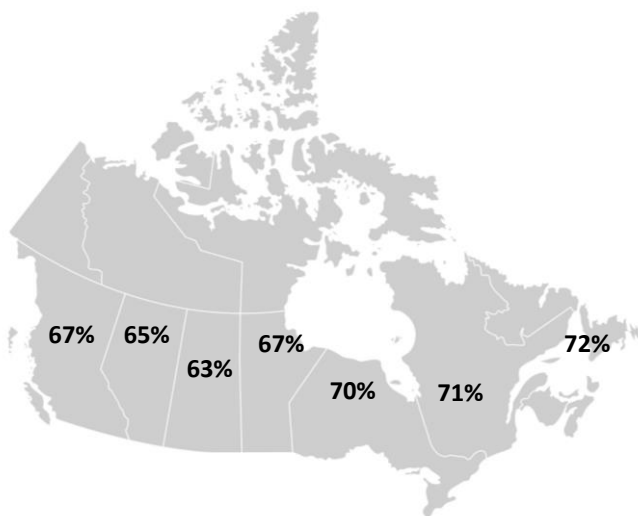
Many Canadians are counting on youth to help win the fight against climate change. The majority (69%) of respondents nationally and in MB (67%) agreed that the work and voices of young people can inspire important climate action.

Trends were similar across respondent groups. In each respondent group (parents, students and the general public), MB had slightly lower agreement compared to the national average.

MB* educator data is from open-source data, thus caution should be taken to not directly compare it to the Lager-panel national educator data.

Province/Region - % Agree
(Strongly Agree/Agree)

67% 65% 63% 67% 72% 70% 71%

A majority of respondents across various provinces in Canada agree with this statement, ranging from 72% of those in ATL to 63% in SK.

National: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)

When you think about climate change, what main emotions or feelings arise?

Feelings on Climate Change

	Frightened	Frustrated	Anxious	Unconcerned	Indifferent	Hopeful	Motivated	Confident
National Total	25%	35%	37%	10%	13%	25%	15%	
MB Total	29%	45%	31%	14%	14%	28%	17%	

Legend:
- Frightened
- Frustrated
- Anxious
- Unconcerned
- Indifferent
- Hopeful
- Motivated
- Confident
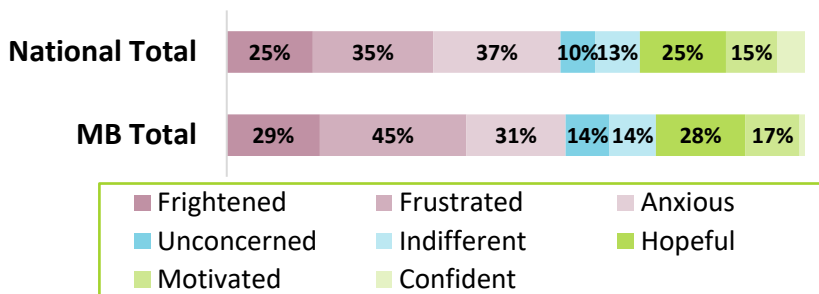
Feelings on Climate Change – Respondent Group

EDUCATOR
	Frightened	Frustrated	Anxious	Unconcerned	Indifferent	Hopeful	Motivated	Confident
National	31%	35%	38%	10%		30%		
MB*	36%	56%	50%			30%	25%	

PARENT
	Frightened	Frustrated	Anxious	Unconcerned	Indifferent	Hopeful	Motivated	Confident
National	27%	32%	39%	10%	16%	22%	14%	
MB	26%	45%	42%		24%	27%		

STUDENT
	Frightened	Frustrated	Anxious	Unconcerned	Indifferent	Hopeful	Motivated	Confident
National	32%	33%	41%	13%	13%	21%	15%	
MB	34%	27%	39%	12%	22%	23%	13%	

GENERAL PUBLIC
|	Frightened	Frustrated	Anxious	Unconcerned	Indifferent	Hopeful	Motivated	Confident
National	24%	35%	36%	10%	13%	25%	16%	
MB	28%	43%	24%	16%	13%	27%	20%	

National: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
MB: *Educator=257, Parent=75, Student=103, General Public=51
Responses 9% or less not labelled.

Feelings on Climate Change - Province/Region

	Frightened	Frustrated	Anxious	Unconcerned	Indifferent	Hopeful	Motivated	Confident
BC	28%	43%	45%	10%	11%	26%	12%	8%
AB	20%	33%	36%	16%	16%	27%	12%	
SK	14%	51%	34%	12%	26%	21%	11%	
MB	29%	45%	31%	14%	14%	28%	17%	
ON	26%	37%	36%	9%	13%	26%	17%	
QC	24%	24%	36%	9%	13%	19%	17%	14%
ATL.	28%	29%	36%	12%	16%	32%	10%	

National: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)
Responses 6% or less not labelled

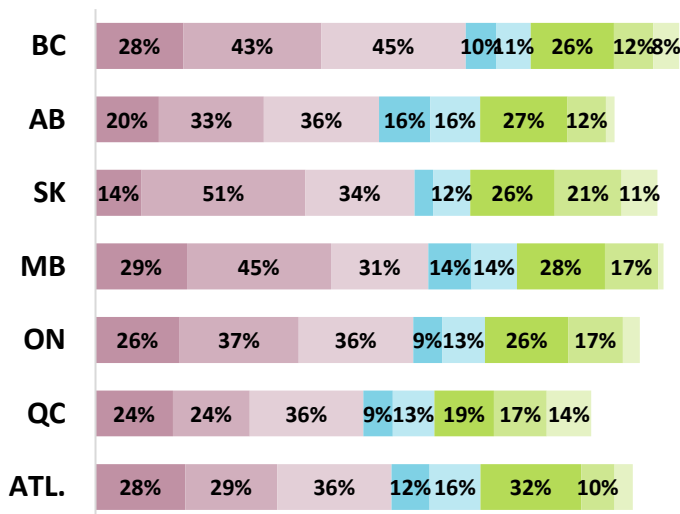When MB respondents were asked to think about climate change and the emotions or feelings that arise when they do, they were significantly more likely than respondents nationally to indicate feeling frustrated (45% in MB vs. 35% nationally). Feelings of frustration were followed by feeling anxious (31% in MB and 37% nationally). Fewer respondents in MB feel confident (2%) compared to respondents nationally (8%).

Parents in MB were also significantly more likely to feel frustrated than parents nationally (45% vs. 32%). The MB general public reported feeling much less anxious (24% in MB vs. 36% nationally) but also much less confident (1% in MB vs. 8% nationally).

MB* educator data is from open-source data, thus caution should be taken to not directly compare it to the Lager-panel national educator data.

MB respondents were the most frightened about climate change by a small margin (29%) and had the second highest reported frustration (45%). Respondents in BC (45%) are significantly more likely to feel anxious about climate change than those in MB (31%), ON (36%), and QC (36%). SK respondents are most likely to feel frustrated. Residents in BC have the highest combined negative feelings while those in AB and QC have the lowest.
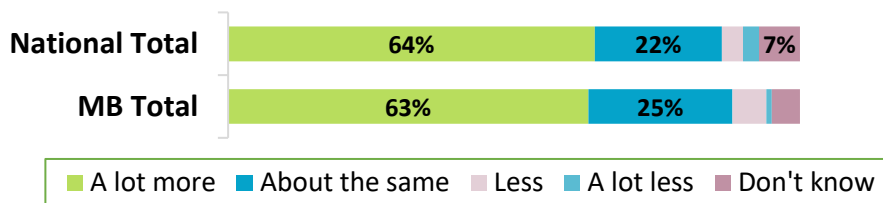
Those in QC (14%) are significantly more likely to feel confident about climate change. 16% of those in AB feel unconcerned, which is significantly more than those in SK (6%), ON (9%), and QC (9%).

Part 3: Climate Change Education

Part 3 highlights respondent's opinions and perspectives of climate change education in schools.

Should education systems do more, less, or about the same as now to educate young people about climate change?

National Total	64%	22%	7%
MB Total	63%	25%	

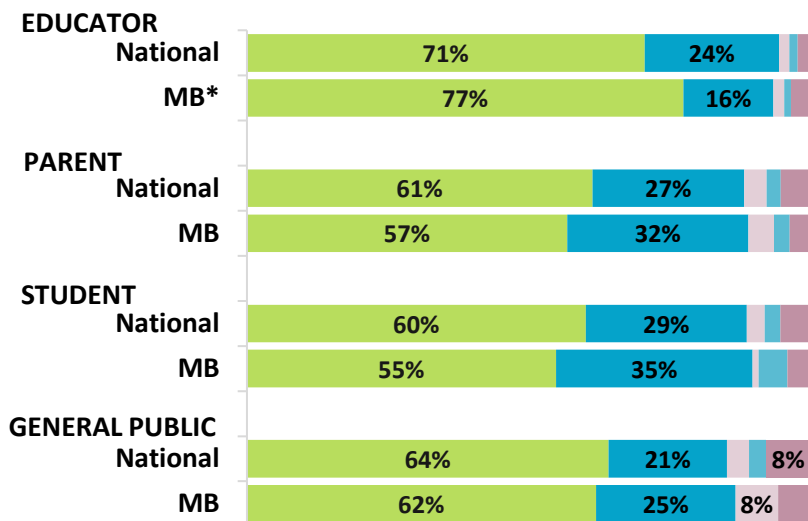Legend: ■ A lot more ■ About the same ■ Less ■ A lot less ■ Don't know

Many Canadians understand the importance of education in the fight against climate change, as 64% nationally and 63% in MB indicated they think that 'a lot more' should be done to educate young people.

Similar levels of agreement are seen between the respondent groups (parents, students and the general public). Students are slightly less likely to agree in MB (55% in MB vs. 60% nationally). Parents are also a little less likely to agree in MB (57% vs. 61% nationally).

MB* educator data is from open-source data, thus caution should be taken to not directly compare it to the Lager-panel national educator data.

Respondent Group

EDUCATOR
- National: 71% | 24%
- MB*: 77% | 16%

PARENT
- National: 61% | 27%
- MB: 57% | 32%

STUDENT
- National: 60% | 29%
- MB: 55% | 35%

GENERAL PUBLIC
- National: 64% | 21% | 8%
- MB: 62% | 25% | 8%

National: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
MB: *Educator=257, Parent=75, Student=103, General Public=51
Responses 6% or less not labelled.

Province/Region

BC	62%	21%	11%
AB	58%	25%	9%
SK	61%	23%	11%
MB	63%	25%	
ON	65%	22%	
QC	69%	22%	
ATL	62%	20%	12%
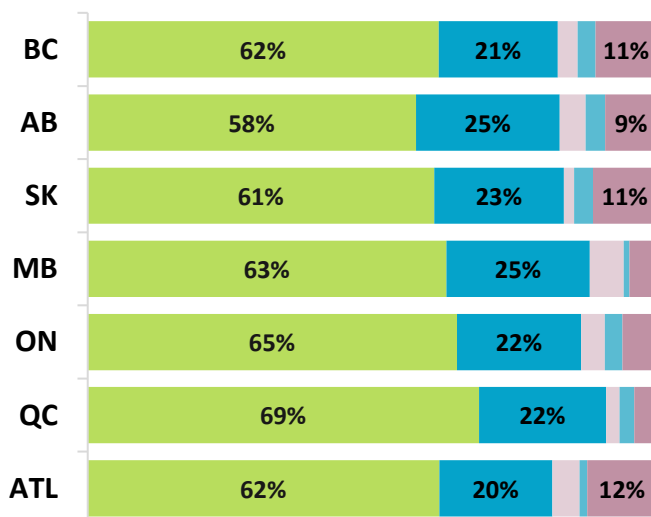
Across Canada, the majority of respondents think the education system should be doing more to educate about climate change. MB agreement fell in the middle of the provinces at 63%. AB (58%) had the lowest levels of support for the schools doing more to educate young people about climate change, while QC had the highest (69%).

National: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)
Responses 6% or less not labelled.

To what extent do you agree (or disagree) with the following on teaching climate change in schools?

% Agree (Strongly Agree/Agree)– **Total**

|	National Total	MB Total
Climate change education should aim to change the way people behave.	75%	68%
Climate change education should be a high priority for schooling.	67%	66%
Climate change education should be the role of all teachers.	61%	63%
Only one 'side' of the climate change debate should be taught (it is happening, and humans are the cause).	31%	28%
The topic of climate change is too complex and should not be discussed in younger grades.	15%	14%
It is not the role of schools to teach students about climate change.	13%	15%

National: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
MB: n=241 (Educator=19, Parent=75, Student=103, General Public=51)

Overall, most respondents agreed that climate change education should aim to change the way people behave. However, respondents nationally are significantly more likely than respondents in MB to agree with this statement (75% nationally vs. 68% in MB).

Few respondents nationally and in MB, agree the topic of climate change is too complex and should not be discussed in younger grades (15% nationally, 14% in MB) and that it is not the role of schools to teach students about climate change (13% nationally and 15% in MB).

Perceptions of teaching climate change in schools varied regionally with MB agreement falling in the middle on most questions. MB had the second highest agreement, 63% (just behind ON at 65%), that climate change education should be the role of all teachers.

% Agree (Strongly Agree/Agree)– **Province/Region**

	BC	AB	SK	MB	ON	QC	ATL
Climate change education should aim to change the way people behave.	75%	67%	65%	68%	76%	78%	71%
Climate change education should be a high priority for schooling.	69%	58%	59%	66%	70%	66%	71%
Climate change education should be the role of all teachers.	62%	49%	52%	63%	65%	62%	57%
Only one 'side' of the climate change debate should be taught (it is happening, and humans are the cause).	38%	26%	26%	28%	31%	34%	23%
The topic of climate change is too complex and should not be discussed in younger grades.	13%	20%	21%	14%	15%	13%	15%
It is not the role of schools to teach students about climate change.	18%	15%	14%	15%	13%	12%	9%

National: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)

To what extent do you agree (or disagree) with the following on teaching climate change in schools? *(continued)*

Most respondents agree that climate change education should aim to change the way people behave, that it should be a high priority for schooling, and that climate change education should be the role of all teachers.

Students in MB are significantly less likely than students nationally to agree climate change education should be the role of all teachers (50% vs. 61%) and are more likely to agree than students nationally that the topic of climate change is too complex and should not be discussed in younger grades (24% vs. 16%). Parents and students in MB are less likely than the national average (parents 26% in MB vs. 31% nationally and students, 23% in MB vs 30% nationally) to agree that only one side of the debate should be taught.

% Agree (Strongly Agree/Agree)– **Respondent Group**

	Educator		Parents		Students		General Public	
	Nat.	MB*	Nat.	MB	Nat.	MB	Nat.	MB
Climate change education should aim to change the way people behave.	78%	80%	74%	69%	72%	69%	75%	64%
Climate change education should be a high priority for schooling.	68%	81%	64%	69%	66%	62%	67%	63%
Climate change education should be the role of all teachers.	61%	76%	60%	54%	61%	50%	61%	62%
Only one 'side' of the climate change debate should be taught (it is happening, and humans are the cause).	36%	35%	31%	26%	30%	23%	31%	33%
The topic of climate change is too complex and should not be discussed in younger grades	12%	6%	17%	17%	16%	24%	15%	13%
It is not the role of schools to teach students about climate change.	10%	5%	15%	13%	14%	18%	14%	16%

National: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
MB: *Educator=257, Parent=75, Student=103, General Public=51

To what extent do you feel that the Kindergarten to Grade 12 classes should focus on the following?

% Agree (Somewhat more/A lot more)

72% — MB: **67%**
The science behind climate change.

70% — MB: **72%**
How to take individual/personal climate action.

70% — MB: **68%**
How to take collective climate action in the school and community.

69% — MB: **65%**
The solutions to mitigating and adapting to the effects of climate.

62% — MB: **66%**
The social, economic, & political elements of climate change.

59% — MB: **55%**
How to address anxiety and other emotions brought about by climate change.

52% — MB: **52%**
Indigenous traditional knowledge related to climate change.

48% — MB: **44%**
The connection between climate change and racial inequality, gender equality, and social justice issues with students.

■ National Total
■ MB Total

Most respondents agree that Kindergarten to Grade 12 classes should focus on the science behind the climate change (72% nationally and 67% in MB), as well as how to take individual (70% nationally and 72% in MB)and collective action (70% nationally and 68% in MB).

Note: Respondent group and provincial data can be viewed on the following page. Parents in MB are significantly more likely than parents nationally to agree Kindergarten to Grade 12 classes should focus on the connection between climate change and racial inequality, gender equality, and social justice issues with students (59% in MB vs. 46% nationally), whereas we can see the opposite trend in the general public, Manitoba respondents are much less likely to agree (35% in MB vs. 48% nationally).

The regions that were the least likely to believe in a connection to racial inequality, gender equality and social justice issues were ATL (40%) and MB (44%). Responses diverge across the country on many questions, but the highest unanimous agreement was related to the science of climate change and how to take personal and collective action.

National Total: *n*=4,035
MB Total: n=241

To what extent do you feel that the Kindergarten to Grade 12 classes should focus on the following?

Respondent Group
% Somewhat more/A lot more

	Educators		Parents		Students		General Public	
	Nat.	MB*	Nat.	MB	Nat.	MB	Nat.	MB
The science behind climate change	76%	87%	72%	79%	70%	72%	72%	61%
How to take individual/personal climate action	74%	82%	70%	76%	69%	68%	70%	69%
How to take collective climate action in the school and community	73%	84%	68%	77%	68%	70%	70%	64%
The solutions to mitigating and adapting to the effects of climate	73%	81%	69%	65%	63%	65%	69%	62%
The social, economic, & political elements of climate change	66%	80%	61%	63%	61%	56%	62%	64%
How to address anxiety and other emotions brought about by climate change	62%	79%	58%	62%	57%	62%	59%	50%
Indigenous traditional knowledge related to climate change	51%	81%	50%	56%	48%	53%	52%	47%
The connection between climate change and racial inequality, gender equality, and social justice issues with students	55%	77%	46%	59%	47%	54%	48%	35%

National: *n*=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290)
MB: *Educator=257, Parent=75, Student=103, General Public=51

Province/Region
% Somewhat more/A lot more

	BC	AB	SK	MB	ON	QC	ATL
The science behind climate change	71%	72%	71%	67%	76%	69%	69%
How to take individual/personal climate action	67%	67%	66%	72%	71%	73%	70%
How to take collective climate action in the school and community	66%	66%	68%	68%	71%	72%	68%
The solutions to mitigating and adapting to the effects of climate	71%	64%	70%	65%	70%	69%	69%
The social, economic, & political elements of climate change	66%	62%	63%	66%	65%	58%	56%
How to address anxiety and other emotions brought about by climate change	57%	57%	60%	55%	60%	57%	60%
Indigenous traditional knowledge related to climate change	48%	46%	51%	52%	57%	48%	52%
The connection between climate change and racial inequality, gender equality, and social justice issues with students	49%	45%	51%	44%	52%	46%	40%

National: *n*=4,035 (BC=514, AB=467, SK=217, MB=241, ON=1,025, QC=1,168, ATL.=300)

How do you think education systems should further contribute to climate change education?

Survey respondents were given the opportunity to answer this open-ended question in their own words. Out of the survey population, 137 individuals from MB chose to answer this optional question.

The results were coded and grouped according to themes. The 7 most common themes are shown below, and indicate suggestions for an enhanced curriculum, increased awareness, and a solution-based approach.

1

**Include with curriculum in school
56%**

"The elements contributing to climate change need to become a component of the science curriculum, starting at a young age, then building on that knowledge and understanding each year." (Educator)

2

**Explain scientific evidence of what causes climate change
25%**

"Making sure students understand the science around climate change so they understand that it is real." (Parent)

3

**Offer solutions to the problem (e.g., reduce your carbon footprint, less pollution)
15%**

"Talk about changing habits in everyday tasks to help reduce impact on climate change." (Student)

4

**Keep it non-biased/honest
12%**

"It (climate change) needs to be taught as a regular part of curriculum but based in science and research not personal opinion." (Member of the General Public)

5

**Educate people more/ Increase awareness
7%**

"Teach it from the k-grade 6 level so it creates awareness from a young age" (Parent)

6

**Multi-media educational material/resources
6%**

"Give students more resources to learn about different aspects of what things cause or affect climate change and how to help make changes easier." (Student)

7

**Recycling programs
6%**

"Schools should be given resources and support in order to get recycling programs, composting programs, litter cleanup programs, and community gardening programs up and running all throughout the year." (Educator)

Part 4: Teaching Climate Change

Part 4 highlights the results from the portion of the survey **designed exclusively for educators**. This section includes their perspectives on the issues that impact the teaching of climate change. 406 Educators responded to the survey with representation from each province across Canada.

NOTE: MB, SK and ATL educator data in this report were obtained from the open-link survey promoted by LSF and its partner groups due to insufficient Leger panel data. Caution should be taken when making direct comparison of open-link findings with Leger-panel data, as the responses using open-link data are often different due to the type of individuals who respond to requests to participate in volunteer surveys of this nature. Therefore, provincial data has been grouped according to the method of sampling in the tables in this section for comparison purposes.

Manitoba Educator Demographics

Years of Teaching Experience^

- 0-5 years: 14%
- 6-10 years: 19%
- 11-15 years: 16%
- 16-20 years: 20%
- Over 20 years: 31%

Subjects Taught

- Math: 55%
- Science: 51%
- English: 46%
- Social Studies: 45%
- Arts: 35%

Grades Taught

- Kindergarten: 16%
- Grade 1: 16%
- Grade 2: 19%
- Grade 3: 21%
- Grade 4: 23%
- Grade 5: 23%
- Grade 6: 21%
- Grade 7: 19%
- Grade 8: 22%
- Grade 9: 25%
- Grade 10: 26%
- Grade 11: 26%
- Grade 12: 25%
- Cégep - 1st + 2nd year: 2%
- Teacher Candidates: 2%
- Specialized teaching: 3%
- Other: 6%
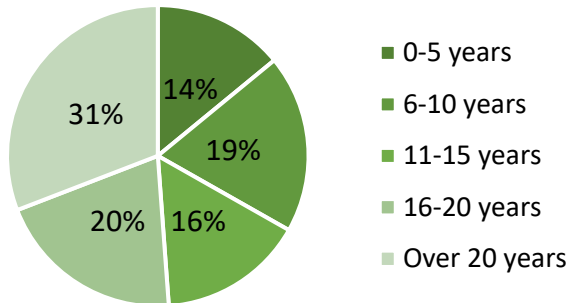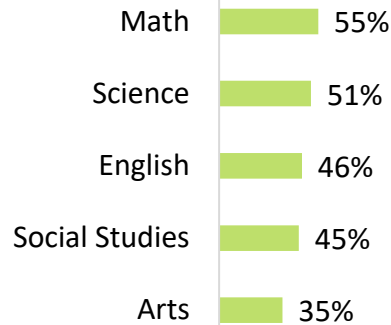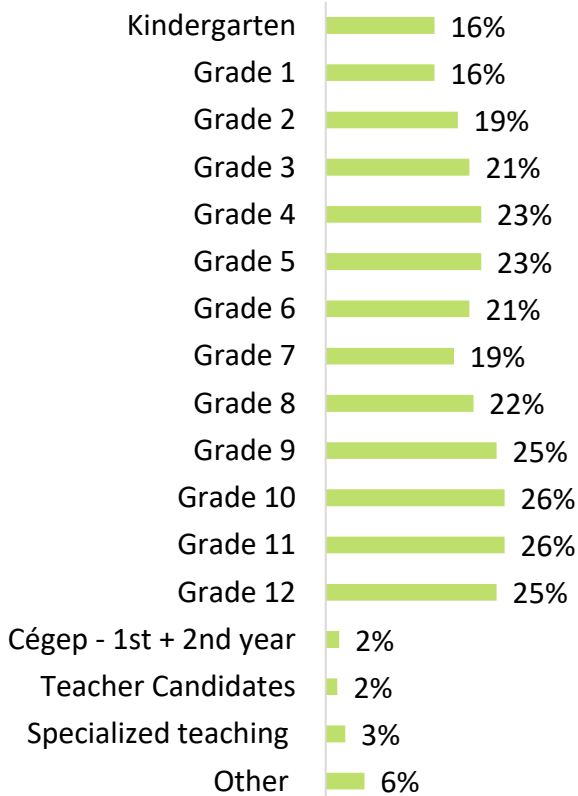
Courses Taught that Address Climate Change

- Science: 50%
- Social Studies: 35%
- English: 25%
- Arts: 18%
- Health: 18%
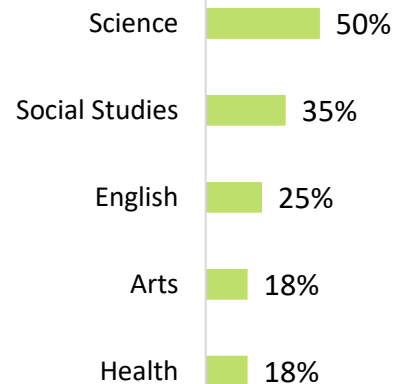
14% do not cover climate change topics in any subjects they teach

Hours in a School Year Spent Covering Climate Change

- Not covered: 9%
- 1 - 2 hours: 17%
- 3 - 5 hours: 16%
- 6 – 10 hours: 10%
- 11 + hours: 23%
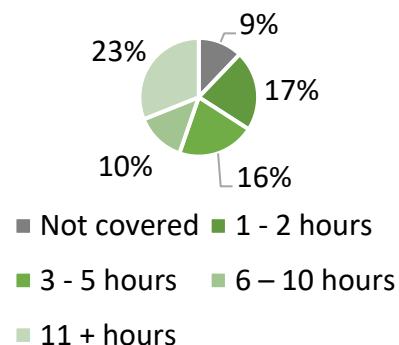
57%^ feel students are developmentally ready to learn about the concept of climate change and its impacts starting in **Junior Kindergarten/Kindergarten**

MB: Educators n=257^ (all current and former MB educators)
or n=175 (current MB teachers)

What barriers have you experienced when attempting to include climate change education within your classroom?

Barriers when attempting to include climate change education within the classroom

Barrier	National	MB*
Lack of time within course/grade to teach the topic of climate change	50%	55%
Lack of classroom resources/activities	43%	54%
Lack of professional development opportunities to learn about the issues involved with teaching climate change	40%	49%
Lack of climate change topics included in curriculum documents	36%	51%
Lack of current or accurate information sources	24%	36%
Structural barriers (e.g. standardized teaching materials or specific assessment criteria)	22%	25%
Unsure of appropriate instructional strategies	19%	25%
No barriers	16%	10%

■ National
■ MB*

National: *n*=306
MB: *n*=175*
National Responses less than 10% not shown.

The results shown on the bar graph illustrate similar overall trends nationally and in MB. Educators feel that a lack of time within a course/grade to teach the topic of climate change is their biggest barrier when attempting to include climate change education within their classrooms followed by lack of classroom resources and activities. Other challenges include lack of PD and inadequate curriculum documents. Very few educators faced no barriers when teaching climate change.

Educators from QC do not feel that lack of accurate information sources or instructional strategies are barriers compared to BC, AB and ON. ATL*, MB* and SK* have similar trends overall.

Province/Region

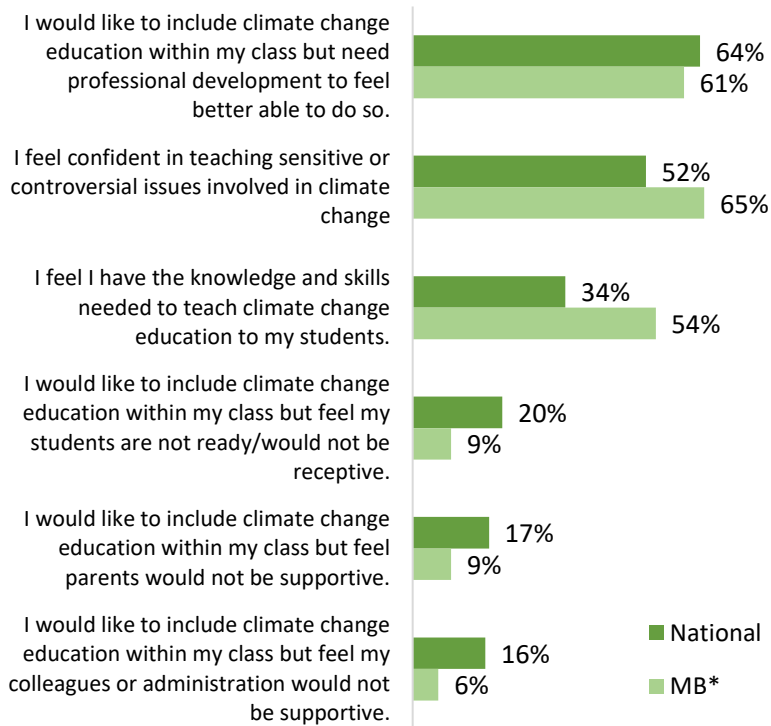|	BC	AB	ON	QC		ATL*	SK*	MB*
Lack of time within course/grade to teach the topic of climate change	69%	57%	43%	48%		62%	55%	55%
Lack of classroom resources/activities	53%	34%	52%	38%		59%	62%	54%
Lack of professional development opportunities to learn about the issues involved with teaching climate change	59%	42%	48%	28%		56%	45%	49%
Lack of climate change topics included in curriculum documents	48%	42%	44%	28%		60%	59%	51%
Lack of current or accurate information sources	48%	32%	22%	19%		31%	45%	36%
Structural barriers (e.g. standardized teaching materials or specific assessment criteria)	18%	27%	21%	24%		33%	31%	25%
Unsure of appropriate instructional strategies	14%	30%	23%	13%		24%	21%	25%
No barriers	8%	18%	14%	17%		12%	-	10%

National: Educators (BC=40, AB=35, SK=29, MB=175, ON=81, QC=109, ATL=156)
Total National Responses less than 10% not shown.
* Indicates open-link data

To what extent do you agree/disagree with the following statements?

% Agree (Strongly Agree/Agree)

Statement	National	MB*
I would like to include climate change education within my class but need professional development to feel better able to do so.	64%	61%
I feel confident in teaching sensitive or controversial issues involved in climate change	52%	65%
I feel I have the knowledge and skills needed to teach climate change education to my students.	34%	54%
I would like to include climate change education within my class but feel my students are not ready/would not be receptive.	20%	9%
I would like to include climate change education within my class but feel parents would not be supportive.	17%	9%
I would like to include climate change education within my class but feel my colleagues or administration would not be supportive.	16%	6%

National: *n*=306
MB: *n*=175*

The results shown on the bar graph illustrate similar overall trends nationally and in MB. Educators expressed the need for professional development to feel comfortable teaching climate change, and very few educators agree that unsupportive parents, colleagues and administration are a barrier.

Similar trends are seen in the data across the country. Educators from BC are most likely to express that they need professional development opportunities compared to AB, ON & QC. Among open link respondents, SK* was much more likely to agree that parents would not be supportive (41% vs. 8% in ATL* and 9% in MB*).
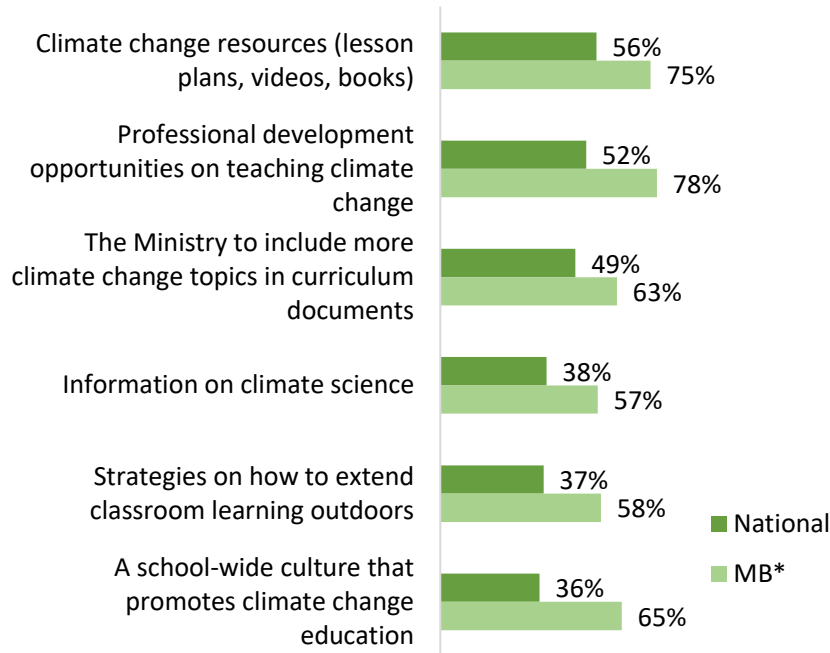
% Agree - Province/Region

	BC	AB	ON	QC		ATL*	SK*	MB*
I would like to include climate change education within my class but need professional development to feel better able to do so.	89%	40%	68%	63%		63%	52%	61%
I feel confident in teaching sensitive or controversial issues involved in climate change	59%	34%	51%	51%		62%	83%	65%
I feel I have the knowledge and skills needed to teach climate change education to my students.	41%	30%	41%	25%		53%	86%	54%
I would like to include climate change education within my class but feel my students are not ready/would not be receptive.	16%	13%	18%	24%		9%	17%	9%
I would like to include climate change education within my class but feel parents would not be supportive.	14%	17%	19%	16%		8%	41%	9%
I would like to include climate change education within my class but feel my colleagues or administration would not be supportive.	20%	7%	18%	15%		8%	24%	6%

National: Educators (BC=40, AB=35, SK=29, MB=175, ON=81, QC=109, ATL=156)
* Indicates open-link data

What support do you need to teach climate change?

Top 6 "Things" Needed to Teach Climate Change

Climate change resources (lesson plans, videos, books)
- National: 56%
- MB*: 75%

Professional development opportunities on teaching climate change
- National: 52%
- MB*: 78%

The Ministry to include more climate change topics in curriculum documents
- National: 49%
- MB*: 63%

Information on climate science
- National: 38%
- MB*: 57%

Strategies on how to extend classroom learning outdoors
- National: 37%
- MB*: 58%

A school-wide culture that promotes climate change education
- National: 36%
- MB*: 65%

■ National
■ MB*

National: *n=306*
MB: *n=175*
Top 6 Responses Shown.

Some survey topics were included in different questions to confirm findings.
Again, educators substantiated that some of the most needed supports were climate change resources and professional development opportunities on teaching climate change.

Educators from BC are most likely to express that they need professional development opportunities compared to AB, ON and QC, whereas MB* scored highest in the request for professional development compared to SK* and ATL*. All provinces express a need for more climate change topics in curriculum documents.

Strategies for how to take learning outdoors, and information on climate science were less likely to be requested in most provinces.

Province/Region

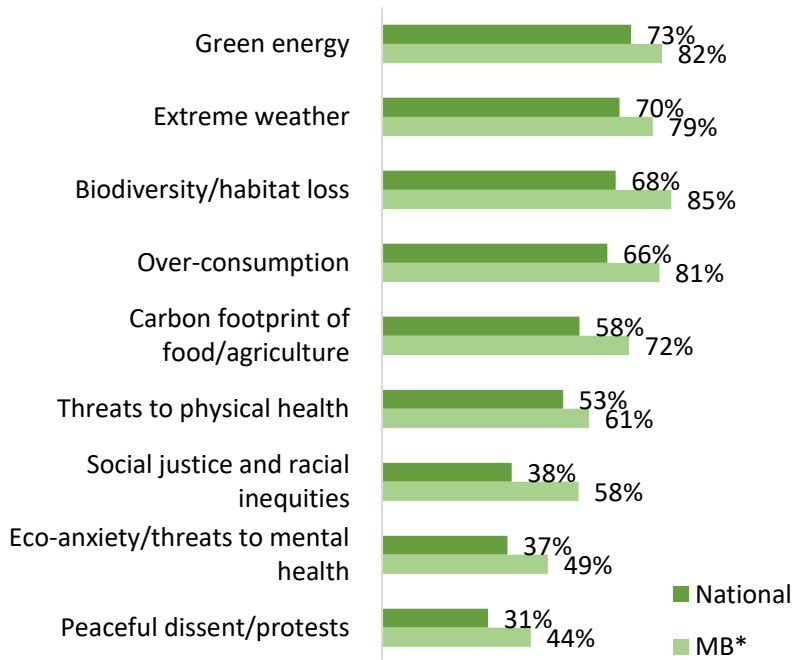|	BC	AB	ON	QC		ATL*	SK*	MB*
Climate change resources (lesson plans, videos, books)	61%	39%	57%	54%		72%	72%	75%
Professional development opportunities on teaching climate change	83%	58%	52%	42%		69%	55%	78%
The Ministry to include more climate change topics in curriculum documents	43%	48%	59%	40%		60%	76%	63%
Information on climate science	38%	39%	42%	34%		60%	48%	57%
Strategies on how to extend classroom learning outdoors	36%	38%	40%	33%		56%	45%	58%
A school-wide culture that promotes climate change education	50%	32%	46%	23%		61%	69%	65%

National: Educators (BC=40, AB=35, SK=29, MB=175, ON=81, QC=109, ATL=156)
National Total Responses less than 10% not shown.
Top 6 responses shown. * Indicates open-link data

To what extent do you agree (or disagree) that climate change should be addressed in grades Kindergarten to Grade 3?

% Agree (Strongly Agree/Agree)

Topic	National	MB*
Green energy	73%	82%
Extreme weather	70%	79%
Biodiversity/habitat loss	68%	85%
Over-consumption	66%	81%
Carbon footprint of food/agriculture	58%	72%
Threats to physical health	53%	61%
Social justice and racial inequities	38%	58%
Eco-anxiety/threats to mental health	37%	49%
Peaceful dissent/protests	31%	44%

National: *n=406*
MB: *n=257**

The results shown on the bar graph illustrate similar overall trends nationally and in MB. Educators strongly agreed that overconsumption, biodiversity/habitat loss, green energy and extreme weather should be addressed in Kindergarten to Grade 3. Less popular topics for this age group included peaceful dissent/protests and eco-anxiety/threats to mental health.

There are visible trends across the country when it comes to topics that should be addressed in younger grades. Particularly topics that are less likely to be covered are eco-anxiety and threats to mental health as well as peaceful dissent/protests. Physical health and social justice/racial inequities also had lower agreement overall.
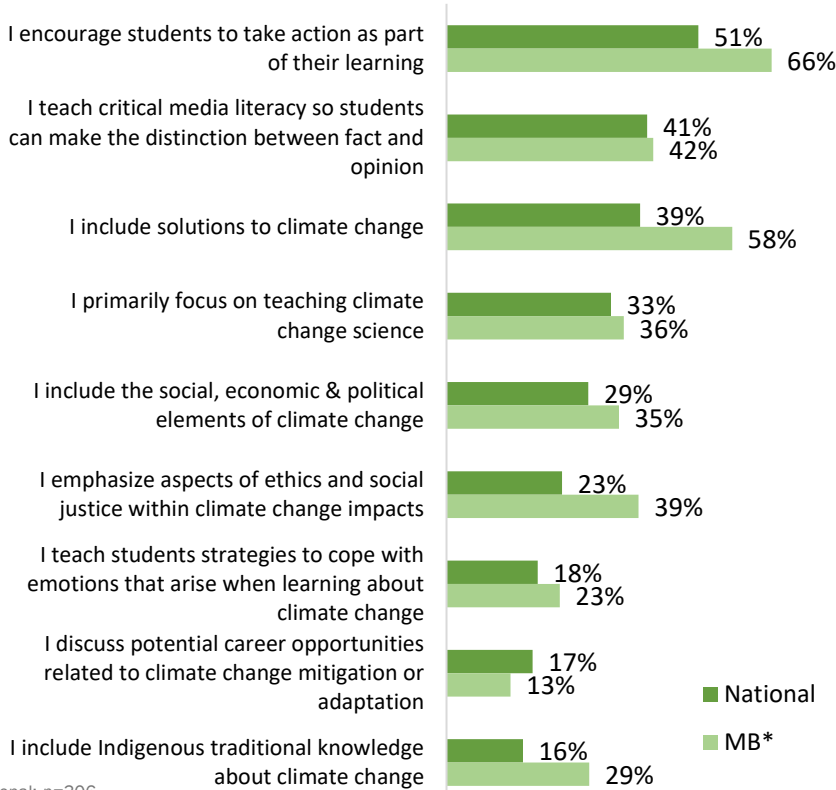
Province/Region

	BC	AB	ON	QC	ATL*	SK*	MB*
Green energy	67%	63%	72%	75%	85%	82%	82%
Extreme weather	65%	62%	71%	72%	73%	74%	79%
Biodiversity/habitat loss	64%	70%	66%	63%	84%	85%	85%
Over-consumption	48%	66%	66%	77%	86%	79%	81%
Carbon footprint of food/agriculture	59%	60%	64%	53%	75%	72%	72%
Threats to physical health	59%	38%	54%	53%	48%	51%	61%
Social justice and racial inequities	26%	38%	31%	42%	53%	59%	58%
Eco-anxiety/threats to mental health	21%	19%	36%	43%	42%	46%	49%
Peaceful dissent/protests	19%	21%	28%	34%	39%	28%	44%

National: Educators (BC=57, AB=41, SK=39, MB=257, ON=110, QC=130, ATL=219)
* Indicates open-link data

When I teach about climate change...

A Great Deal/ A Moderate Amount

I encourage students to take action as part of their learning
- National: 51%
- MB*: 66%

I teach critical media literacy so students can make the distinction between fact and opinion
- National: 41%
- MB*: 42%

I include solutions to climate change
- National: 39%
- MB*: 58%

I primarily focus on teaching climate change science
- National: 33%
- MB*: 36%

I include the social, economic & political elements of climate change
- National: 29%
- MB*: 35%

I emphasize aspects of ethics and social justice within climate change impacts
- National: 23%
- MB*: 39%

I teach students strategies to cope with emotions that arise when learning about climate change
- National: 18%
- MB*: 23%

I discuss potential career opportunities related to climate change mitigation or adaptation
- National: 17%
- MB*: 13%

I include Indigenous traditional knowledge about climate change
- National: 16%
- MB*: 29%

■ National
■ MB*

National: *n*=306
MB: *n*=175*

The results in the bar graph illustrate similar overall trends nationally and in MB. Many educators mention they encourage students to take action as part of their learning when they teach about climate change. There is room for improvement when it comes to teaching about climate-related career opportunities and emotional coping strategies.

Educators from AB are less likely to take many of the following actions.

Educators in most provinces are not likely to emphasize that scientists believe increases in temperature are due to natural causes.
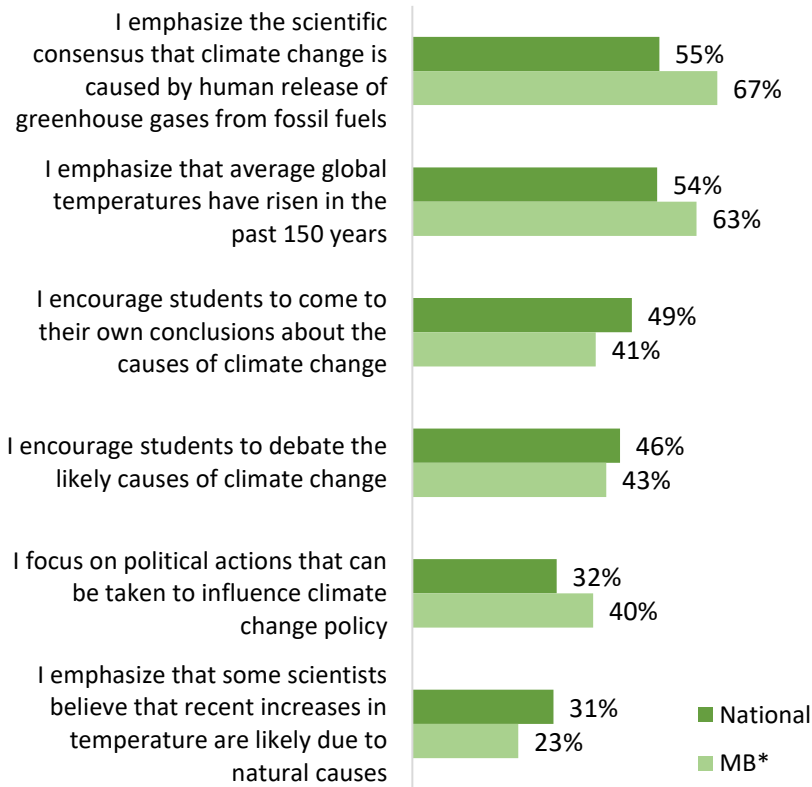
Province/Region

	BC	AB	ON	QC	ATL*	SK*	MB*
I encourage students to take action as part of their learning	45%	30%	60%	50%	66%	66%	66%
I teach critical media literacy so students can make the distinction between fact and opinion	41%	26%	45%	45%	45%	66%	42%
I include solutions to climate change	40%	26%	42%	41%	56%	59%	58%
I primarily focus on teaching climate change science	25%	27%	38%	32%	42%	59%	36%
I include the social, economic & political elements of climate change	31%	28%	30%	29%	35%	38%	35%
I emphasize aspects of ethics and social justice within climate change impacts	25%	16%	27%	22%	32%	34%	39%
I teach students strategies to cope with emotions that arise when learning about climate change	12%	18%	24%	15%	19%	28%	23%
I discuss potential career opportunities related to climate change mitigation or adaptation	23%	16%	21%	12%	27%	28%	13%
I include Indigenous traditional knowledge about climate change	13%	26%	20%	11%	19%	48%	29%

National: Educators (BC=40, AB=35, SK=29, MB=175, ON=81, QC=109, ATL=156)
* Indicates open-link data

In my classes...

% Agree (Strongly Agree/Agree)

I emphasize the scientific consensus that climate change is caused by human release of greenhouse gases from fossil fuels
- **55%** (National)
- **67%** (MB*)

I emphasize that average global temperatures have risen in the past 150 years
- **54%** (National)
- **63%** (MB*)

I encourage students to come to their own conclusions about the causes of climate change
- **49%** (National)
- **41%** (MB*)

I encourage students to debate the likely causes of climate change
- **46%** (National)
- **43%** (MB*)

I focus on political actions that can be taken to influence climate change policy
- **32%** (National)
- **40%** (MB*)

I emphasize that some scientists believe that recent increases in temperature are likely due to natural causes
- **31%** (National)
- **23%** (MB*)

■ National
■ MB*

National: *n*=306
MB: *n*=175*

There are some similar trends nationally and in MB as visualized on the bar graph. Many educators agree that they emphasize the scientific consensus that climate change is caused by human release of greenhouse gases from fossil fuels and that average global temperature have risen in the past 150 years in their classes.

The top two rows in the provincial chart below show that most common emphasis across the country is on greenhouse gasses and global rising temperatures. Educators from AB are least likely to agree with all statements, except for emphasizing that some scientists believe that recent increases in temperature are likely due to natural causes.

Province/Region

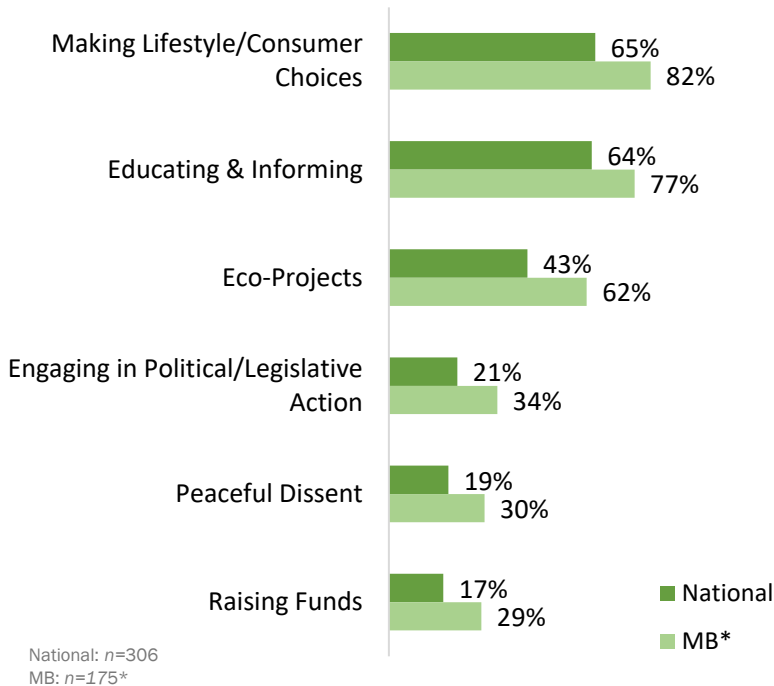|	BC	AB	ON	QC		ATL*	SK*	MB*
I emphasize the scientific consensus that climate change is caused by human release of greenhouse gases from fossil fuels	73%	37%	60%	50%		69%	79%	67%
I emphasize that average global temperatures have risen in the past 150 years	71%	39%	59%	48%		64%	79%	63%
I encourage students to come to their own conclusions about the causes of climate change	37%	39%	53%	46%		39%	34%	41%
I encourage students to debate the likely causes of climate change	50%	34%	44%	48%		33%	45%	43%
I focus on political actions that can be taken to influence climate change policy	43%	16%	34%	32%		42%	52%	40%
I emphasize that some scientists believe that recent increases in temperature are likely due to natural causes	34%	37%	29%	27%		16%	24%	23%

National: Educators (BC=40, AB=35, SK=29, MB=175, ON=81, QC=109, ATL=156)
* Indicates open-link data

How frequently do you engage students in taking the following types of actions to address climate change?

Frequently / Occasionally

Action	National	MB*
Making Lifestyle/Consumer Choices	65%	82%
Educating & Informing	64%	77%
Eco-Projects	43%	62%
Engaging in Political/Legislative Action	21%	34%
Peaceful Dissent	19%	30%
Raising Funds	17%	29%

National: *n=306*
MB: *n=175*

Similar trends can be seen on the bar chart between educators nationally and in MB. Educators mention they were most likely to engage their students in making lifestyle/consumer choices as well as educate and inform others to address climate change. Overall, educators are much less likely to engage students in fundraising or peaceful dissent.

Provincially, the top two actions are consistent (making lifestyle/consumer choices and educating & informing). Educators from AB engage students in all actions that address climate change less frequently than those from BC, ON or QC. BC Educators are the most likely to engage students in making lifestyle/ consumer choices. Among open-link respondents, MB* is most likely to engage their students in raising funds, engaging in political action, and making lifestyle/consumer choices compared to ATL* and SK*.

Province/Region

	BC	AB	ON	QC		ATL*	SK*	MB*
Making Lifestyle/Consumer Choices	71%	39%	70%	65%		76%	76%	82%
Educating & Informing	65%	48%	65%	65%		74%	86%	77%
Eco-Projects	37%	34%	46%	45%		56%	69%	62%
Engaging in Political/Legislative Action	24%	16%	24%	18%		24%	31%	34%
Peaceful Dissent	13%	11%	26%	14%		24%	31%	30%
Raising Funds	25%	13%	25%	10%		15%	10%	29%

National: Educators (BC=40, AB=35, SK=29, MB=175, ON=81, QC=109, ATL=156)
* Indicates open-link data

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Section 4: Climate Audiences

Ladder of Engagement

The group EcoAnalytics has been mapping Canadian public opinion on climate change since 2016. As well, they have been providing additional analysis on specific segmented audiences in order to provide insights for communicators, educators, and policymakers for better targeting and engagement. Within this body of work, EcoAnalytics has put forward a Canadian ladder of engagement, which is a conceptual map to help groups engage audiences with more success (LaChappelle, Mahéo, & Nadeau, 2016).

The four audiences are broadly categorized and paraphrased from the EcoAnalytics report as:

- **Dismissive** - disagree that climate change is happening

- **Sceptic** - agree that climate change is happening and do not think it's caused by humans OR, neither agree nor disagree that climate change is happening

- **Aware** - agree that climate change is happening and do think it's caused by humans AND indicated that there is nothing that we can do to change it

- **Empowered** - agree that climate change is happening and do think it's caused by humans AND indicated that there are things we can do to change it

Below is a comparison of the MB Ladder of Engagement Results to the National Results:

	Empowered	Aware	Skeptic	Dismissive
National Total	41%	36%	15%	8%
MB Total	48%	24%	22%	6%
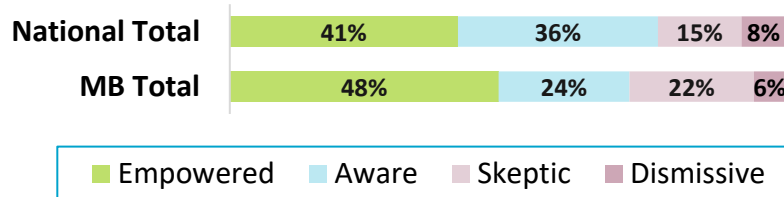
National: *n*=4,025 (Educator=404, Parent=1,368, Student=1,207, General Public=1,288)
MB: Educator =257, Parents=74, Student=103, General Public=51
Responses less than 4% not labelled.

Respondent Group

		Empowered	Aware	Skeptic	Dismissive
Educator	National	47%	40%	8%	6%
	MB*	59%	31%	6%	
Parent	National	38%	39%	15%	8%
	MB	46%	33%	15%	6%
Student	National	39%	39%	13%	9%
	MB	33%	41%	15%	11%
General Public	National	41%	34%	17%	8%
	MB	46%	23%	26%	5%

The majority of respondents are either Empowered or Aware, meaning they do agree that climate change is happening and that it is caused by humans. Significantly more respondents in MB are Empowered than respondents nationally (48% vs. 41%), however, they are also significantly more Skeptic (22% vs. 15%). Respondents nationally are more likely to be Aware than respondents in MB (36% vs. 24%).
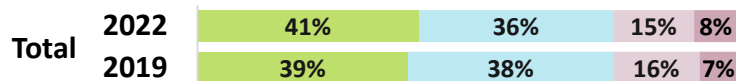
Responses among parents, students, and members of the general public in MB are fairly consistent with responses nationally. Parents in MB are more empowered than the national average (46% in MB vs. 38% nationally).
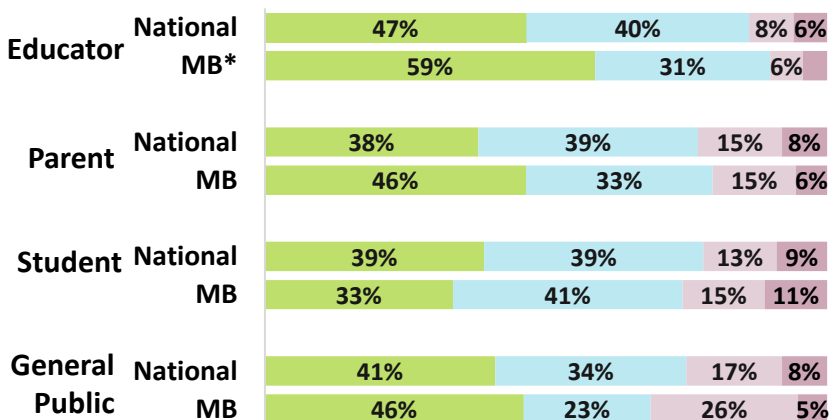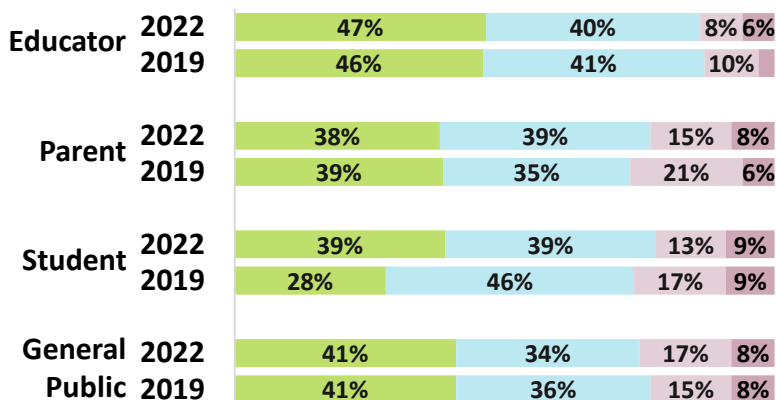
NOTE: Ten respondents were excluded from reporting as they belonged to both the Dismissive and the Skeptic category, their responses were not consistent with their views towards climate change.

Ladder of Engagement 2022 vs. 2019

Legend: ■ Empowered ■ Aware ■ Skeptic ■ Dismissive

Total

Year	Empowered	Aware	Skeptic	Dismissive
2022	41%	36%	15%	8%
2019	39%	38%	16%	7%

Respondent Group

Group	Year	Empowered	Aware	Skeptic	Dismissive
Educator	2022	47%	40%	8%	6%
Educator	2019	46%	41%		10%
Parent	2022	38%	39%	15%	8%
Parent	2019	39%	35%	21%	6%
Student	2022	39%	39%	13%	9%
Student	2019	28%	46%	17%	9%
General Public	2022	41%	34%	17%	8%
General Public	2019	41%	36%	15%	8%

2022: *n*=4,025 (Educator=404, Parent=1,368, Student=1,207, General Public=1,288)
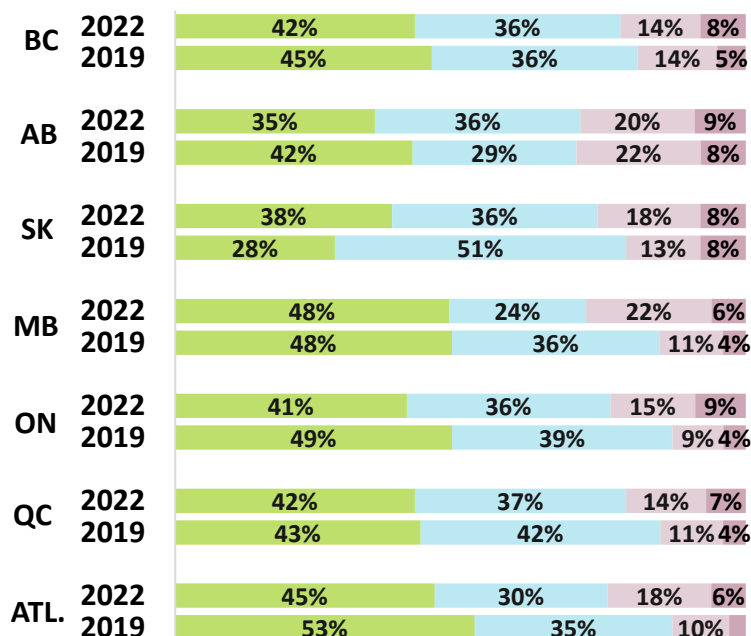2019: *n*=3,196 (Educator =111, Parents=571, Student=486, General Public=908)
Responses less than 4% not labelled.

In three of the four participant groups (educators, parents and general public), there was little change in the ladder of engagement in 2022 vs. 2019, with educators remaining the most empowered (47% vs. 46%) and parents feeling the least empowered (39% vs 38%).

This lack of movement in other groups made the change in the student results much more significant. The percentage of students feeling "empowered" in 2019 was 28%. However, this number rose to 39% in 2022, meaning more students felt that human-caused climate change is happening, and that there are things we can do to change it.

Province/Region

Region	Year	Empowered	Aware	Skeptic	Dismissive
BC	2022	42%	36%	14%	8%
BC	2019	45%	36%	14%	5%
AB	2022	35%	36%	20%	9%
AB	2019	42%	29%	22%	8%
SK	2022	38%	36%	18%	8%
SK	2019	28%	51%	13%	8%
MB	2022	48%	24%	22%	6%
MB	2019	48%	36%	11%	4%
ON	2022	41%	36%	15%	9%
ON	2019	49%	39%	9%	4%
QC	2022	42%	37%	14%	7%
QC	2019	43%	42%	11%	4%
ATL.	2022	45%	30%	18%	6%
ATL.	2019	53%	35%		10%

When the ladder of engagement is applied regionally, most provinces are largely either empowered and aware. In 2022 in some regions (BC, AB, ON, QC, and ATL) there were fewer respondents in the empowered group than in 2019. SK, however, showed significant gains in the empowered group in 2022 vs. 2019 (38% vs. 28%).

2022: *n*=4,025 (BC=513, AB=464, SK=217, MB=240, ON=1,021, QC=1,168, ATL.=299)
2019: *n*=2,180 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=814, ATL=118)
Responses 4% or less not labelled.

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Section 5: Recommendations

Recommendations

The analysis of the survey data revealed a series of opportunities to strengthen climate change education in Canada, both in formal and informal education settings. Overall, Canadians wish to be better informed about climate change. In addition, educators call for enhanced professional learning and resources.

The following recommendations provide a roadmap for governments, policymakers, universities, school boards, teachers' unions, community organizations, corporations, educators, and youth to address the importance of climate change education and recognize the urgency of acting now.

Formal Education

- Ministries of Education should revise curricula to incorporate climate change expectations across all subjects and in all grades, from kindergarten to grade 12 and seek input from:
    - youth
    - Indigenous educators
    - marginalized communities

- Curriculum expectations should include: scientific consensus that climate change is human caused, the social, economic, and political aspects of climate change, Indigenous knowledge, and social justice issues.

- Ministries of Education, school boards, and teachers' unions should provide professional development and resources to enhance teacher knowledge, skills, and confidence in teaching climate change. and should include transformative pedagogies such as inquiry, active learning, and hands-on, experiential learning.

- Teachers must be supported to include solutions to mitigating and adapting to the effects of climate change, and promote student action to foster feelings of hope and empowerment and ameliorate emotions brought about by climate change.

- Faculties of Education, in implementing the *Accord on Education for a Sustainable Future* adopted by the Association of Canadian Deans of Education in 2022 should highlight the urgency of climate change education. They must ensure that climate change education is a central and required component of course offerings in pre-service, in-service, and graduate-level teacher education curricula

Recommendations

Informal and Non-Formal Education

- Canadians should be provided with information, from trusted sources including scientists and academics, about the process and causes of climate change, opportunities for mitigation and adaptation, and personal, higher-impact actions.

- Sources of information about climate change need to target different population groups more purposefully and effectively.

- Informal education sources should provide resources and strategies to help parents, grandparents, children, and youth cope with emotions that arise when learning about climate change, with a focus on solutions, actions, and hope.

- Canadians should hear positive stories of climate action and learn about collaborative approaches that create systemic change.

- Informal education sources should provide resources and professional learning for teachers on current national/provincial climate data, information on green jobs, and locally relevant climate change classroom resources.

In summary, the results of the climate change survey emphasized the need for enhanced climate change education, both in the formal school setting, as well as through informal education channels. Using this two-pronged, targeted approach will help to reduce climate change knowledge gaps and work towards the positive outcome of active citizenship for all Canadians.

Climate change mitigation and adaption will require education, support, action, and empowerment at ALL levels of Canadian society.

EDUCATION ▸ **SUPPORT** ▸ **ACTION** ▸ **EMPOWERMENT**

Contact information
Pamela Schwartzberg
 President and CEO Learning for a Sustainable Future
cc-survey@LSF-LST.ca
1 877 250 8202