

# Canadians' Perspectives on Climate Change & Education: 2022 Saskatchewan 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.



Canadians' Perspectives on Climate Change & Education: 2022

Saskatchewan Provincial Report

**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 Saskatchewan Provincial Report provides the highlights from the full national report and gives additional results based on further analysis of Saskatchewan 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.

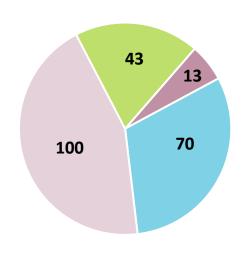
From the sample that was collected through the LSF open-link, a total of 2,461 completed surveys were received from November 9, 2021 to March 6, 2022. The supplemental open-link data was used where Leger panel data was insufficient, and was thus only needed to augment the educator respondent data for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

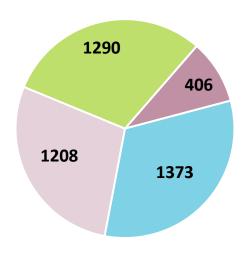
See the methodology section of the full national report for further details.

### **2022 Demographics**

### Saskatchewan Respondent Groups

#### **National Respondent Groups**

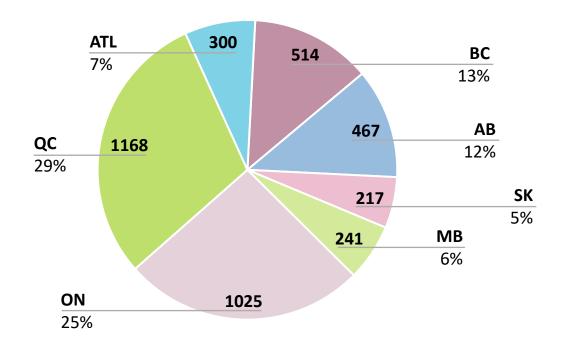




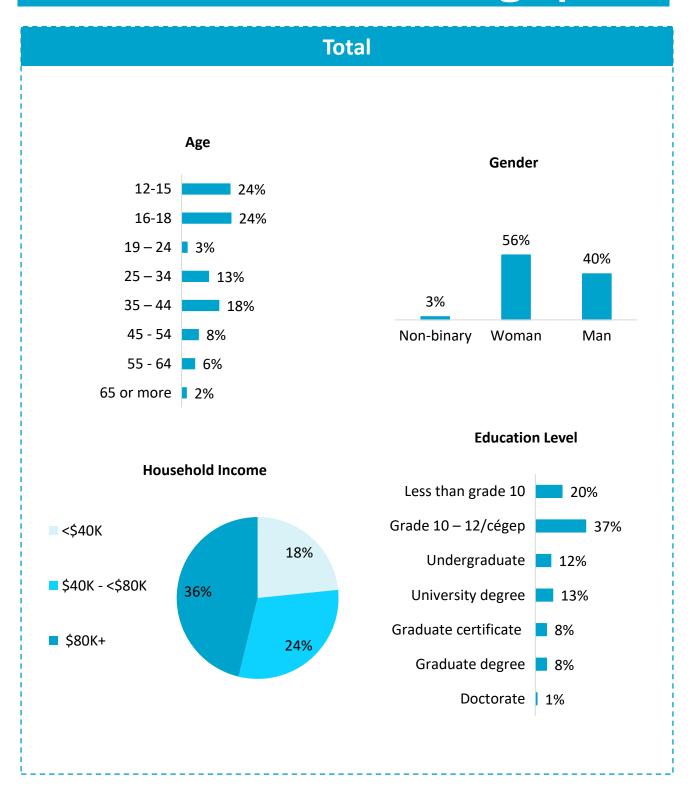
<sup>\*</sup> A sample size of 13 educators was insufficient for data analysis, thus for this report, open-link data of 39 SK educator responses was used.

■ Educator ■ Parent ■ Student ■ General Public

#### **National Respondents by Province/Region**



### **2022 Saskatchewan Demographics**





Canadians' Perspectives on Climate Change & Education: 2022

Saskatchewan Provincial Report

**Section 2: What has changed since 2019?** 

#### Overall Climate Change Knowledge

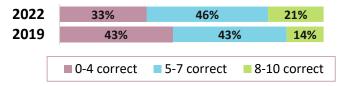
Respondents were asked 10 climate change questions early in the survey, to test their knowledge and understanding. Each question had a correct answer. The number of correct responses per respondent group and province/region are shown on the following slide, and responses from selected questions are shown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

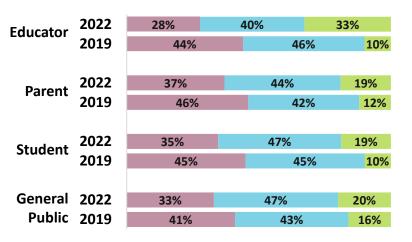
- B6. Canada's average temperature has \_\_\_\_\_ since 1948.
  - a. Decreased by 1 1.5 degrees Celsius
  - b. Decreased by 1 0.5 degrees Celsius
  - c. Decreased by 0.5 0 degrees Celsius
  - d. Stayed the same
  - e. Increased by 0 0.5 degrees Celsius
  - f. Increased by 0.5 1 degrees Celsius
  - g.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



#### **Total Correct Answers – Respondent Group**

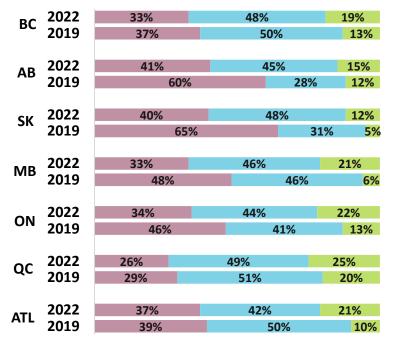


2022: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) 2019: n=2,191 (Educator=111, Parent=571, Student=486, General Public=908)

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



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.

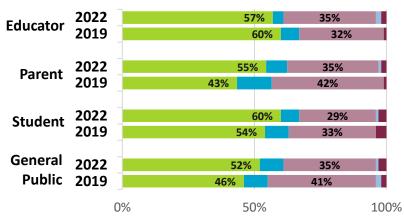
Furthermore, significantly more respondents were able to answer 8 or more questions correctly in BC SK, MB, ON, QC and in ATL. While AB and SK have improved, their scores remain lower than the rest of Canada.

## Do you think climate change is...



- 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**



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%).

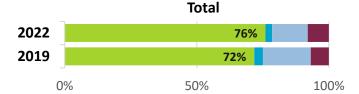
Notably, a proportion (35%) still think climate change is equally caused by both human activities and natural changes, although this number has decreased since 2019 (41%).

	Caused mostly by human activities (correct)						
Province	2019	2022	(+/-)				
ВС	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.

## Which comes closest to your own view?

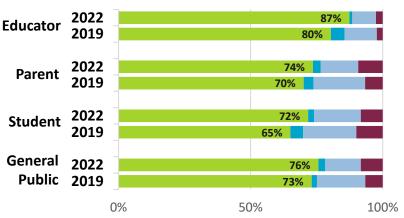


- Most climate scientists think climate change is happening (correct)
- Most climate scientists do not think climate change is happening
- There is a lot of disagreement among climate scientists about whether climate change is happening or not
- Don't know enough to say

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.





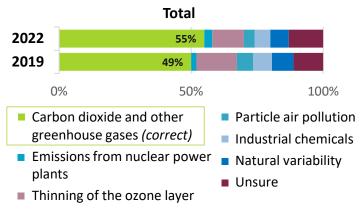
2022: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) 2019: n=2,189 (Educator=110, Parent=571, Student=486, General Public=907)

	Most climate scientists think climate change is happening (correct)							
Province	2019	2019 2022 (+/-)						
ВС	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					

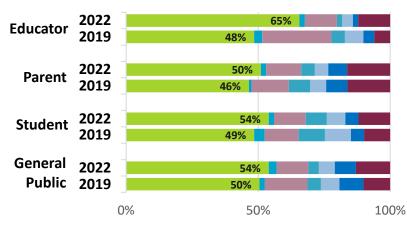
The percentage of respondents who were able to answer this question correctly in 2022 increased across all regions compared to 2019, except for QC, which decreased by 4 percentage points, and MB which stayed consistent with 2019 answers.

Correct responses increased from +1 percentage points in BC to +21 percentage points SK.

## Climate change is caused by...







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.

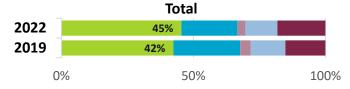
2022: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) 2019: n=2,191 (Educator=111, Parent=571, Student=486, General Public=908)

	Carbon Dioxide and other greenhouse gases (correct)						
Province	2019	2022	(+/-)				
ВС	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.

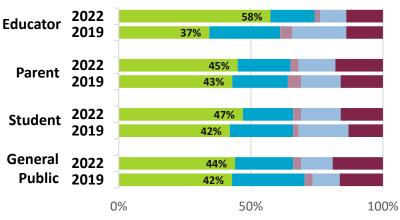
SK had the largest increase in correct responses from 2019 to 2022, with significantly more respondents in SK answering this question correctly in 2022 (52%) than in 2019 (34%).

### The main process behind climate change is...



- 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





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	2019 2022 (+/-)							
ВС	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.

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

## Total 28% 26% 46% 31% 27% 41%

Unsure

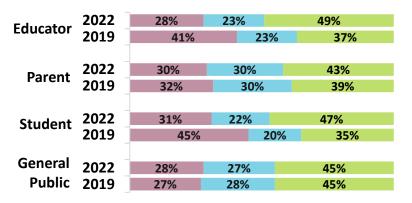
True

2022

2019

#### **Respondent Group**

False (correct)



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	(+/-)				
ВС	38%	37%	-1				
АВ	43%	42%	-1				
SK	37%	42%	+5				
MB	35%	42%	+7				
ON	41%	43%	+2				
QC	45%	58%	+13				
ATL	41%	48%	+7				

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
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)

		Responde	nt Group	% Correct
Educator	2022	41%	38%	79%
Luucatoi	2019	53%	42%	76%
	2022	.=0/	240/	760/
Parent	2022	45%	31%	76%
raiciic	2019	51%	36%	73%
Student	2022	45%	30%	76%
Student	2022 2019	46%	31%	65%
General	2022	40%	34%	74%
Public	2019	51%	36%	74%

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%).

When asked what countries

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%).

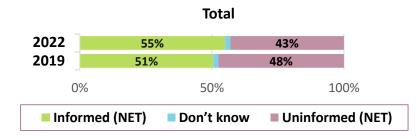
2022: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) 2019: n=2,189 (Educator=111, Parent=571, Student=486, General Public=906)

		<b>% Correct</b> lecrease emissionet zero emission							
Province	2019	2019 2022 (+/-)							
ВС	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						

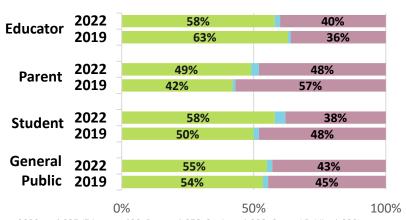
The percentage of correct responses varied across all province/regions from 2019 to 2022. Most had an increase in correct responses, however, in MB and QC correct responses decreased by -8 to -4 percentage points, respectively.

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

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



#### **Respondent Group**



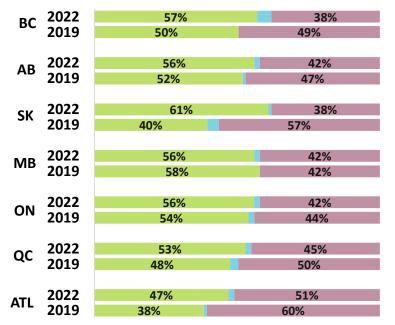
2022: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) 2019: n=2,188 (Educator=110, Parent=571, Student=485, General Public=907)

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



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

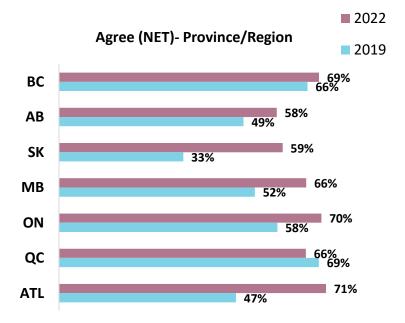


#### Agree (NET) - Respondent Group



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)



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.



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

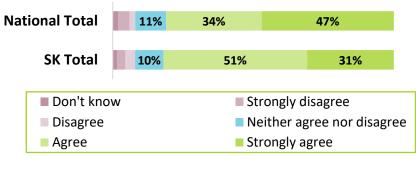
- Part 1: Knowledge Questions
- Part 2: Effects and Action
- Part 3: Climate Change Education
- Part 4: Teaching Climate Change



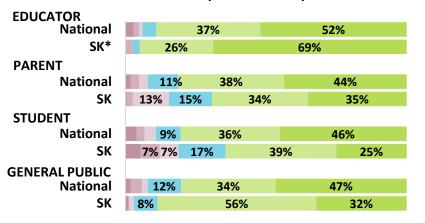
## Part 1: Climate Change Perspectives and Knowledge

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.



#### **Respondent Group**



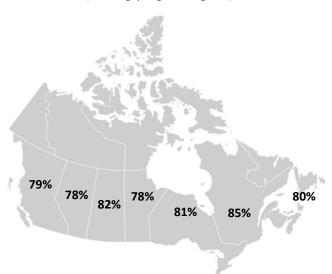
National: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) SK: \*Educator=39, Parent=70, Student=100, General Public=43 Responses 6% or less not labelled

# When asked if they "are certain that climate change is happening", respondents overwhelmingly agree with this statement nationally (81%) and in SK (82%).

Parents and students in SK are significantly less likely to agree they are certain climate change is happening than those nationally (parents: 69% in SK vs. 82% nationally and students: 64% in SK vs. 82% nationally). In contrast, the general public in SK is slightly more likely to agree compared to nationally (88% in SK vs. 81% nationally).

SK\* educator data is from open-link data, thus caution should be taken to not directly compare it to the Lagerpanel national educator data.

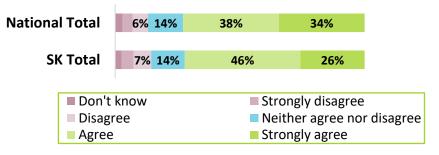
#### Province/Region - % Agree (Strongly Agree/Agree)



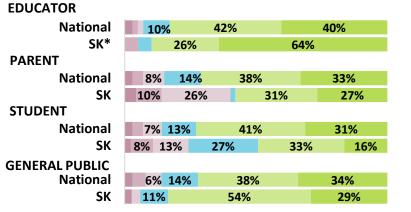
Provinces across Canada are in similar agreement, with a majority being certain that climate change is happening.

Regional agreement ranges from 85% in QC to 78% in AB and MB. SK agreement falls in the middle of the regional variation at 82%.

## We are experiencing a climate emergency

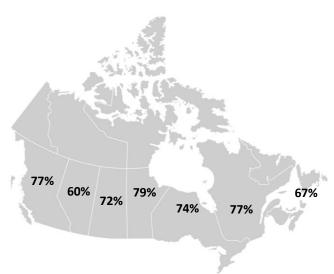


#### **Respondent Group**



National: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) SK: \*Educator=39, Parent=70, Student=100, General Public=43 Responses 5% or less not labelled.

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



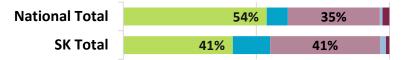
A large majority of Canadians believe that the climate change situation we are facing is extremely urgent. Close to three quarters (72%) of respondents nationally and in SK were in agreement that we are currently experiencing a climate emergency.

Students in SK were significantly less likely to agree that we are experiencing a climate emergency (49% in SK vs. 72% nationally). Similarly, parents in SK were less likely to agree (58% in SK vs. 71% nationally). The general public was more likely to agree in SK (83%) than nationally (72%).

SK\* educator data is from open-link data, thus caution should be taken to not directly compare it to the Lagerpanel national educator data.

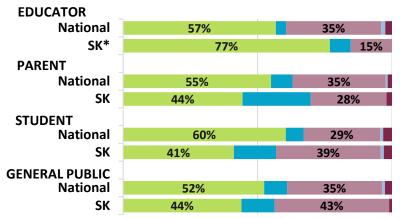
Respondents in MB had the highest level of agreement overall (79%). On the other side of the spectrum, AB had the lowest agreement (60%), followed by ATL (67%). BC (77%) and QC (77%) had slightly higher levels of agreement overall. SK respondents fell in the middle of the regional variation at 72%.

### Do you think climate change is...



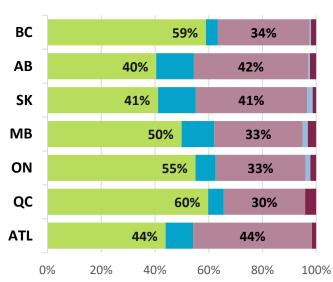
- Caused mostly by human activities (correct)
- Not happening■ Don't know
- Caused mostly by natural changes in the environment
- About equally caused by both human activities and natural changes

#### **Respondent Group**



National: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) SK: Educator=39, Parent=70, Student=100, General Public=43

Province/Region



When asked in the survey whether climate change is human-caused, 54% of respondents nationally, and significantly less respondents in SK (41%), answered correctly. Around one third of respondents nationally (35%), and even more in SK (41%) believe that climate change is "equally caused by both human activities and natural changes."

Across the parent, student and the general public respondent groups in SK, there was lower agreement that climate change is mostly caused by human activities compared to national data. The difference was particularly pronounced among students (60% nationally vs 41% in SK).

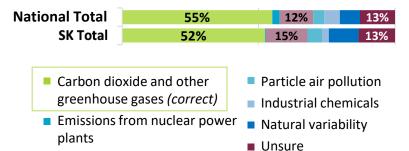
SK\* educator data is from open-link data, thus caution should be taken to not directly compare it to the Lager-panel national educator data.

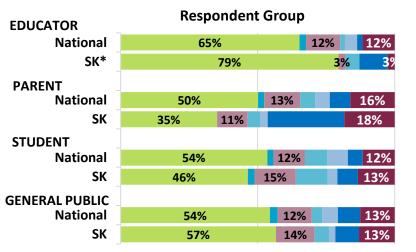
The understanding and acceptance that climate change is human-caused, varies across regions. Those in BC (59%), ON (55%), and QC (60%) understand and agree that climate change is mostly caused by human activities, more than those in AB (40%), SK (41%), ATL (44%), and MB (50%).

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

## Climate change is caused by...

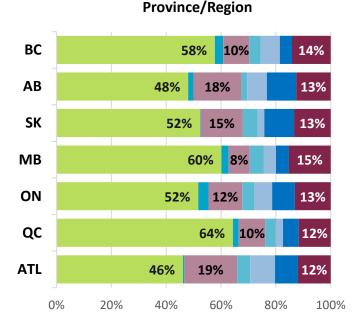
Thinning of the ozone layer





National: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) SK: \*Educator=39, Parent=70, Student=100, General Public=43

#### General Public=43



In terms of understanding the scientific causes of climate change, just over half of respondents nationally (55%) and in SK (52%) answered correctly, that carbon dioxide and other greenhouse gases are the primary cause of climate change.

A notable portion of respondents were 'unsure' of the cause of climate change (13% nationally and in SK) or incorrectly believed that climate change is caused by the thinning of the ozone layer (12% nationally and 15% in SK).

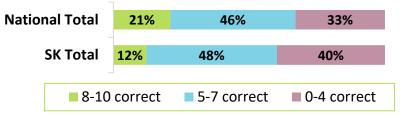
Parents nationally were significantly more likely than parents in SK to answer correctly, that greenhouse gases cause climate change (50% nationally vs. 35% in SK).

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

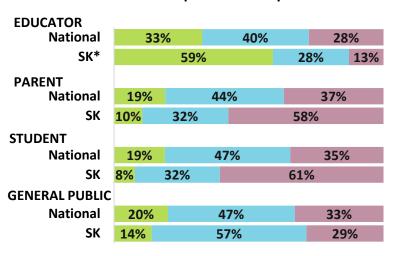
Across provinces, there is a variation in the knowledge that carbon dioxide and other greenhouse gases are the principal cause of climate change. SK (52%) scored only above AB (48%) and the ATL provinces (46%).

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

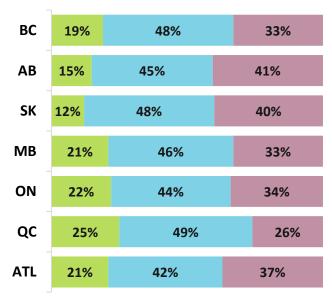


#### **Respondent Group**



National: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) SK: \*Educator=39. Parent=70, Student=100, General Public=43

#### Province/Region



On average, 67% of respondents nationally answered 5 or more of the climate change knowledge questions correctly. Fewer respondents in SK (60%) were able to get a passing grade on the knowledge questions.

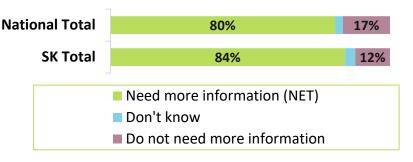
Parents and students in SK were significantly less likely to have answered 5 or more of the climate change knowledge questions correctly compared to those nationally (parents: 42% in SK vs. 63% nationally and students: 40% in SK and 66% nationally).

SK\* educator data is from open-link data, thus caution should be taken to not directly compare it to the Lagerpanel national educator data.

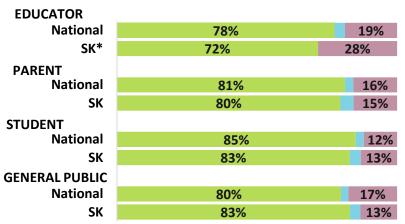
Provinces ranged between a 60% (AB and SK) to 74% (QC) success rate in answering 5 or more of the knowledge statements correctly.

When it comes to how many residents in each province successfully scored over 80%, 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?



#### **Respondent Group**



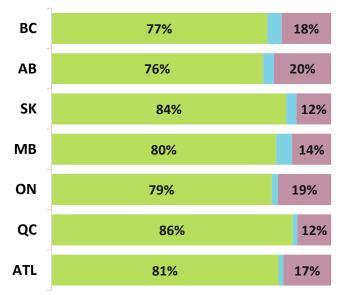
National: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) SK: \*Educator=39, Parent=70, Student=100, General Public=43

A large majority of Canadians (nationally and in SK) would like more information about climate change. 80% of respondents nationally and 84% in SK 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 SK are consistent with responses nationally.

SK\* educator data is from open-link data, thus caution should be taken to not directly compare it to the Lagerpanel national educator data.

#### Province/Region



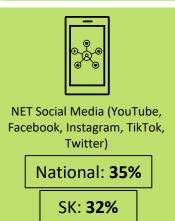
Respondents in all provinces across Canada indicate they feel they need more information about climate change to form a firm opinion.

Respondents in QC and SK are more likely to indicate they need more information (86% in QC and 84% in SK), compared to respondents living in BC (77%), AB (76%), and ON (79%).

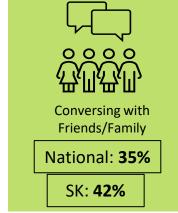
## Which of the following do you use to inform yourself about climate change?

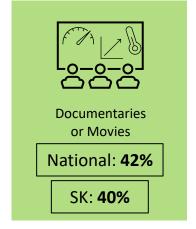
#### 2022 Total













When asked which sources respondents use most to inform themselves about climate change, 51% of respondents nationally indicated television news programs compared to 46% of respondents in SK. SK respondents were most likely to indicate using newspaper/online news websites to inform themselves (53% in SK vs. 47% nationally). Fewer respondents indicated conversing with friends/family (42% in SK vs. 35% nationally) and listening to radio news programs (22% in SK and nationally).

Note: Respondent group and provincial data can be viewed on the following page Students nationally and in SK are most likely to use various social media platforms to inform themselves about climate change (51% nationally, 49% in SK), followed by having conversations with family or friends (43% nationally, 49% in SK). Parents in SK (30%) are less likely to watch television news programs to inform themselves compared to parents nationally (44%). 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.

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

#### **Respondent Group**

Sources of Information	Educators		Par	arents Stude		ents		General Public	
	Nat.	SK*	Nat.	SK	Nat.	SK	Nat.	SK	
Television news programs	56%	54%	44%	30%	31%	30%	54%	50%	
Newspaper and/or online news websites	56%	74%	50%	43%	33%	32%	48%	59%	
Documentaries or movies	44%	72%	44%	35%	34%	28%	42%	46%	
NET Social Media (YouTube, Facebook, Instagram, TikTok, and Twitter)	35%	54%	36%	43%	51%	49%	33%	23%	
Conversations with friends and family	33%	62%	34%	37%	43%	48%	34%	40%	
Radio news programs	32%	44%	23%	18%	13%	14%	22%	27%	

National: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) SK: \*Educator=39, Parent=70, Student=100, General Public=43

#### **Province/Region**

Sources of Information	ВС	АВ	SK	МВ	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%



## 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

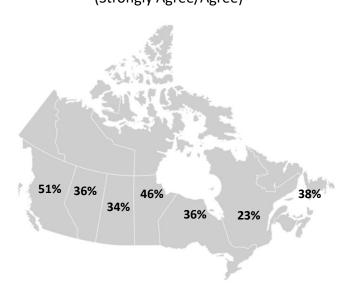


#### Respondent Group

EDUCATOR					
National	12%	17%	24%	33%	10%
SK*	8%3%	15%	41%	3	1%
PARENT					
National	6% 9%	19%	26%	31%	10%
SK	10% 11	21	% 21%	23%	13%
STUDENT					
National	12% 8	% 21%	<b>6</b> 27%	<b>6</b> 24%	8%
SK	12% 8	% 16%	35%	24	<b>!%</b>
<b>GENERAL PUBLIC</b>					
National	6% 9%	17%	33%	27%	8%
SK	12% 3%	6	46%	27%	11%

National: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) SK: \*Educator=39, Parent=70, Student=100, General Public=43 Responses 4% or less not labelled.

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



36% of respondents nationally and 35% in SK agreed (strongly agree/agree) that they have personally experienced the effects of climate change.

Agreement among parents, students, and members of the general public in SK are fairly consistent with responses nationally. The general public nationally was more likely to disagree with this statement (3% in SK vs. 26% nationally)

SK\* educator data is from open-link data, thus caution should be taken to not directly compare it to the Lagerpanel national educator data.

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

Those living in QC are less likely to agree (23%) as are those living in SK (34%) especially compared to those in BC (51%), MB (46%), and ATL (38%).

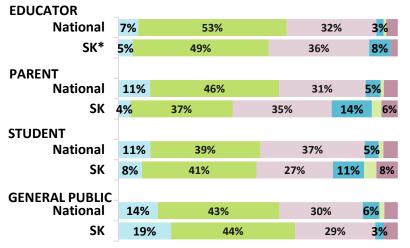
## Which of the following statements comes closest to your personal view?

#### National Total SK Total

13%	44%	31%	6%	
14%	44%	28%	6%	

- 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**



National: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) SK: \*Educator=39, Parent=70, Student=100, General Public=43 Responses 5% or less not labelled.

#### **Province/Region**



Over two-in-five (44%) respondents nationally, and in SK (44%), 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% nationally and 28% in SK) of respondents who believe that humans could reduce climate change, but that people aren't willing to change their behaviour so we aren't going to.

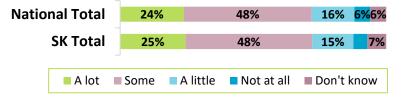
Students in SK are significantly less likely than students nationally to believe humans could reduce climate change, but that people aren't willing to change their behaviour so we aren't going to (27% vs. 37%). Parents in SK are less likely to believe humans will successfully reduce climate change (4% in SK vs. 11% nationally).

SK\* educator data is from open-link data, thus caution should be taken to not directly compare it to the Lagerpanel 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 than those in MB (19%), that humans could reduce climate change, but that people aren't willing to change their behaviour so we aren't going to. SK responses fall in the middle of the national variation.

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



#### **Respondent Group**



National: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) SK: \*Educator=39, Parent=70, Student=100, General Public=43 Responses 5% or less not labelled.

**Province/Region** 



A large majority of respondents nationally (72%) and in SK (73%) would be willing to change their life either "a lot" or "some" to help reduce the effects of climate change. Only 6% nationally and 5% in SK are not at all willing to change their life at school, work, or home.

Students in SK are significantly less likely than students nationally to be willing to change their lives to help reduce the effects of climate change (53% vs. 68%). The general public is more willing to change (some or a lot) in SK vs. nationally (79% in SK vs. 70% nationally).

SK\* educator data is from open-link data, thus caution should be taken to not directly compare it to the Lagerpanel national educator data.

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%), ON (24%), QC (25%), and SK (25%) are more willing than those in AB (15%) to take a lot of action.

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



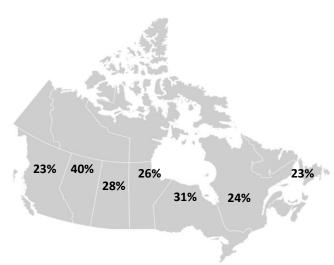
#### **Respondent Group**

LDOCATOR									
National	9%	149	%	28%		19%		25%	
SK*	15%			38%		21%		10%	13%
PARENT									
National	8%	13%	6	27%		23%		21%	7%
SK	12%	<b>1</b>	4%	20%		21%	2	6%	7%
STUDENT									
National	10%	119	6	23%		23%	2	4%	8%
SK	12%	6%	1	.7%	30	%	239	%	12%
GENERAL PUBLIC									
National	9%	149	%	27%		23%		21%	7%
SK	16	%	8%	20%		31%		219	6

**EDUCATOR** 

National: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) SK: \*Educator=39, Parent=70, Student=100, General Public=43 Responses 5% or less not labelled.

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



Few respondents nationally (28%) and in SK (28%) agreed (strongly agree/agree) that new technologies can solve climate change without individuals having to make big changes in their lives. 40% of respondents nationally, and significantly less in SK (30%) disagree with this statement.

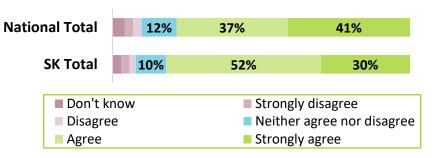
Agreement among SK parents, students, and members of the general public were fairly consistent with responses nationally. The general public in SK was more likely to not know compared to nationally (16% vs. 9%).

SK\* educator data is from open-link data, thus caution should be taken to not directly compare it to the Lagerpanel national educator data.

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%). SK agreement fell right in the middle of the regional variation (28%).

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

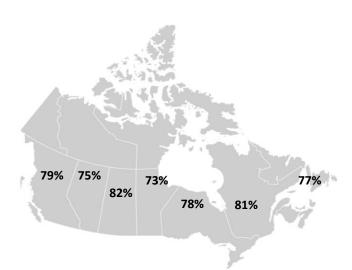


#### **Respondent Group**



National: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) SK: \*Educator=39, Parent=70, Student=100, General Public=43 Responses 4% or less not labelled.

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



Most respondents feel individual efforts must be supported by a wholesystem response to mitigate the effects of rising temperatures. A majority of respondents both nationally (78%) and in SK (82%) agreed (strongly agree/agree) that while personal actions are important, systemic change is required to address climate challenges.

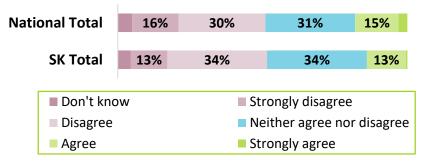
Parents and students in SK were significantly less likely than those nationally to agree that while personal actions are important, systemic change is required to address climate challenges (67% vs. 82% and 55% vs. 77%, respectively). However, members of the general public in SK were significantly more likely than those nationally to agree (91% vs. 78%).

SK\* educator data is from open-link data, thus caution should be taken to not directly compare it to the Lagerpanel national educator data.

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

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

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

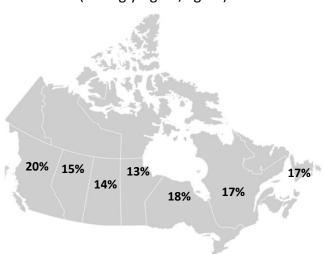


#### **Respondent Group**



National: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) SK: \*Educator=39, Parent=70, Student=100, General Public=43 Responses 5% or less not labelled.

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



Residents of Saskatchewan, like most other Canadians, are not satisfied with the actions the government is taking to mitigate the effects of a warming planet. Few respondents nationally (17%) and fewer in SK (14%) agreed (strongly agree/agree) that the government is doing a good job in their actions to address climate change.

Agreement among students, and members of the general public in SK are consistent with responses nationally. Parents in SK are more likely to disagree with this statement compared to nationally (59% vs. 46%).

SK\* educator data is from open-link data, thus caution should be taken to not directly compare it to the Lagerpanel national educator data.

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. SK agreement falls just above MB at 14%.

## 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, 129 individuals from SK chose to answer this optional question.

The results were coded and grouped according to themes. The 6 most common themes are shown below, and indicate suggestions for government regulation, lifestyle changes to reduce carbon footprint, reduced consumptions and waste, among other suggestions to address climate change.

1

## Reduce carbon footprint/lifestyle change to become more environmentally friendly 24%

"My family is planning to move to an acreage and be self-sufficient, growing our own food and using natural resources wisely to reduce our carbon footprint."

(Student)

3

## Everybody must do their share 11%

"It needs to start at a grassroots level and everybody has to do their part." (Member of the General Public) 2

## Government legislation/regulations/action 20%

"Proper information from the government agency that really focuses on climate change. Not only information but the concrete plan of action from the government." (Student)

5

## Reduce consumption of products/reduce waste 9%

"Local programs to better reduce all household waste." (Parent)

4

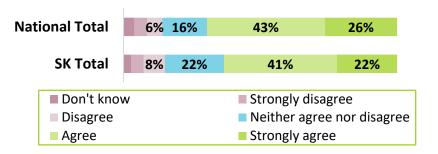
## Reduce greenhouse emissions/pollution 9%

"To stop climate change, humanity/society has to reduce emissions and use less materials that require factories creating pollution to make and more." (Student) 6

## Cooperation/responsibility from industries/companies 9%

"Companies need to take more responsibility." (Member of the General Public)

# The work and voices of young people can inspire important climate action

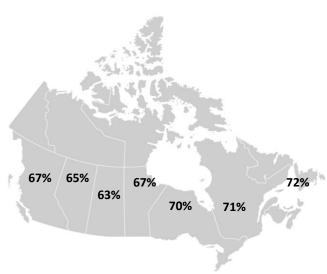


### **Respondent Group**



National: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) SK: \*Educator=39, Parent=70, Student=100, General Public=43 Responses 5% or less not labelled.

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



Many Canadians are counting on youth to help win the fight against climate change. The majority (69%) of respondents nationally and in SK (63%) agreed that the work and voices of young people can inspire important climate action.

Parents and students in SK are significantly less likely to agree than those nationally that the work and voices of young people can inspire important climate action (53% vs. 71% and 57% vs.72% respectively). Responses were similar from the general public in SK and nationally.

SK\* educator data is from open-link data, thus caution should be taken to not directly compare it to the Lagerpanel national educator data.

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

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



### Feelings on Climate Change – Respondent Group



#### **GENERAL PUBLIC**

ATL

28%

National	24%	35%	36%	10% 13%	25%	16%	
SK	14%	53%	35%	28%	27	% 1!	5%

National: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) SK: \*Educator=39, Parent=70, Student=100, General Public=43) Responses 8% or less not labelled.

#### BC 28% 43% 45% 10%11% 26% 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%

36%

**12%** 16%

32%

10%

Feelings on Climate Change - Province/Region

When SK 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 (51% vs. 35%). Respondents nationally were more likely than those in SK to feel frightened (25% vs. 14%). Few respondents are feeling confident and/or unconcerned.

Students nationally are more likely to feel frightened than students in SK (32% nationally vs. 16% in SK). Members of the general public in SK are significantly more likely to feel frustrated than those nationally (53% in SK vs. 35% nationally).

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

SK respondents are most likely to feel frustrated (51%) but the least likely to feel frightened (14%). Respondents in BC (45%) are significantly more likely to feel anxious about climate change than those in other provinces, especially MB (31%). 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%).

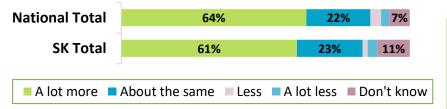
29%



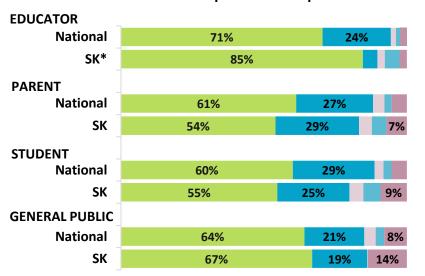
## Part 3: Climate Change Education

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: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) SK: \*Educator=39, Parent=70, Student=100, General Public=43 Responses 6% or less not labelled.

Many Canadians understand the importance of education in the fight against climate change, as 64% nationally and 61% in SK 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). Parents are slightly less likely to agree in SK (54% in SK vs. 61% nationally).

SK\* educator data is from open-link data, thus caution should be taken to not directly compare it to the Lagerpanel national educator data.

### **Province/Region**



Across Canada, the majority of respondents think the school system should be doing more to educate about climate change. SK agreement fell in the middle of the provinces (61%). 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%)

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

% Agree (Strongly Agree/Agree) – Total

**National Total** 

**SK Total** 

Climate change education should aim to change the way people behave.	75%	65%
Climate change education should be a high priority for schooling.	67%	59%
Climate change education should be the role of all teachers.	61%	52%
Only one 'side' of the climate change debate should be taught (it is happening, and humans are the cause).	31%	26%
The topic of climate change is too complex and should not be discussed in younger grades.	15%	21%
It is not the role of schools to teach students about climate change.	13%	14%

National: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) SK: \*Educator=39, Parent=70, Student=100, General Public=43

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 SK to agree with this statement (75% nationally vs. 65% in SK).

Few respondents nationally agree that the topic of climate change is too complex and should not be discussed in younger grades (15%), however, significantly more respondents in SK agree (21%). Both nationally and in SK, few respondents agree that it is not the role of schools to teach climate change (13% nationally and 14% in SK).

Perceptions of teaching climate change in schools varied regionally, with agreement in AB and SK being lower.

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

	ВС	АВ	SK	МВ	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%

# 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.

Parents in SK are less likely than those nationally to agree that climate change education should aim to change the way people behave (62% vs. 74%) and that it should be a high priority for schooling (48% vs. 64%). There is a similar trend among students: in SK, 54% agree that climate change should aim to change behaviour vs. 72% nationally, and 50% of students in SK agree that climate change should be a high priority for schooling vs. 66% nationally. Parents in SK are also less likely than parents nationally to agree climate change education should be the role of all teachers (40% vs. 60%), however, are more likely to agree the topic of climate change is too complex and should not be discussed in younger grades (25% vs. 15%). Students in SK are less likely than students nationally to agree only one side of the climate change debate should be taught (it is happening, and humans are the cause) (15% vs. 30%).

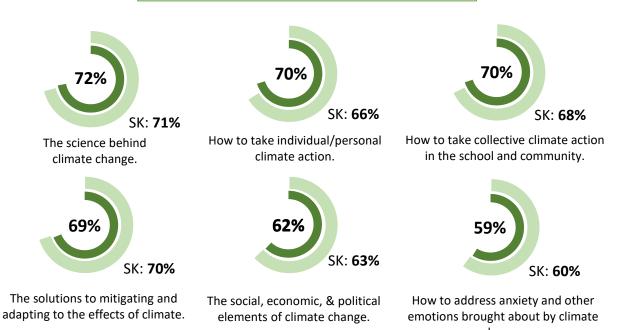
#### % Agree (Strongly Agree/Agree) – Respondent Group

	Educator		Parents		Stud	ents	General Public	
	Nat.	SK*	Nat.	SK	Nat.	SK	Nat.	SK
Climate change education should aim to change the way people behave.	78%	82%	74%	62%	72%	54%	75%	67%
Climate change education should be a high priority for schooling.	68%	87%	64%	48%	66%	50%	67%	68%
Climate change education should be the role of all teachers.	61%	69%	60%	40%	61%	50%	61%	58%
Only one 'side' of the climate change debate should be taught (it is happening, and humans are the cause).	36%	51%	31%	25%	30%	15%	31%	31%
The topic of climate change is too complex and should not be discussed in younger grades	12%	5%	17%	25%	16%	23%	15%	19%
It is not the role of schools to teach students about climate change.	10%	10%	15%	25%	14%	20%	14%	9%

National: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) SK: \*Educator=39, Parent=70, Student=100, General Public=43

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

% Agree (Somewhat more/A lot more)





Indigenous traditional knowledge related to climate change.

The connection between climate change and racial inequality, gender equality, and social justice issues with students.

Most respondents agree that Kindergarten to Grade 12 classes should focus on the science behind the climate change (72% nationally and 71% in SK), as well as how to take individual/personal (70% nationally and 66% in SK) and collective action (70% nationally and 68% in SK).

Note: Respondent group and provincial data can be viewed on the following page.

Parents in SK are less likely than parents nationally to agree on focusing on how to take individual climate action (54% in SK vs. 70% nationally) and the social, economic, and political elements of climate change (49% in SK vs. 61% nationally). Students in SK are less likely than students nationally to think taking collective action in the school and community should be focused on in kindergarten to grade 12 (56% in SK vs. 68% nationally).

The regions that were the most likely to believe in a connection to racial inequality, gender equality and social justice issues were ON (52%) and SK (51%). 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.

# 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.	SK*	Nat.	SK	Nat.	SK	Nat.	SK
The science behind climate change	76%	85%	72%	67%	70%	64%	72%	78%
How to take individual/personal climate action	74%	82%	70%	54%	69%	60%	70%	69%
How to take collective climate action in the school and community	73%	90%	68%	63%	68%	56%	70%	71%
The solutions to mitigating and adapting to the effects of climate	73%	82%	69%	63%	63%	58%	69%	74%
The social, economic, & political elements of climate change	66%	85%	61%	49%	61%	54%	62%	71%
How to address anxiety and other emotions brought about by climate change	62%	87%	58%	50%	57%	53%	59%	66%
Indigenous traditional knowledge related to climate change	51%	87%	50%	46%	48%	40%	52%	56%
The connection between climate change and racial inequality, gender equality, and social justice issues with students	55%	74%	46%	39%	47%	38%	48%	57%

National: n=4,035 (Educator=406, Parent=1,373, Student=1,208, General Public=1,290) SK: \*Educator=39, Parent=70, Student=100, General Public=43

### Province/Region

% Somewhat more/A lot more

	вс	АВ	SK	МВ	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%

## 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, 116 individuals from SK chose to answer this optional question.

The results were coded and grouped according to themes. The 6 most common themes are shown below, and indicate suggestions for government regulation, lifestyle changes to reduce carbon footprint, reduced consumptions and waste, among other suggestions to address climate change.

1

## Include with curriculum in school 33%

"Make it part of the curriculum to learn about the true facts of climate change." (Member of the General Public)

3

## Educate people more/ Increase awareness 13%

"Educate kids like me more about it, giving them enough information to have an opinion and to hopefully help out with the situation as much as they can." (Student)

5

## Offer solutions to the problem (e.g., reduce your carbon footprint, less pollution) 10%

"Teach kids the impact of climate change and how to reduce it at our end through small steps." (Parent) ( 2

## Explain scientific evidence of what causes climate change/Facts 14%

"Teach real science-based evidence and not alternative unfounded views." (Educator)

4

## Keep information up-to-date/Reliable data 11%

"Have classes and information sessions." (Student)

6

## Controversial issues should be kept out of the classroom 10%

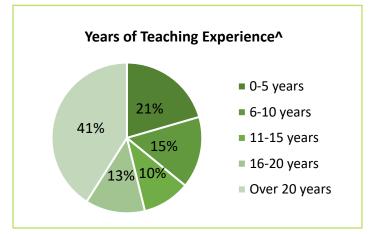
"Keep propaganda out of schools." (Parent)

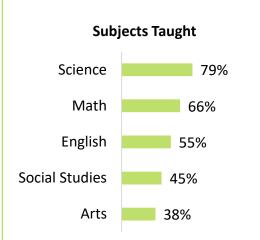


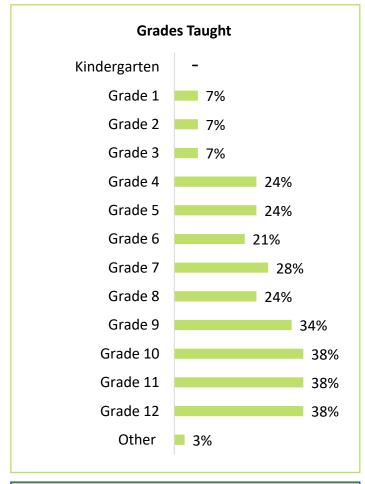
# Part 4: Teaching Climate Change

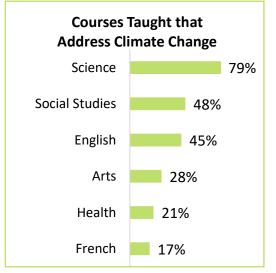
Part 4 highlights the results from the portion of the survey designed exclusively for educators. This section includes their perspectives on the issues that impact the teaching of climate change. 406 Educators responded to the survey with representation from each province across Canada.

## **Saskatchewan Educator Demographics**



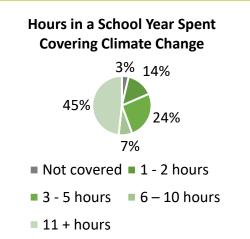






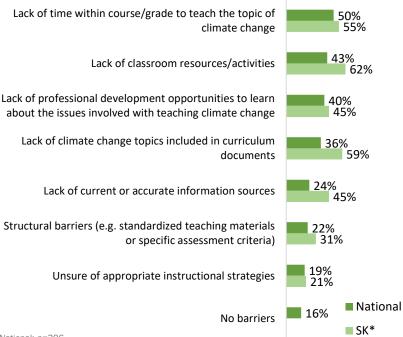
3% do not cover climate change topics in any subjects they teach

51%^ feel students are developmentally ready to learn about the concept of climate change and its impacts starting in <u>Junior</u>
<u>Kindergarten/Kindergarten</u>



# 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



The results shown on the bar graph illustrate similar overall trends nationally and in SK. Educators feel that a lack of time within a course/grade to teach the topic of climate change, lack of classroom resources and activities, lack of PD and lack of climate change topics in curriculum documents. Very few educators faced no barriers when teaching climate change.

Regionally, educators from QC do not feel that lack of accurate information sources or instructional strategies are barriers compared to BC, AB and ON. The open-link data for ATL\*, MB\* and SK\* show similar trends overall.

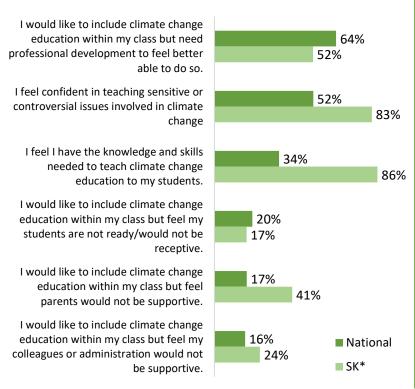
National: n=306 SK: n=29\*

National Responses less than 10% not shown.

	ВС	АВ	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%

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

#### % Agree (Strongly Agree/Agree)



Educators nationally are most likely to agree they would like to include climate change education within their class but that they need professional development to feel better able to do so (64%). Educators in SK\* who responded via the open-link, are most likely to agree they feel they have the knowledge and skills needed to teach climate change education to their students (86%). Nationally and in SK\*, lack of student receptivity and lack of colleague/admin support were not likely to be the reason climate change was omitted from educators' classrooms.

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\*).

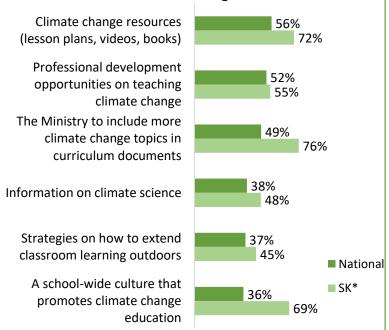
National: *n*=306 SK: *n*=29\*

### % Agree - Province/Region

	ВС	АВ	ON	QC	ATL*	SK*	МВ*
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%

## What support do you need to teach climate change?

## Top 6 "Things" Needed to Teach Climate Change



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.

All provinces express a need for more climate change topics in curriculum documents. Educators in SK\* report the highest desire for the Ministry to include climate change in curriculum compared to ATL\* and MB\*. SK\* educators are most likely to agree (among openlink educators) that a school-wide culture to promote climate education would support climate education.

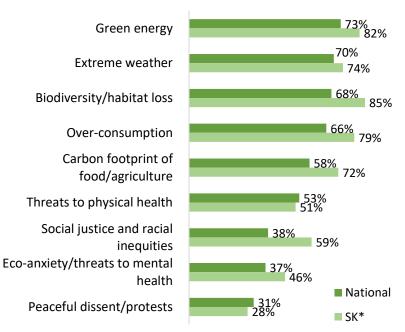
Regionally, strategies for how to take learning outdoors, and information on climate science were less likely to be requested in most provinces.

National: n=306 SK n=29\* Top 6 Responses Shown.

	вс	АВ	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%

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

### % Agree (Strongly Agree/Agree)



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

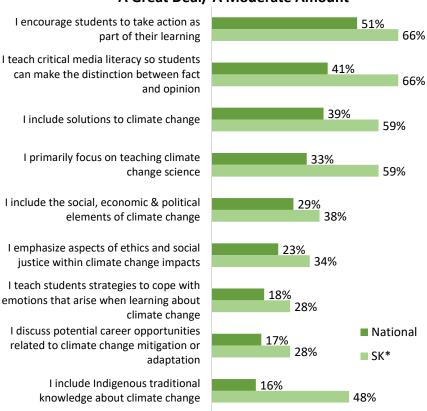
There are visible trends across the provinces when it comes to topics that should be addressed in younger grades. Topics that are less likely to be covered are eco-anxiety and threats to mental health as well as peaceful dissent/protests. Physical health and social justice/racial inequities also had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

National: *n*=406 SK: *n*=39\*

	вс	АВ	ON	QC	ATL*	SK*	МВ*
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%

## When I teach about climate change...

#### A Great Deal/ A Moderate Amount



The results in the bar graph illustrate similar overall trends nationally and in SK. 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.

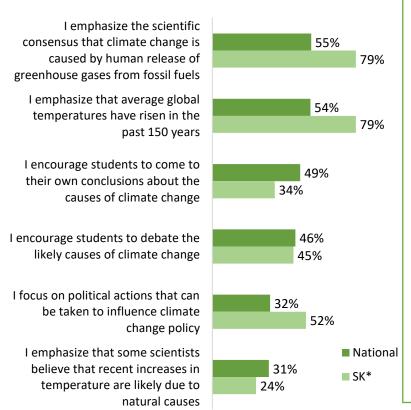
SK\* educators are more likely than ATL\* and MB\* to report including Indigenous traditional knowledge in their teaching, and teaching critical media literacy to distinguish the difference between fact and opinion. Overall, all regions in Canada could improve their focus on Indigenous Knowledge, career opportunities and coping strategies.

National: *n*=306 SK: *n*=29\*

	ВС	АВ	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%

## In my classes...

### % Agree (Strongly Agree/Agree)



There are some similar trends nationally and in SK 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. Educators are not likely to focus on the belief held by some scientists that temperatures are due to natural changes.

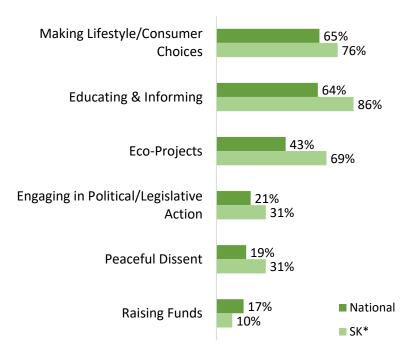
The top two rows in the provincial chart below show that most common emphasis across the country is on greenhouse gasses and global rising temperatures. Educators from AB are least likely to agree with all statements, except for emphasizing that some scientists believe that recent increases in temperature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

National: *n*=306 SK: *n*=29\*

	вс	АВ	ON	QC	ATL*	SK*	МВ*
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%

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

#### Frequently / Occasionally



Similar trends can be seen on the bar chart between educators nationally and in SK. 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, SK\* is most likely to engage students in educating and informing students, and eco-projects compared to ATL\* and MB\*.

National: *n*=306 SK: *n*=29\*

	ВС	АВ	ON	QC	ATL*	SK*	МВ*
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%



Canadians' Perspectives on Climate Change & Education: 2022

Saskatchewan Provincial Report

Section 4: Climate Audiences

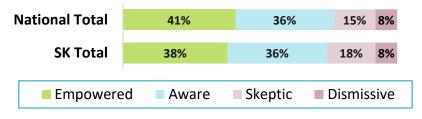
## **Ladder of Engagement**

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).

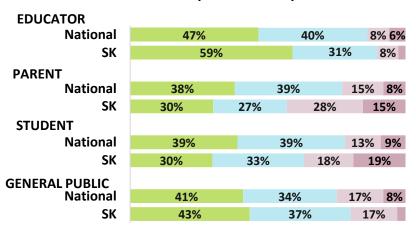
The four audiences are broadly categorized and paraphrased from the EcoAnalytics report as:

- 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 SK Ladder of Engagement Results to the National Results:





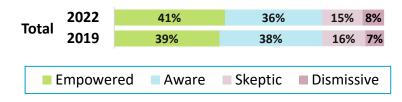


National: n=4,025 (Educator=404, Parent=1,368, Student=1,207, General Public=1,288) SK: n=217 (Educator=39, Parents=70, Student=100, General Public=43) Responses less than 4% not labelled.

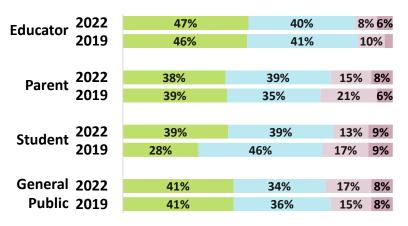
The majority of respondents both nationally and in SK are either Empowered (41% and 38%, respectively) or Aware (36% and 36%, respectively), meaning they do agree that climate change is happening and that it is caused by humans.

Significantly more parents nationally are Aware compared to parents in SK (39% vs. 27%). Significantly more parents in SK than parents nationally, are both Skeptic and/or Dismissive (28% vs. 15% and 15% vs. 8%, respectively). Similarly, significantly more students in SK are Dismissive compared to students nationally (19% vs. 9%).

## Ladder of Engagement 2022 vs. 2019

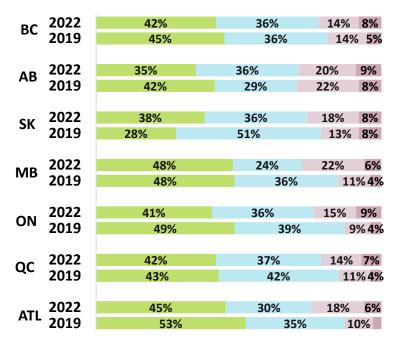


#### **Respondent Group**



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.

#### Province/Region



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.

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%).



Canadians' Perspectives on Climate Change & Education: 2022

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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 preservice, 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.



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