These Needs were compiled by CERBC in collaboration with students, parents, teachers, scientists, and other community members.



Context

Recognizing Article 12 of the Paris Climate Agreement¹ and the BC Ministry of Education's purpose to ensure students are prepared to contribute to a "healthy society and a prosperous and sustainable economy", the BC community implores the Ministry of Education to fulfill these commitments and accept the six Needs outlined in this document.

Furthermore, Premier Horgan mandated² that our Minister of Education Jennifer Whiteside take steps toward:

- 1. Putting people first
- 2. Lasting and meaningful reconciliation
- 3. Ensuring equity and anti-racism
- 4. A better future though fighting climate change
- 5. A strong and sustainable economy

Each of these mandates is reflected in the following Needs and are necessary steps in order to create a just, inclusive, and equitable education system that prepares students to understand and contribute to adaptation and mitigation of the effects of the climate crisis.

A "need" is the requirement of an essential and important necessity. Urgent, evidence-based, measurable action on the climate crisis -- a key intergenerational justice issue of our time -- is a shared need of children and youth and collective responsibility of adults to deliver upon.

We additionally ask that the Ministry of Education comes up with a timeline for each of the Needs listed below, and presents them to the CERBC team within a reasonable timeframe, to ensure that community voices are accurately consulted, represented and heard.

¹ https://unfccc.int/sites/default/files/english_paris_agreement.pdf

² https://www2.gov.bc.ca/assets/gov/government/ministries-organizations/premier-cabinet-mlas/minister-letter/fleming-mandate.pdf

Our Communities Need:

1) A public declaration of a Climate Emergency³ from the BC Ministry of Education, alongside a public commitment to act through a climate justice, decolonizing, and anti-oppressive lens.

Our provincial government must commit to treating the climate crisis as a true emergency and reflect this through our education system. Twenty-three city jurisdictions within BC and approximately 500 across Canada have declared a state of climate emergency⁴. Declaring a state of climate emergency necessitates adhering to professional and scientific recommendations in all decisions, including following the guidelines as laid out by the Intergovernmental Panel on Climate Change (IPCC) report⁵ and the Paris Agreement. This declaration must come alongside acknowledging the interconnected and inseparable nature of climate change and social justice.

This declaration must also include a promise to put equitable climate change education and climate mitigation as a top budget priority, meaning that the Ministry promises to spend the appropriate amount that is required to fund meaningful changes, as determined through third-party professional and community consultation.

2)

A. The creation of specialized committees at the provincial and/or district levels that direct the following:

- 1. To review how British Columbia's K-12 education system could be better preparing students to face our world's state of climate emergency.
- 2. To review what tools, resources, and professional learning school staff need to teach a new climate education curriculum in an effective, accurate and unbiased way.
- 3. To review how teaching practices and methods across BC can be better adapted to climate and anti-oppressive education.
- 4. To review how British Columbia's school infrastructure can align with IPCC 1.5° targets and net-zero goals.
- 5. To actively seek and integrate community partnerships at a district and classroom level to further and continually enhance climate education.

³ The Federal Declaration of a Climate Emergency Commons, House of. (June 17, 2019) Vote No. 1366, National climate emergency. Retrieved from https://www.ourcommons.ca/Members/en/votes/42/1/1366/

⁴ National Climate Declarations: https://www.theclimatemobilization.org/climate-emergency/

⁵ IPCC 1.5 C Report: <u>https://www.ipcc.ch/sr15/download/</u>

6. To keep the BC Ministry of Education and School Districts publicly accountable for changes by creating a measurable timeline and clear measures of success, and publishing regular progress reports.

The purpose of these committees will be to ensure timely action and ongoing accountability on key aspects of climate education reform. Partnerships with researchers and policy experts, as well as Black, Indigenous, and People of Colour voices and those with lived experiences, should be included wherever appropriate to best guide actions. As illustrated in point five above, there should be a designated committee to evaluate what partnerships should be formed to create an effective, science-based, and anti-oppressive climate justice education system.

B. The creation of a Community Consultation Committee at both the provincial and district levels to provide active feedback and insight on the education reform process.

This committee should include, but is not limited to, the diverse and balanced voices of climate professionals, climate activists, educators, First Peoples and other community members to oversee and advise the educational reform process.

This committee must be given active access to updates on all work being done in committees around climate education reform, and be consulted on an ongoing basis. By bringing together individuals from all parts of our community in a structured committee, we can collaboratively shape a holistic and representative plan for curriculum change, classroom implementation, and further educational reform in an efficient manner.

This committee must stand independent from the Ministry of Education's internal body, as well as fossil fuel companies or those with business risks associated with climate reform, to ensure that calls for necessary change will not be watered down to serve our fossil fuel-driven and dependent society.

C. The creation of a preliminary Coordinating Committee made up of Ministry staff to assess the criteria and qualifications of individuals, and oversee the creation of these committees.

Acknowledging that there are many barriers in the creation of these committees, an initial internal committee should be set up to meet and discuss the formation and organization of committees as outlined in Part A and Part B, as well as Need number three. They should evaluate how many committees should be set up, how large each should be, and how responsibilities will be divided amongst these committees. They should then consider what qualifications and attitudes are required to suitably take on the various responsibilities, as well as what kind of process can be undertaken to seek diverse and representative community members for the Community Consultation Committee. This may include

working alongside Climate Education Reform BC, who can assist with the process of reaching out to community members.

Measures to set up this Coordinating Committee should be taken immediately.

3) The creation of a Youth Advisory Committee to work alongside the BC Ministry of Education as well as individual district-level committees to ensure that student voices are consistently heard.

The provincial Youth Advisory Committee's purpose will be to provide representative, climate action driven voices within the BC Ministry of Education and school districts to ensure the implementation of effective and meaningful education reform. Currently, while positive efforts to seek youth input have been made, such as through District Student Councils, there is no provincial body nor any dedicated body to climate education. This advisory body represents the primary stakeholder in the education system and will offer not only the voices of a select group of students to guide work being done but will also take on the responsibility of actively consulting with youth across fellow districts to collectively represent the student voices of the province.

Similarly, the individual District level committees will provide a space for youth to actively participate in conversations regarding the application of teacher practice, community engagement, and the future of our education system at a detailed level.

This committee will be essential to accountability and will ensure that our school system truly meets student needs. Members of this committee should be selected through a process that ensures equity and diversity.

4) A revision of the K-12 Curriculum to implement comprehensive intersectional, interdisciplinary, and action-oriented climate education across subjects.⁶

This revision must integrate climate justice education into mandatory courses at all grade levels⁷ beyond science subjects, communicating key concepts to students adjusted to their school context (e.g. age, grade, subject, environment, city, etc). Addressing physical climate, climate politics, climate justice and anti-oppression, stewardship and community applications (activism, etc.), and mitigation strategies and solutions (real world exemplars, etc.) are all crucial to addressing climate change as the severe, holistic crisis it is.

⁶ Italy to make climate change study compulsory in schools. *Reuters*. Retrieved from https://www.reuters.com/article/us-climate-change-italy-exclusive/exclusive-italyto-make-climate-change-study-compulsory-in-schools-idUSKBN1XF1E1

⁷ New Jersey K-12 Climate Education https://www.nj.gov/governor/news/news/562020/20200603b.shtml

The curriculum change must enable all students to:

- Understand the physical climate system and the causes and effects of climate change.
 - Evidence of rising global temperatures and the scientific consensus.
 - Human responsibility for climate crisis and primary causes.
 - The diverse and damaging impacts associated with climate change.
- Understand the urgency of the climate crisis and the need to act now.
 - The timelines and scale of action we need, and the challenges this presents.
 - The comparison between the climate crisis and other historical crises.
 - Regular up to date information on current political and technological progress.
- Understand the political, economic and sociological aspects of the climate emergency.8
 - The history of the UN and other policy efforts, including in Canada and BC, to address climate change, and how/why they have failed to date.
 - The arguments on both sides of key controversies over climate policies (e.g. carbon tax, pipelines).
 - How human nature and social structures have contributed to the climate emergency (e.g. role of capitalism, colonialism, psychology).
- Understand the relationship of social justice issues with climate change and climate solutions.
 - How colonialism and racism intersect with the climate crisis.
 - The disproportionate and devastating impact of climate change on underprivileged populations and other vulnerable communities.⁹ (Eg: climate change causing harm to women and girls, migrant communities, poorer and racialized populations disproportionately, climate migrants).
 - Indigenous sovereignty, rights, and culture¹⁰ (land and water defenders, ongoing disputes, traditional stewardship).
- Critically engage in politics.¹¹
 - Why civic engagement is important, particularly in regards to the climate crisis.
 - How to register as a future voter and importance of voting.
 - How to hold the government accountable beyond voting.
 - How to critically interpret climate news, climate politics and related information in the media, including around key controversies.

⁸ Ethiopia - curriculum reform process - education for climate resilience and green economy https://www.unitar.org/about/news-stories/news/education-climate-change-ethiopia-government-leads-discussion-priorities-climate-resilient-and-green

https://www.un.org/sites/un2.un.org/files/udhr.pdf

 $^{{\}color{blue} {\bf 10}} \ https://\underline{www.un.org/development/desa/indigenouspeoples/declaration-on-the-rights-of-indigenous-peoples.html}$

¹¹ Finland curriculum change to educate students on interpreting news/ fake news, etc. https://www.theguardian.com/world/2020/jan/28/fact-from-fiction-finlands-new-lessons-in-combating-fake-news

- Feel a stronger connection to the environment through further out of classroom learning.¹²
 - The profound, inherent and irreplaceable value of nature.
 - How we interact with the environment in our personal lives, and how climate change affects us directly.
- Contribute to climate solutions by understanding the types of changes needed and the many ways to be involved to enact those changes.
 - How individuals can make a difference, both as students and as adults in future careers.
 - The concept of systems thinking and systemic change, and how our society must structurally reorient itself.
 - How to approach climate solutions equitably.
 - Exemplars of real-world implementation of climate solutions and mitigation strategies, both socially and technologically.
 - Barriers to action.
 - Other key skills and guidance to help youth become climate leaders as youth and in the future as adults (e.g. how to communicate the urgency of climate issues to others).
- Envision a better world, and feel empowered¹³ and energized.
 - The contributions of climate activism, particularly youth climate activism.
 - How to cope with eco-anxiety, overwhelm, burnout, and the other emotional aspects of facing this crisis.

These points should serve as the starting point, though the objectives and direction of the curriculum change are not limited to the above.

It is important that teachers incorporate diverse, decolonized perspectives when addressing these topics. Additionally, in order to fully meet these learning targets, traditional and outdated teaching methods will not be enough. It is important that students of all grades are actively learning through hands-on classroom activities, projects, and discussions that help them internalize the knowledge, skills, and mindsets the climate emergency requires. Integrating community-oriented action projects into classrooms has the additional benefit of contributing to community resilience, as well as local climate mitigation and carbon footprint reduction.

5) The assessment and provision of professional learning, resources, and support for school staff to enhance their knowledge, tools, and strategies in teaching the reformed curriculum and preparing students for the climate crisis.

¹² Mexican government -- amended constitution include understanding/respect for natural world as a basic requirement for education

https://www.earthday.org/mexicos-environmental-education-initiative-climate-change/

¹³ New Zealand schools to teach students about climate crisis, activism and 'eco-anxiety.' *The Guardian*. Retrieved from https://www.theguardian.com/world/2020/jan/13/newzealand-schools-to-teach-studentsabout-climate-crisis-activism-and-eco-anxiety

Teachers must be equipped with sufficient training, resources, and support so that they can teach about climate change, climate politics, and climate solutions confidently and accurately, as well as in a non-partisan and unbiased way.¹⁴ A Ministry-led committee should be responsible for direct communication and consultation with school staff to identify the gaps in current knowledge and support, as well as to listen to and address concerns.

Dedicated professional learning days should help teachers understand the systemic root of the climate crisis, as well as Indigenous perspectives on the subject; this will be critical for developing a decolonized perspective in classrooms. Moreover, teachers should be given the space and structure to regularly share concerns and ideas with each other, as well as with the wider community, so as to collaboratively learn and unlearn teaching systems and optimize approaches to climate education in an inspiring way. Additionally, training on climate and justice pedagogy must go beyond sporadic professional development days, and should eventually be integrated into pre-service teacher education and certification.

It is essential that measures are taken to instill a genuine concern for the crisis among teachers and administrators, and for them to comprehend the importance of their role, so that there will be an authentic and sustainable desire to teach the subject fully and creatively. Without this, students cannot truly receive the necessary level of climate education and empowerment. There should be thorough consultation to design a program or system to achieve this.

6) The implementation of equitable school infrastructure in alignment with transitioning towards a 95% reduction in greenhouse gas emissions by 2030.

Recognizing the Clean BC¹⁵ goal of 40% reduction by 2030 and the IPCC 1.5 goal by 2035, and recognizing that any capital costs are insignificant next to the costs of climate change, we ask the BC Ministry of Education to reduce school infrastructure emissions by 95% by 2030 compared to 2007 levels.

A policy should be effective immediately to ensure that all new buildings or buildings being renovated will be carbon negative. There should then be a planning committee to coordinate the rapid replacement of existing polluting infrastructure that does not align with targets.

This includes, but is not limited to:

- A. Choosing building materials with low embodied carbon.
- B. Transitioning to fully electric heating utilities.

¹⁴ National Survey done by Learning for a Sustainable Future looking at teacher preparation and public interest in climate education https://lsf-lst.ca/media/National_Report/National_Climate_Change_Education_FINAL.pdf

¹⁵ Clean BC: https://www2.gov.bc.ca/assets/gov/environment/climate-change/action/cleanbc/cleanbc_2018-bc-climate-strategy.pdf

- C. Replacing school buses with fully electric models.
- D. Free transit for all school-aged youth.
- E. Air filtration systems that improve air quality and limit exposure to pollutants, such as wildfire smoke.
- F. Incentivizing the production of renewable energy on school sites.
- G. Retrofitting lighting to LEDs.
- H. Incorporating ethical procurement practices for items such as food, furniture, apparel, athletic equipment and technology.
- I. Establishing a minimum of 80% recycled content in paper.
- J. Ensuring clean, lead-free drinking water with stations.
- K. Locally sourced cafeteria food that offers affordable and plant-based options.
- L. In-house staff for cafeteria, maintenance and custodial roles.
- M. Independent energy advisors that aren't tied to utility companies.
- N. Establishing gender-neutral washroom facilities.

The physical transition to decarbonize schools will provide a key real life example to students of the changes our systems are making towards a greener and sustainable future, and will play a central role in and of itself in protecting the future of the students they service.

We acknowledge that a 95% reduction is an ambitious target, and that it will require ambitious investment and funding. However, we ask that the Ministry of Education carefully evaluate the full costs of neglecting these changes and to seriously develop a plan to meet the target in its whole, understanding that there are no other options if we are to truly protect our future.

These Needs are only the initial steps in a long-term shift the education system must make to ensure students can be active contributors of a just and sustainable society.

We ask that any desired revisions be fully explained and negotiated with the CERBC team and the community members we represent. We also ask that student voices, as well as those of community members and field professionals, play a central and lasting role in reshaping the education system.

Further reading:

- <u>Unleashing the creativity of teachers and students to combat climate change:</u>
 An opportunity for global leadership
- A New Green Learning Agenda: Approaches to Quality Education for Climate
 Action Center for Universal Education at Brookings
- Our children's planet: What does their education have to do with climate change? - World Bank
- New UC San Diego CREATE Initiative to Strengthen K-12 Climate Education

Climate Education Reform BC Organizing Team

We acknowledge that CERBC is not the first to be advocating for climate action and that First Peoples have been leading and are continuing to organize for climate and environmental justice for generations before us across Turtle Island. We are thankful to reside, work and study on First Peoples' traditional, unceded, and stolen territories across so called "British Columbia."