



CLIMATE JUSTICE AND PARTICIPATORY RESEARCH: BUILDING CLIMATE-RESILIENT COMMONS

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ISBN 978-1-77385-408-3

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Youth Climate Activism: Mobilizing for a Common Future

Patricia Figueiredo Walker

Introduction

Historically, young people globally, especially marginalized, disenfranchised children and youth—those who are disadvantaged, Indigenous, racialized, immigrants, refugees, and disabled—have been largely excluded from consideration as a group in global climate change mitigation and adaptation decision-making processes. This is perhaps because they are below voting age, are not seen as important consumption decision-makers, and/or are assumed to fall under family categories in relation to food, housing, transportation, recycling, leisure activities, and other climate mitigation and adaptation factors. The traditional climate change narrative often represents children and young people as "victims," because of their young age and longer lifetime exposure to climate change impacts, rather than as capable agents of change. However, engaging children and young people in climate change research, policy, and practice and supporting their participation at the highest levels of climate change decision-making is important for several reasons. Many scholars have argued that young people's climate change engagement is a moral imperative—that young people have a right to be informed and consulted regarding issues that will affect their future (Chawla & Heft, 2002; Hicks & Holden, 2007; Page, 2007; Trott, 2020)—while others have argued

that children's engagement is necessary in preparing them to face and address future climatic changes (Ballantyne et al., 1998; see also Ojala, 2012; Koger, 2013; Schreiner et al., 2005).

Of course, all young people carry gender, ethnic, racial, national, sexual, ability, and other identity characteristics that are part of their relationships to both climate change and political action. Children and youth also differ from each other by age, maturity, physical ability, and many other factors. Rather than understanding children and youth as a single group, our focus here is on how age is an additional intersectional category that differentiates how people are impacted by climate change, as well as their ability to influence their own future.

As noted by Haynes and Tanner (2015), young people's "capacities to inform decision-making processes, communicate risks to their communities and take direct action to reduce risks" have been largely neglected to date (p. 357). However, when properly informed, empowered, and enabled, young people have the capacity to engage in constructive climate change action, influence adults, parents/caregivers, peers, and the public, and inform climate change research, policy, and practice. Participatory youth-centred research studies in the Global South and the Canadian Arctic have demonstrated the importance of directly involving young people in climate change research and including their voices in policy discussions, as important pathways for enhancing their agency and adaptive capacity and facilitating their adaptation to climate change (Haynes & Tanner, 2015; MacDonald et al., 2015). Youth Participatory Action Research (YPAR), and other participatory methodologies, are emerging as promising ways to explore young peoples' perspectives and elicit their participation in public forums on climate change.

Lawson et al. (2018, p. 204) argue that "children have unique perspectives on climate change, represent an audience that is easily reached through schools and are arguably best equipped to navigate the ideologically fraught topic of climate change with older generations in ways that inspire action." They further state that "children may be able to overcome anti-reflexive tendencies of adults through intergenerational learning (IGL) in the context of climate change" (p. 205). According to Lawson et al. (2018), anti-reflexive "forces" or "tendencies" include "individuals' political ideologies and worldviews" and "politically driven climate change skepticism" (pp. 204–205). For instance, "the bond between parent and child helps facilitate conversations around uncomfortable topics" and parents, in general, tend to perceive their

children as being more trustworthy and "ideologically neutral" sources of climate change information (Lawson et al., 2018, p. 205). Given their effectiveness as climate change communicators, children and young people are ideally suited to communicate climate-related risks to their communities and raise awareness of these issues with government officials and other stakeholders. In addition, given their situated knowledge, observations, and lived experiences, children and young people are important stakeholders in climate change processes and can offer unique perspectives and policy ideas. Thus, supporting their engagement and developing their sense of agency can be very important politically—as seen, for example, in the impact of the Fridays for Future (FFF) movement.

This chapter focuses on intersectional climate justice for children and youth, and their engagement as subjects in climate action. Focusing mainly on Canada, we outline several ways that adults in home, school, or community settings, and young people themselves, can work to include children and youth in climate discussions—as well as the importance and potential of doing so.

Agency

Children and young people need agentic experiences to develop their sense of agency and become more resilient and adaptive. Agency refers to one's "ability to imagine and effect change" (O'Brien et al., 2018) as well as the belief in one's own capacity or competence. Agency enables children and young people, especially those who are disadvantaged and marginalized, to play active roles in shaping, improving, and preserving their communities (and cultural identities) and advocating for equitable adaptation. Furthermore, agency is one of the factors that contribute "to shaping patterns of public (dis) engagement with climate change" (Bieler et al., 2017, p. 65).

Research to date suggests that environmental, climate change, and social engagement as well as the opportunity to become involved and actively participate in climate change research and decision-making processes can enhance young people's agency, adaptive capacity, resilience, and adaptation (MacDonald et al., 2015; Trott, 2019). For example, "the opportunity to be meaningfully involved in their community, whether through research projects or community programs, is one of the many protective factors known

to enhance circumpolar Indigenous youth resilience to a variety of stresses, including climate change challenges" (MacDonald et al., 2015, p. 487).

Fostering Hope, Engagement, and Action

A growing body of research has examined the association between hope and environmental engagement. Ojala (2008; 2012) found a positive association between hope and pro-environmental behaviour. According to Ojala (2012) "hope about a better, alternative, future could play an important part in motivating people to take action concerning global problems" (p. 626). Thus, children and young people who experience a high degree of (constructive) hope concerning climate change are more likely to act and seek out solutions (Ojala, 2008; Ojala, 2012; Li & Monroe, 2019).

How climate change is presented or framed may influence the response and engagement of children and youth with climate change. For example, "framing of climate change as an impending environmental disaster may contribute to a sense of despair and feelings of helplessness, which can lead to disillusion, apathy, and inactivity, or a perceived lack of potential to influence sustainability outcomes" (Hayes et al., 2018, p. 2). In addition, as Ojala (2012) points out, "education about global issues sometimes increases" pessimism (p. 626). Therefore, climate change education should go beyond enhancing scientific literacy to foster hope and facilitate action.

Research suggests that scientific literacy alone is insufficient to spur and sustain young people's political engagement and action on climate change (Trott, 2020; Hargis & McKenzie, 2021). As Groulx et al. (2017) explain, "rigorous science is an integral part of defining and promoting action in the face of climate change, but so are legitimate opportunities for citizens to engage with the climate change discourse, define local priorities, and meaningfully influence decisions" (p. 69). Thus, experiential opportunities for children and youth to become directly involved and engaged with local climate issues can foster meaningful action on climate-related public policies as well as personal decisions.

Additionally, engagement is thought to contribute to one's mental health and can be used as a strategy to address *climate anxiety*—an ever-growing problem among children and youth (Cunsolo Willox & Ellis, 2013; Ojala, 2018; Clayton, 2020; Wray, 2022). Trott (2020) argues that "children's constructive engagement enables [them] to envision alternatives and to believe

they can be agents of transformative change" (p. 535). As Corner et al. (2015) note, when young people's "perceived self-efficacy is limited, personal engagement with climate change is likely to be lower" (p. 530). In addition to directly benefitting children and young people in the short- and long-term, their sustained, constructive engagement is beneficial to society, as it can lead to "societal transformation to sustainability" (Trott, 2020, p. 535).

Participatory Methods to Enhance the Agency and Promote the Voices of Young People

Emerging research indicates that participatory research methods, like digital photography (e.g., photovoice) and participatory video, are effective ways to enhance children's and youth's agency, adaptive capacity, climate change awareness, knowledge, engagement, visibility, and influence (MacDonald et al., 2015; Trott, 2019; Trott, 2020). Participatory research projects that employ these methodologies offer young people opportunities to be in control of the research process and share their unique perspectives on climate change, local problems, and solutions. In addition, they allow young people to "shape the outcome according to their own interests, ideas, skills, and values and [...] contribute rich, unanticipated, and meaningful understandings of [the] research questions" (MacDonald et al., 2015, p. 490). This approach to research challenges the narrative that children and young people are *victims* of climate change who require the protection and assistance of adults and caregivers to speak and make decisions on their behalf; rather, children and young people are positioned as "negotiators who are powerful experts" (Marr & Malone, 2007, p. 4).

As Trott (2019) explains, participatory methods stand out for their potential to empower young people's agency and facilitate their constructive climate change engagement. For example, YPAR "provides young people with opportunities to study social problems affecting their lives and then determine actions to rectify these problems" (Cammarota & Fine, 2010, p. 2). Most importantly, "YPAR teaches young people that conditions of injustice are produced, not natural; are designed to privilege and oppress; but are ultimately challengeable and thus changeable" (Cammarota & Fine, 2010, p. 2). As such, YPAR may contribute to young people's sense of empowerment and agency, or belief in their capacity to affect change, thereby addressing feelings of hopelessness and helplessness—known factors that contribute to apathy

and disengagement. However, as Trott (2019) points out, participatory action research (PAR)-based studies involving "children as social actors, change agents, collaborators, or co-researchers" remain rare (p. 46).

The following sections explore participatory methods, including photovoice, participatory video, and citizen science, to empower young people's agency and facilitate their constructive climate change engagement. Furthermore, they provide a brief overview of climate change activism in Canada, including young Canadians' active involvement in the fossil fuel divestment (FFD) movement and climate change litigation in this country.

Photovoice

Photovoice, a PAR method based on feminist theory and Paulo Freire's educational approach for critical consciousness, "is a process by which people can identify, represent, and enhance their community through a specific photographic technique" (Wang & Burris, 1997, p. 369). This strategy enables children and youth to "record and vivify their community's strengths and concerns; promote critical dialogue and knowledge about community issues through group discussion of photographs; and reach policy makers" (Wang, 2006, p. 147). Furthermore, photovoice is emancipatory and agentic (Derr & Simons, 2020), as "it entrusts cameras to the hands of people to enable them to act as recorders, and potential catalysts for change, in their own communities" (Wang & Burris, 1997, p. 369).

To date, photovoice remains underutilized as a strategy for facilitating young people's engagement with climate change (Trott, 2019). However, Trott demonstrated the potential of this strategy in supporting children's constructive climate change engagement through a collaborative PAR project with children ages ten to twelve. *Science, Camera, Action!* combined hands-on climate change educational activities with photovoice, integrating "transformative pedagogy with arts-based and participatory methodology to empower children's agency through personally relevant and locally meaningful action projects addressing climate change" (Trott, 2019, p. 58). Project participants "acquired new knowledge about climate change and its local impacts" and "developed stronger beliefs in their agentic capabilities, while taking tangible steps towards the sustainable transformation of their communities" (Trott, 2019, p. 58).

Participatory Video

As MacDonald et al. (2015) explain, "participatory video (PV) is a digital media research method with roots in community activism and social development that aims to shift power dynamics by having participants direct and control the creation of a film on a topic of research and community" (p. 488). Although youth-centred PV research examining climate change is still uncommon, this research approach has become more popular in recent years (Haynes & Tanner, 2015). As Kindon (2003) explains, PV offers "a feminist practice of looking, which actively works to engage with and challenge conventional relationships of power associated with the gaze in geographic research, and results in more equitable outcomes and/or transformation for research participants" (p. 143). This makes PV appealing as a strategy for child- and youth-centred climate change organizing.

Empirical research using PV methods with groups of young people in the Philippines has demonstrated the potential and efficacy of this method in increasing young people's awareness and knowledge of local disaster and climate-related risks and empowering them to engage with community members and decision-makers around climate change. In addition, young people, ages 13 to 21, were able to "document and raise awareness of disaster risk and use screening events to mobilise and advocate for risk reduction measures in their communities" (Haynes & Tanner, 2015, p. 357). Similarly, MacDonald et al. (2015) examined "the potential of youth-led PV as a strategy to foster known protective factors that underpin the resilience of youth and their capacity to adapt to various stresses, including impacts of climate change" (p. 486). This research, which focused on Inuit youth in Labrador, Canada, showed "that PV may be a pathway to greater adaptive capacities because the process connects to known protective factors that enhance resilience of circumpolar [I]ndigenous youth. PV also shows promise as a strategy to engage youth in sharing insights and knowledge, connect generations, and involve young Inuit in planning decision making in general" (MacDonald et al., 2015, p. 486).

In general, participatory research methods such as PV and photovoice "bring awareness and respect of the culture and context of the partner community, facilitate capacity development, and highlight local knowledge, voices, and experience that advance research in a way Western science cannot do alone" (MacDonald et al., 2015, p. 487). When employed by young

people, these participatory research methods can facilitate and highlight the importance of collective engagement, which "can promote children's hope and well-being—by creating conditions that allow children to feel part of a collaborative effort rather than acting in isolation" (Trott, 2019, pp. 57–58, citing Kelsey & Armstrong, 2012). In addition, participatory research methods can be effective strategies for children and youth to share knowledge, information, and local perspectives with diverse stakeholders, including policy makers. They also offer opportunities for political advocacy and youth climate activism.

Citizen Science

Like the above-mentioned participatory research methods, citizen science can enhance youth participation, representation, and climate change engagement and action. "Co-created and collaborative citizen science designs, for instance, can offer citizens some control over what research questions are asked, and how data is collected" (Groulx et al., 2017, p. 47). Additionally, citizen science "can promote the co-creation of scientific and environmental knowledge" and "individual changes in environmental attitudes," specifically "by fostering experiential learning" and "(re) connecting participants to the natural world" (Groulx et al., 2017, p. 50). Hargis and McKenzie (2020) highlight the "critical" role of place-based pedagogies "in moving beyond climate and environmental awareness to empowerment and action" (p. 2). A growing body of research supports place-based approaches to climate change education (Field, 2017; Hargis & McKenzie, 2020) as they serve to contextualize climate change and help young people understand that climate change is not a far-away/distant problem with complex and inaccessible solutions, but rather a process with very concrete local impacts.

Youth Climate Change Activism

In recent years, children and youth globally have—in unprecedented ways and numbers—engaged in climate change activism to express opposition to the business-as-usual status quo that is causing global warming, and to demand systemic change, climate justice, and political action on this issue. O'Brien et al. (2018) argue that when young people engage with climate change, they are "implicitly or explicitly entering into debates that involve dissenting from prevailing norms, beliefs, and practices, including economic

and social norms like consumption, fossil energy use, and the unjust use of power in decision making" (p. 42). This is evidenced by the FFF (Fridays for the Future) Global Climate Strike, a youth-led grassroots movement initiated and led by Swedish youth climate activist Greta Thunberg beginning in 2018.

The FFF movement, which continues to organize local and global, physical and digital school strikes, rallies, and marches has adopted an *intersectional* approach to climate justice, outlining "collective demands, that include [I]ndigenous rights and sovereignty; defending land, water, and life; zero-carbon economy; separation of oil and state, universal public services and infrastructure; justice for migrants and refugees and a sustainable future for all" (March 2019). The FFF movement gained international attention in 2019, leading to the largest climate demonstration in human history, which took place on 20 September 2019—with over four million people worldwide, including hundreds of thousands of Canadians from at least eighty-five Canadian cities and towns, joining the Global Climate Strike. Montreal held the largest single climate march yet (estimated at five hundred thousand people). The FFF movement has been a catalyst for youth climate activism in Canada and globally, demonstrating the potential of young people to exert political and intergenerational influence at national and global scales.

Fossil Fuel Divestment Movement

The FFD movement aims to eliminate public and private investment in fossil fuel companies. The first FFD campaign took place in 2010 in Philadelphia, where a Swarthmore College student group called upon their institution to stop investing in fossil fuel companies after learning about the environmental impacts of mountaintop removal (Maina et al., 2020). In 2012, environmentalist and 350.org co-founder Bill McKibben (2012) wrote a radical essay for *Rolling Stone* magazine urging the public to "view the fossil-fuel industry in a new light" (p. 6). In his essay, McKibben (2012) boldly declared: "[The fossil fuel industry] has become a rogue industry, reckless like no other force on Earth. It is Public Enemy Number One to the survival of our planetary civilization" (p. 6). The essay sparked a global FFD movement, with higher education institutions and students in particular playing a key role.

Canada has the third-largest proven oil reserves in the world—most of which are found in Alberta's oil sands—and is the fourth largest global producer and exporter of oil (Natural Resources Canada, 2019). According to a

recent report by Environmental Defence (2021), "In 2020, the federal government either announced or provided a minimum of nearly \$18 billion to the oil and gas sector" (p. 1). According to the Canadian Association of Petroleum Producers (2021), the oil sands are responsible for 11 per cent of total national greenhouse gas emissions (). However, recent aircraft measurements over the Canadian oil sands "indicate that $\rm CO_2$ emission intensities for OS [oil sands] facilities are 13–123% larger than those estimated using publicly available data. This leads to [...] 30% higher overall OS GHG [greenhouse gas] emissions (17 Mt) compared to that reported by industry" (Liggio et al., 2019, p. 1).

Divesting from fossil fuel companies is seen by many as a vital step in eroding the fossil fuel industry's social license to operate, or the public's perception and acceptance of the industry's legitimacy. Furthermore, it is seen as crucial to addressing climate change and the environmental and social impacts of fossil fuel extraction in Canada. Given the fact that "post-secondary institutions have a significant amount of their endowment funds invested in fossil fuel companies" (Maina, 2016, p. 1), they can play an important role in the divestment movement and influence similar action by other investors. FFD campaigns across higher education institutions, led primarily by students, have increased steadily over the last decade (Maina et al., 2020). According to Maine et al. (2020), students in the Canadian higher education institution FFD movement are responsible for initiating thirty-one of the existing thirty-seven FFD campaigns in Canada.

In January 2021, FFF Toronto, Sustainabiliteens Vancouver, FFF Calgary, School Strike for Climate Halifax, and Climate Justice Guelph initiated a series of "bank switch" actions to bring attention to the fact that "Canada's big five banks—TD, RBC, Scotiabank, BMO and CIBC—are among the biggest financiers of fossil fuels in the world" (Speers-Roesch, 2021). Through these actions, youth intended to pressure the banks "by threatening to remove [their] money from [these] banks unless they made stringent, concise plans to fully divest from fossil fuels" (FFF Toronto, 2021). Similarly, students across Ontario released a video urging teachers "to demand that the Ontario Teachers' Pension Plan (OTPP) stop investing their retirement savings in oil, gas, coal, and pipeline companies that fuel the climate crisis" (Shift: Action for Pension Wealth & Planet Health, 2021).

These groups have used a number of tactics including "signing of petitions, sit-ins, rallies, and protests, facilitated through face-to-face and online platforms" to mobilize FFD campaigns and promote climate and ecological

justice more broadly (Maina et al., 2020, p. 1). In Canada, the FFD movement has given young people opportunities to engage in constructive climate change activism and express opposition to neo-liberal capitalism, continuing legacies of colonialism, and the status quo that is contributing to climate change (Saad, 2019).

Through their collaborations, innovations, and resilience, young people across Canada are not only leading the FFD divestment movement, but also the fight against climate inaction and social, intergenerational, and ecological injustice. In addition, they are turning to the Canadian legal system in unprecedented efforts to demand action on climate change.

Climate Change Litigation in Canada

In the year 2019, children and youth across Canada filed climate justice lawsuits against federal and provincial governments alleging violations to their rights and freedoms. In June 2019, ENvironnement JEUnesse (ENJEU, n.d.), an environmental non-profit, filed a climate lawsuit against the Canadian government at the Superior Court of Quebec, on behalf of young Quebeckers thirty-five years old and under. In July 2019, the court refused "to grant ENvironnement JEUnesse the authorization to institute a class action" (ENJEU, n.d.) on behalf of the plaintiffs because it "found the age 35 cutoff to be arbitrary and inappropriate, since it did not consider the rationale for choosing it to be adequately justified" (Amnesty International, 2020). In August 2019, ENJEU appealed the court's decision and in February 2021 it "presented its application for authorization to institute its class action to the Quebec Court of Appeal" (ENJEU, n.d.). Unfortunately, the court dismissed the appeal, but "given the importance of the matter, ENvironnement JEUnesse filed an application for leave to appeal to the Supreme Court of Canada on February 11, 2022" (ENJEU, n.d.).

In October 2019, fifteen young people—ages ten to nineteen years—from seven provinces and one territory filed a lawsuit (*La Rose et al. v. Her Majesty the Queen*) against the Canadian Government alleging Canada's actions on climate change violate their rights to life, liberty, and security of the person under Section 7 of the Canadian Charter of Rights and Freedoms and their right to equality under Section 15, given the disproportionate impacts of climate change on young people. The federal government responded with a motion to strike the plaintiffs' claim in order to stop the case from proceeding

to trial. On 27 October 2020 the Federal Court of Canada granted the government's motion, despite acknowledging that "the negative impact of climate change to the Plaintiffs and all Canadians is significant, both now and looking forward into the future" (Our Children's Trust). On 24 November 2020 the attorneys for the plaintiffs filed a Notice of Appeal with the Federal Court of Appeals. "The youth plaintiffs are currently awaiting a date for oral argument in the Federal Court of Appeals" (Our Children's Trust).

In November 2019, seven young Ontario climate activists, between the ages of thirteen and twenty-four, filed a similar lawsuit (Mathur et al. v. Her Majesty in Right of Ontario) arguing that Ontario's new greenhouse gas reduction target and the repeal of the old Climate Change Act "violate the rights of Ontario youth and future generations under ss. 7 and 15 of the Charter" (Chen, n.d.). Like the federal government, the Ontario government responded with a motion to strike the lawsuit. However, in July 2020, the youth plaintiffs countered the motion and the court ruled in their favour. For the first time in Canadian history, a court "ruled that fundamental rights protected under the Charter can be threatened by climate change and citizens have the ability to challenge a Canadian government's action on the climate crisis under the highest law in the land" (Thomson, 2021). In response, the Ontario Government applied for leave to appeal the ruling, which the court dismissed. According to Ecojustice, Mathur et al., which proceeded to a full hearing before the Ontario Superior Court in September 2022, is "the first case of its kind to clear key procedural hurdles" (n.d.). As noted by Ecojustice, the "case is already changing the Canadian legal landscape" (Page & Thomson, 2021). More specifically, the case, 1) "established the courts are a viable avenue for citizens to challenge government actions that threaten their Charter rights and the climate," 2) "established that the harms from climate change are not speculative nor impossible to prove," and 3) "established that climate change can impact Canadians' rights to life, liberty and security of the person" (Page & Thomson, 2021).

These lawsuits represent a potential turning point in climate change litigation and youth climate activism in Canada. They illustrate how children and youth are expressing their agency by taking legal action to challenge government actions and contributions to climate change—a trend also seen in other parts of the world, including Colombia and the Netherlands (Savaresi & Auz, 2019). Despite lack of educational opportunities to engage with climate change in schools and contribute to solutions inside and outside of formal

institutions of education (see Bieler et al., 2017; Wynes & Nicholas, 2019), young Canadians are demonstrating remarkable agency, resilience, and resourcefulness, successfully engaging in organizing and climate activism and mobilizing other youth and actors for climate action, fossil fuel divestment, and social and ecological justice.

Conclusion

As the Earth continues to heat up, young people will continue to share their perceptions, inform climate research and policy, and contribute actively to local solutions. For both ethical and pragmatic reasons, it is crucial to respect and enhance young people's rights to express their views and become active participants in research and decisions on issues that may affect their lives and futures, especially climate change, due to its huge long-term impacts. From a procedural justice perspective, children and youth must be represented in climate policy and decision-making processes, considering they have a stake in the outcomes and will be directly or indirectly affected long into the future by decisions made today.

According to the United Nations Convention on the Rights of the Child, children have the right to express their views freely (Article 12), the right to freedom of expression (Article 13), and the right to grow up in a healthy environment (Article 24). It is, therefore, every child's *right* to participate in decision-making processes concerning their present and future adaptation and to grow up in a healthy and climate just world. Promoting the participatory rights of *all* children and youth is essential in addressing their vulnerability to climate change and ensuring their effective adaptation.

Consulting with and including the voices, experiences, concerns, and perceptions of young people in climate change research, as well as encouraging and facilitating their meaningful participation in decision-making processes, is essential to ensure that the data collected, and measures developed, are complete and representative of young people and the challenges they face. Although this chapter has focused specifically on children and youth in Canada, the concepts discussed are applicable and relevant to young people everywhere.

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