



# Canada, Climate Change and Education: Opportunities for Public and Formal Education

## Focus on Alberta Regional Report

A project of



Learning for a  
Sustainable Future

**LSF**



L'éducation au  
service de la Terre

**LST**

With support from

SSHRC  CRSH

**Leger**  
Metrics

**tw** INSURANCE  
BROKERS

*LSF would like to acknowledge the enduring presence of Indigenous peoples on the lands from which we all gather virtually today across Alberta and Ontario and we thank the past, present and future caretakers of this land.*

*These lands are gathering points where age old ceremonies of celebration, initiation and renewal took place. LSF is grateful to have the opportunity to work and learn on these lands in a community of sharing.*

# Facilitators

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**Dr. Ellen Field**

Principal Investigator

Assistant Professor, Lakehead University

[efield@lakeheadu.ca](mailto:efield@lakeheadu.ca)

**Pamela Schwartzberg**

President & CEO, Learning for a Sustainable Future

[pam@LSF-LST.ca](mailto:pam@LSF-LST.ca)

**Elaine Rubinoff**, Director of Programs, Learning for a Sustainable Future [elaine@LSF-LST.ca](mailto:elaine@LSF-LST.ca)

**Samantha Gawron**, Manager of Programs, Learning for a Sustainable Future [samantha@LSF-LST.ca](mailto:samantha@LSF-LST.ca)

**Jennifer Stevens**, Program Coordinator, Learning for a Sustainable Future [jenn@LSF-LST.ca](mailto:jenn@LSF-LST.ca)

**Dr. Karen Acton**, Assistant Professor, Faculty of Education, Western University; Learning for a Sustainable Future Consultant [kacton@LSF-LST.ca](mailto:kacton@LSF-LST.ca)

**Dr. Michele Martin**, Environmental Consultant, Sustainability/Climate Change/Education; Learning for a Sustainable Future Consultant [mmartin@LSF-LST.ca](mailto:mmartin@LSF-LST.ca)

# About the Partners

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

**Lakehead University** is a fully comprehensive university with approximately 8,500 students and over 2,000 faculty and staff at two campuses in Orillia and Thunder Bay, Ontario. Lakehead has 10 Faculties, including Education.

**TW Insurance Brokers Inc. (TW)**, is a full-service brokerage offering auto, home and life insurance products for Alberta teachers and Alberta Retired Teachers Association members.

# Our Agenda

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10:00 Welcome and introductions

10:05 Presentation of the National and Alberta data

10:50 Q & A

11:00 Share insights from survey

11:10 Activity 1: Current reality by sector

11:20 Brainstorm: what needs to be done to advance climate change education for each sector

11:30 Activity 2: Action planning

11:45 Whole group discussion

12:00 Adjourn

# About The Survey

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The purpose of this national survey is to gain an understanding of Canadians' current levels of knowledge and perceptions of climate change and its risks, assess Canadians' views on how the education system should respond to climate change, and provide a snapshot of climate change education practice in Canada.

**Total respondents:**

3,196

**Languages:**

English • French

**Target Audiences:**

General Public in Canada

Parents of K-12 students

Youth in grades 7-12

Educators of grade K-12

“Why should I be studying for a future that soon will be no more, when no one is doing anything whatsoever to save that future?”

And what is the point of learning facts within the school system when the most important facts given by the finest science of that same school system clearly mean nothing to our politicians and our society?”

- Greta Thunberg, 2018

# Why The Survey

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Moving Canada toward resilience and adaptability for climate impacts today and in the future will require support and action at all levels of Canadian society.

This study establishes Canada-wide baseline data reflecting audiences' knowledge and understanding of climate change, their perspectives on the importance of climate change and its risks, and views on the role of schools and climate change education. It is presented both nationally and from provincial/regional jurisdictions.

The study also provides insights into climate change education practice from an open-sample (OS) of teachers and a closed-sample (CS), which is representative. These results are significant in providing an unprecedented snapshot of teacher practice in Canada.





# Methodology - National Data

This survey tool was developed in May 2018 by Dr. Ellen Field, Lakehead University, with Learning for a Sustainable Future and Leger Research Intelligence.

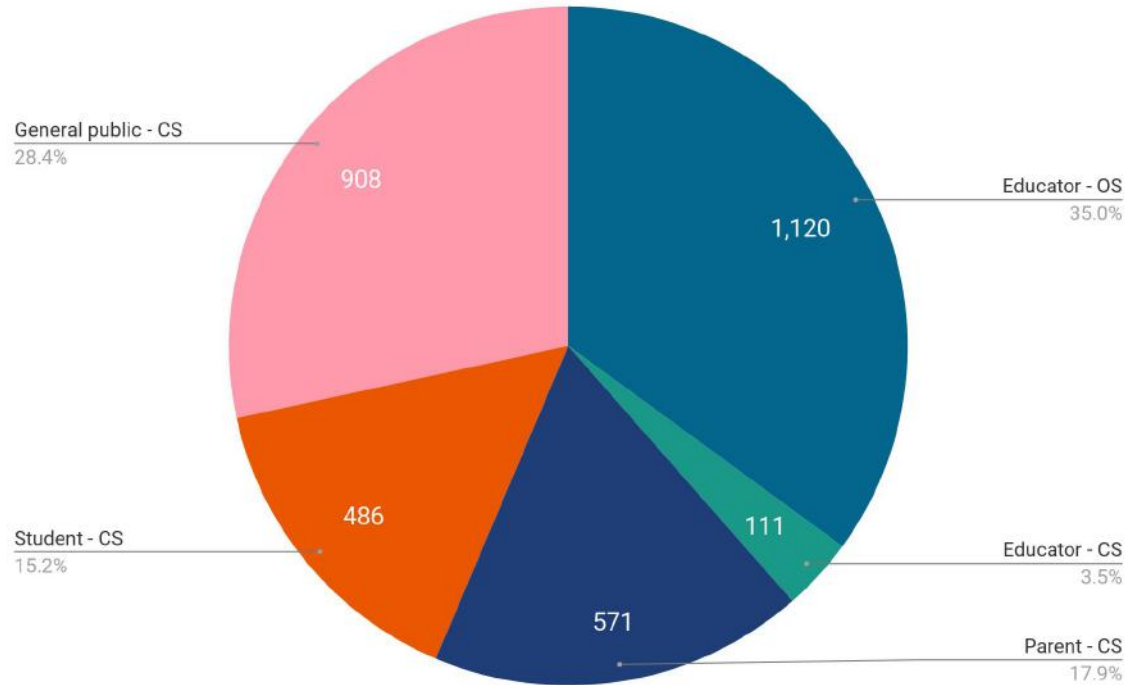
The survey was conducted online through Leger, who operate one of Canada's largest online survey panels of approximately 400,000 Canadians. In total, 2,191 responses were collected through Leger's survey panel (closed sample - CS) from the general public, parents, students, educators, and district leaders/school administrators. This included 111 Educators (K-12 teachers and district leaders). The CS sample is representative of the Canadian public.

In order to reach a significant number (1,000+) of educators, the survey was also distributed via Learning for a Sustainable Future through an Open Sample (OS) which was publicly available. While OS responses were received from all audiences, only the K-12 teachers and district leaders (1,120) were included in this report. Since the OS data is not subject to the same controls as the Leger panel survey (CS), the OS results for educators are presented separately from the CS results in this study.

**See Methodology section in National Survey Report for full description.**

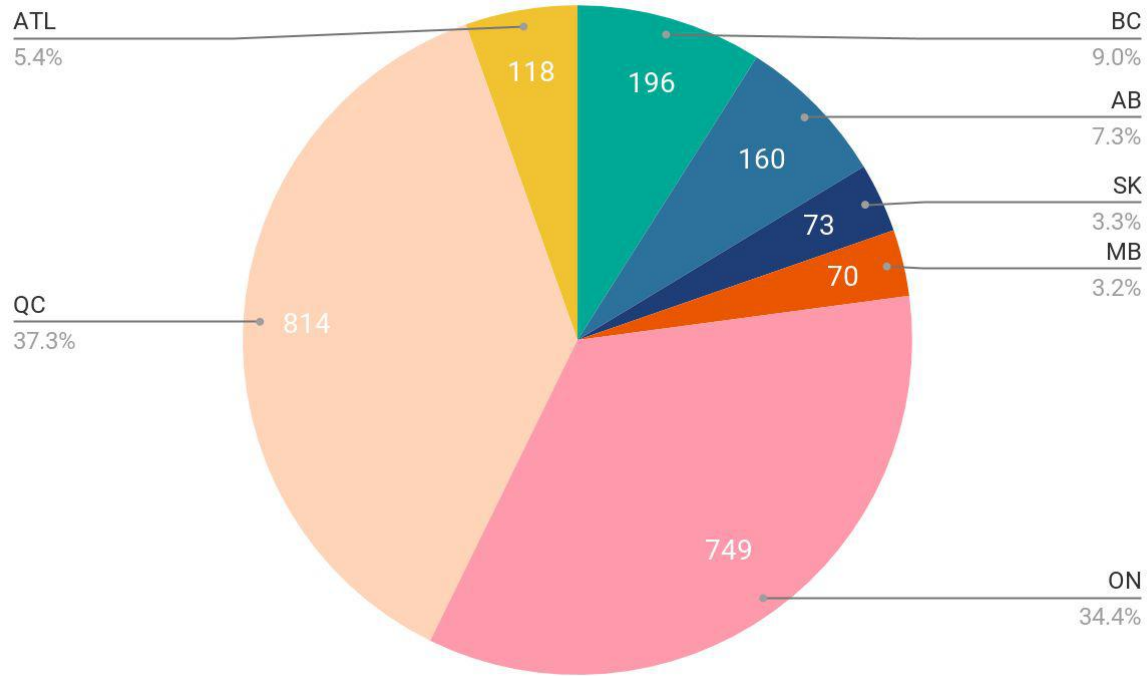


# National Respondents



n=3196 (Educator OS = 1120, Educator CS = 111, Parent CS= 571, Student CS= 486, Other CS= 908)

# Provincial/Regional Respondents



$n=2180$  (BC=196, AB=160, SK=73, MB=70, ON=749, QC=814, ATL=118)

# Survey insights: Perspectives of Canadians\*

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- **Canadians are concerned about climate change**

79% of Canadians are concerned about the impacts of climate change and 78% believe there are risks to people in Canada.

- **Canadians are certain that climate change is happening**

85% of Canadians are certain that climate change is happening.

- **Canadians are less sure about the human impacts**

In response to a question early in the survey 46% of Canadians indicated that they think climate change is caused mostly by human activity. Further into the survey when asked if they think human beings are responsible for climate change 73% agreed.

- **Canadians are less certain that carbon dioxide and other GHGs cause climate change**

48% of Canadians correctly attributed carbon dioxide and other GHGs as primary causes of climate change.

\*Canadians = average of closed-sample respondents (students, parents, teachers, public)

# Survey insights: Knowledge, Understanding and Information

- **43% of Canadians failed the climate change knowledge test**  
43% of Canadians answered 4 or fewer of the 10 knowledge questions correctly
- **Significant gap between perception and awareness**  
While half (51%) of Canadians feel they are well-informed about climate change, only 14% correctly answered 8 - 10 knowledge questions. 86% agree they need more information on climate change.
- **Canadians get climate change information predominantly from television news**

When asked which sources of climate change information Canadians trust the most, 72% of Canadians said scientists/academics; however Canadians get climate change information from television news (54%), documentaries (48%), and conversations with friends and family (47%).

\*Canadians = average of closed-sample respondents (students, parents, teachers, public)



# Survey insights: Impacts and Action

- **Canadians are already seeing the impacts of climate change**  
While only 36% of Canadians reported that they have personally experienced the effects of climate change, a majority feel that climate change is causing or making the following worse: droughts (72%), hurricanes (69%), wildfires (76%), coastline erosion (75%), river flooding (73%), and severe winters (70%).
- **Two thirds of Canadians are taking action to reduce climate change**  
 $\frac{2}{3}$  of Canadians have reported taking actions to reduce their personal contribution to greenhouse gas emissions.
- **There is doubt that technology will solve climate change**  
Only 30% of Canadians agree that new technologies will solve the problem without individuals having to make big change.
- **Systemic change is needed**  
57% of Canadians believe their actions have an impact on climate change while 79% agree that, while personal actions are important, systemic change is needed to address climate change.

\*Canadians = average of closed-sample respondents  
(students, parents, teachers, public)



# Survey insights: Role of Education

- **Canadians and educators agree that more should be done to educate young people about climate**

65% of Canadians, 76% of closed-sample educators and 82% of open-sample educators think the education system should be doing more to educate young people about climate change

- **Limited class time spent on climate change content**

Only 1/3 of closed-sample educators and 59% of open sample educators reported teaching any climate change. For teachers who do integrate climate change content, most students experience 1 - 10 hours of instruction per year or semester.

\*Canadians = average of closed-sample respondents (students, parents, teachers, public)



# Survey insights: Role of Education Cont'd

- **Teachers need support**

Only 32% of closed-sample educators feel they have the knowledge and skills to teach about climate change. Educators say they need professional development, classroom resources, current information on climate science, curriculum policy, information on the economics and politics of climate change, and national/provincial climate data.

- **All teachers should be teaching about climate change**

Climate change content is predominantly taught in science and social studies, when it is covered. 75% of closed-sample teachers and 81% of open-sample teachers believe that climate change education is the role of all teachers.

\*Canadians = average of closed-sample respondents  
(students, parents, teachers, public)





# Survey insights: Students

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- **Students are a key group to target with climate change education and action**

46% of students ages 12-18 are categorized as “aware,” meaning they understand that human-caused climate change is happening, but they do not believe that human efforts will be effective.

## Survey insights: Regional Responses

- **AB & SK frequently diverge from the rest of Canada**

In general, levels of certainty that climate change is happening, overall knowledge of climate change, concern about impacts, acknowledgement of risks, and support for a greater focus on climate change education are lowest in AB and SK.



# Methodology - Alberta

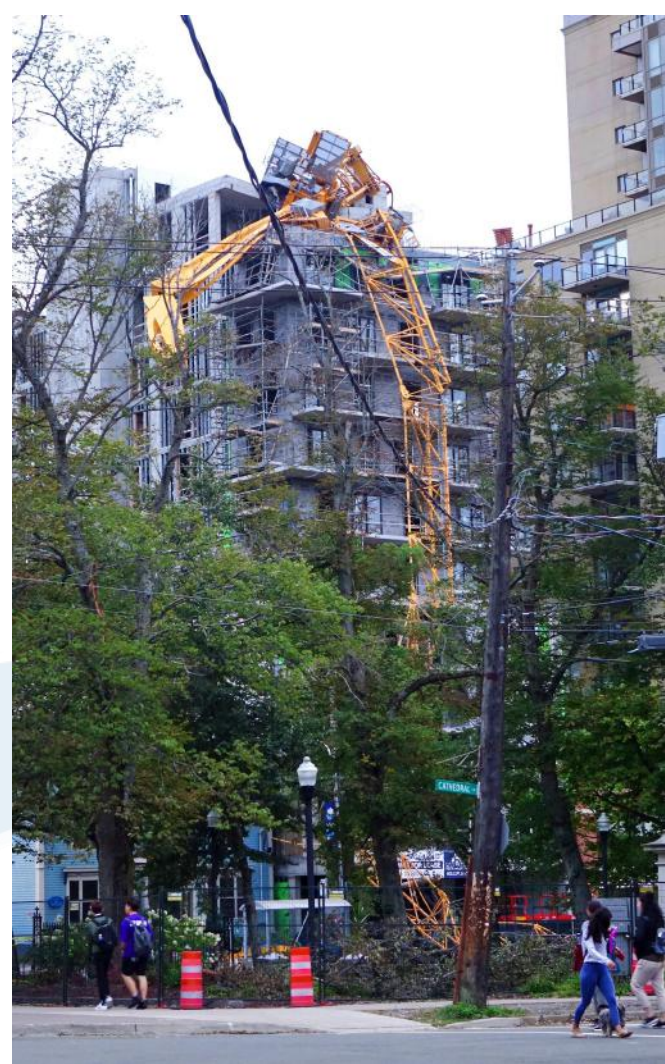
To generate an overview of the province of Alberta, data has been visualized of the following:

- Perceptions of climate change and its risks
- Current levels of knowledge and understanding
- Albertans views on how the education system should respond to climate change
- Report on climate change education practice in Alberta

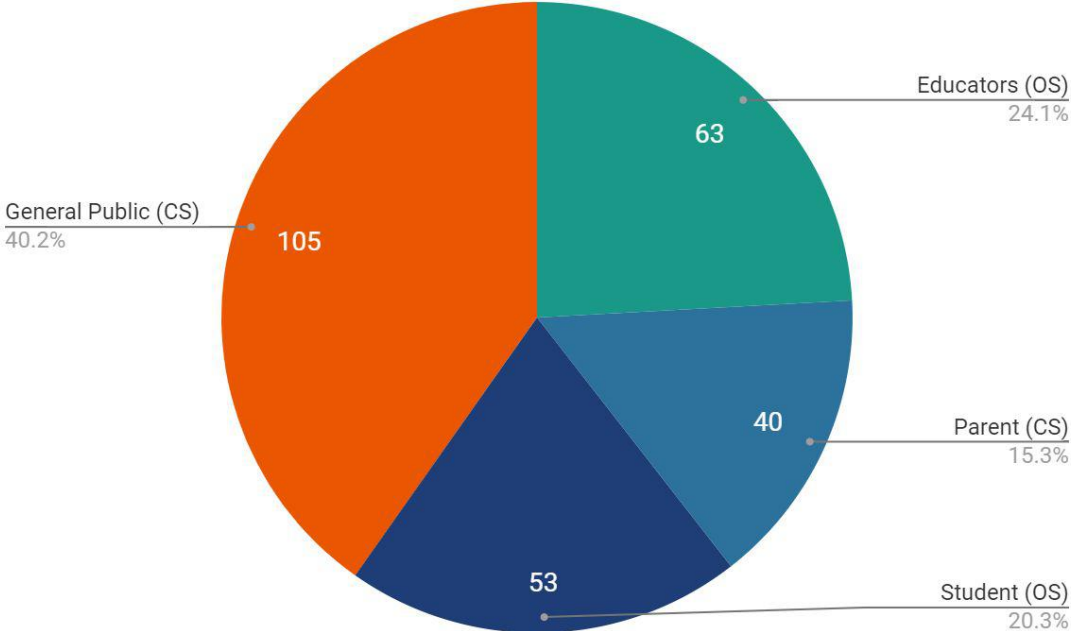
Due to not having a large enough sample size (>30) to report on from each respondent group in the closed-sample, data is pulled from both OS and CS data sets. The CS data is considered representative of the population and percentages are weighted accordingly. OS data is not considered representative of the population, because of the ability for respondents to opt-in, and is therefore not weighted. Throughout this report, we drew on:

- |                       |                             |
|-----------------------|-----------------------------|
| ● Educators (OS) = 63 | ● General Public (CS) = 105 |
| ● Student (OS) = 53   | ● Parent (CS) = 40          |

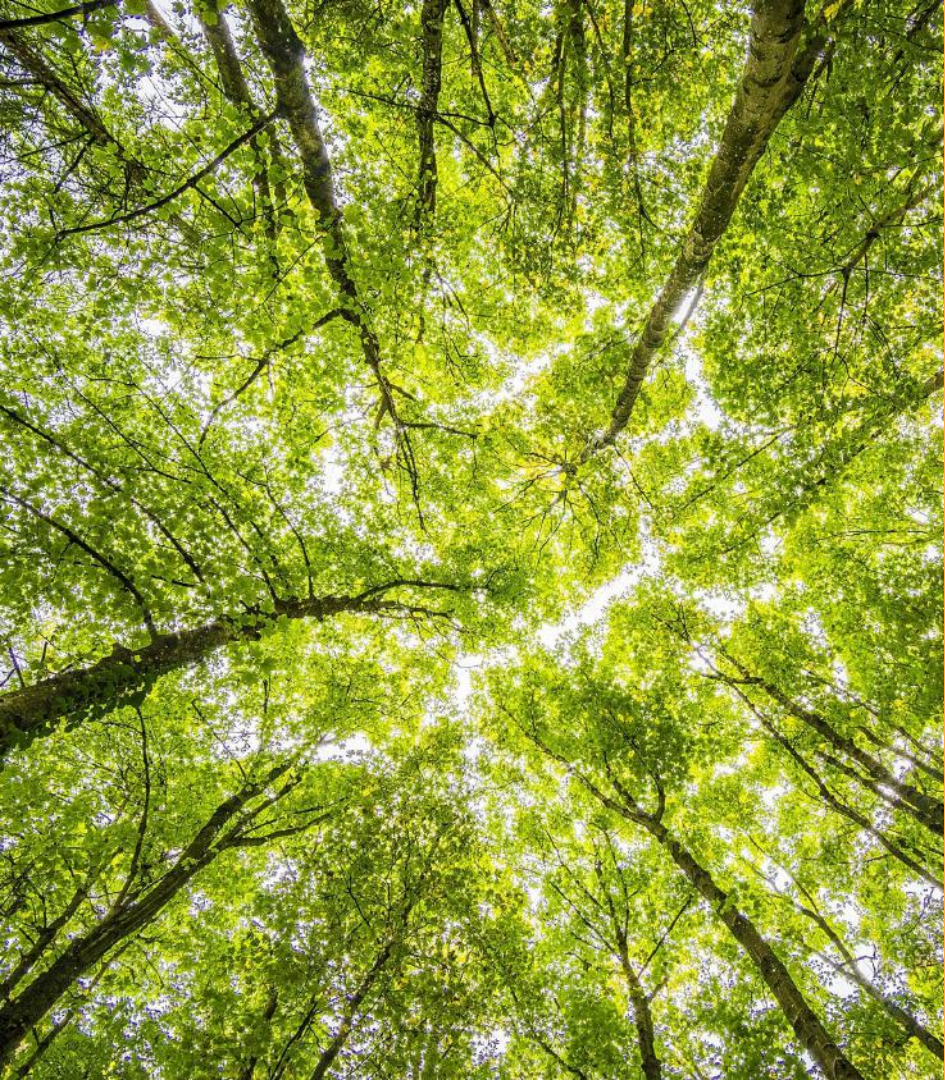
**Note:** In some questions student (OS) may be included with <30 student responses but >25 responses for illustrative purposes only. In some questions the student numbers were too low to include for a reasonable data comparison.



# Alberta Respondents



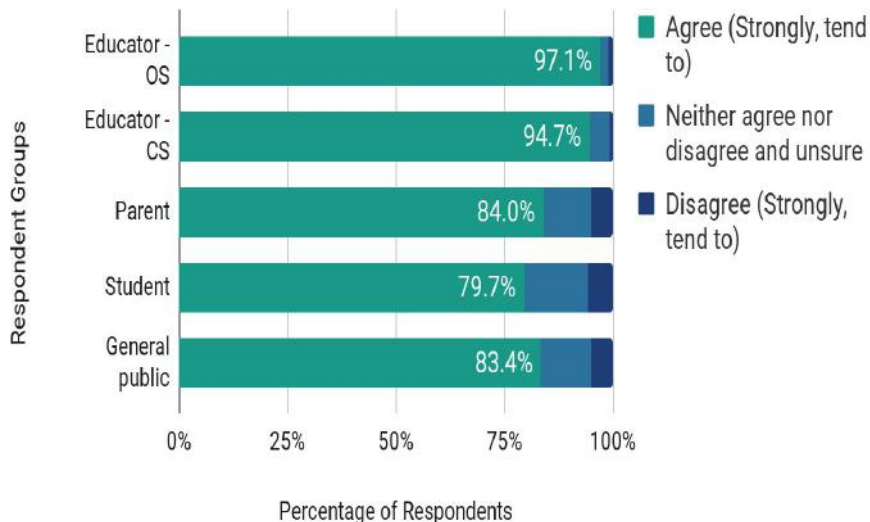
n=261 (Educator OS = 63, Student OS= 53, General public = 105, Parent (CS) =40)



# Perceptions

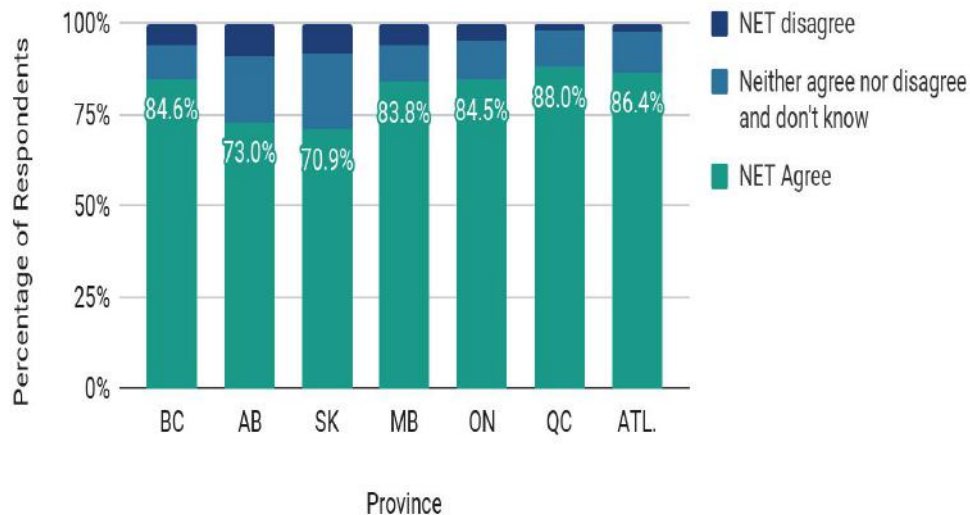
# I am certain that climate change is really happening

## National Results



n=3196 (Educator OS = 1120, Educator CS = 111, Parent CS = 571, Student CS= 486, General public = 908)

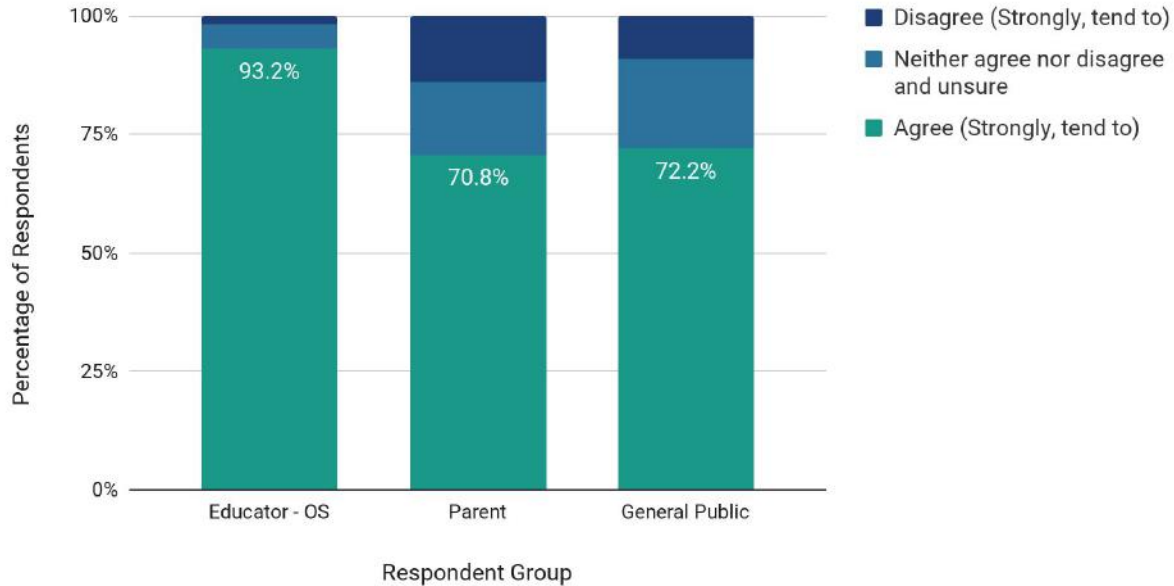
## Provincial Results



n=2180 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=814, ATL=118)

# I am certain that climate change is really happening

## Alberta Results



n=261 (Educator OS = 63, Parent CS =40, General public CS = 105)

# I am certain that climate change is really happening

## National

Overall, the vast majority in all groups identify climate change as happening. Educators demonstrated the highest degree of certainty (97% OS and 95% CS) with other groups acknowledging the reality of climate change with a lesser degree of certainty: 83% of members of the general public, 80% of students and 84% of parents.

## Provincial

Across Canada, most educators, parents, students, and members of the general public in most provinces accept that climate change is happening (BC = 85%, MB = 84%, ON = 85%, QC = 88%, ATL= 86%); however, this acceptance drops to 73% in Alberta and 71% in Saskatchewan. The regional rates of acceptance of climate change are slightly below other public opinion polling on Canadians' acceptance of climate change, recorded as 88% (EcoAnalytics, 2018).

## Alberta

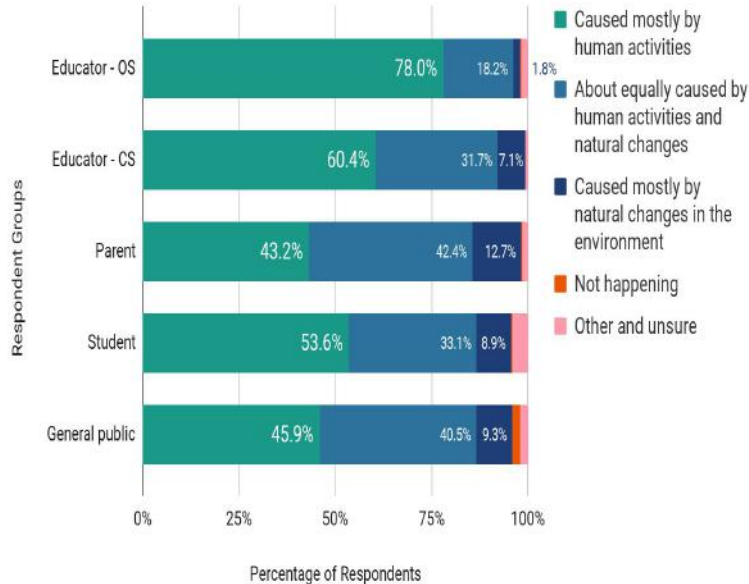
Among respondent groups in Alberta, educators are the most certain that climate change is happening (93% reporting certainty) compared to a drop in certainty, although still a majority among parents (71%) and the general public (72%). Not enough students completed this question to include results.

## Notable Differences

Parents and the general public in Alberta appear less certain that climate change is happening compared to the national results. An average of 84% of parents nationally feel certain that climate change is happening compared to 14% less (71%) in Alberta. Similarly, 82% of the general public report feeling certain compared to 72% in Alberta.

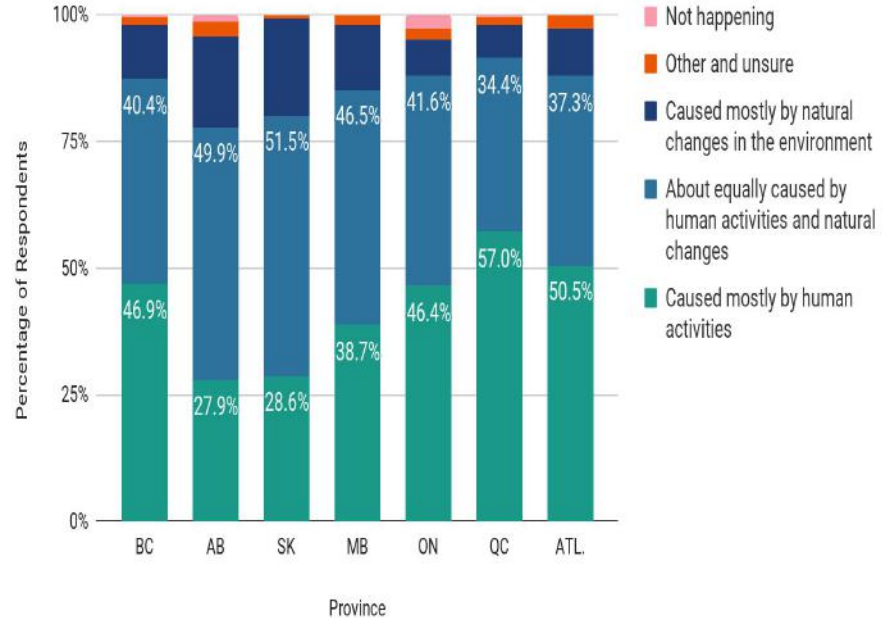
# Do you think climate change is...

## National Results



n=3196 (Educator OS = 1120, Educator CS = 111, Parent CS = 571, Student CS = 486, General public = 908)

## Provincial Results

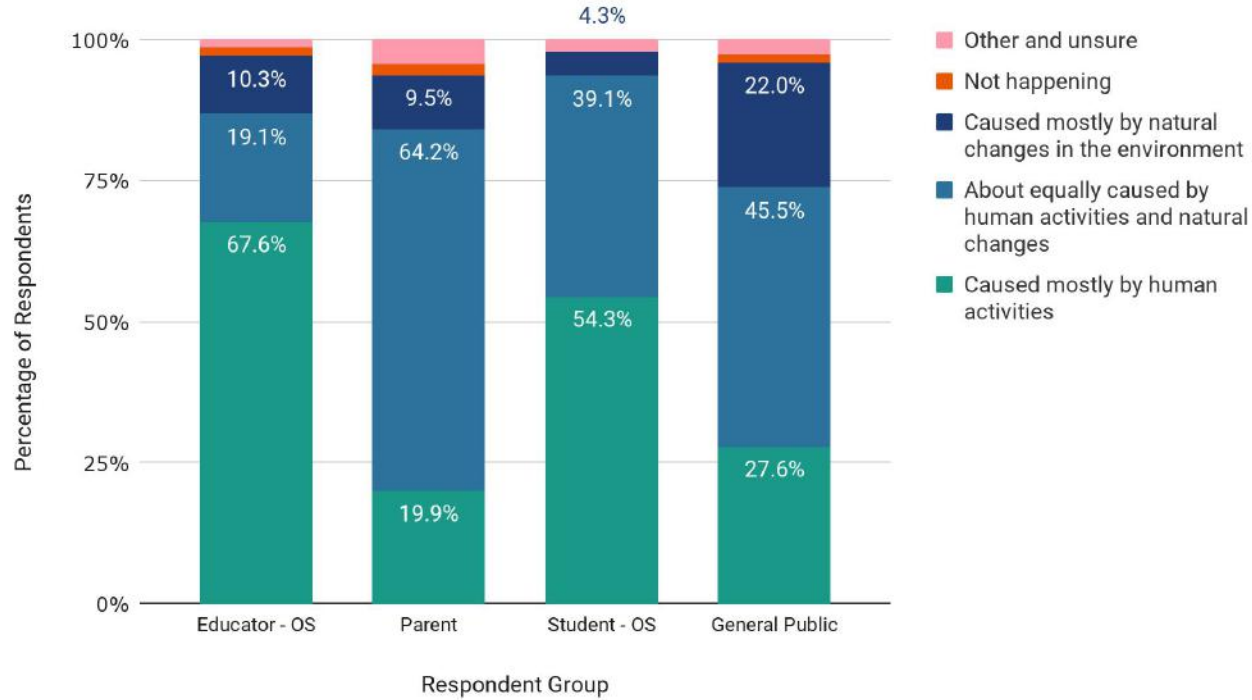


n=2180 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=814, ATL=118)



# Do you think climate change is...

## Alberta Results



n=261 (Educator OS = 63, Parent CS =40, Student OS= 53, General public CS = 105 )

# Do you think climate change is...

## National

When asked early in the survey whether climate change is human-caused, open-sample educators agreed (78%) more than closed-sample educators (60%). Students agreed (54%) more than both members of the general public (46%) and parents (43%).

## Provincial

The understanding and acceptance that climate change is anthropogenic varies across regional jurisdictions. 47% of BC respondents accept climate change is anthropogenic whereas only 28% of Alberta respondents and 29% of Saskatchewan respondents accept this. A substantial percentage of respondents indicated that climate change is “about equally caused by human activities and natural changes” with percentages ranging from 34% in Quebec to 52% in Saskatchewan. Public education that prioritizes educating the public on the difference between natural changes in the climate and human-caused climate change is recommended to address this predominant misconception. Understanding that climate change is human-caused shifts across provinces with the following percentages: QC=57%, ATL=51%, BC= 47%, ON= 46%, AB=28%, and SK=29%.

## Alberta

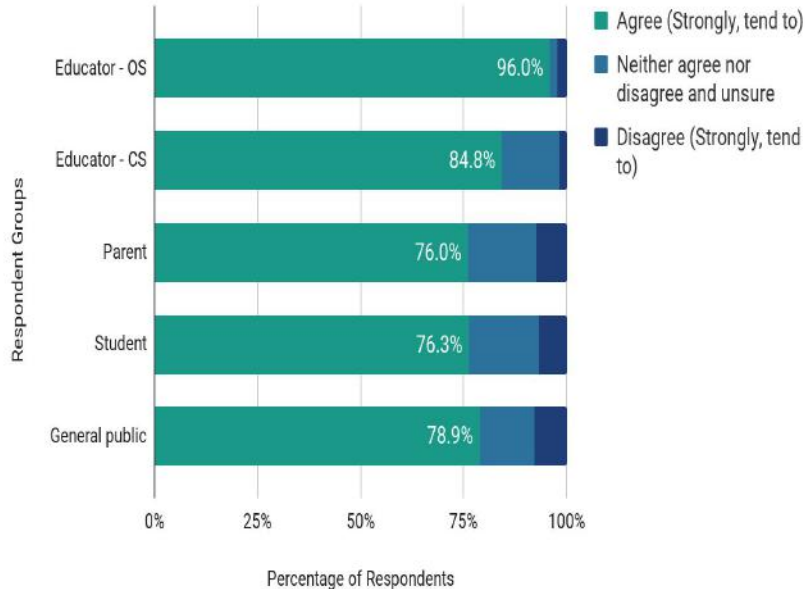
Alberta respondents vary in their belief that climate change is human-caused. 68% of educators (OS) agree that climate change is human-caused, followed by just over half (54%) of students (OS). Less than one third of the general public accept that climate change is anthropogenic (28%) and only 20% of parents in Alberta.

## Notable Differences

The percentage of students in Alberta (54%) who believe that climate change is human-caused aligns with the National results (54%); however, the level of agreement among the general public respondents is 18% lower in Alberta compared to nationally, and the percentage of acceptance among parents is 23% lower.

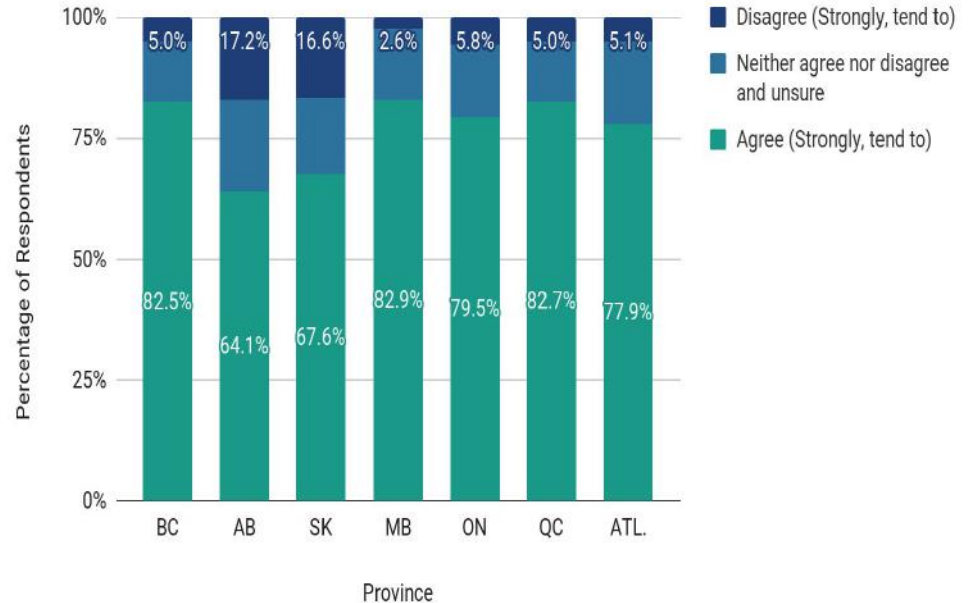
# I am concerned about the impacts of climate change

## National Results



n=3196 (Educator OS = 1120, Educator CS = 111, Parent CS = 571, Student CS= 486, General public = 908)

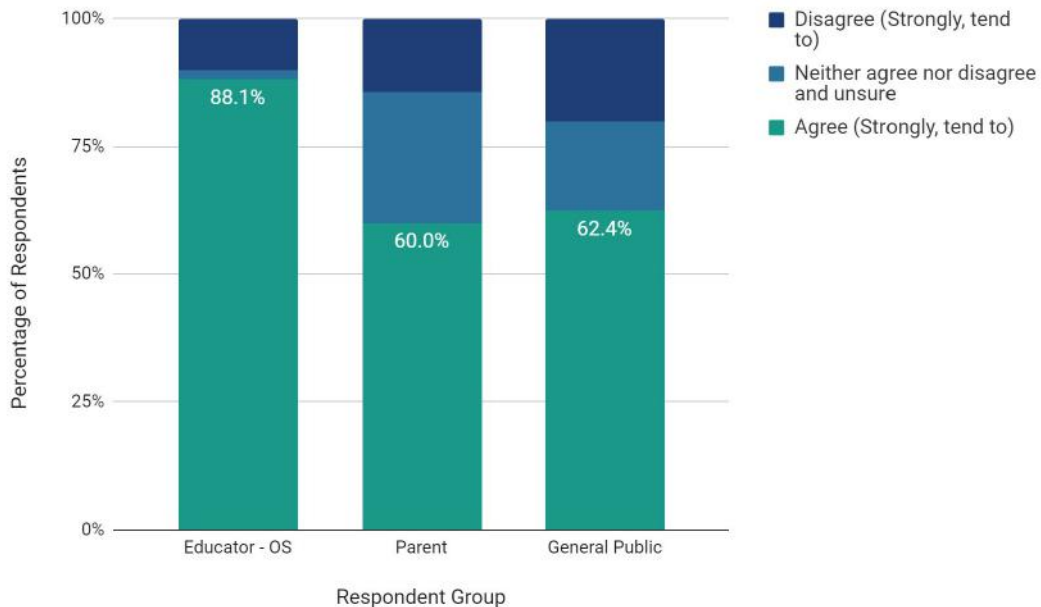
## Provincial Results



n=2180 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=814, ATL=118)

# I am concerned about the impacts of climate change

## Alberta Results



n=261 (Educator OS = 63, Parent CS =40, General public CS = 105)

# I am concerned about the impacts of climate change

## National Results

While the majority of Canadians (79% of members of the general public, 75% of students, and 75% of parents) are concerned about climate change, an overwhelming majority of educators are concerned (open-sample=96% and closed-sample=85%).

## Provincial

Across the regions, Manitoba respondents most often expressed a high level of concern about the impacts of climate change (83%) while respondents from Alberta did so least often (64%). Still, across all regions, a large majority indicated that they are concerned.

## Alberta

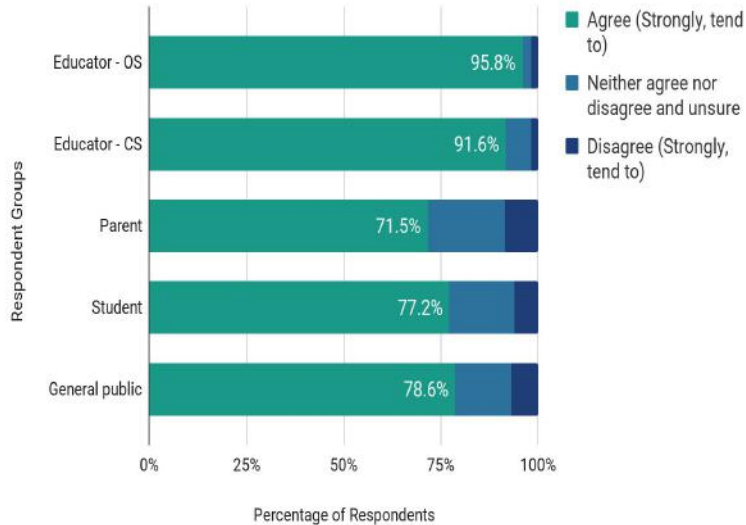
Educators in Alberta are the most concerned about climate change (88%) followed by substantially less members of the general public (62%) and parents (60%). Not enough students completed this question to include results.

## Notable Differences:

Overall, respondents in Alberta express less concern about the impacts of climate change compared to the national average. The biggest difference is seen between parent responses: 76% report feeling concerned nationally compared to 60% in Alberta. A similar difference is seen in the general public: 80% express concern nationally compared to 62% in Alberta.

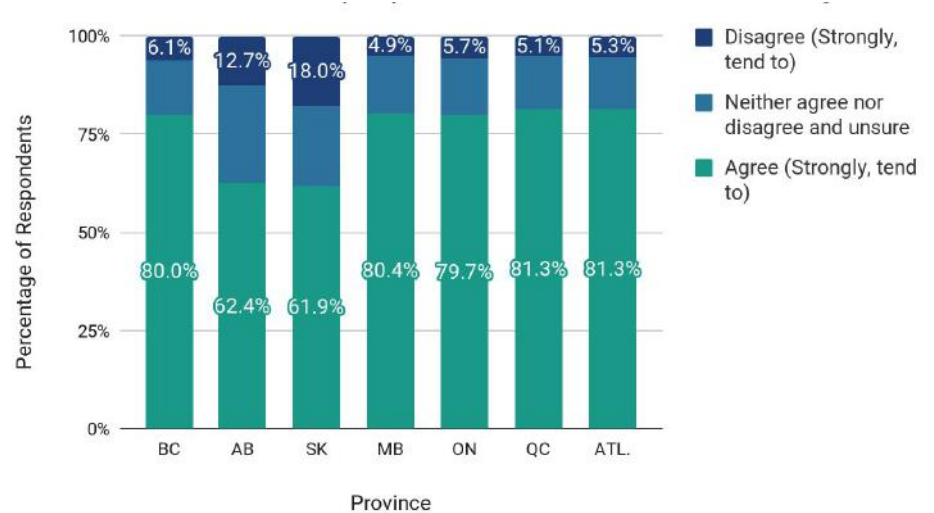
# There are risks to people in Canada from climate change.

## National Results



n=3196 (Educator OS = 1120, Educator CS = 111, Parent CS = 571, Student CS= 486, General public = 908)

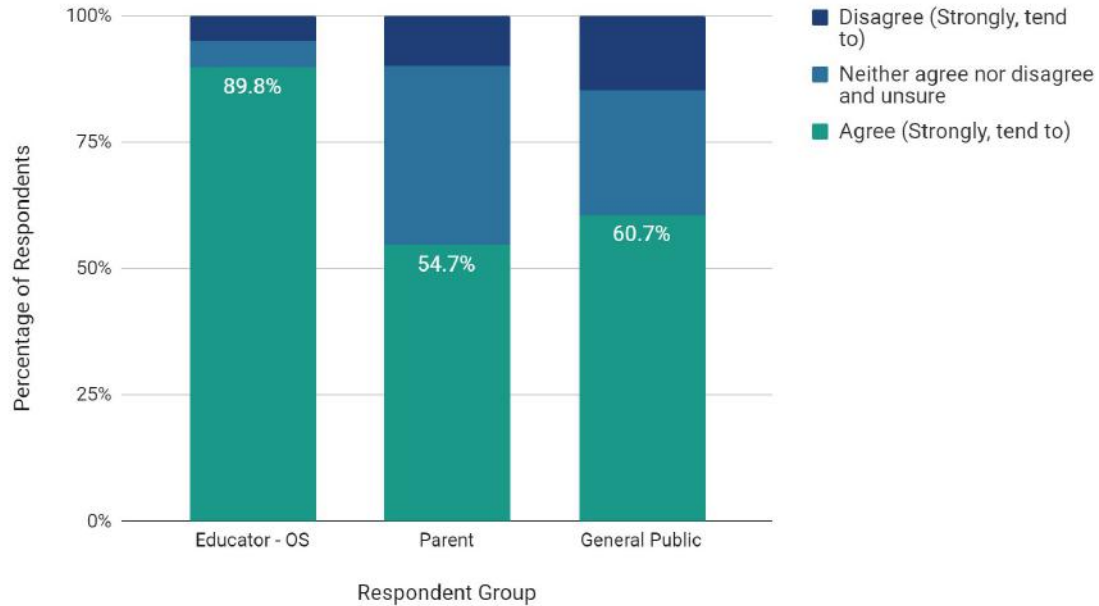
## Provincial Results



n=2180 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=814, ATL=118)

# There are risks to people in Canada from climate change.

## Alberta Results



n=261 (Educator OS = 63, Parent CS =40, General public CS = 105)

# There are risks to people in Canada from climate change.

## National

There is high awareness that climate change poses a risk to Canadian citizens with 96% of open-sample educators and 92% of closed-sample educators in agreement. Remaining respondent groups also demonstrated high awareness but to a lesser extent: 79% of members of the general public, 76% of students and 72% of parents.

## Provincial

Among Canadians living in British Columbia, Manitoba, Ontario, Quebec, and the Atlantic provinces there is a widespread perception of risk that climate change is affecting, or will affect, Canadians (averaged across provinces = 80%) whereas only 62% of respondents from Alberta and 62% of respondents from Saskatchewan perceive that climate change poses risks to Canadians.

## Alberta

Educators in Alberta express a high level of awareness that there are risks to Canadians associated with climate change (90%). Just over half of parents in Alberta are aware of the connection between climate change and risks to humans (55%), and slightly more members of the general public (61%). Not enough students completed this question to include results.

## Notable Differences

Parents and members of the general public in Alberta express a much lower level of awareness of the risks associated with climate change compared to the national average. The average number of parents who agree that there are risks in Alberta is 17% lower (55%) than the national average (72%). The difference in the general public is 18%. (79% compared to 61%).





# Knowledge, Understanding & Information

# List of 10 Climate Knowledge Questions and Answers

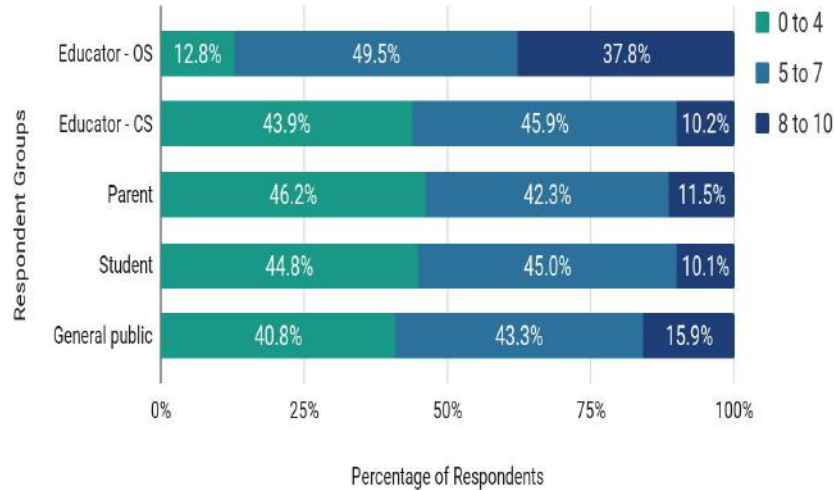
<p>1. Do you think climate change is...</p>	<p><b>Caused mostly by human activities</b> Caused mostly by natural changes in the environment About equally caused by both human activities and natural changes Not happening Other (please specify) Unsure</p>
<p>2. Which comes closest to your own view?</p>	<p><b>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 Don't know enough to say</p>
<p>3. To the best of your knowledge, climate change is mostly caused by...</p>	<p><b>Carbon dioxide and other greenhouse gases</b> Emissions from nuclear power plants Thinning of the ozone layer Particulate air pollution Industrial chemicals Natural variability Climate change is not happening Unsure</p>

<p>4. To the best of your knowledge, the main process behind climate change is...</p>	<p><b>An increase in gasses in the Earth's atmosphere that trap heat</b>          Letting more of the sun's heat into the Earth's atmosphere through a thinner ozone layer          An increase in solar activity          Particle pollution in the air reflecting heat back to Earth          Climate change is not happening          Unsure</p>
<p>5. To the best of your knowledge, Canada's average temperature has ... since 1948.</p>	<p><b>Increased by 1 – 1.5 degrees Celsius</b>          Increased by 0.5 – 0.99 degrees Celsius          Increased by 0 – 0.49 degrees Celsius          Decreased by 1 – 1.5 degrees Celsius          Decreased by 0.5-0.99 degrees Celsius          Decreased by 0-0.49 degrees Celsius          Stayed the same          Unsure</p>
<p>6. To the best of your knowledge, in Canada (between 1990 – 2015), what sector was the largest greenhouse gas emitter?</p>	<p><b>Oil and gas</b>  <b>Transportation</b>          Agriculture          Heavy industry          Electricity          Buildings          Waste          Unsure</p>

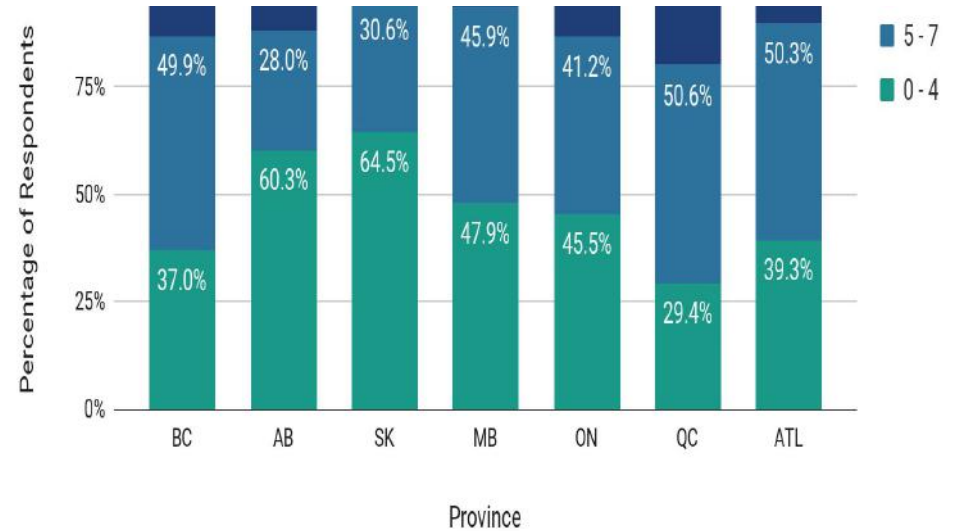
<p>7. To the best of your knowledge, Canada, as an Arctic nation, is more affected by the impacts of climate change</p>	<p><b>True</b> False Unsure</p>
<p>8. To the best of your knowledge, in the next 20 years Canadian winters are predicted to be colder and to have more snow.</p>	<p>True <b>False</b> Unsure</p>
<p>9. Scientists predict that the amount of temperature increase the Earth system can tolerate is...</p>	<p>Select all that apply:  <b>0-0.49 degrees Celsius</b>  <b>0.5 – 0.99 degrees Celsius</b>  <b>1.0 – 1.49 degrees Celsius</b>  <b>1.5 – 1.99 degrees Celsius</b>  2.0 – 2.49 degrees Celsius  2.5 – 3.0 degrees Celsius  Unsure</p>
<p>10. What do the world's countries need to do in order to ensure temperatures stay within the range that the Earth system can tolerate?</p>	<p>Select all that apply:  <b>Significantly decrease emissions</b>  <b>Move to net zero emissions (balancing a measured amount of carbon released with an equivalent amount of sequestered or offset carbon emissions)</b>  Significantly increase emissions  Moderately Increase emissions  Do nothing  Moderately decrease emissions</p>

# Number of correct responses to 10 climate knowledge questions.

## National Results



## Provincial Results

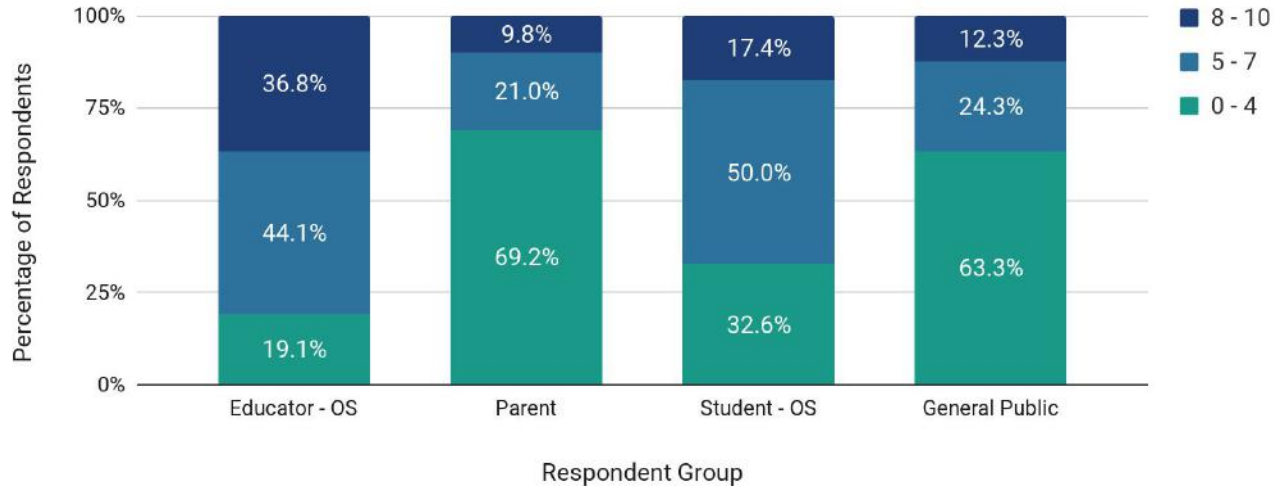


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n=2180 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=814, ATL=118)

# Number of correct responses to 10 climate knowledge questions.

## Alberta Results



n=261 (Educator OS = 63, Parent CS =40, Student OS= 53, General public CS= 105 )

# Number of correct responses to 10 climate knowledge questions.

## National

On average, 43% of parents, students, and closed-sample educators answered 4 or fewer of the knowledge questions correctly: closed-sample educators (44%), parents (46%), students (45%), and the general public (41%). 12% of the open-sample educators answered 4 or fewer questions correctly. On average, 14% of closed-sample respondents correctly answered 8 or more of the 10 climate change knowledge questions: closed-sample educators (10%), parents (12%), students (10%), and members of the general public (16%). There is a gap between open-sample educators and the other groups, with 37% of open-sample educators getting 8 or more of the 10 questions correct.

## Provincial

Regionally, the percentage of respondents answering four or fewer correctly is as follows: BC =37%, AB=61%, SK=65%, MB= 48%, ON= 46%, QB= 29% and AL=39%. QC scored the highest with 20% of respondents getting 8 to 10 correct and SK scored lowest with 5% of respondents getting 8 to 10 correct.

## Alberta

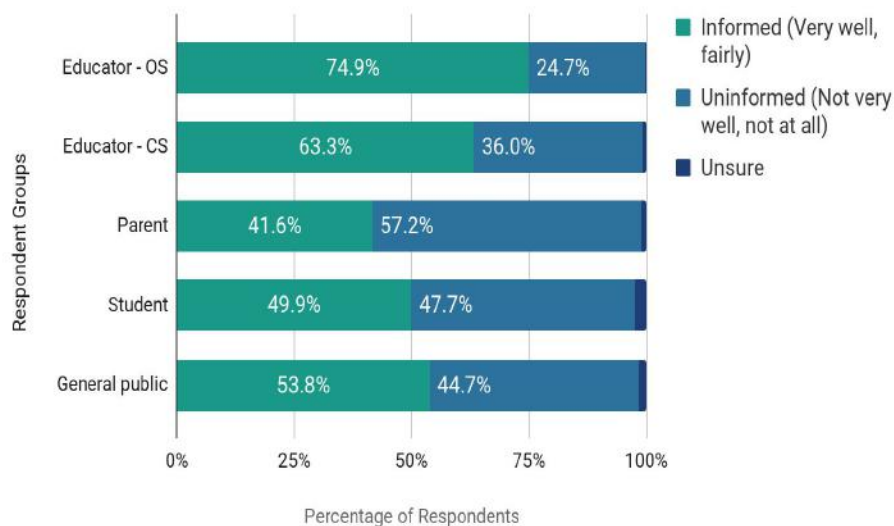
The majority of parents (69%) and the general public (63%) answered 4 or fewer of the climate knowledge questions correctly. Educators had more success with only 19% answering 4 or fewer correctly, and students fell somewhere in the middle, with 33% only able to answer 4 or fewer questions correctly.

## Notable Differences:

Notably, students in Alberta were more successful on the climate knowledge test, with 17% of respondents able to correctly answer between 8-10 questions (compared to 10% nationally). On the other hand, parents and the general public scored much lower in Alberta (69%) compared to the national average (43%) - a similar difference is seen in the general public 63% in AB and 41% nationally scored in the lowest bracket.

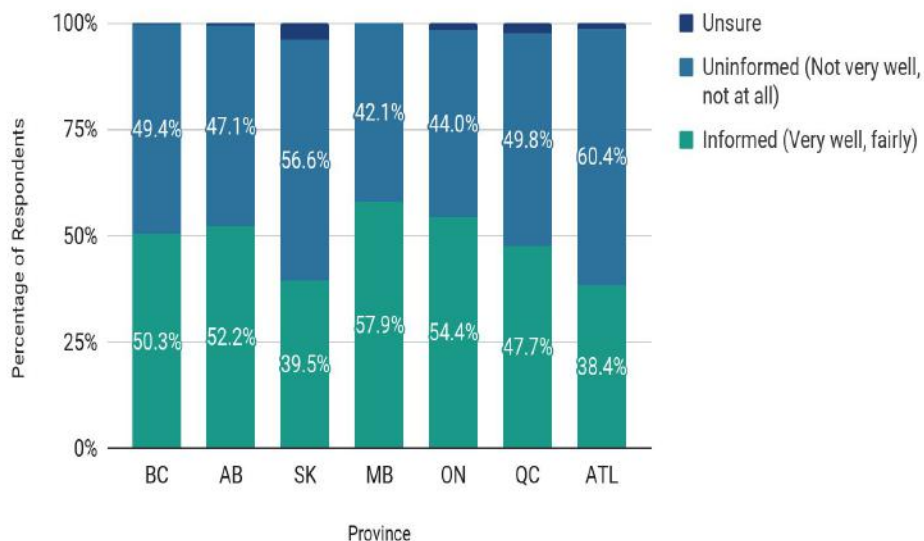
# Personally, how well-informed do you feel you are about climate change?

## National Results



n=3196 (Educator OS = 1120, Educator CS = 111, Parent CS = 571, Student CS= 486, General public = 908)

## Provincial Results

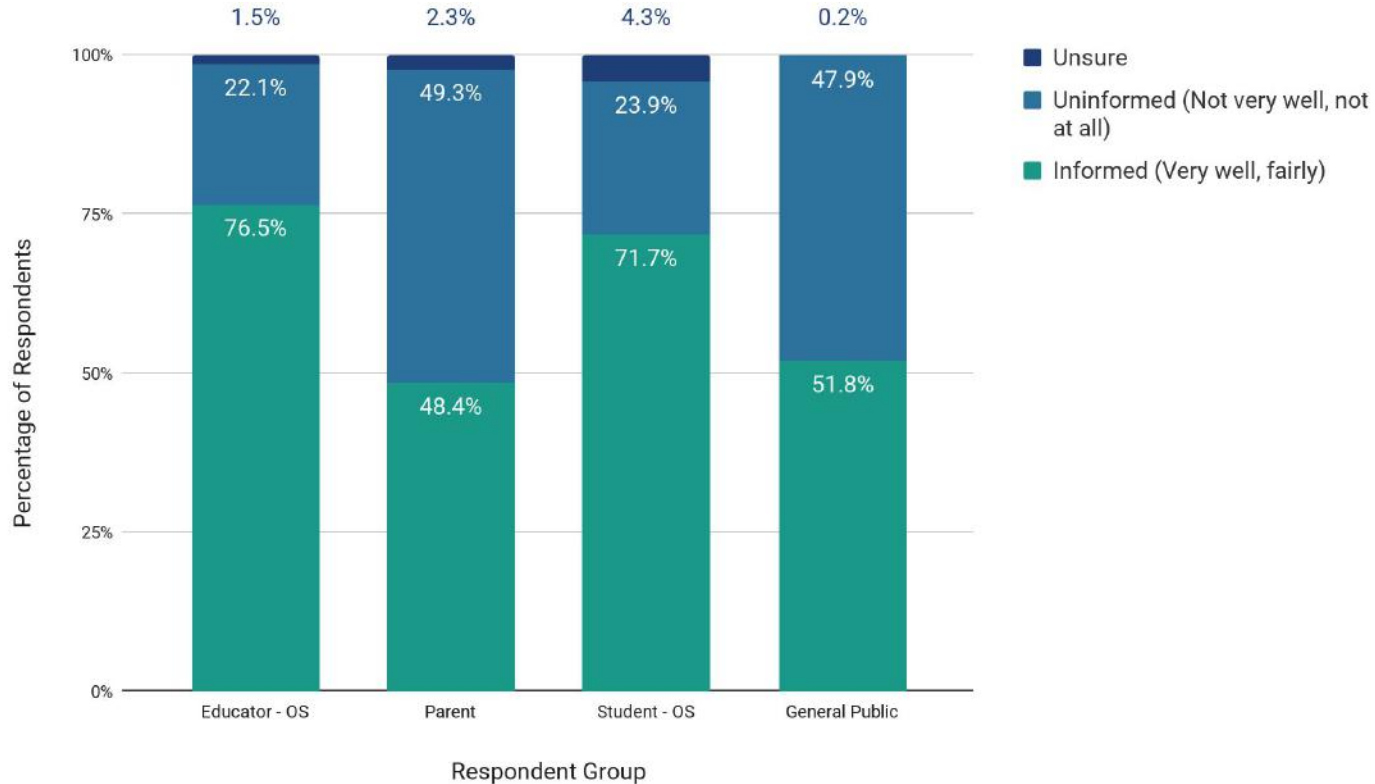


n=2180 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=814, ATL=118)



# Personally, how well-informed do you feel you are about climate change?

## Alberta Results



n=261 (Educator OS = 63, Parent CS =40, Student OS= 53, General public CS= 105 )

# Personally, how well-informed do you feel you are about climate change?

## National

When asked, “how well informed do you feel you are about climate change?”, those who indicated “very well” or “fairly well” include: open-sample educators (75%), closed-sample educators (63%), parents (42%), students (50%), and the general public (54%).

## Provincial

Regional responses for those feeling “very well” or “fairly well” informed about climate change are as follows: BC=50%, AB= 52%, SK= 40%, MB= 58%, ON= 54%, QC= 48% and ATL=38%.

## Alberta

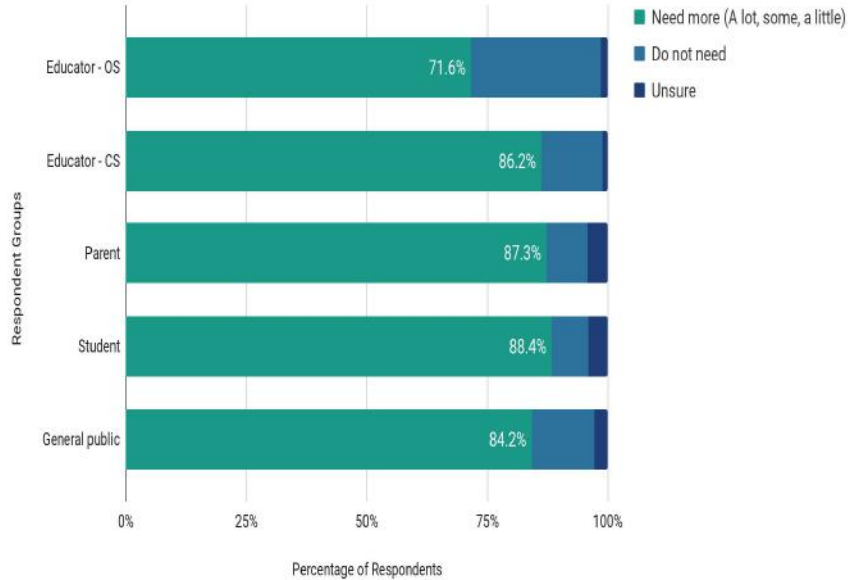
77% of educators in Alberta feel very well or fairly well informed about climate change, and interestingly, students are not far behind with 71% feeling very or fairly well informed on the subject. In contrast, only 48% of parents and 52% of the general public feel similarly.

## Notable Differences:

Students in Alberta feel substantially more informed on the subject of climate change (72%) compared to the national average (50%). Also notable, parents in Alberta report feeling more informed by 6% (48% compared to the national average 42%). This is particularly notable because parents in Alberta fared much worse on the climate knowledge test, compared to parents nationally.

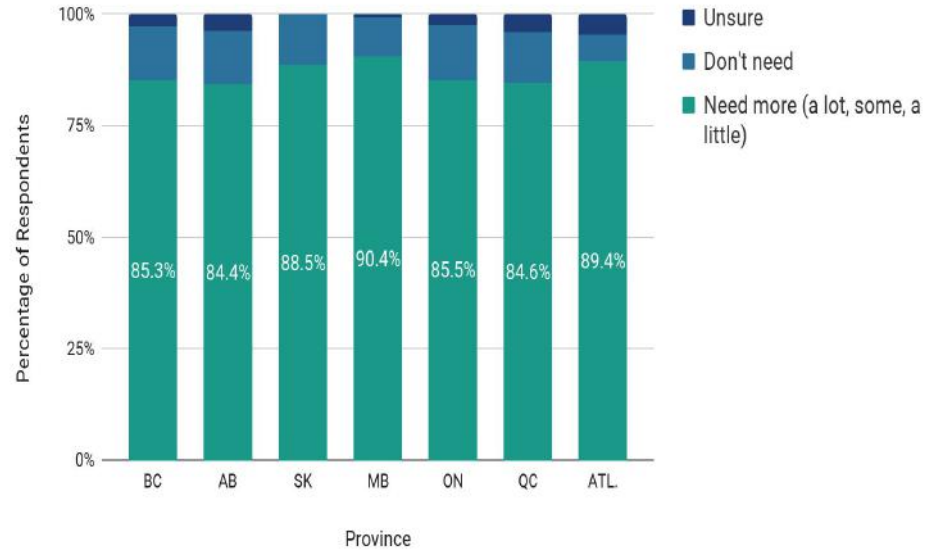
**On some issues, people feel they have all the information they need in order to form a firm opinion, while on other issues they would like more information before making up their mind.  
For climate change, where would you place yourself?**

**National Results**



n=3196 (Educator OS = 1120, Educator CS = 111, Parent CS = 571, Student CS= 486, General public = 908)

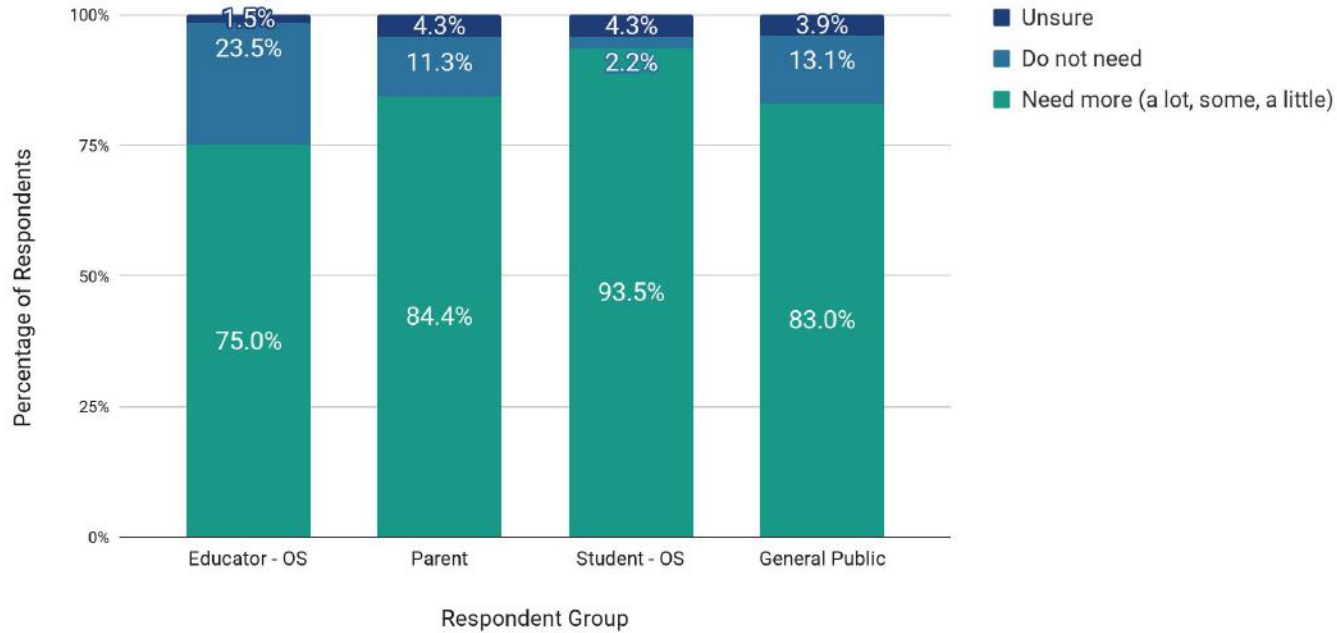
**Provincial Results**



n=2180 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=814, ATL=118)

On some issues, people feel they have all the information they need in order to form a firm opinion, while on other issues they would like more information before making up their mind.  
For climate change, where would you place yourself?

### Alberta Results



n=261 (Educator OS = 63, Parent CS =40, Student OS= 53, General public CS= 105 )

# **On some issues, people feel they have all the information they need in order to form a firm opinion, while on other issues they would like more information before making up their mind. For climate change, where would you place yourself?**

## **National**

Most respondents in all groups indicated that more information on climate change is required for them to form a firm opinion on climate change. The smallest percentage of respondents indicating the need for additional information were open-sample educators (72%), while others were nearly unanimous on the need for more information: 88% of students, 87% of parents, 86% of closed-sample educators, and 84% of members of the general public. We interpret this result as meaning almost everyone would benefit from more information about climate change and believe these data support the need for increased public education and professional development for teachers on climate change education.

## **Provincial**

Across the provinces, 87% of Canadians identified that they need more information in order to form a firm opinion on climate change.

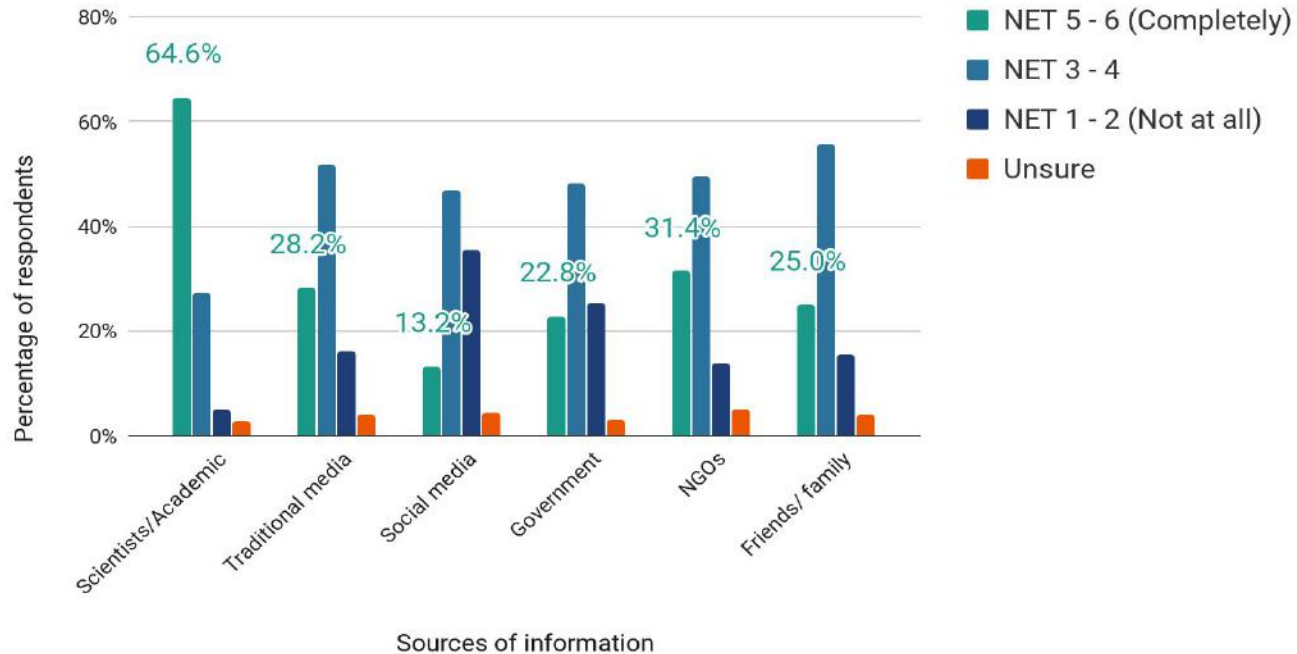
## **Alberta**

The majority of respondents in each group indicated that they need more information in order to form a firm opinion on climate change. The lowest agreement came from educators in Alberta, with 75% indicating a need for more information, followed by the general public (83%), parents (84%) and the highest level of agreement came from students, with 94% answering that they need more information.

## **Comparison**

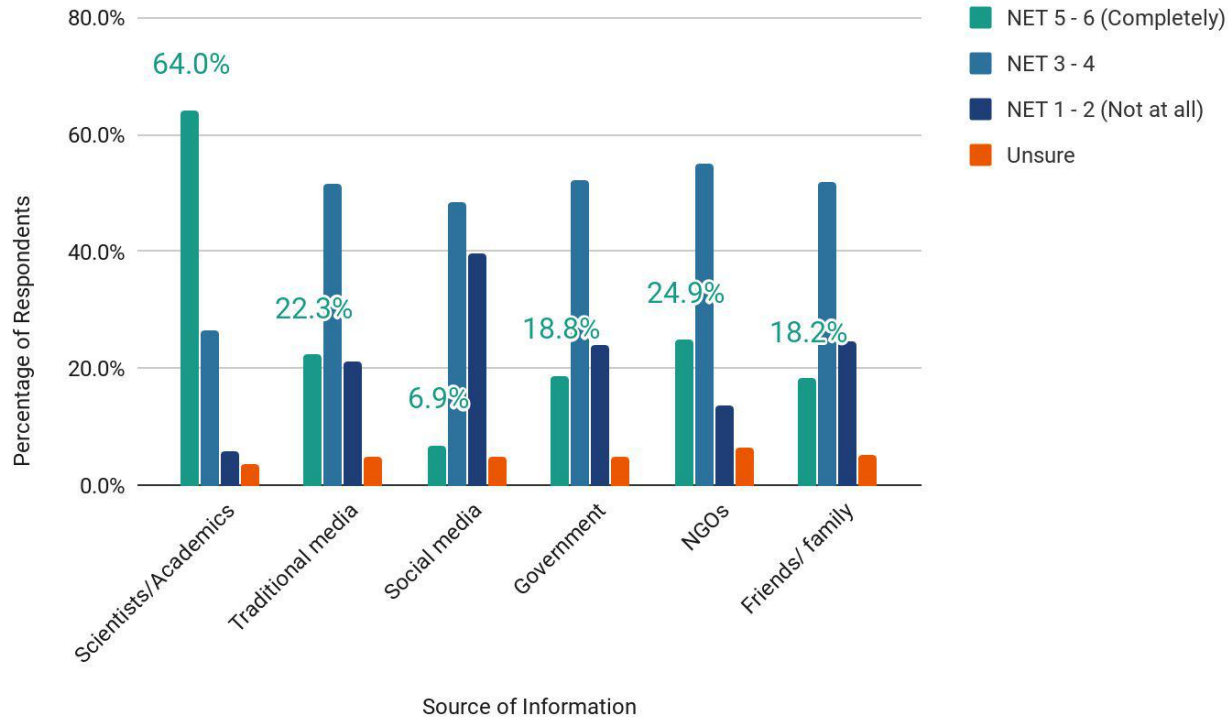
Responses to this question follow a similar pattern to the national results.

# National - Trust in different sources of information



n=3196 (Educator OS = 1120, Educator CS = 111, Parent CS = 571, Student CS= 486, General public = 908) [aggregated]

# Alberta- Trust in different sources of information



n=261 (Educator OS = 63, Parent CS =40, Student OS= 53, General public CS= 105)

# Trust in different sources of information

## National

When asked which sources of climate change information respondents trust the most, 65% of closed-sample respondents indicated scientists/academics; 31% indicated non-governmental organizations, 28% indicated traditional media, 25% friends/family and 23% indicated government.

## Alberta

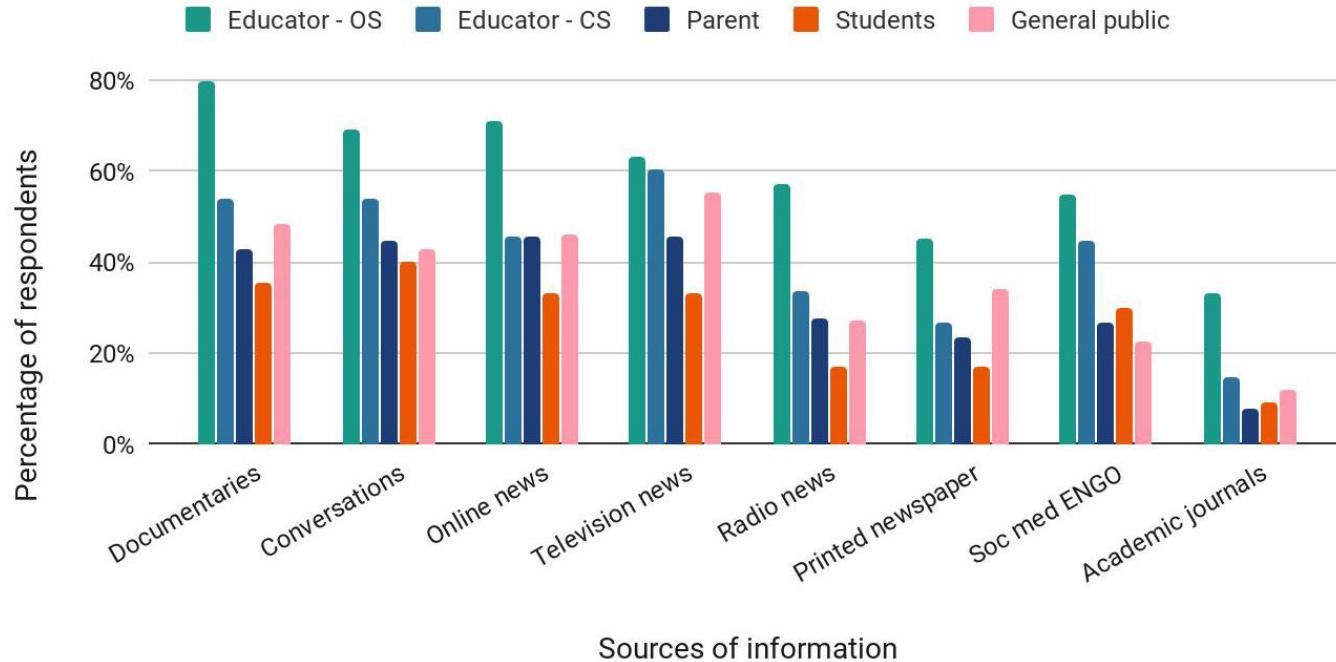
Respondents in Alberta indicated the highest level of trust for information on climate change from scientists and academics by a large margin (64%). NGO's (25%) and traditional media (22%) were completely trusted by around one quarter of respondents. Trust was slightly lower for the government (19%) and friends and family (18%), and the lowest level of trust reported was for social media (7%).

## Notable Differences:

The pattern among Alberta respondents is similar to the national results. On a national level, respondents trust social media slightly more than Alberta (13% complete to 7%).

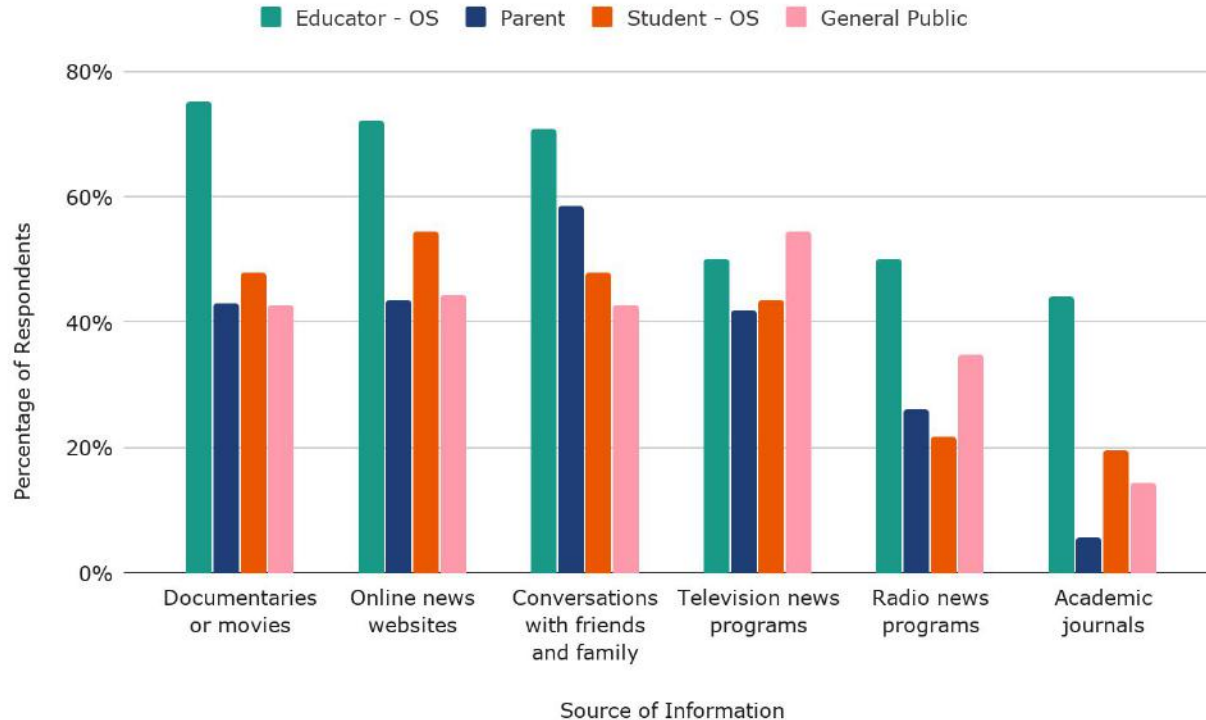


# National - Which of the following do you use to inform yourself about climate change?



n=3196 (Educator OS = 1120, Educator CS = 111, Parent CS = 571, Student CS= 486, General public = 908)

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



n=261 (Educator OS = 63, Parent CS =40, Student OS= 53, General public CS= 105)

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

## National

The top five sources that people use to inform themselves about climate change include: documentaries, conversations with others, online news, television news and radio news. Although scientists and academics were noted in the previous slide as the most trusted source, academic journals are among the least cited by respondents as being used for climate change information. Respondent groups differed slightly, for instance, the highest percentage of the general public and closed sample educators selected television news as a source of information compared to the highest percentage of open sample educators selected documentaries.

## Alberta

In Alberta, the top five sources that people use to inform themselves about climate change are: documentaries, online news, conversations with others, television news and radio news. The top source of information differed between respondent groups. Educators cited documentaries and movies most often whereas students chose online news and websites most often. The general public is most likely to turn to television news, and parents use conversations with friends and family most often to inform themselves.

## Notable Differences

The top five sources that respondents use to inform themselves were the same in Alberta as they are nationally. A higher number of educators in Alberta reported using academic journals compared to the national average.

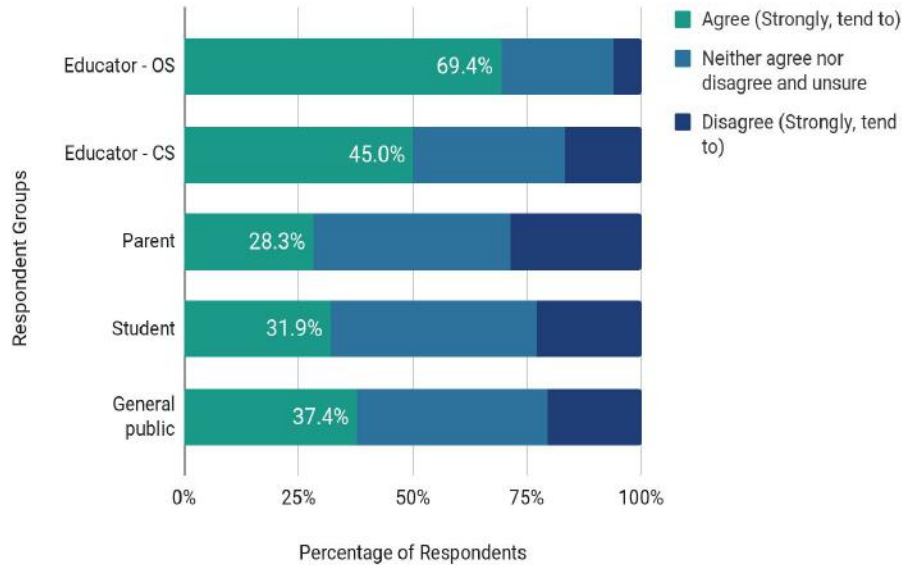


# Impacts and Action



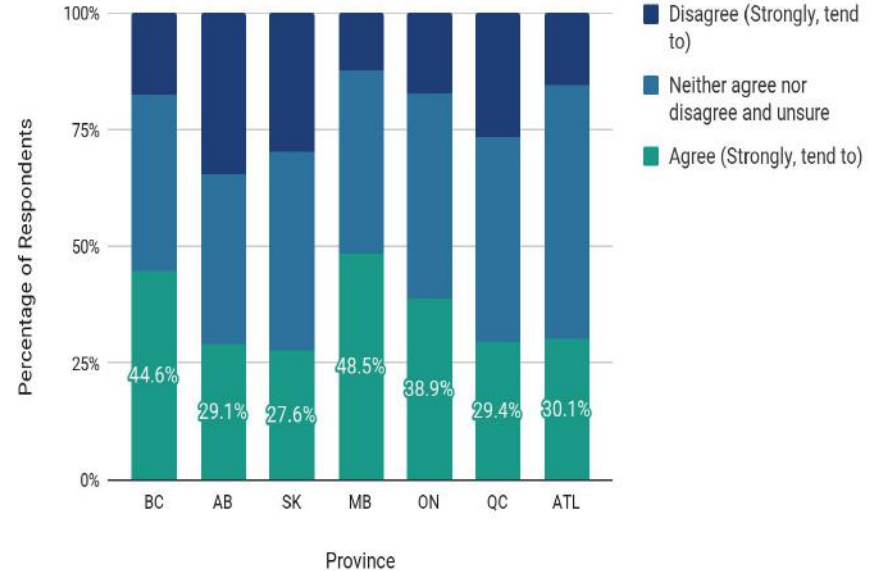
# I have personally experienced the effects of climate change

## National Results



n=3196 (Educator OS = 1120, Educator CS = 111, Parent CS = 571, Student CS= 486, General public = 908)

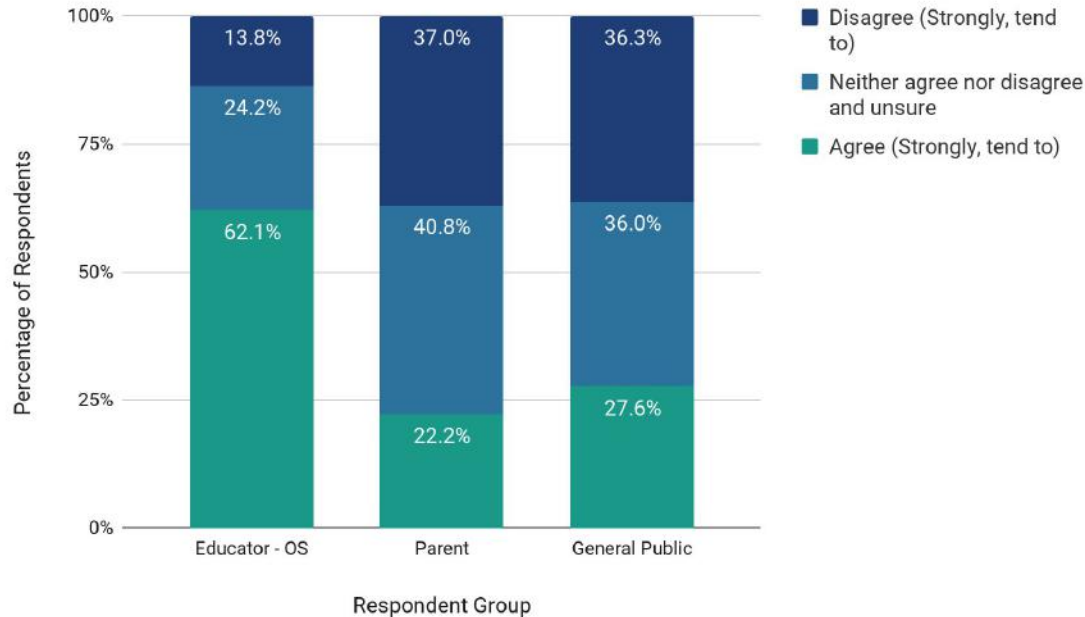
## Provincial Results



n=2180 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=814, ATL=118)

# I have personally experienced the effects of climate change

## Alberta Results



n=261 (Educator OS = 63, Parent CS =40, General public CS= 105)

Note= not enough students completed this question to include.

# I have personally experienced the effects of climate change

## National

More than two-thirds (69%) of open-sample educators and just fewer than half (45%) of the closed-sample educators indicated that they had experienced climate change impacts. Comparatively, only one-third of the members of the general public (37%) and students (32%) indicated having personally experienced climate change impacts, with the fewest parents (28%) having experienced impacts.

## Provincial

Regionally, with regards to having experienced the effects of climate change, BC and Manitoba had a significantly higher number of respondents who had personally felt climate impacts (45% and 48% respectively). In contrast, around one quarter of respondents in Saskatchewan (27%) reported experiencing the effects of climate change, and just slightly more in Alberta (29%) and Quebec (29%).

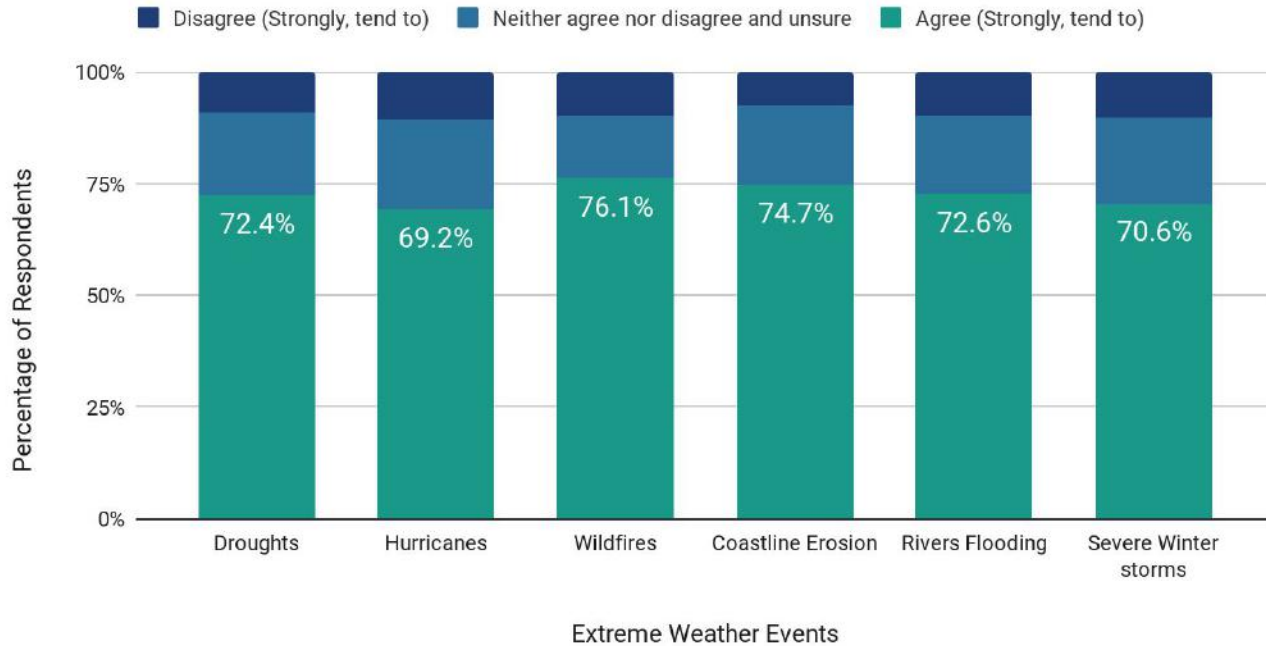
## Alberta

Among respondent groups, educators are most likely to report having felt the effects of climate change (62%). Only around ¼ of parents (22%) and the general public (28%) agree. Not enough students completed this question to include results.

## Notable Differences:

The pattern of responses is similar between the National and Alberta specific results; however Alberta responses indicate a that fewer people recognize having experienced the effects of climate change personally across the board. The most prominent difference is seen in the general public with 28% agreeing to experiencing climate change. This is 9% lower than the national average (37%).

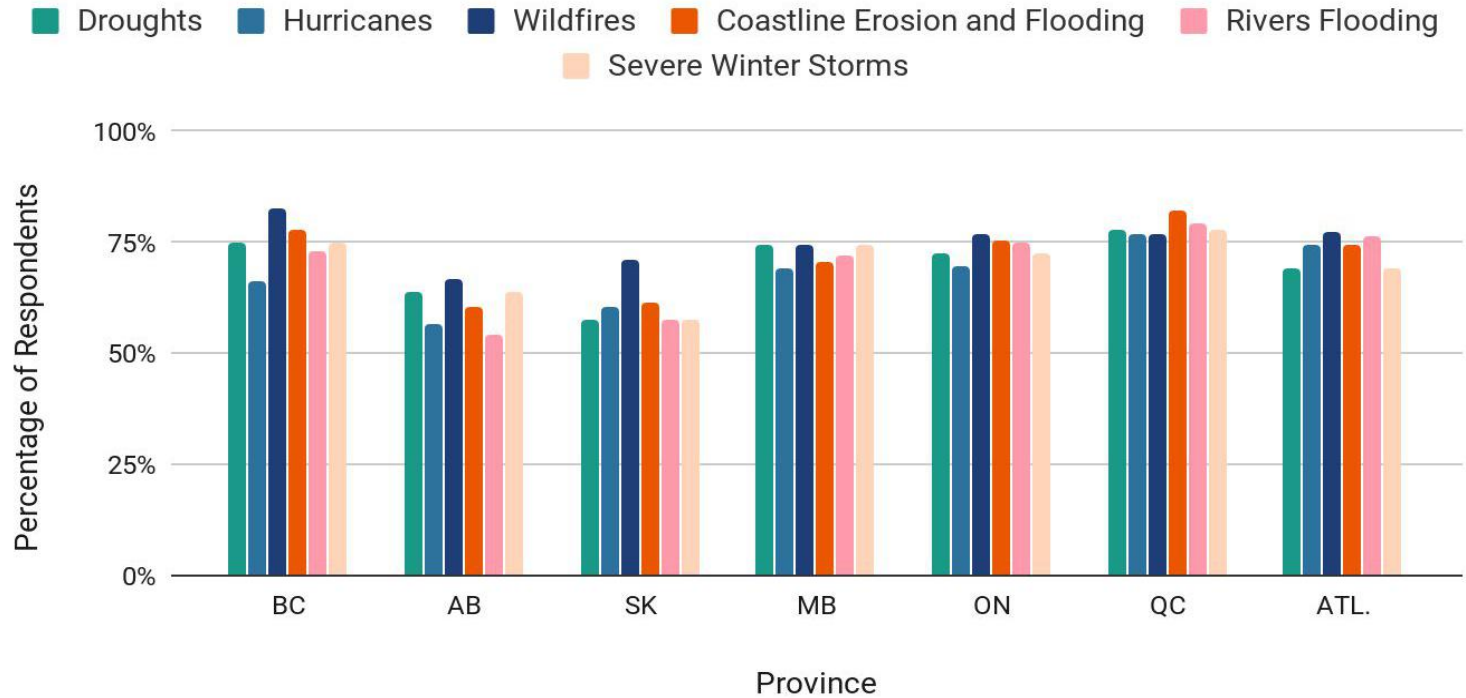
# National - Do you agree or disagree that climate change is already causing or making the following things worse: droughts, hurricanes, wildfires, coastline erosion, rivers flooding and severe winter storms?



n= 3196 (Educator OS = 1120, Educator CS = 111, Parent CS = 571, General public CS = 908)  
[aggregated]



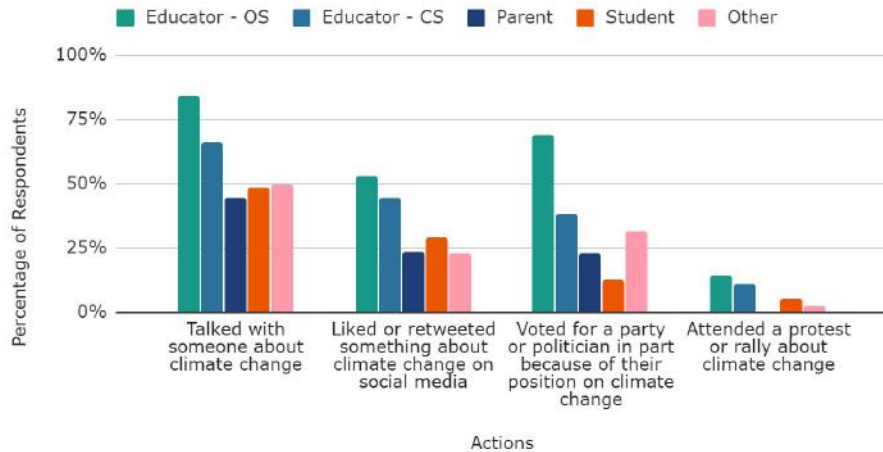
# Provincial - Do you agree or disagree that climate change is already causing or making the following things worse: droughts, hurricanes, wildfires, coastline erosion, rivers flooding and severe winter storms?



n=2180 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=814, ATL=118)

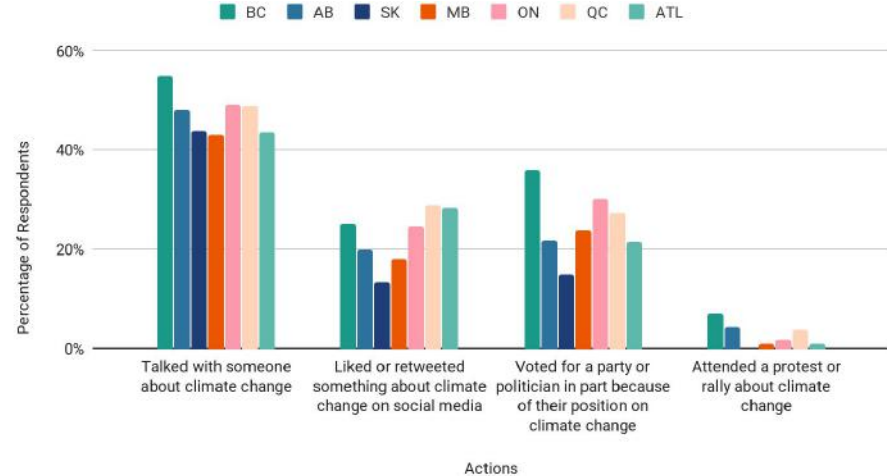
# Actions taken to discuss or learn about climate change

## National Results



n= 3196 (Educator OS = 1120, Educator CS = 111, Parent CS = 571, General public CS = 908)

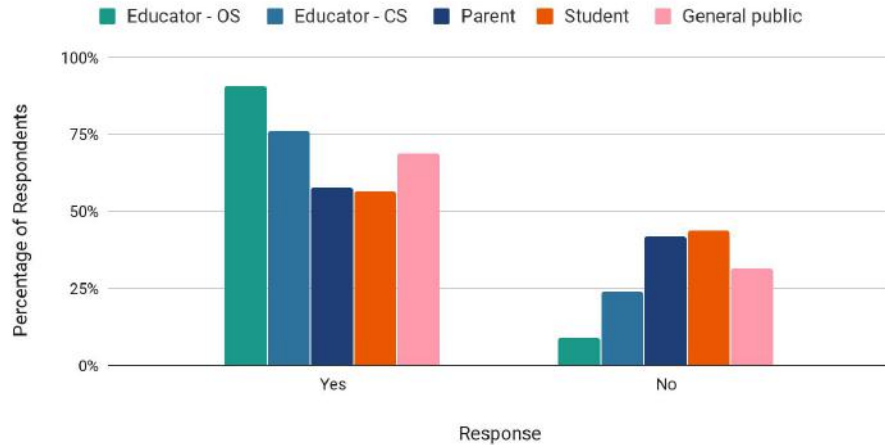
## Provincial Results



n=2180 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=814, ATL=118)

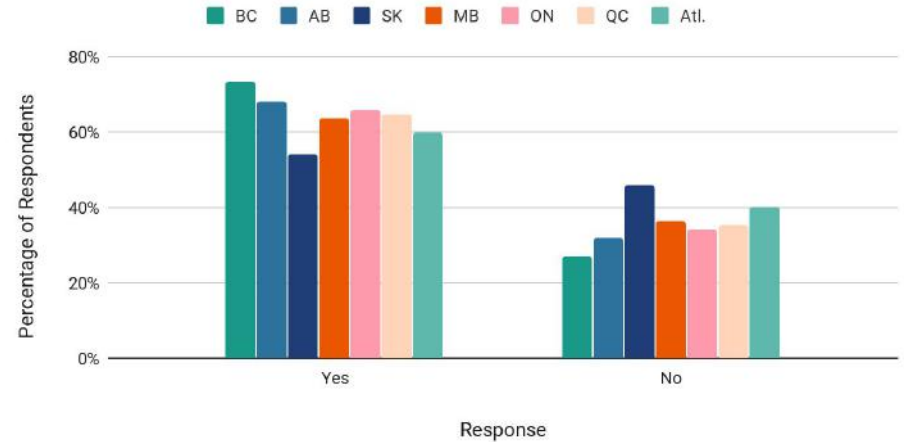
# I have personally taken action to reduce greenhouse gas emissions

## National Results



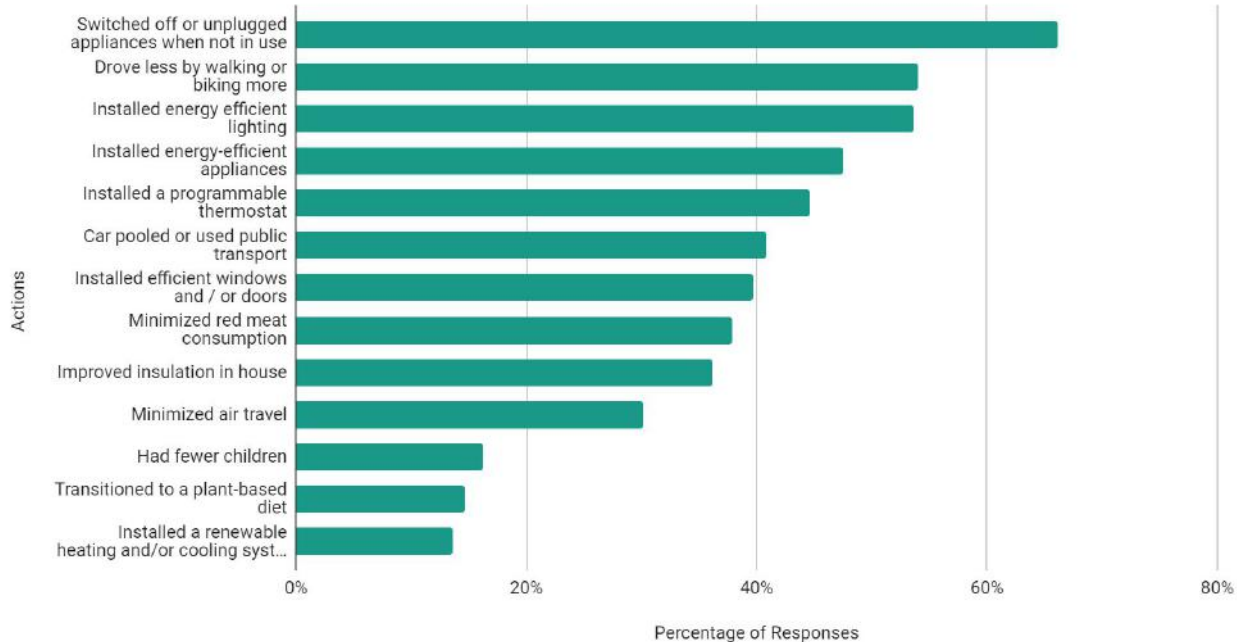
n= 3196 (Educator OS = 1120, Educator CS = 111, Parent CS = 571, General public CS = 908)

## Provincial Results



n=2180 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=814, ATL=118)

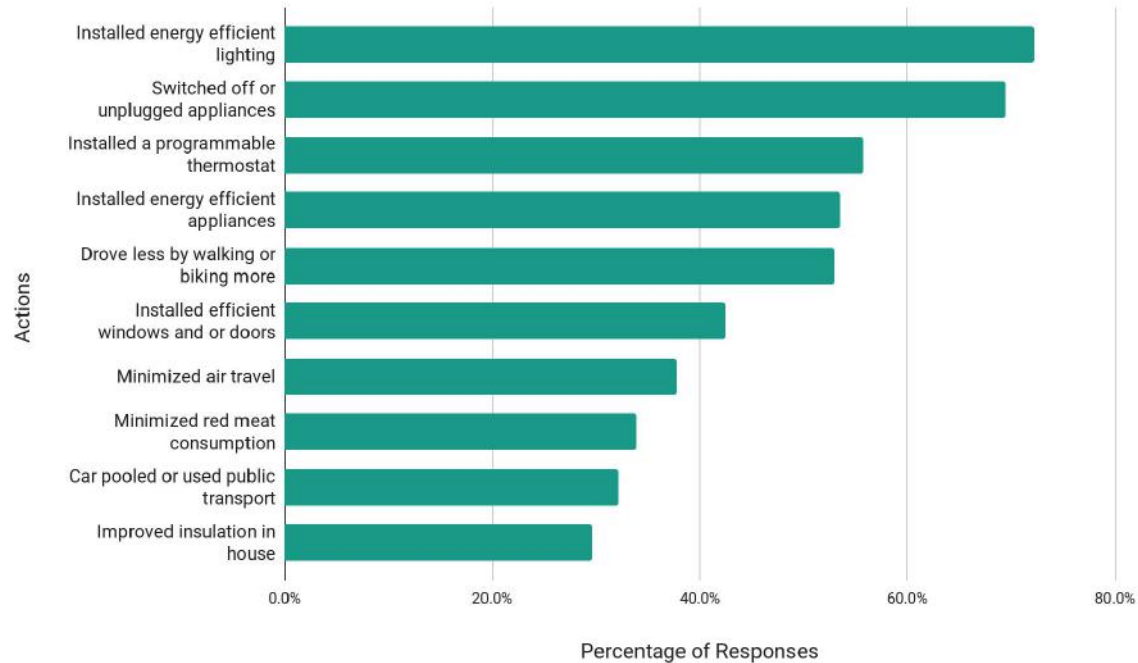
# National - I have personally taken action to reduce greenhouse gas emissions



Note: Respondents could select all actions that applied. An average for each action is provided in order to create an order of actions. Across the groups there is variation in applicability of action.

n= 3196 (Educator OS = 1120, Educator CS = 111, Parent CS = 571, General public CS = 908)

# Alberta- I have personally taken action to reduce greenhouse gas emissions



n=261 (Educator OS = 63, Parent CS=40, Student OS= 53, General public CS= 105 )

*Note:* Respondents could select all actions that applied. An average for each action is provided in order to create an order of actions. Across the groups there is variation in applicability of action.

# I have personally taken actions to reduce my greenhouse gas use

## National

The top five actions reported nationally to reduce GHG's were: switched off or unplugged appliances when not in use, drove less by walking or biking more, installed energy efficient lighting, installed energy efficient appliances, and installed a programmable thermostat.

## Alberta

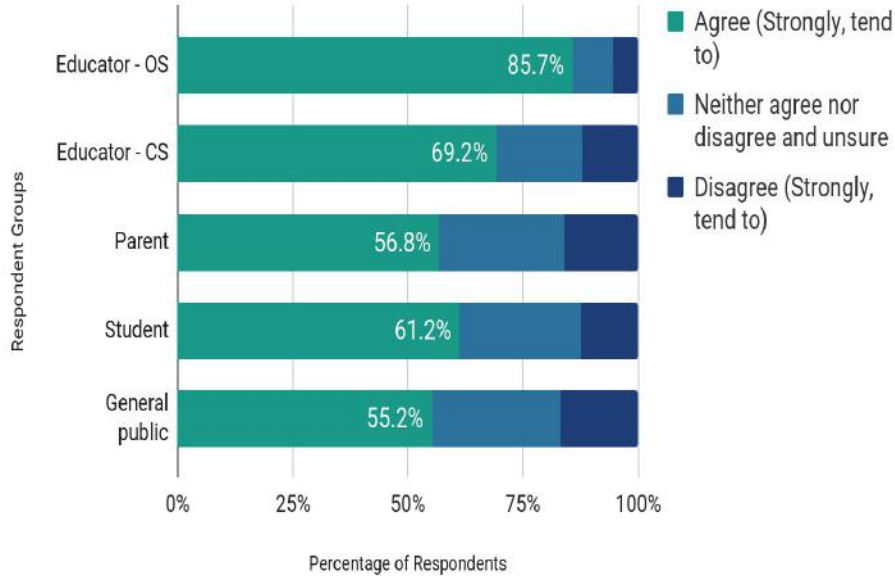
The top five actions taken by Albertans are: installed energy efficient lighting, switched or unplugged appliances when not in use, installed a programmable thermostat, installed energy efficient appliances and drove less by walking or biking more.

## Notable Differences

The actions that occupy the top five in Alberta, and as a national average are the same, it is only the order that they fall in that differs. In Alberta, the top action is installing energy efficient lighting, an action that comes third on the national list. Albertan's fifth top choice, driving less by walking or biking more, was an action that was picked second most often nationally.

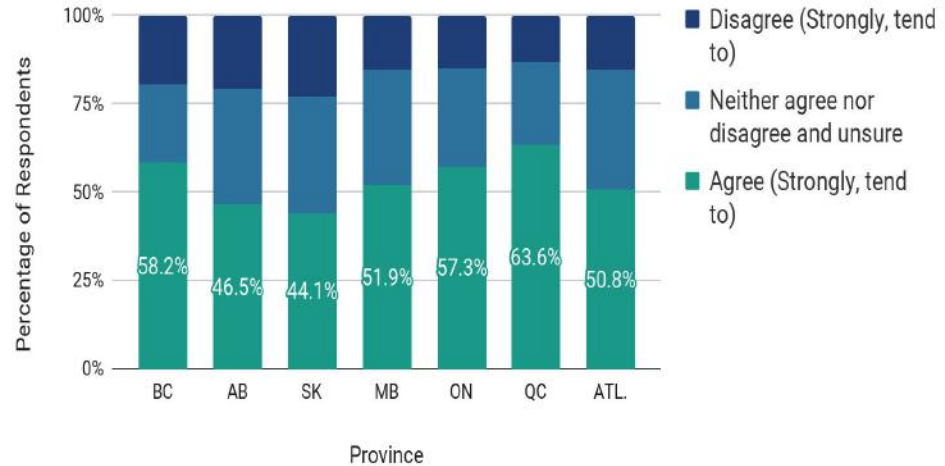
# I believe my actions have an influence on climate change.

## National Results



n=3196 (Educator OS = 1120, Educator CS = 111, Parent CS = 571, Student CS= 486, General public = 908)

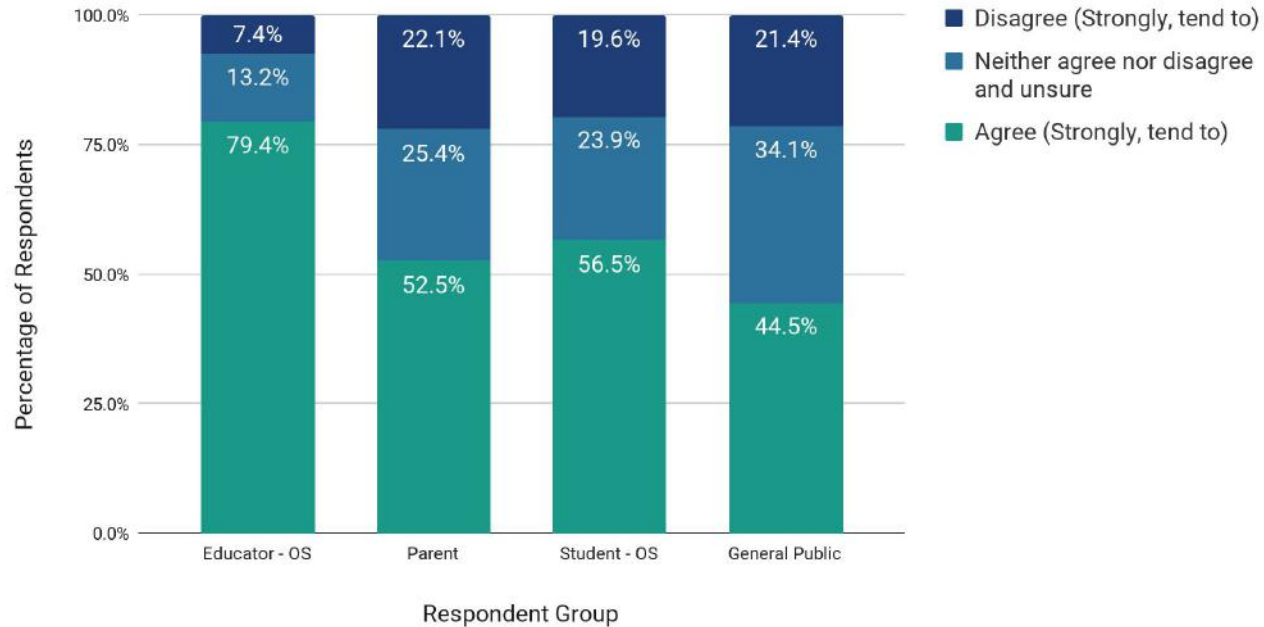
## Provincial Results



n=2180 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=814, ATL=118)

# I believe my actions have an influence on climate change.

## Alberta Results



n=261 (Educator OS = 63, Parent CS =40, Student OS= 53, General public CS = 105 )



# I believe my actions have an influence on climate change.

## National

Respondent groups differed significantly in their beliefs on the influence that personal actions have on climate change. While the majority of open-sample educators (86%) believed that personal actions influence climate impacts, only 69% of closed-sample educators felt similarly. Amongst the remaining respondents, students were in highest agreement with 61% of respondents, while just over half of parents (57%) and members of the general public (55%) believed the same.

## Provincial

The conviction that personal actions influence climate change varied from region to region. Less than half of respondents from Saskatchewan and Alberta believe that their actions are influential (44% and 47%, respectively), while almost two-thirds of respondents from Quebec (64%) reported believing that their personal actions could influence climate change.

## Alberta

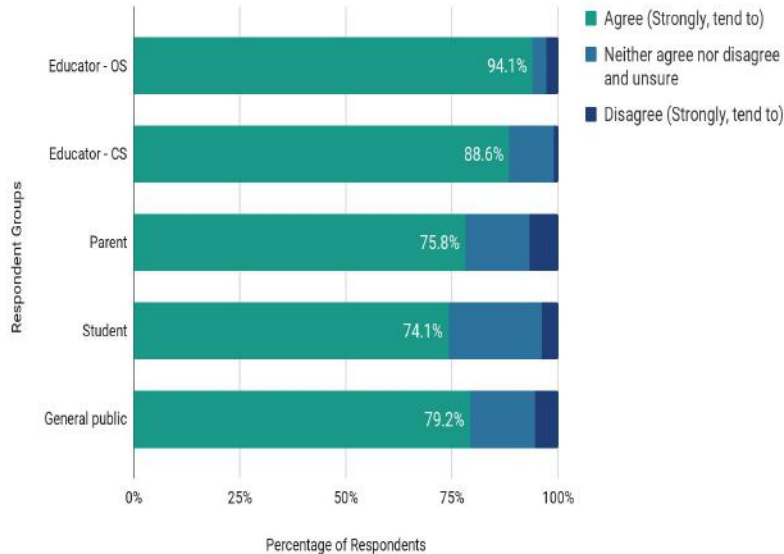
Alberta respondents differ in their belief that personal actions have an influence on climate change. Educators are the most convinced that their actions have an influence (79%) followed by 57% of students, 53% of parents, and the lowest level of agreement is within the general public, less than half, 45% believing that their actions have an influence.

## Notable Differences:

Overall, Alberta respondents feel less sure that their actions have an influence on climate change compared to the National results. Every respondent group has a lower percentage of those who agree that their actions have an impact. The biggest contrast is seen in the general public with 55% agreeing nationally and in Alberta at 45% (10% lower agreement)

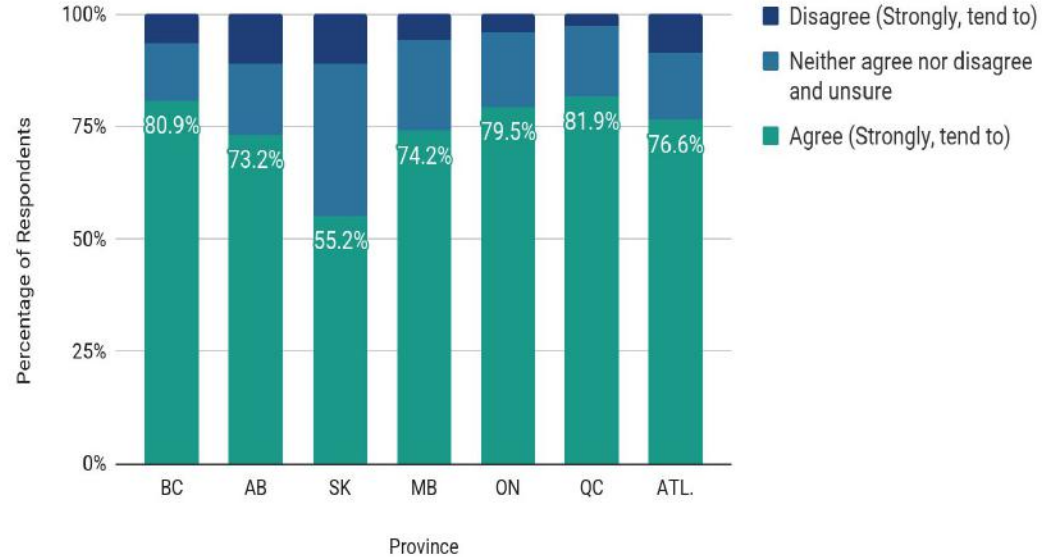
# I understand personal actions are important but systemic change is required to address climate change challenges.

## National Results



n=3196 (Educator OS = 1120, Educator CS = 111, Parent CS = 571, Student CS= 486, General public = 908)

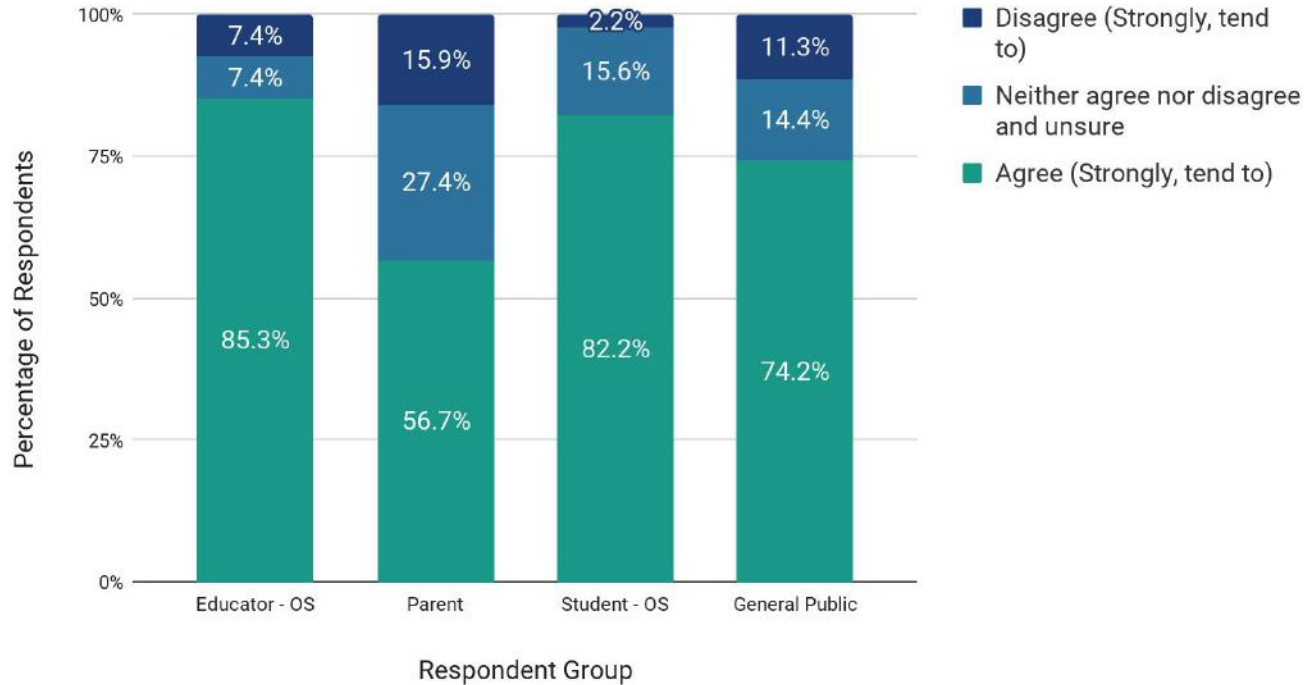
## Provincial Results



n=2180 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=814, ATL=118)

# I understand personal actions are important but systemic change is required to address climate change challenges.

## Alberta Results



n=261 (Educator OS = 63, Parent CS=40, Student OS= 53, General public CS = 105)

# **I understand personal actions are important but systemic change is required to address climate change challenges.**

## **National**

A large majority in all respondent groups indicated that systemic change is required (in addition to personal actions) to address the challenges of climate change. Nearly all open-sample educators (94%) agreed with the need for systemic change, as well as the majority of closed-sample educators (89%). Approximately three-quarters of remaining respondent groups shared similar beliefs with members of the general public at 79%, parents at 76% and students at 74% agreement.

## **Provincial**

In every region across the country, most respondents acknowledged that systemic change is required in order to address the challenges posed by climate change. Quebec (82%), closely followed by BC (81%) had the highest percentage of respondents agree that systemic change is required. Saskatchewan had significantly lower agreement, with only 55% of the respondents acknowledging that systematic change is a requirement to address climate change challenges.

## **Alberta**

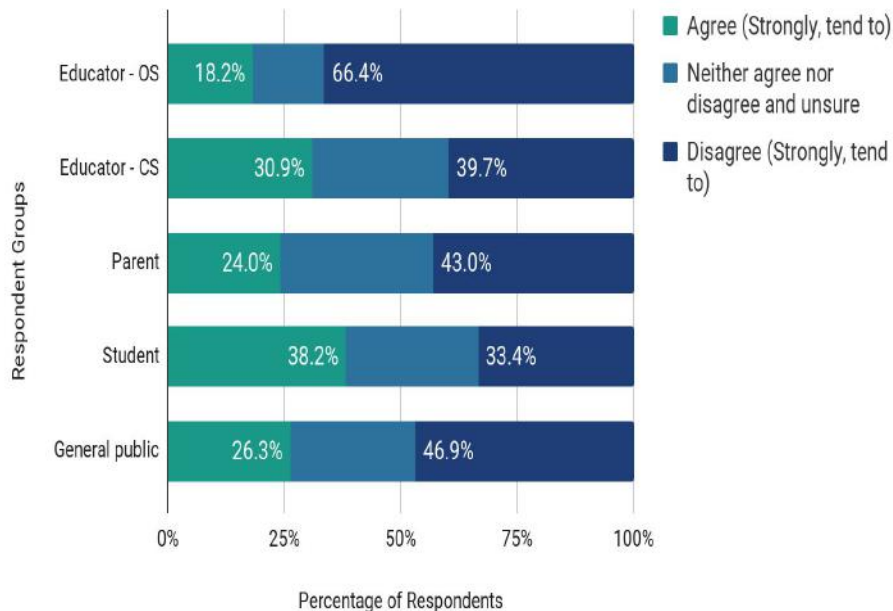
The majority of each respondent group in Alberta agree that systematic change is required to address the challenges of climate change. Educators (85%) and students (82%) feel the most strongly that systematic change is required in addition to personal actions, followed by the general public (74%), and 57% of parents agree.

## **Notable Differences:**

There are two key differences between Alberta's results and the national results. First, 76% of parents nationally recognize that systematic change is required to address the challenges posed by climate change, compared to 19% less agreement among parents in Alberta (57%). The second difference is seen with a larger percentage of students in Alberta acknowledging the importance of systematic change (82%) compared to the national results (74%).

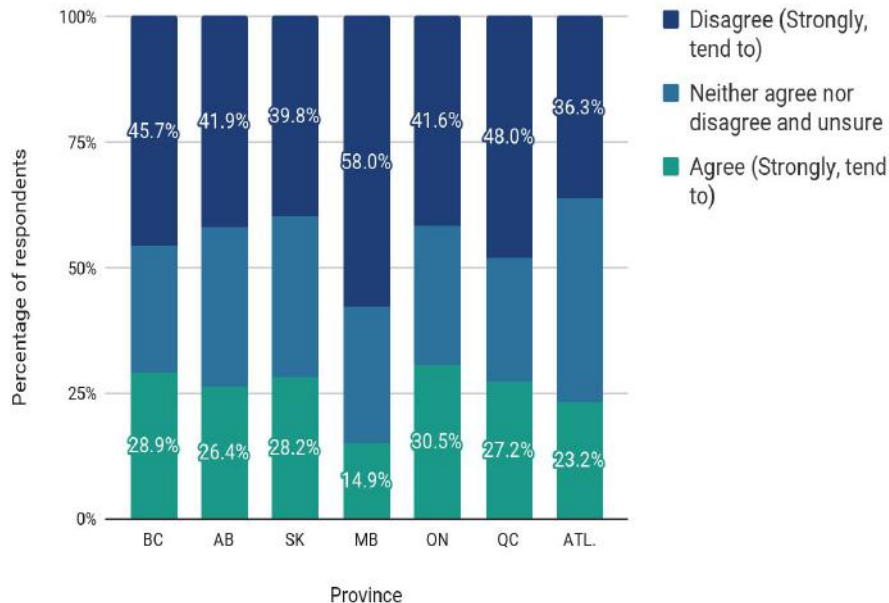
# New technologies can solve climate change without individuals having to make big changes in their lives.

## National Results



n=3196 (Educator OS = 1120, Educator CS = 111, Parent CS = 571, Student CS= 486, General public = 908)

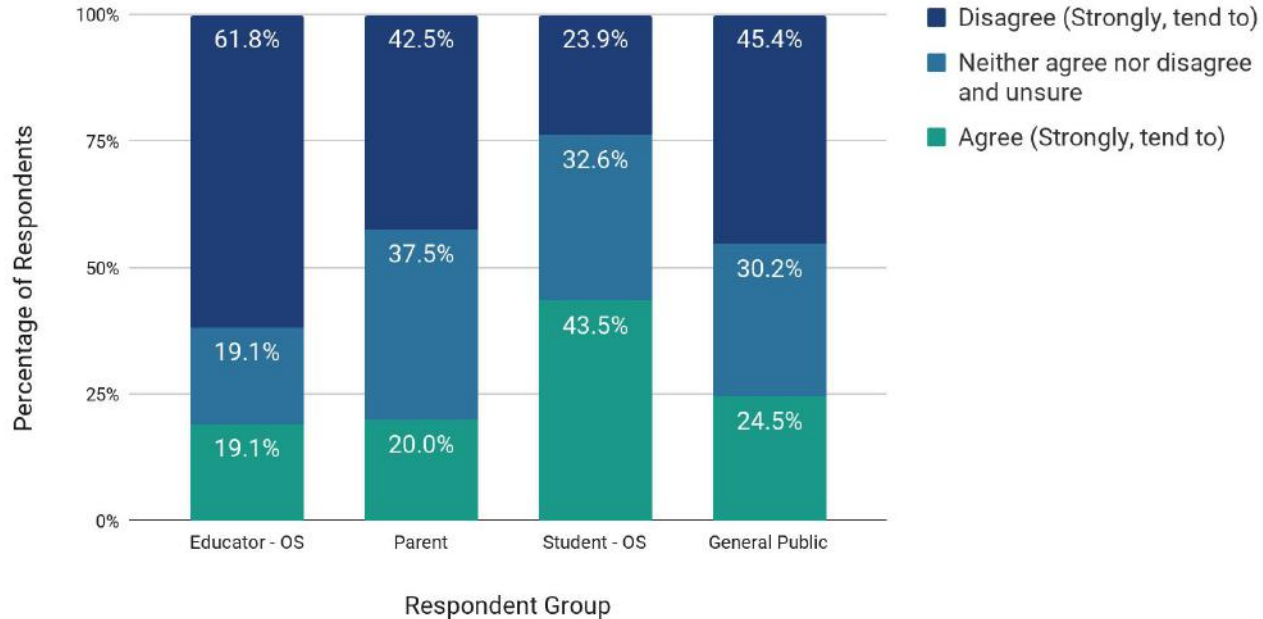
## Provincial Results



n=2180 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=814, ATL=118)

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

## Alberta Results



n=261 (Educator OS = 63, Parent CS =40, Student OS= 53, General public CS = 105)

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

## **National**

A large majority in all respondent groups indicated that new technologies cannot solve climate change without individuals having to make big changes in their lives. Only 18% of open-sample educators agreed that they could, 31% of closed-sample educators, 24% of parents, 38% of students and 26% of members of the general public.

## **Provincial**

Overall, on average 26% of respondents across Canada believe that new technologies alone can solve climate change without individuals having to make big changes in their lives. Agreement is highest in Ontario (31%) Saskatchewan (28%) and lowest in Manitoba (15%)

## **Alberta**

Respondents in Alberta in general do not agree that technology alone can solve climate change. Students are the group have the strongest belief that technology alone can solve climate change with 44% agreement.

## **Notable Differences**

Students in Alberta have a slightly stronger belief (44%) that technology alone can solve climate change compared to the national average (38%), whereas parents in Alberta agree slightly less often (20%) with this statement compared to nationally (24%).

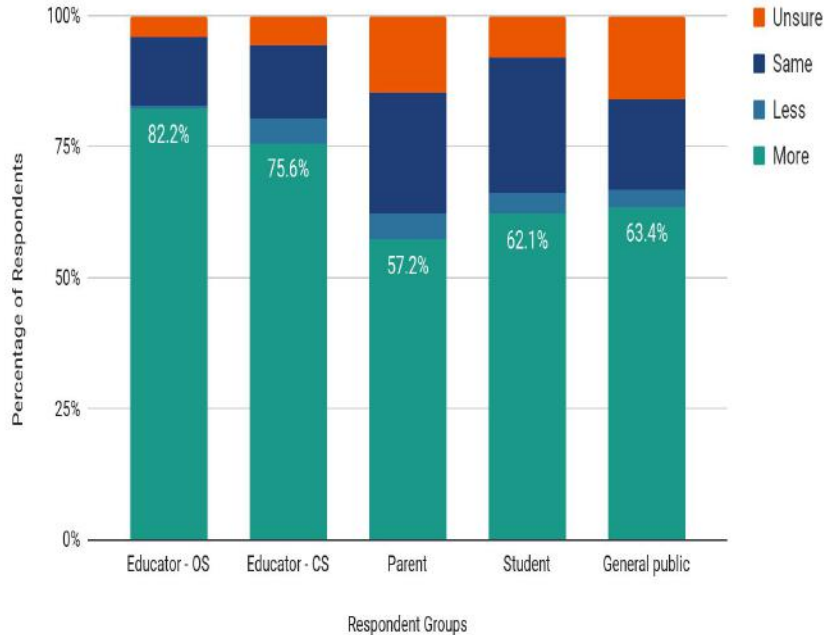


# Climate Change & The Education System



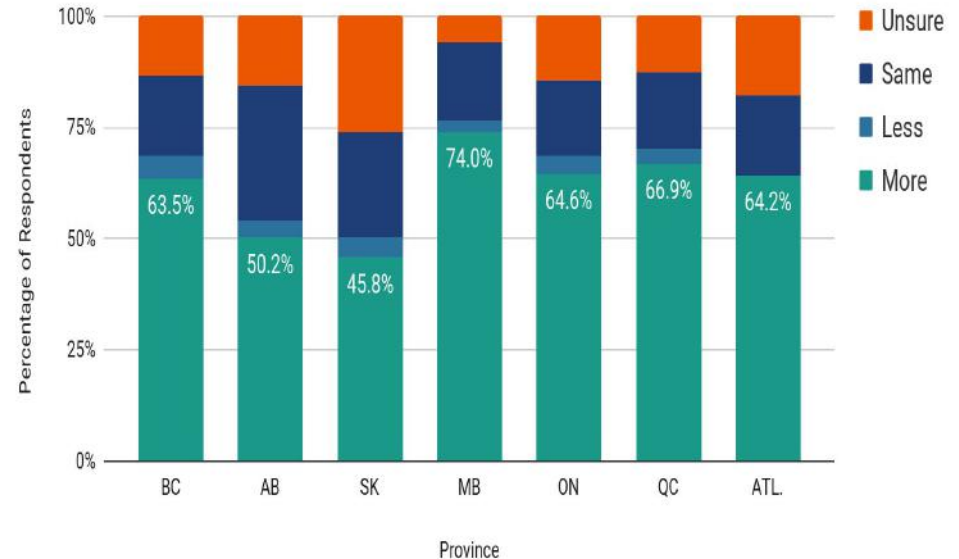
# Do you think the education system (grades 7 - 12) should be doing more, less, or about the same as now to educate young people on climate change?

## National Results



n=3196 (Educator OS = 1120, Educator CS = 111, Parent CS = 571, Student CS= 486, General public = 908)

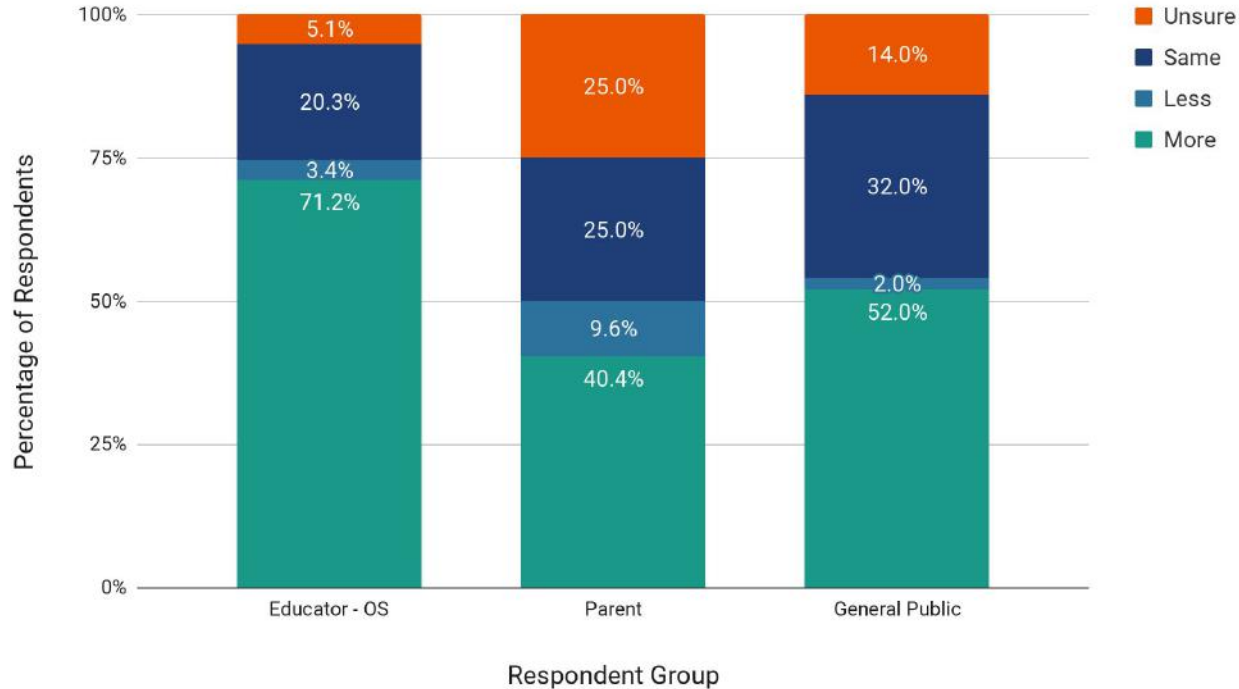
## Provincial Results



n=2180 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=814, ATL=118)

# Do you think the education system (grades 7 - 12) should be doing more, less, or about the same as now to educate young people on climate change?

## Alberta Results



n=261 (Educator OS = 63, Parent CS =40, General public CS = 105)

# Do you think the education system (grades 7 - 12) should be doing more, less, or about the same as now to educate young people on climate change?

## National

Most educators (OS 82% and CS 76%) strongly believe that the formal education system (grades 7-12) should be doing more to educate young people about climate change (82% and 76%). Approximately two-thirds of students (62%) and members of the public (63%) indicated the same, while 57% of parents shared the same view.

## Provincial

Across Canada, in most provinces, the majority of respondents think the school system should be doing more to educate about climate change (BC=64%, MB =74%, ON=65%, QC=67%, ATL=64%). Alberta (50%) and Saskatchewan (46%) had the lowest levels of support for the schools doing more to educate young people about climate change.

## Alberta

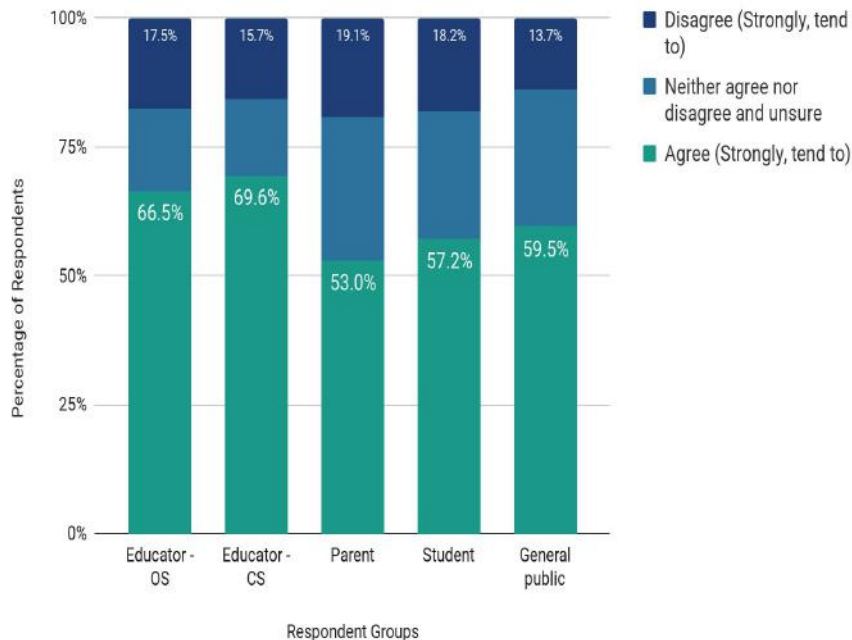
Alberta respondents are varied in their ideas about the school's role in climate change education. Educators most strongly believe that the education system should be doing more (71%), just over half of the general public agrees (52%), and less than half of parents are in agreement (40%). Not enough students completed this question to include results.

## Notable Differences:

The most notable difference is among parents; nationally a majority of parents think the school system should be doing more (57%) whereas in Alberta, less than half agree (40%).

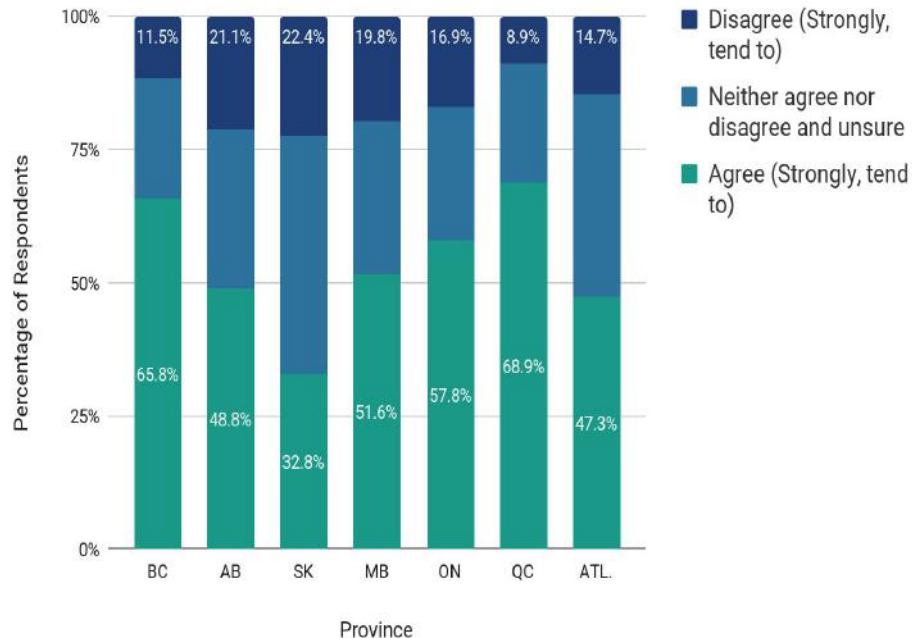
# Climate change education is a high priority for schooling

## National Results



n=3196 (Educator OS = 1120, Educator CS = 111, Parent CS = 571, Student CS= 486, General public = 908)

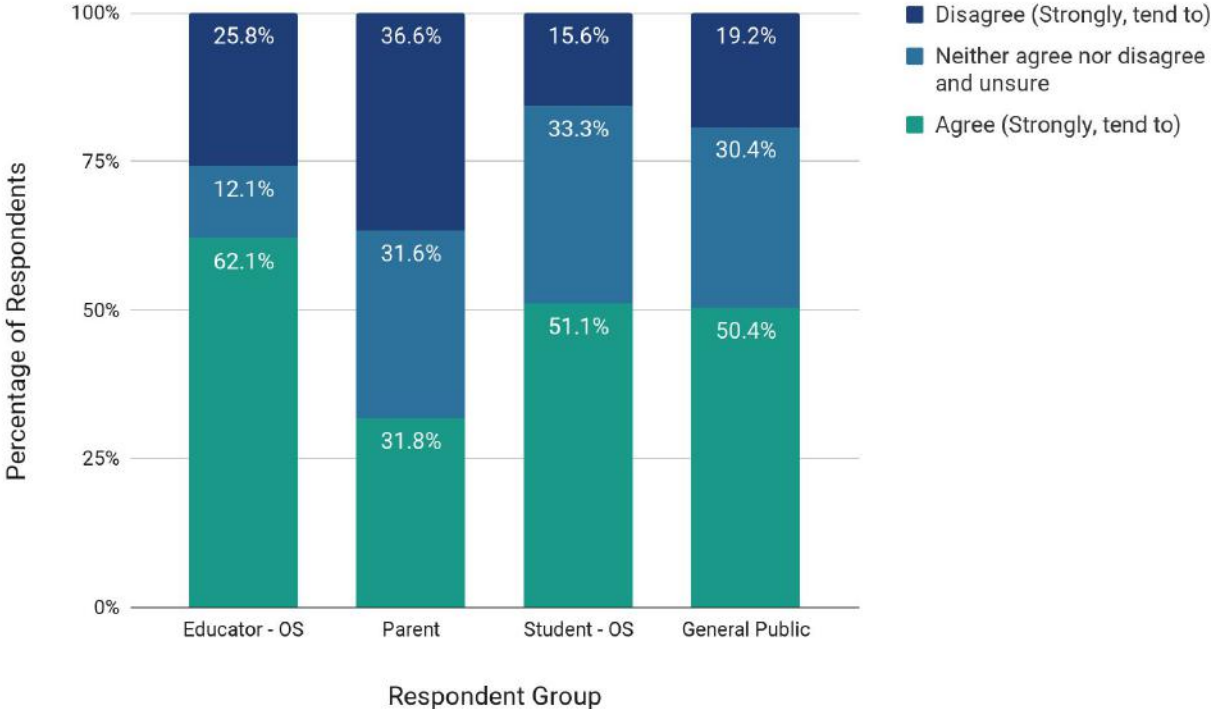
## Provincial Results



n=2180 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=814, ATL=118)

# Climate change education is a high priority for schooling

## Alberta Results



n=261 (Educator OS = 63, Parent CS =40, Student OS= 53, General public = 105)

# Climate change education is a high priority for schooling

## National

Approximately two-thirds of both groups of educators (CS 70% and OS 67%) felt that climate change education was of high importance for grade 7 - 12 students to be learning in school. To a lesser degree, the majority of remaining respondent groups shared similar sentiments with members of the public at 60%, students at 57% and parents at the lowest agreement (53%).

## Provincial

Regions across the country had differing opinions on the priority level that climate change education should have in schools. Quebec (69%) and British Columbia (66%) had the highest percentage of respondents who saw climate change as a high priority for schooling with over two-thirds of respondents agreeing that climate change is a high priority for students in grades 7-12, while Saskatchewan (33%) had only approximately one-third of respondents agree that it is a high priority.

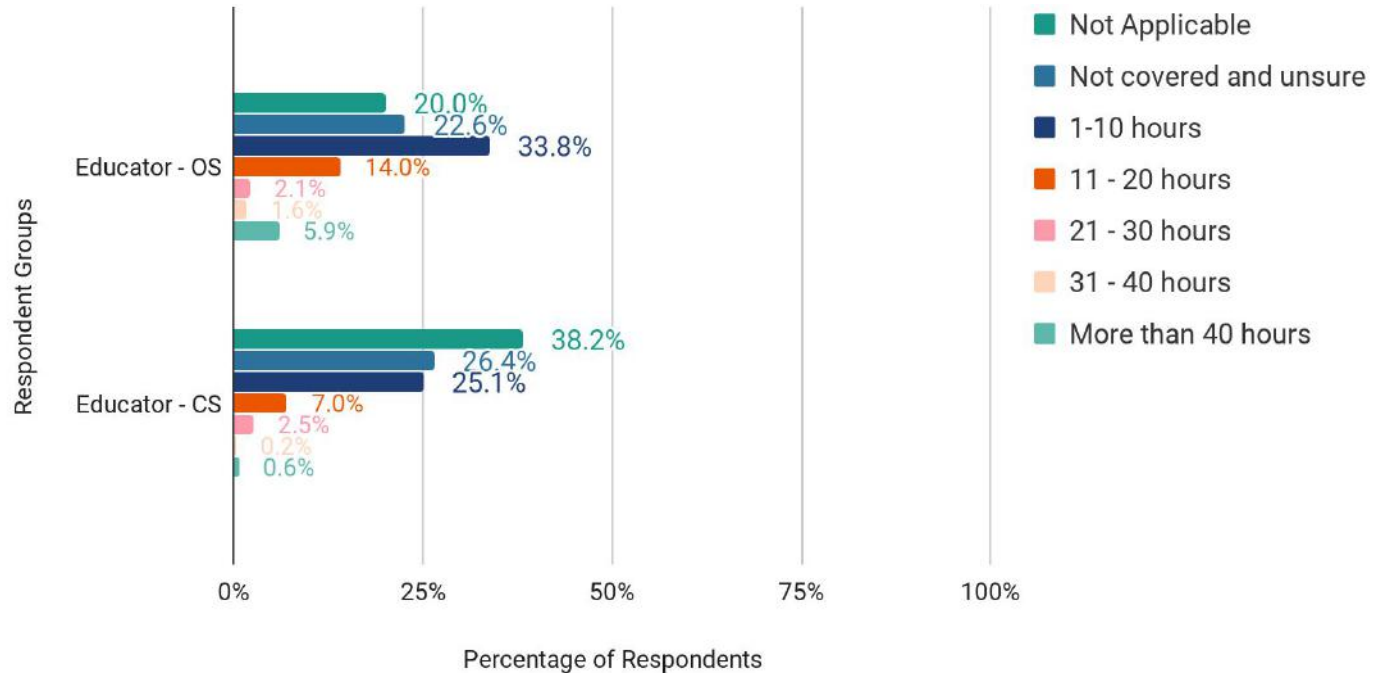
## Alberta

Over half of students (51%), the general public (50%) and open sample educators (62%) believe that education is a high priority for schooling. On the other hand, only 32% of parents agree.

## Notable Differences

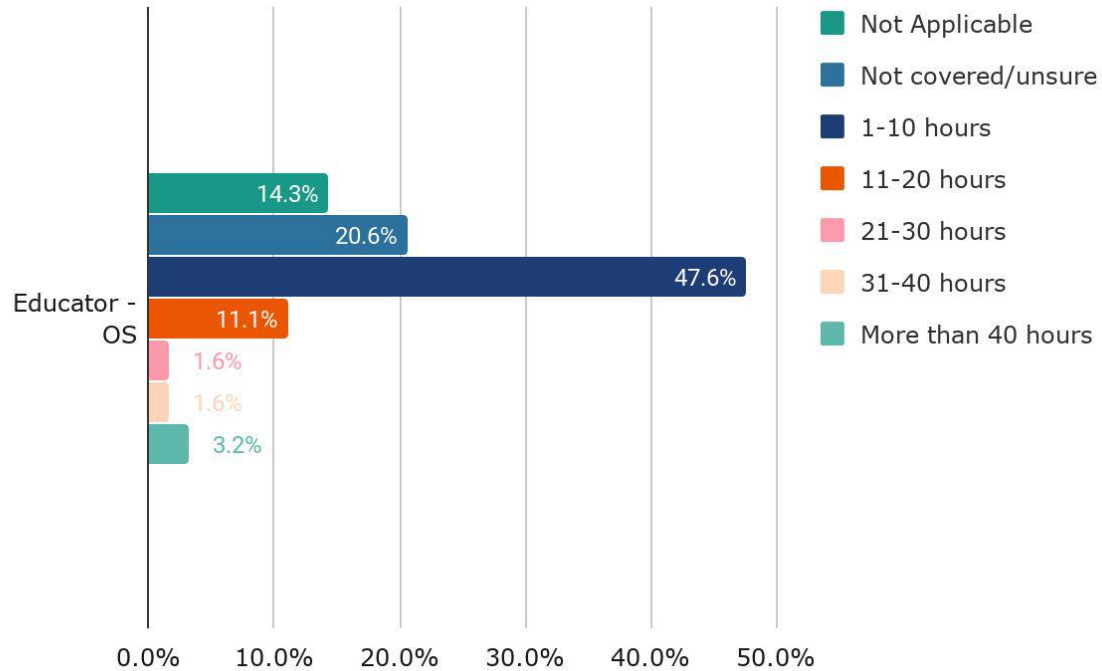
Overall, Alberta respondents feel less sure that education is a high priority for schooling. The largest difference is found between groups of parents. Nationally, 53% of parents agree that climate change education is a high priority compared to 21% lower agreement in Alberta (32%).

# National - How many hours over a school year/semester would you typically spend covering topics related to climate change in your classroom



n= 1231 (Educator OS = 1120, Educator CS = 111)

# Alberta - How many hours over a school year/semester would you typically spend covering topics related to climate change in your classroom



n=63 (Educator OS = 63)



# How many hours over a school year/semester would you typically spend covering topics related to climate change in your classroom

## National

When asked how many hours in a semester or year educators focus on climate change, 23% of the open-sample and 26% of closed-sample educators indicated that they do not cover climate change, while 20% of the open-sample, and 38% of the closed-sample educators reported that climate change is not applicable to the grade/subject they teach. 34% of the open-sample and 25% of the closed-sample educators spend 1 to 10 hours of instruction per year or semester focused on teaching climate change. For what has become the defining issue of the 21st century, classroom instruction time focused on climate change is minimal in most cases.

Overall, 35% of closed-sample educators reported spending at least some time teaching about climate change. This compares with the American NPR/IPSOS poll from March of 2019, which found that 42% of teachers teach about climate change (Kamenetz, 2019).

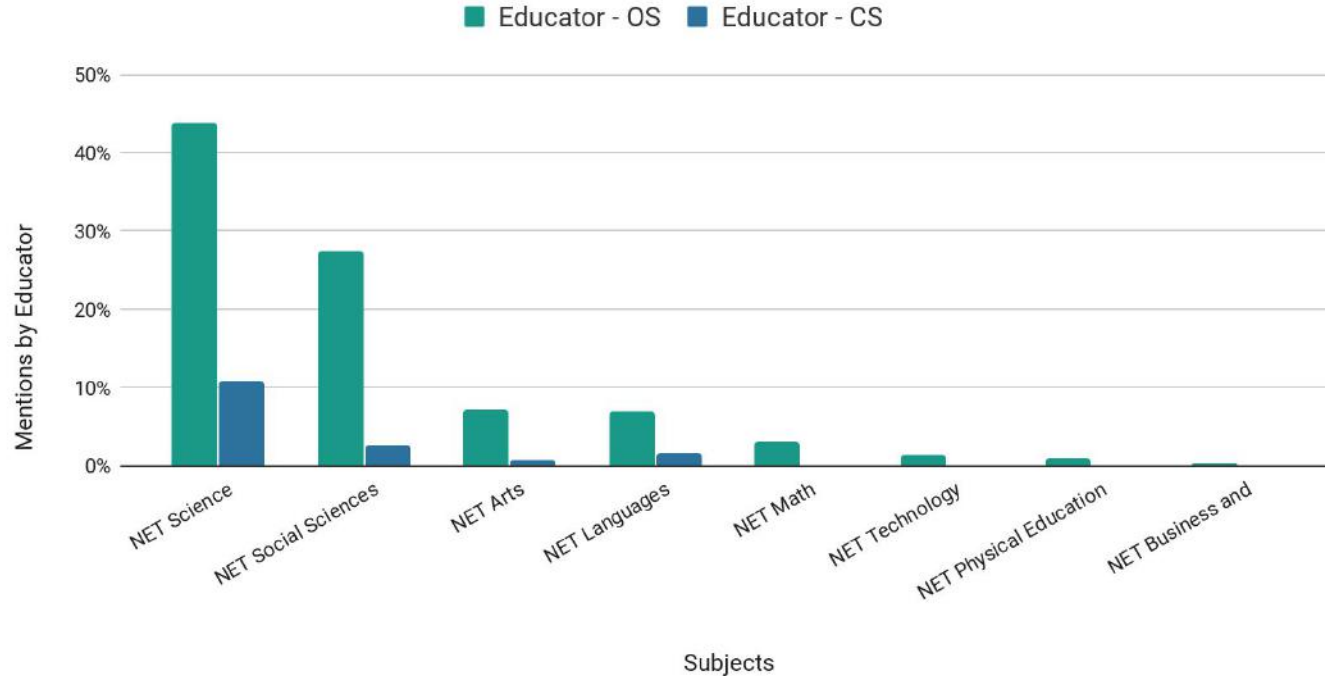
## Alberta

35% of open-sample educators in Alberta are unsure of their coverage or it is not applicable to the subject they teach. 48% of educators spend 1-10 hours of instruction on climate change content and 17.5% spend more than 10 hours on climate change content.

## Notable Differences:

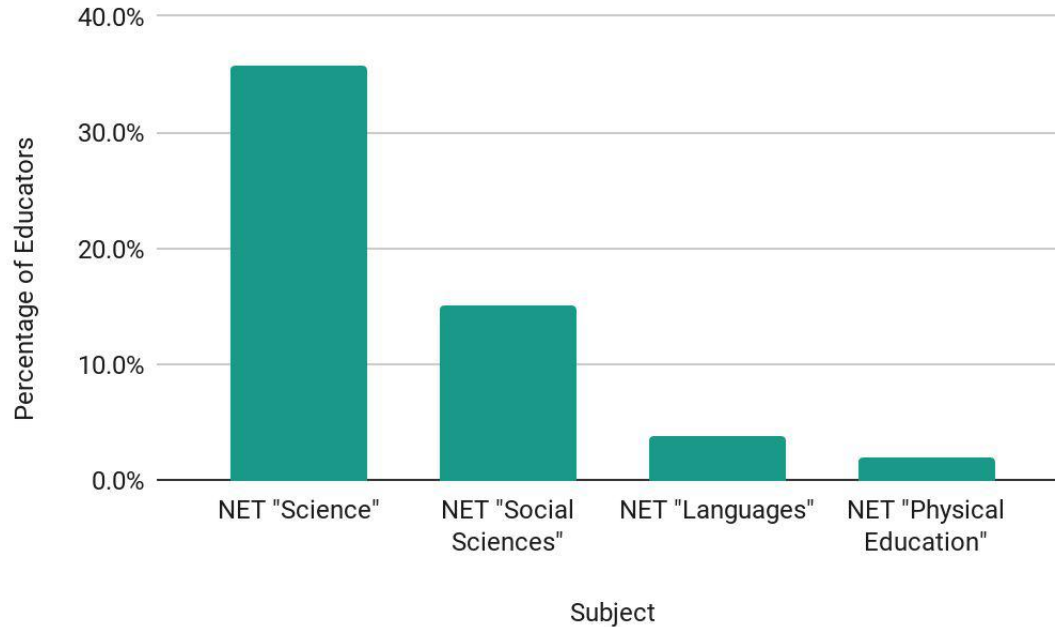
The distribution of responses is similar in Alberta to national results. However, a notable difference, is the amount of teachers in Alberta who teach between 1-10 hours of climate change instruction (48%) is much higher than the national results (both OS=34% & CS=25). It appears that a higher number of educators nationally either report that climate change is not applicable to their teaching practice or report not teaching it at all. Less than 25% of educators both in Alberta (17%) and nationally (OS=24%, CS= 10%) report teaching more than 10 hours per semester/year.

# National - Do you cover climate change topics in any of the subjects that you teach? If yes, which subjects?



n= 1231 (Educator OS = 1120, Educator CS = 111)

# Alberta - Do you cover climate change topics in any of the subjects that you teach? If yes, which subjects?



n=63 (Educator OS = 63)

# **Do you cover climate change topics in any of the subjects that you teach? If yes, which subjects?**

## **National**

Science-related subjects were the most chosen by both open-sample and closed-sample educators as the places in which teachers most often integrate climate change topics, followed by social sciences. The arts, languages, math, technology, physical education, and business and economic courses were the least named, if named at all.

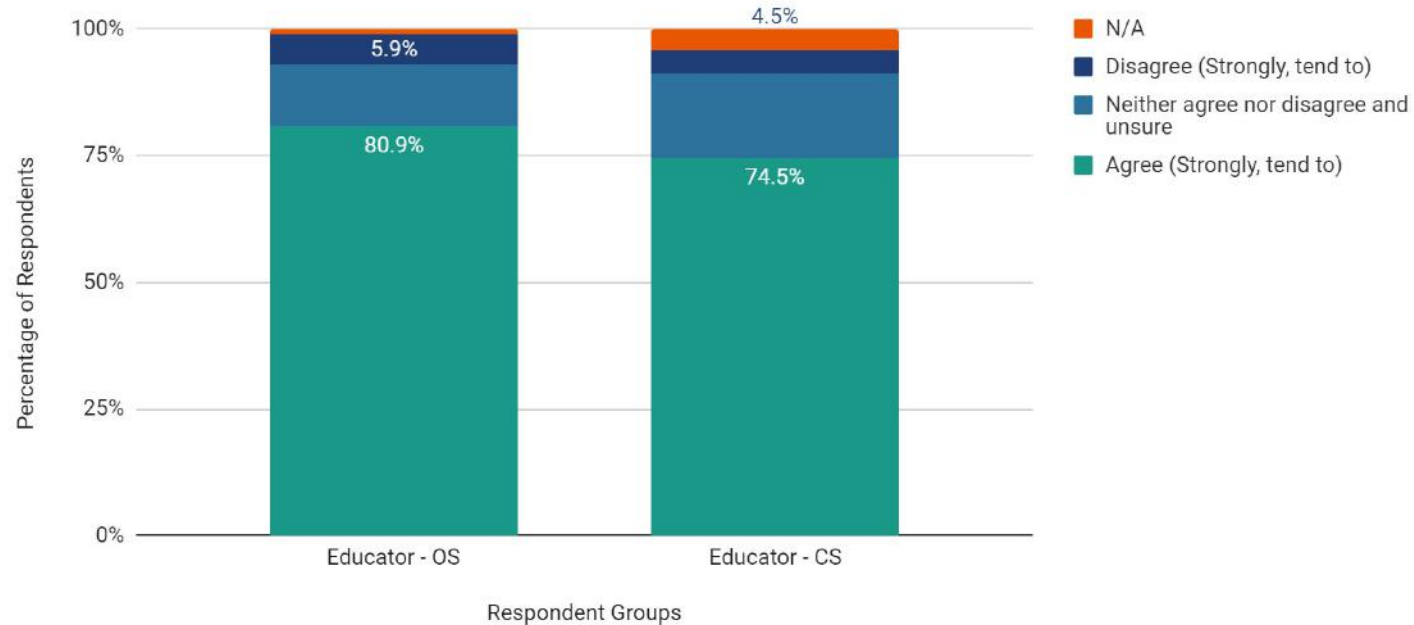
## **Alberta**

Among Alberta respondents, science-related subjects fall far ahead in mentions by educators compared to every other subject. After sciences, social sciences was mentioned most often. Languages and physical education were hardly cited by educators as classes where climate change is taught.

## **Comparison**

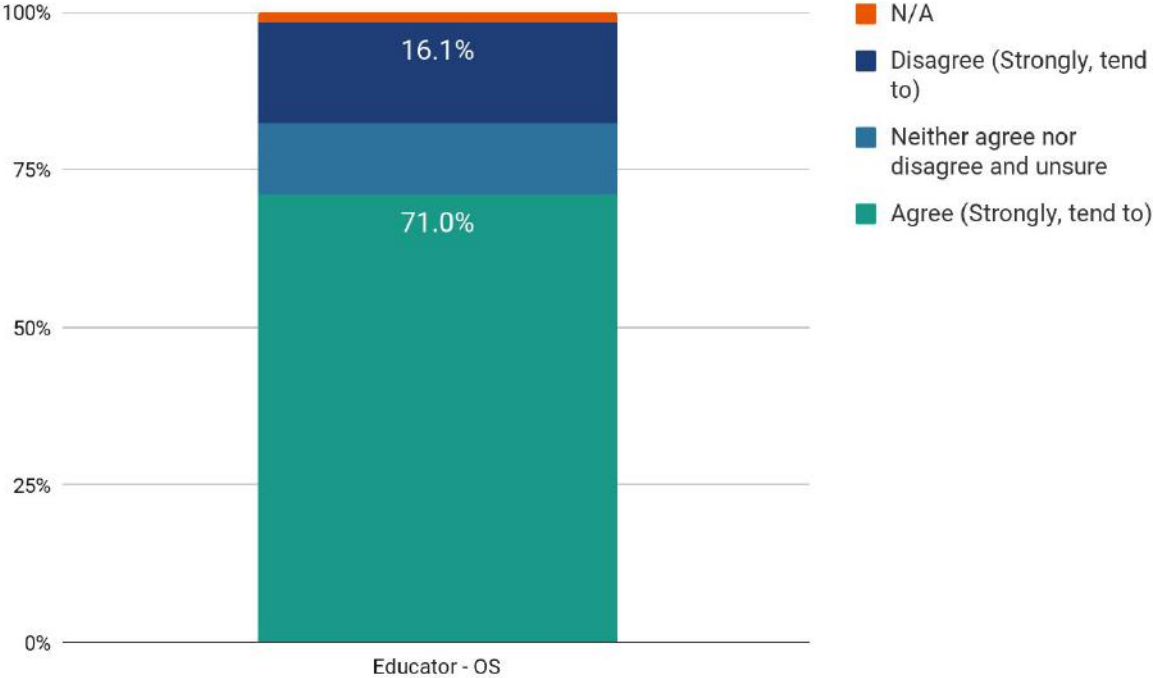
Responses are similar between the national responses and Alberta educators. Science is the most likely subject where climate change will be taught, followed by social sciences, and every other subject falls much farther behind in mentions.

# National - I believe climate change education is the role of all teachers



n= 1231 (Educator OS = 1120, Educator CS = 111)

# Alberta- I believe climate change education is the role of all teachers



n=63 (Educator OS = 63)

# I believe climate change education is the role of all teachers

## National

75% of closed-sample educators and 81% of open-sample educators believe that climate change education is the role of all teachers.

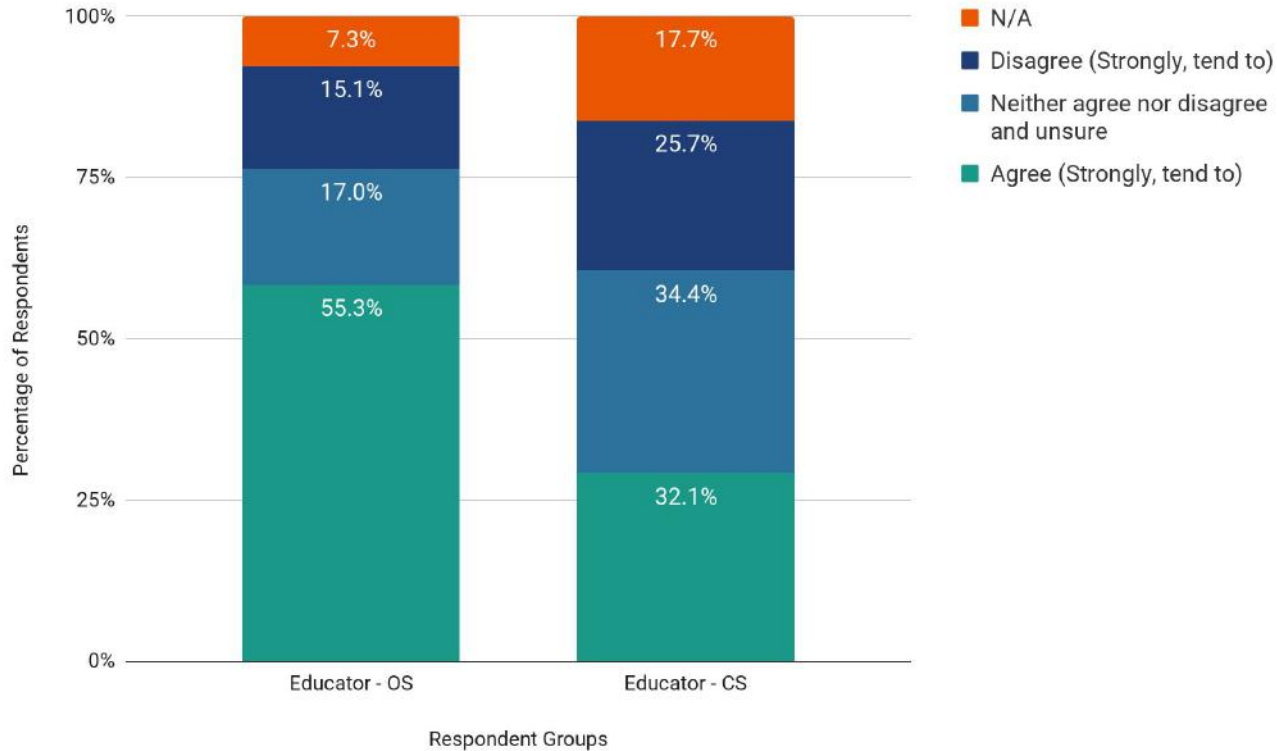
## Alberta

71% of open sample educators in Alberta believe that climate change education is the role of all teachers and 16% strongly or tend to disagree.

## Notable Differences:

More educators in Alberta disagree with the idea that all teachers are responsible for climate change education (16%) compared to the national average (open sample: 6%, closed sample: 5%).

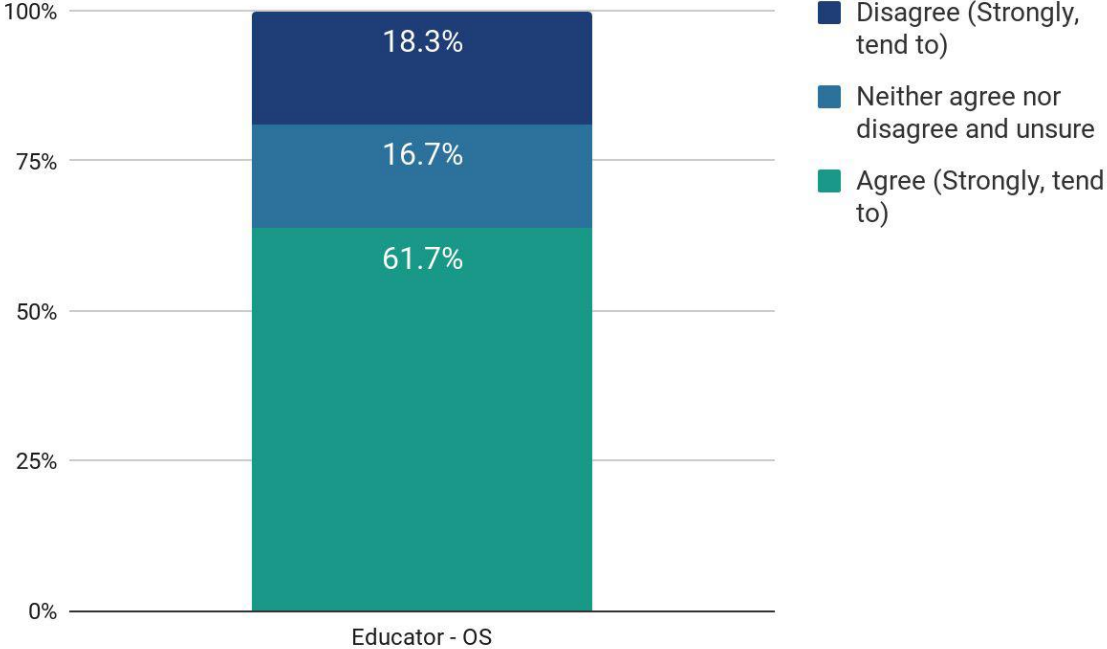
# National - I feel I have the knowledge and skills needed to teach climate change education to my students.



n= 1231 (Educator OS = 1120, Educator CS = 111)



# Alberta- I feel I have the knowledge and skills needed to teach climate change education to my students.



n=63 (Educator OS = 63)

# **I feel I have the knowledge and skills needed to teach climate change education to my students.**

## **National**

There is a disparity between educators' level of preparedness for teaching climate change. Over half of open-sample educators (55%) indicated feeling prepared, compared to less than one-third of closed-sample educators (32%).

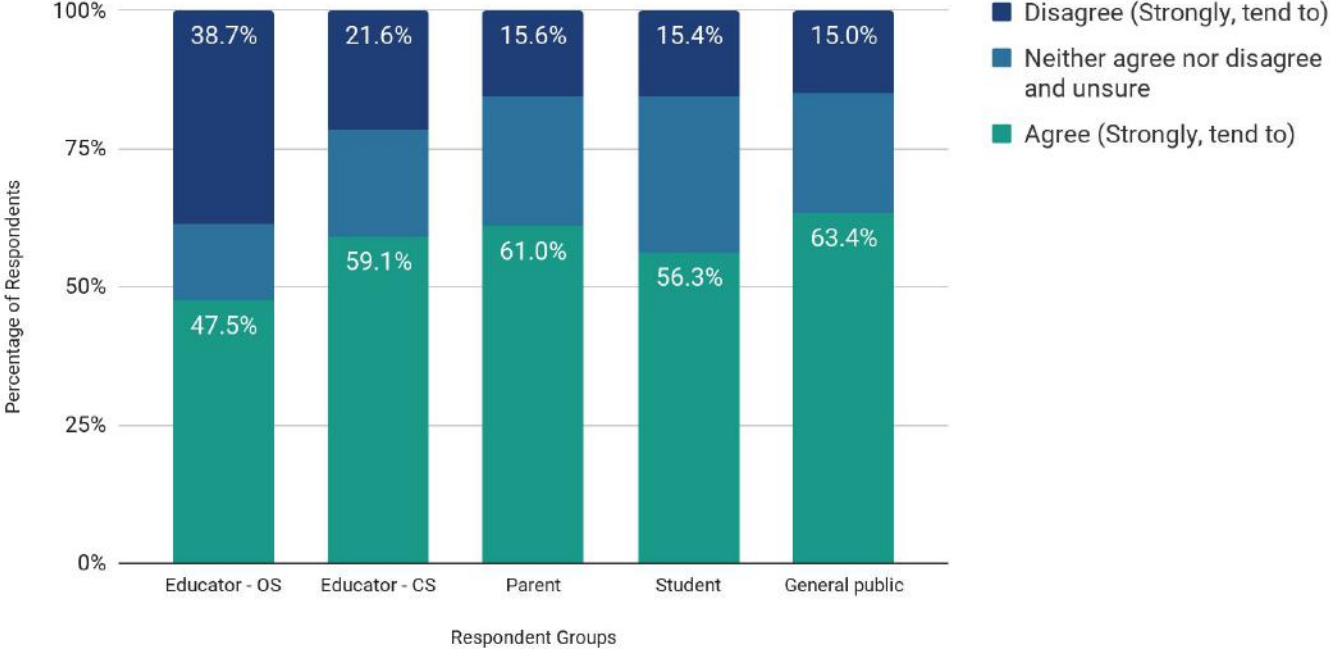
## **Alberta**

Almost two thirds of Alberta open-sample educators report feeling that they have the knowledge and skills to teach climate change education (62%).

## **Notable Differences**

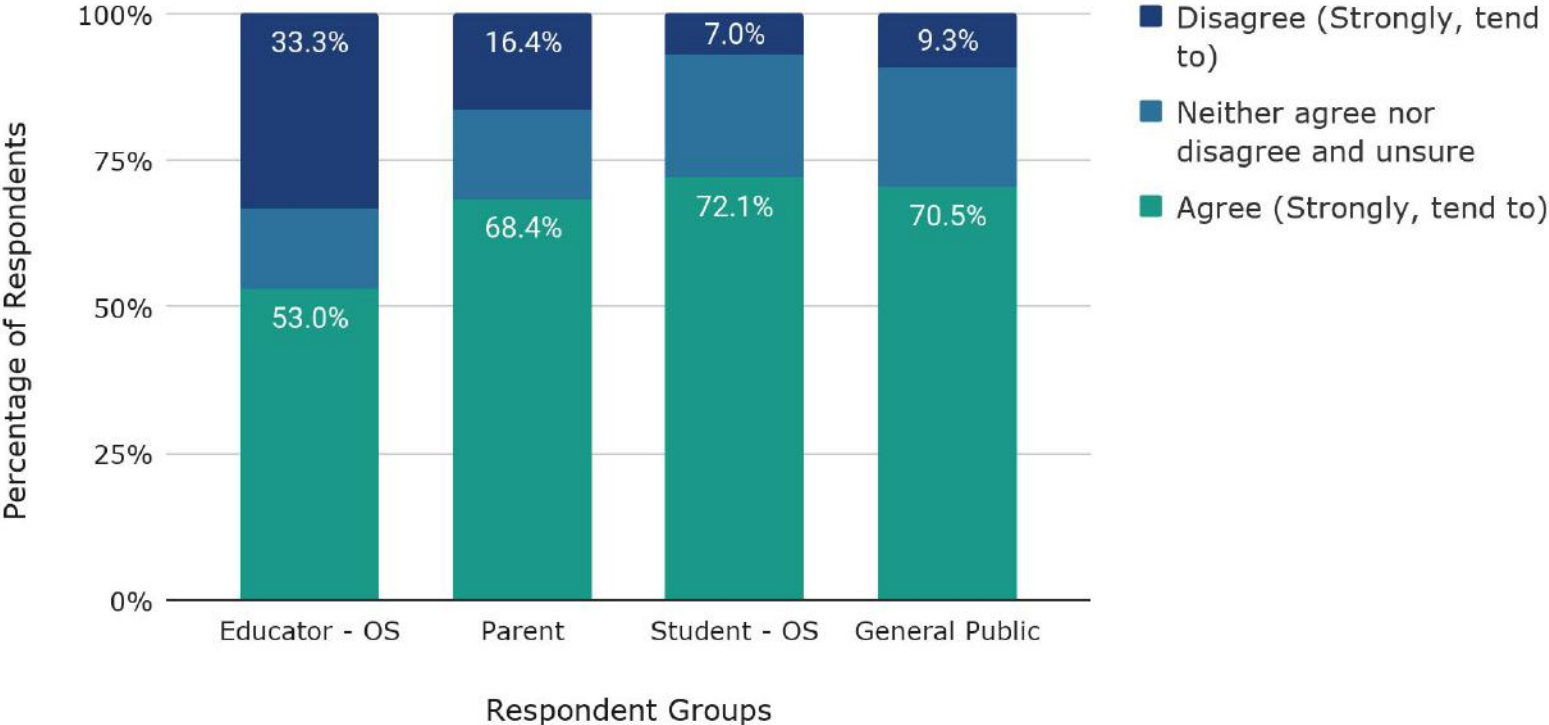
Overall, Alberta open-sample educator respondents feel more confident in their knowledge and skills compared to the national average. As a comparison, 83% of this group of educators answered 8 to 10 climate knowledge questions correctly compared to nationally.

# National - Climate change education should include 'both sides' of the debate equally



n = 1231 (Educator OS = 1120, Educator CS = 111)

# Alberta - Climate change education should include 'both sides' of the debate equally



# Climate change education should include ‘both sides’ of the debate equally

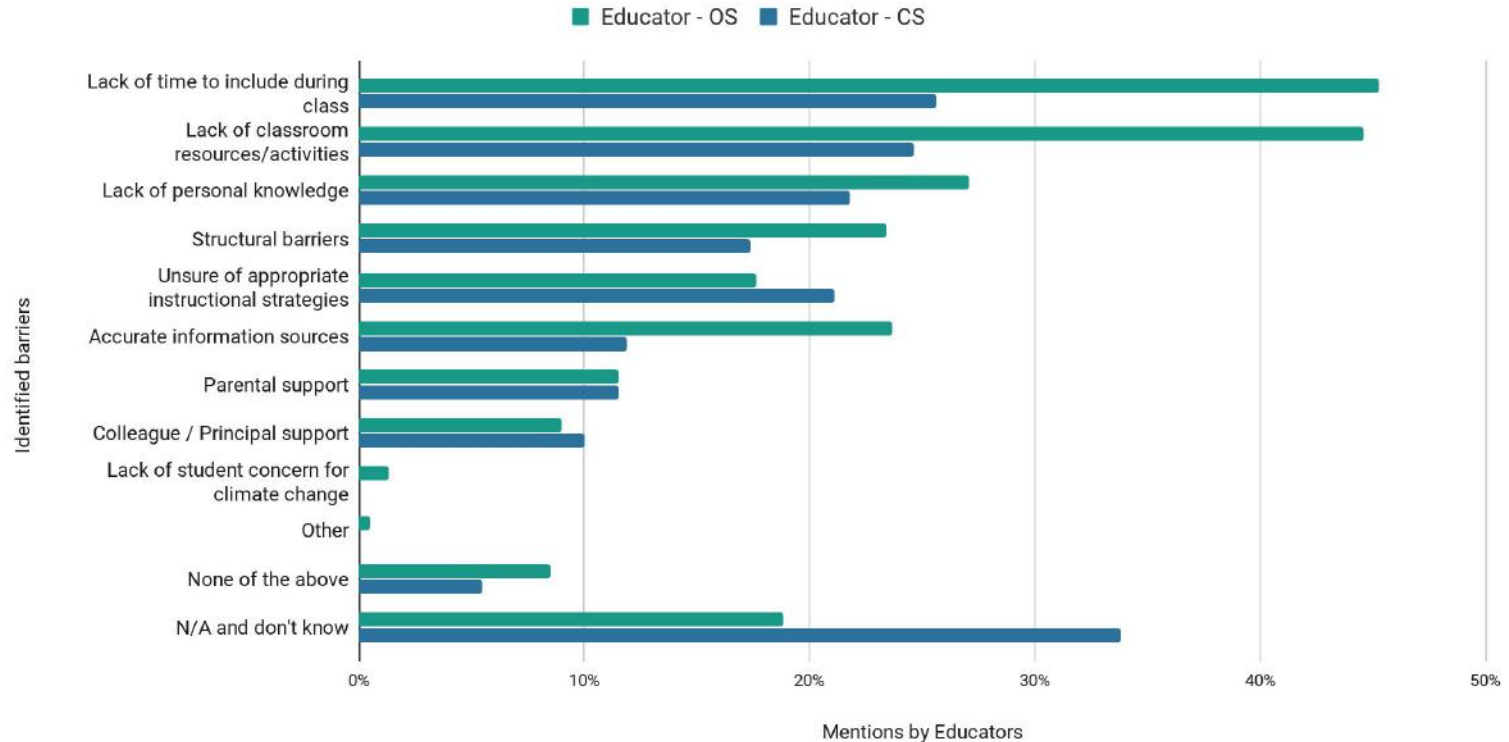
## National

Educators have differing views on including ‘both sides’ of the climate debate equally. 39% of open-sample educators disagreed with this statement whereas only 22% of closed-sample educators disagreed.

## Alberta

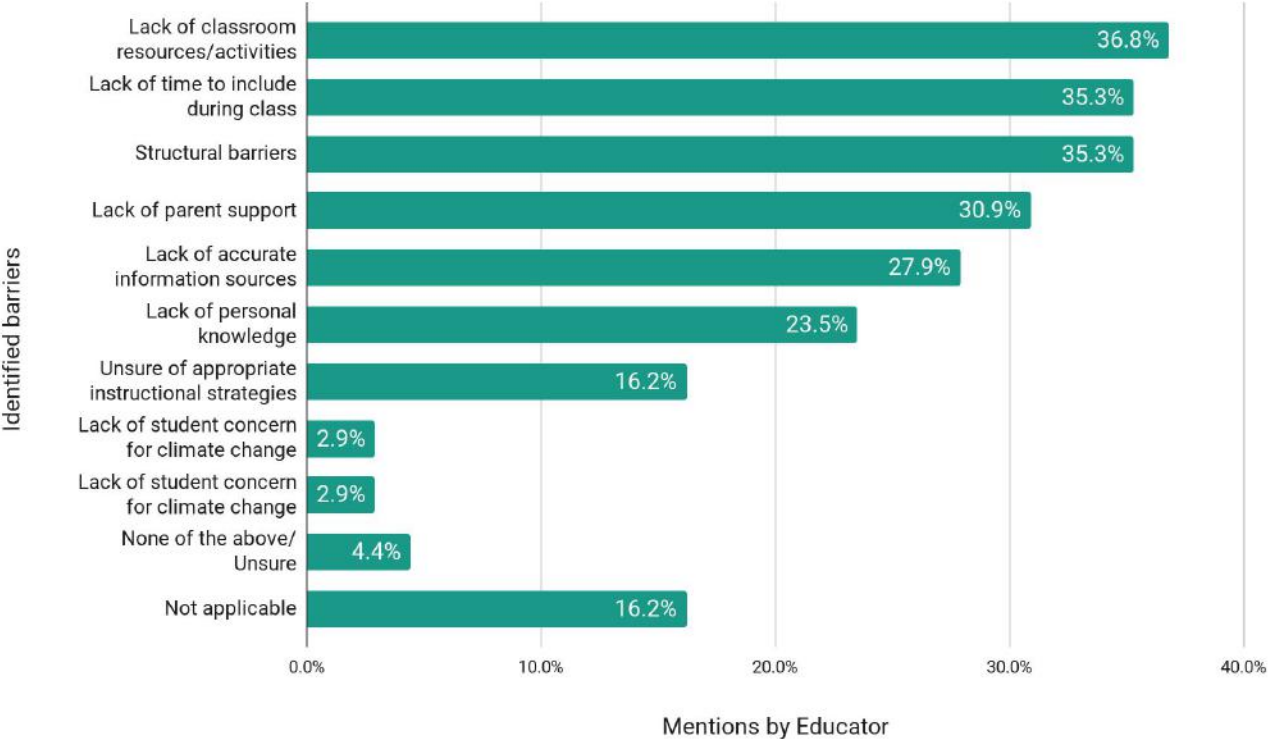
In Alberta 33% of open-sample educators disagreed with the statement and only 16% of parents, 9% of members of the general public, and 7% of students did. The Alberta open-sample of educators had high self-reported confidence in knowledge and did well on the climate change knowledge. It is interesting that only 53% feel that climate change should not be taught as a debate, given the scientific consensus and the teachers knowledge and confidence. This may be a strategy that teachers have adopted for teaching a topic that does not seem to have public consensus in Alberta.

# National - What are some of the barriers you have experienced when attempting to include climate change education into your classroom?



n=1231 (Educator OS = 1120, Educator CS = 111)

# Alberta- What are some of the barriers you have experienced when attempting to include climate change education into your classroom?



n=63 (Educator OS = 63)

# What are some of the barriers you have experienced when attempting to include climate change education into your classroom?

## National

Presented with a list of choices, the largest barrier that educators reported when attempting to include climate change education in classrooms was lack of time (OS=45%, CS=26%), followed by lack of classroom resources (OS=45%, CS=25%), and lack of personal knowledge by both open-sample (27%) and closed-sample educators (22%). Parental, colleague, or principal support, or lack of student concern about climate change were not identified as barriers by a large percentage of educators.

## Alberta

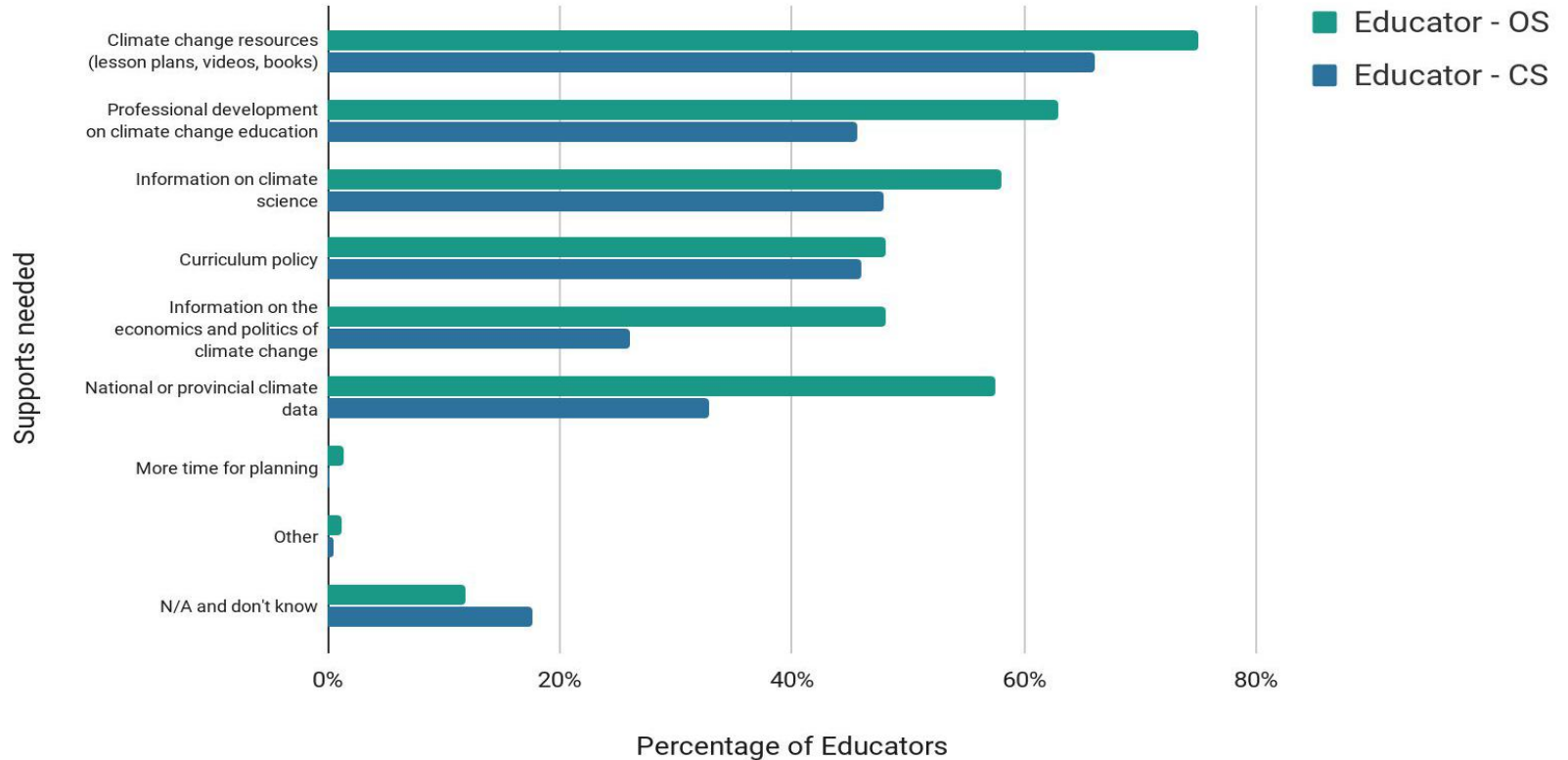
The top barrier that Alberta educators chose from a list of options when attempting to include climate change education into their classroom is lack of classroom resources/activities (37%) followed by lack of time (35%) and structural barriers (35%), lack of parental support (31%) and lack of accurate information sources (28%) were also highly cited by Alberta educators.

## Notable Differences

Lack of parental support is cited much more often in Alberta (31%) compared to nationally (12%). Whereas, lack of personal knowledge is much more likely to be a barrier on a national level (OS=27%, CS=22%) compared to Alberta.

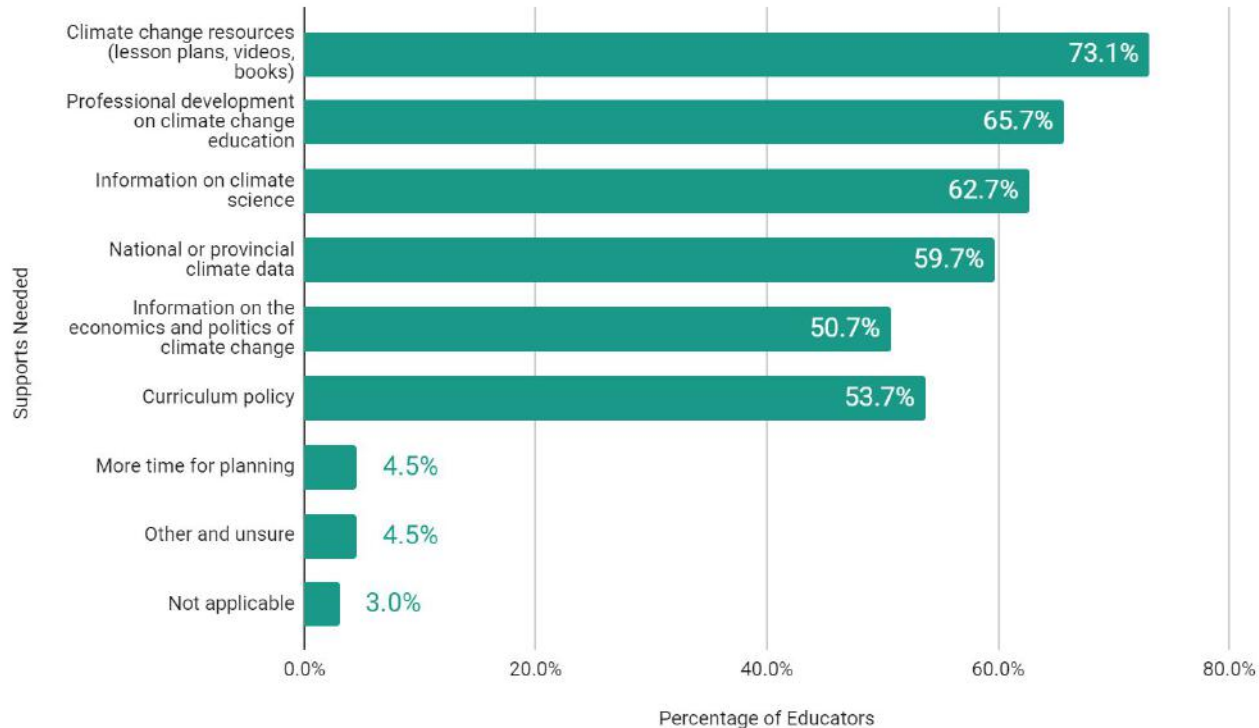


# National - What support(s) do you need to teach climate change in your subjects?



n=1231 (Educator OS = 1120, Educator CS = 111)

# Alberta - What support(s) do you need to teach climate change in your subjects?



n=63 (Educator OS = 63)

# What support(s) do you need to teach climate change in your subjects?

## National

Presented with a list of possible choices of supports educators might need to teach climate change in their subjects, climate change resources (including lesson plans, videos and books) were the most chosen (OS=75%, CS=66%), followed by professional development on climate change education (OS=63%, CS=46%), information on climate science (OS=58%, CS=48%), curriculum policy (OS=48%, CS=46%), information on the economics and politics of climate change (OS=48%, CS=26%), and national/provincial climate data (OS=58%, CS=33%). Least noted was time for planning (OS=1% CS=0%).

## Alberta

The top three supports that Alberta educators chose from a list of options to help support climate change education were: climate change resources (73%), professional development on climate change education (66%), and information on climate science (63%). Over 50% of educators also asked for: national or provincial climate data (60%), curriculum policy (54%) and information on the economics and politics of climate change (51%).

## Notable Differences

The most requested supports were identical between the national and Alberta specific responses.

# Ladder of Engagement: Overview

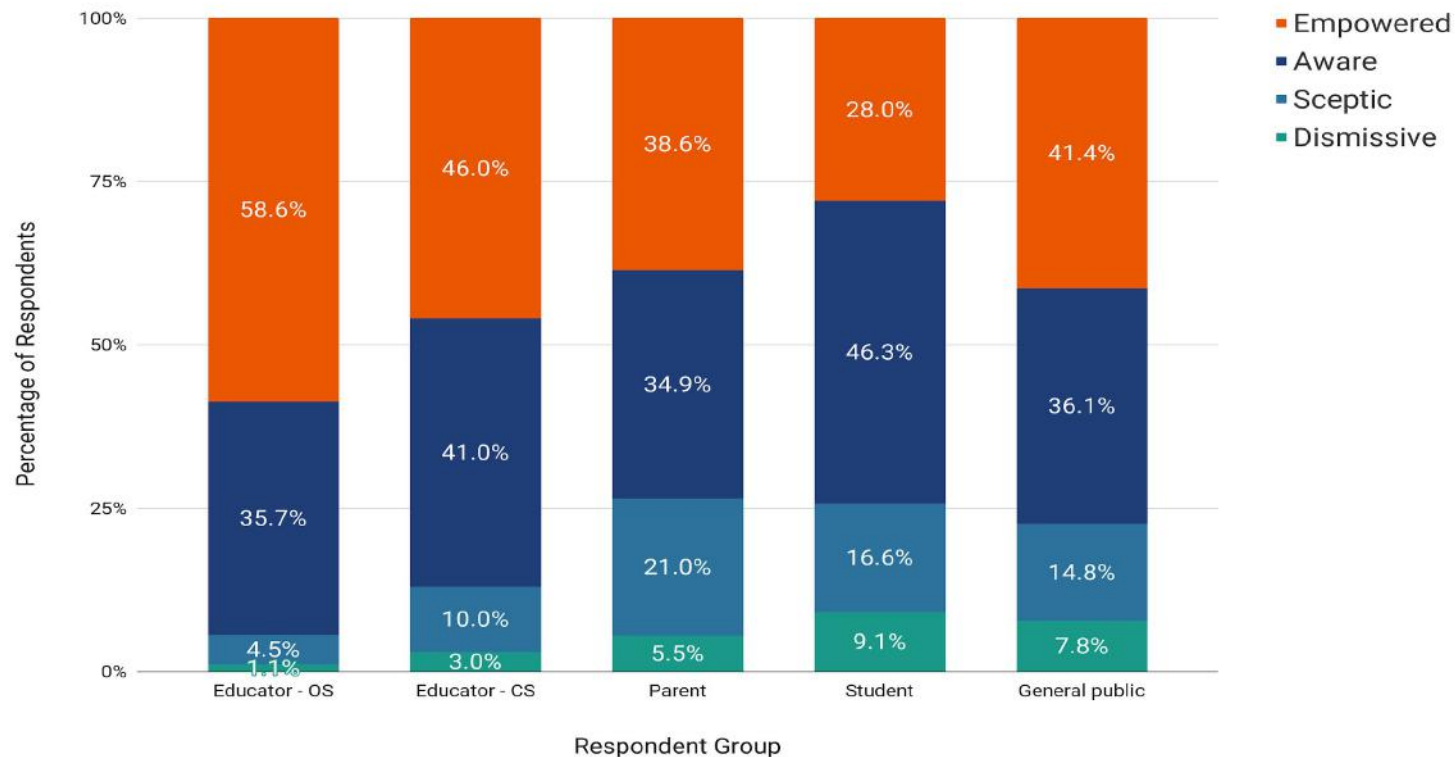
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EcoAnalytics put forward a Canadian ladder of engagement. The map is comprised of four audiences: *dismissive*, *sceptics*, *aware*, and *empowered*. We chose to apply the ladder of engagement to segmented groups to create a clearer picture of how Canadians perceive and engage with climate change at a broad level.

- **Dismissives:** disagree that climate change is happening
- **Sceptics:** 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

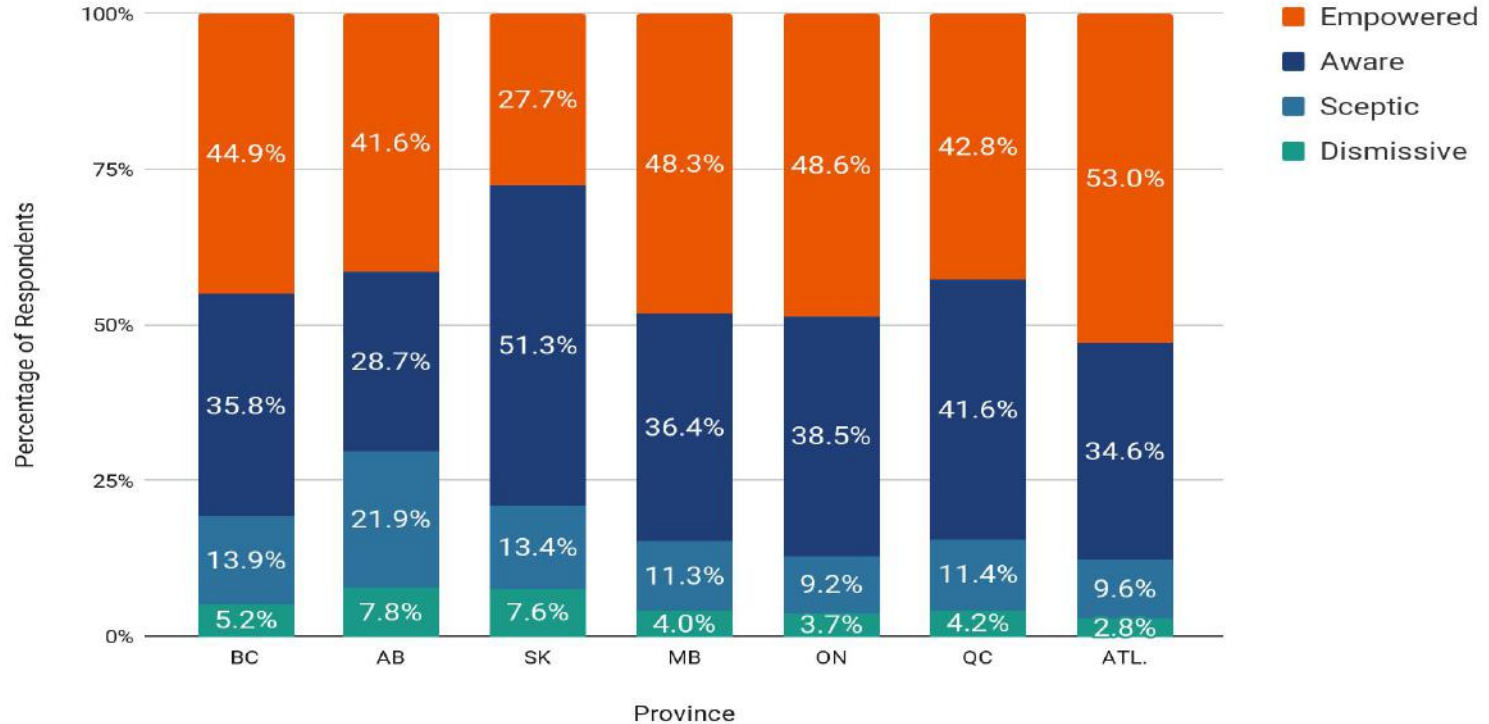
“In reality, the engagement process is non-linear, but for analytical purposes it helps to present groups of Canadians in a ranking from least to most likely to be “engaged” (Ecoanalytics, 2016).

# Ladder of Engagement: National Overview



n=3196 (Educator OS = 1120, Educator CS = 111, Parent CS = 571, Student CS = 486, General public = 908)

# Ladder of Engagement: Provincial Breakdown



n=2180 (BC=196, AB=160, SK=73, MB=70, ON=749, QC=814, ATL=118)

# Formal Education Recommendations

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- Ministries of Education should release policy statements guiding climate change education
- Ministries of Education should revise curricula to embed core climate change expectations across subjects, with a focus on multiple dimensions of climate change including scientific and environmental, social, cultural, and economic; climate impacts and risk; mitigation and adaptation strategies; and dimensions of justice and ethics
- Ministries of Education should develop a consultation mechanism for youth and First Nations, Metis, and Inuit to participate in curriculum development and review processes for climate change content
- Faculties of Education should ensure teacher-candidates' courses address best practices of climate change education



# Formal Education Recommendations Cont'd

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- School boards and teachers' unions should provide professional development to enhance teacher knowledge, tools and strategies for teaching about climate change, thereby increasing teachers' confidence and ability to engage students.

**Provide instructional strategies for handling different points of view on aspects of climate change and inquiry processes for fostering critical thinking and evidence-based dialogue.**

**Provide resources to help students understand citizen movements and the process of systemic change.**

**Provide teachers with current national/provincial climate data and classroom resources including lesson plans, videos and books to ensure students are learning up-to-date, locally-relevant information.**

- To address apathy and eco-anxiety, school boards, schools and teachers should ensure student learning is authentic and relevant to local climate impacts, utilizing strategies including inquiry, experiential learning, opportunities for deliberative dialogue, and community partnerships for local climate action.
- School boards should provide information on emerging and already established green sector career pathways for teachers and guidance counsellors.



# Public Education Recommendations

- Informal education should provide Canadians with more information about climate change from trusted sources including scientists and academics, utilizing television and radio news programming, online news, documentaries and movies
- Informal education should address predominant misconceptions about climate change and improve public understanding of its primary causes, enabling citizens to understand the need for responses to climate change, such as greenhouse gas reduction policies, and the urgency of this need
- Informal education should provide Canadians with information resources on high impact personal climate actions that they can integrate into their daily lives



# Public Education Recommendations Cont'd

- Informal education agencies should provide a guide book and resources to help parents and grandparents to know how to talk to children and young people about climate change. This resource should draw upon current environmental psychology research.
- Informal education should share case studies of how stakeholders can work together to address climate change locally and nationally, focusing on collective processes that lead to systemic changes

# Contact Information

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Dr. Ellen Field

Lakehead University

[efield@lakeheadu.ca](mailto:efield@lakeheadu.ca)

Learning for a  
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**LSF**



L'éducation au  
service de la Terre

**LST**

Pamela Schwartzberg

Learning for a Sustainable Future

[pam@LSF-LST.ca](mailto:pam@LSF-LST.ca)