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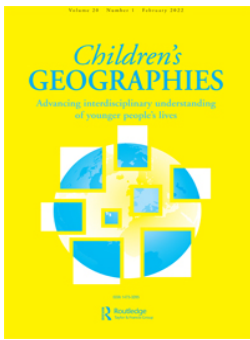
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## The challenges and affordances of online participatory workshops in the context of young people's everyday climate crisis activism: insights from facilitators

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# The challenges and affordances of online participatory workshops in the context of young people's everyday climate crisis activism: insights from facilitators

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## ABSTRACT

Participatory workshops can provide an equitable way of working with diverse communities to co-produce new knowledge and understanding in the context of young people's everyday climate crisis activism. Drawing on data from interviews with seven facilitators, we consider the specific affordances and challenges provided by participatory workshops that are held online with groups including young people and teachers. We highlight that the online format can provide a powerful methodological tool for co-production, community building and developing constructive intergenerational dialogue. Although online workshops can include diverse voices, barriers and challenges remain when seeking to reduce the persistent under-representation of some groups.

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Online workshops; participatory methods; co-production; climate crisis activism; facilitators; young people

## Introduction

Across the global community, there have been consistent calls for research which considers a greater range of perspectives on climate change and environmental activism including those which critically examine the place of schools (Dunlop et al., 2021b), the contributions of diverse groups (Walker 2020) and the spatial and temporal complexities and interdependence (Collins 2020) that infuse environmental issues. We seek to contribute to an aspect of the burgeoning field of young people's climate crisis activism (Skovdal and Benwell 2021) namely, how to create online participatory workshops where young people, teachers and researchers can co-produce written outputs which inform policy makers in the fields of climate change and environmental education. We contribute insights into the challenges and affordances of online participatory workshops as a methodological tool and collaborative space which have the potential to capture the richness and diversity of young people's climate crisis activism. These insights are drawn from two series of online participatory workshops focused on young people and teacher perspectives on climate change and the environment (Table 1).

A central element of these workshops was to provide an intergenerational space for young people and teachers and researchers to debate and discuss environmental crises and solutions and to co-produce written outputs. Participants (young people and teachers) and facilitators came from diverse geographic contexts, which included the United Kingdom, European Union, China and Brazil (Table 1). Therefore, it was not practical for our workshops to take place in person and, as researchers and educators working in the context of the global climate emergency, we also

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**Table 1.** A summary of the two series of online participatory workshops.

Project	Events	Facilitator Organisations	Participants	Youth co-produced outputs
Geo-engineering: A climate of uncertainty? (Geo-engineering)	April – May 2021 4 × 5-hour online workshops	2 Higher Education Institutions based in the U.K. 1 Higher Education Institution based in Belgium. 1 Higher Education Institution based in Brazil. 1 non-governmental organisation with reach across Europe.	13 youth (18–25 years) from countries including: Albania, Belgium, Czech Republic, the Netherlands, Poland, Portugal and the United Kingdom.	Youth Guide and Policy Brief
Manifesto for Education for Environmental Sustainability (Manifesto)	May – June 2021 9 × 2-hour online workshops	5 Higher Education Institutions based in the U.K. 3 non-governmental organisations with a focus on education based in the U.K. 2 non-governmental organisations with a focus on the environment based in the U.K. 1 high school based in the U.K. 1 artist partner based in the U.K.	210 participants including youth aged 16–18 years (34 with declared Additional Educational Needs), teachers and teacher educators from England, Scotland, Wales and Northern Ireland	Illustrated Manifesto for Education for Environmental Sustainability

recognised the imperative to reduce work and travel-related carbon emissions wherever possible. These practical considerations necessitated designing a bespoke methodology for online participatory workshops. The onset of the Covid-19 global pandemic in early 2020 further underlined the need for us as researchers to have a greater understanding of how to implement effective participatory workshops solely online so that our research, and participatory research more broadly, could continue even in the context of worldwide restrictions on travel and in-person gatherings.

### *The nature of participatory workshops*

Over the last three decades, participatory methods have been frequently used by qualitative researchers as a way of more equitably working with communities to ‘co-produce’ new knowledge and understandings in a range of contexts that extend across the social sciences, medicine and beyond (Cornwall and Jewkes 1995). Participatory methods often involve opportunities for conversation, discussion and debate within and between different groups and stakeholders. They draw on a range of theoretical framings which enable participants to develop capabilities, competencies and networks to support their future action (e.g. Læssøe 2017; Nussbaum 2011). In this research, we have taken a pragmatic approach, by which we mean we have focused on the practical bearing that knowledge, seeing social and political ‘facts’ as those which are what they are because of human interest and purpose (Dewey 1988 in Testa 2017) in contrast with scientific facts which are not dependent on human interaction in the same way. The workshops were constructed as a form of inquiry into participants’ perspectives and priorities, with attention to the consequences of continuing or changing actions and policies with regard to climate action and climate education. Participatory methods can position participants as partners in research and have the potential to actively engage individuals and groups in a way that they themselves benefit from the experience beyond the life of the research project (Edwards and Brannelly 2017). Workshops are commonly

used by researchers in the context of participatory methods with intergenerational groups (e.g. Wilkinson et al. 2021). Here, we use the term 'workshop' to describe the meeting of a group of people which involves learning, discussion, problem-solving and/or collaborative production of written outputs in the context of an area of shared interest.

### Workshops as spaces for intergenerational knowledge construction

It is important for both youth and adults to be recognised and able to participate in environmental decision-making, as everyone has a stake in the consequences of these decisions. Teachers have educational expertise and children and young people are experts in their lives (Mason and Danby 2011). In the field of climate education and activism, young people are also at the forefront of dissent towards social, economic and environmental policies (O'Brien, Selboe, and Hayward 2018) and this can be seen in youth leadership of movements such as Teach the Future and #Fridays for Future, which call for climate justice and climate education. As such young people have important and distinctive expertise to bring to climate education and activism. It is important that knowledge is shared between youth and adult populations because adults disproportionately occupy decision-making roles (for example in government, media and other industries) and young people will disproportionately feel the effects of those decisions (Thiery et al. 2021) and have little influence over decisions made today. Therefore, there is value in bringing adults and young people together to determine priorities for climate education and climate action.

In a speech at the recent Youth4Climate Summit in Milan 2021, activist Greta Thunberg noted 'They invite cherry-picked young people to meetings like this to pretend that they listen to us. But they clearly don't listen to us. Our emissions are still rising'. Dissent towards current environmental policies can be categorised as dutiful, disruptive or dangerous (O'Brien, Selboe, and Hayward 2018). Dutiful forms of dissent work within existing systems or institutions to express discontent with business-as-usual; disruptive forms of dissent challenge existing power relationships and the actors who maintain them, often through protest or collective organisation; and dangerous forms of dissent create alternatives which create new types of relationship and sustain long-term transformations in how society is organised (O'Brien, Selboe, and Hayward 2018). These ideal types of dissent are not mutually exclusive and young people and adults may participate in different forms of dissent. Research amongst youth in everyday contexts has found a preference for 'dutiful' dissent (Dunlop et al., 2021b) and the online workshops sit within this space as they are hosted by academic institutions. O'Brien, Selboe, and Hayward (2018) have drawn attention to the risks of such dissent: that it may promote consensus and technocratic responses to climate change rather than challenging the fundamental causes. However, such forms of dissent can contribute to change by identifying and making visible youth perspectives within existing systems and, building capacity amongst participants which may be useful in other forms of dissent. Another way in which dutiful forms of dissent such as intergenerational online workshops can contribute to change is through the intergenerational dialogue that takes place. Mannion (2012) defines intergenerational practice as that which involves people from two or more generations tackling a problem or challenge through reciprocal communication and response to one another. Here, the intergenerational practice resulted in written and illustrated publications serving as an intervention into reality, identifying the perspectives, priorities and concerns of young people in relation to the climate and education. A recent research report for the Royal Society of Arts (RSA) found that young people taking part in social action benefits not only themselves but also their communities, and that this works best when young people can identify the problem, generate solutions, lead the response and reflect on their impact (Partridge et al. 2018). Here we focus on adult facilitators' insights into the challenges and affordances of intergenerational online participatory workshops as, at the current time, adults are most frequently in the position to be able to initiate and implement such workshops. Our subsequent work will also consider youth perspectives.

## Materials and methods

Following ethical approval from our institution's Research Ethics Committee to undertake this study, (9 March 2020, Ref 20/18), we developed and ran two series of online participatory workshops for two distinct but related projects, (1) *Geo-engineering: A climate of uncertainty?* (*Geo-engineering*) and (2) *Manifesto for Education for Environmental Sustainability* (*Manifesto*) (Table 1). Voluntary informed written consent was obtained from participants prior to the workshops and from facilitators prior to interviews. We requested only personal information relevant to the workshops: school, location, accessibility needs and reason for participating for the *Manifesto* workshops, and for the *Geo-engineering* workshops, we also requested nationality and age. We did not request demographic data from facilitators who represented their organisations (universities and non-governmental organisations) and their own research and practice interests (education, inclusion, diversity, sustainability). The *Geo-engineering* project foregrounded youth perspectives in decision-making about technological responses to climate change, based on large-scale human intervention in the Earth's climate, also called 'geo-engineering'. Participatory online workshops with young people from across Europe were facilitated by a team drawn from disciplines including education, philosophy and policy. A key output of the workshops is a Geo-engineering Youth Guide and Policy Brief (Blake et al. 2021; Dunlop et al. 2021a). The *Manifesto* project aimed to co-create with young people (16–18 years) and teachers, an illustrated manifesto for Education for Environmental Sustainability (EfES) for the four jurisdictions of the U.K., where teachers and young people articulated a shared vision of what the future of EfES could look like (Dunlop and Rushton 2021). The Manifesto was launched in November 2021. Across both projects, there were a total of 13 workshops, involving 223 participants, which took place between April and June 2021, with institutional ethical approvals received on 2 November 2020 (*Geo-engineering*) and 9 March 2021 (*Manifesto*). Following the completion of both series of workshops, we interviewed seven facilitators (pseudonyms are used) including three (Johannes, Felicity and Gilda) involved in the *Geo-engineering* workshops and four (Angela, Jenny, Jill and Lauren) from the *Manifesto* project. Their responses and reflections inform the findings of this article, along with our own reflections as workshop designers, facilitators and researchers.

## Results and discussion

We share the core elements of online participatory workshops which co-produce outputs with young people and teachers, including those found within workshop design and workshop facilitation.

### *Workshop design*

In our design of workshop activities, the intention was to create collaborative, dialogic and reflective spaces which included intergenerational *learning* as well as listening (Nolas 2021). Key elements of these workshops included opportunities to think positively about environmental and social futures, attention to the social space (including repeated opportunities to work with the same group of people, who were meeting for the first time online), explicit shared principles for participation (time commitment, camera and microphone etiquette), multiple ways to contribute, and shared responsibility for the workshop outputs. Co-production of written outputs was a core element of both series of workshops (Table 1) and, as Navne and Skovdal (2021) have previously documented, providing young people with authorial roles transforms the visibility of contributions that young people can make to academic debates about climate activism. From the outset, and consistent with previous calls to diversify perspectives on young people's climate crisis activism (Börner, Kraftl, and Giatti 2020; Walker 2020) we actively included participants from under-represented groups, working with stakeholders to ensure there were appropriate ways for all to contribute.

For example, as part of the *Manifesto* project, we collaborated with teachers with expertise in working with those with Additional Educational Needs (AEN) to identify ways for the young people they work with to contribute. In this instance, this meant we shared the key questions and ideas from the workshop with teachers who then supported their pupils to contribute responses (for example writing a poem, drawing a picture, making notes) outside of the online workshop space and these were included in the dataset.

During the online workshops, we included a range of activities, using different paces (such as discussion as a whole group and in breakout rooms, adding responses using the chat function, drawing activities, periods of reflection) so that each participant was able to respond in a time frame that was most comfortable for them. For example, we provided opportunities for discussion in small groups in 'breakout rooms' where participants were supported by a facilitator to consider questions posed by researchers and develop their own questions in response as a way of initiating discussion on a more equal footing. Other activities included thought experiments, consequence mapping and mini inquiries. In the *Geo-engineering* workshops, we included a facilitator-led reflection where participants could turn their cameras off, listen to calming music and consider their experience of the workshops before being invited to share their thoughts.

As part of the workshop design, we invited participants with diverse perspectives (for example a youth climate activist and a school science teacher) to create 'provocations' (short contributions of about 500 words or a video clip of under two minutes in length) where they shared their perspectives and ideas as a stimulus for discussion within the workshops. These were hosted open-access on the website for a journal for young geographers (Routes 2021). In this way, we sought to position participants as key stakeholders and co-leaders of the workshop activities. Angela reflected that the design of the workshops was centred on 'allowing the voices of those for whom the issue is of concern to be brought to the fore ... and to arrive at their own conclusions and what they would like to do about them'. In creating this space for discussion, we brought together young people and teachers from different contexts so that there were opportunities to listen to and discuss ideas where there might not always be agreement, nor a consensus reached.

In our design of the *Manifesto* workshops, we incorporated a values-based approach. We provided participants with 'values cards' prior to the workshops so that they had time to reflect and consider how these values aligned with their own and identify any which may have been missing. Examples of values included, 'tolerance and respect', 'creativity' and 'responsibility'. During the facilitated small group discussions, participants were invited to identify and debate the values which were most important to them. This enabled participants and facilitators to develop a shared set of values which underpinned subsequent work, including the co-production of outputs.

### **Workshop facilitation**

From the outset of both projects, we established partnerships with facilitators that extended beyond academia and included non-governmental organisations and networks in the fields of education and the environment to create a space for mutual learning. As with the design of the workshops, we selected facilitators to ensure that diverse perspectives were heard. For example, Jill said of her work as a facilitator for the *Manifesto* workshops:

Much outreach provides experiences that cater for the mainstream neurotypical kid ... my aim was to make sure the views ... included people who might have a less ... formally educated view but who nevertheless have equally valid and moral responses and to make sure their interests and thoughts are included.

Planning for inclusivity from the outset through choice of partners meant that young people and teachers were able to contribute in different ways, relevant networks were informed about opportunities to contribute and there was attention to digital and other accessibility features in materials produced before and as a result of workshops.

Through the interviews, facilitators shared their ideas of the role of a facilitator in the context of online participatory workshops. They suggested that facilitators were there to elicit participants' opinions, encourage people to expand on their initial contributions and to support active and flowing conversations. Felicity saw her role as providing help and support and shared how she made this explicit from the outset and encouraged participants to ask questions if aspects of the workshop were unclear. Facilitators also saw their role as one of 'nudging' the discussion so that it developed between participants rather than through contributions they made as facilitators, and Lauren described how she built in 'wait time' or pauses during discussions so that people had time to respond. Facilitators described how they were able to build a rapport with the participants through beginning workshops with more informal activities which developed a friendly atmosphere. For example, during both series of workshops, facilitators used 'chatterfalls', where participants are asked to complete a sentence (e.g. 'My understanding of environmental sustainability is ...') by writing their answer in the chat function and then sharing their contributions at a set time so that all responses appeared simultaneously. This gave participants a low-pressure opportunity to contribute (sometimes anonymously) early during the session, which established engagement with the workshop and participant confidence. The facilitator was then able to draw together the responses, making connections between people, highlighting areas of commonality and difference that created a sense of shared interest from the outset. Music was also used by facilitators during both workshops, for example light-hearted music was played as participants joined the workshop to denote a friendly atmosphere and also provided an 'ice breaker' conversation point between participants and facilitators at the beginning of the workshop and during small group discussion sessions. Collaborative online tools (Google Suite, Mural, Miro, Padlet) were used in addition to the host platform (Zoom) according to task needs (e.g. annotating, drawing, sharing photographs, presenting, writing).

A key role for the facilitators was to support the co-production of outputs with youth and teachers that were written for a wider audience. Facilitators provided participants with a range of ways to contribute both during and after the workshops were completed. This included co-writing outputs such as a youth guide and policy brief, academic papers and a press release or through organising social media campaigns to raise awareness of the outputs. Facilitators recognised that there was a balance to be reached between providing spaces for different voices to be heard, sharing ideas and time for reflection during the online workshops, whilst also ensuring that there was sufficient time to co-produce the written outputs. Felicity noted the quality of responses participants generated during the *Geo-engineering* workshops and attributed this to workshop design which, in her view, supported and valued the commitment, interest and prior experiences of the participants but also provided them with new perspectives and concepts which challenged and expanded their thinking.

### **Facilitator perspectives of online participatory workshops**

Through the interviews, facilitators shared a common agreement that both series of online workshops were successful in their central aim – to support young people and teachers to share their diverse perspectives and genuinely co-produce outputs. Reflecting on the *Manifesto* workshops Jill said, 'I really feel we got a youth mandate'. Felicity described how through the *Geo-engineering* workshops, participants were, 'individually touched ... it's more than learning about [geo-engineering]; you have to feel it; knowing is not enough'. Facilitators from both projects articulated in detail both the challenges and opportunities that online participatory workshops provided.

### **Opportunities provided by online participatory workshops**

The online format provided significant logistical benefits in that it was much easier and less expensive to hold a workshop which involved participants from diverse geographical areas and facilitators



reflected that the ease with which participants engaged with the online format was due to the recent global pandemic. Lauren said that the online format had made it possible to

bring together all these different voices from around the U.K. . . . and for people to see online as a viable way to have a workshop has been made possible for us all getting better at doing that sort of thing.

As well as logistical benefits, the facilitators shared that the online nature of the workshops had affordances for the design of the workshop. For example, facilitators suggested that the online format enabled facilitators to 'create a good vibe' (Gilda) and manage the pace and flow of the workshop which meant it was possible to co-produce outputs with a large group of people and to ensure that no one person or group dominated the discussion. Johannes noted that the online format provided a 'real-life' element to decision making, for example having meetings with expert groups from across the world. Jill reflected that the online nature was likely to be familiar and appealing to young people (even before the global pandemic meant a much wider familiarity with online meeting platforms) and that some people are more empowered to contribute as part of an online discussion space. During discussions following the workshops, facilitators reflected how the formatting and online nature of the workshops provided a space where participants were on a more 'equal footing' (Jenny) with the researchers, where their contributions, ideas and perspectives were important and valued. This has the potential to fundamentally alter the notion of participation in research from something that is passive and researcher-led to a space in which the research simply provides the context for individuals to share their ideas and shape outputs, in the case of our research this included a Manifesto and/or a Youth Guide and Policy Brief.

The online nature of the workshop also had benefits for the facilitators themselves as they were able to watch the recording of the workshop after the event and reflect on their own practice for example, where perhaps a facilitator said too much or could have prompted the discussion in a different way. Lauren reflected, 'I felt that I actually developed as I went through the workshops, but it wasn't linear, so it was quite exciting, a little bit scary'. Furthermore, Felicity recognised that there was often a tension in judging when and how to speak as a facilitator and that this was a skill she felt she had developed both during the workshops and in reflecting on the experience as part of the interview for this research note.

Further benefits identified by facilitators included the way that the online nature provided participants with multiple opportunities and pathways to contribute. For example, the *Manifesto* project provided participants with the opportunity to contribute to the questions posed through the workshops outside the workshop series (asynchronous participation) drawing on the support of their teachers in their school context to provide a response through a method of their choice (e.g. poem, poster, drawing) as well as contributing during the workshops (synchronous participation). Jill shared that this combination of synchronous and asynchronous participation meant that 'we did give diverse learners a voice' and that the online format was flexible enough to provide a bespoke pathway for an under-represented group, in this case, those with AEN. Finally, Lauren and Jill shared how the online spaces provided an opportunity to gather a community of people together who otherwise might be a sole voice in their own school or geographic context. They observed that over the course of the workshops, participants developed increased confidence in their views and approaches and valued the opportunity to engage with people from different contexts and backgrounds. Jill suggested that future iterations of the online workshops might include some role play activities to further develop participants' sense of community.

### **Challenges posed by online participatory workshops**

Angela, Lauren and Jill noted that whilst the online nature of the workshops made participation more inclusive and appealing for some, it may have posed a barrier for others as online workshops could be 'isolating' and 'intense' experiences. Angela suggested that the online nature of discussions did have limitations, for example 'losing some of the nuance and in-between conversations that

might happen face to face' and, although the workshops did include smaller group discussions and a mixture of informal activities, it was not possible to replicate aspects such as networking time during refreshment breaks. Lauren highlighted how both a 'cameras off culture' and/or limited access to a reliable internet connection during the workshops sometimes inhibited free flowing conversation and made it more difficult for the facilitator to build a rapport with and between participants. Jill noted that the fast pace of an online workshop posed challenges as well as opportunities, as it favoured participants who were 'quick thinking and highly articulate and confident youth' and, that when this was coupled with a 'cameras off culture', it made it more difficult to identify those participants who may benefit from support during the workshop. There was considerable linguistic diversity in the *Geoengineering* workshops, and the language of the workshop (English) may have been likely to favour more confident English speakers. Finally, Jill and Angela observed that even though the workshops had been designed with a diverse range of partners with experience of working with communities persistently under-represented in conversations about the environment (including people with AEN and young people of colour), this did not always translate into successfully recruiting participation from these groups in the workshops. For example, although we worked with organisations representing people of colour, Angela and Jill reflected they had a sense that during the workshops there was an over-representation of white people participating in the *Manifesto* workshops. Demographic data was not collected from individual participants (save for accessibility needs), so we do not know how representative our group of participants was in terms of gender, race and ethnicity. At the same time, facilitators noted that substantive contributions from young people with AEN were meaningfully incorporated into the *Manifesto* project outputs. We had been able to achieve this by working directly with teachers in schools for young people with additional educational needs. This points to the possibility of reaching a more diverse and representative sample of young people through research in schools, but in the context of the global pandemic this was not a feasible option at the time of the research.

## Final reflections

The online workshops considered during this research were part of work that explores the perspectives of young people and teachers on climate change and the environment. Rousell and Cutter-Mackenzie-Knowles (2019, 203) argue that didactic approaches to climate change education have been largely ineffective and argue that there is a need to stop 'shying away from the Earth's looming runaway climate change'. They call for educators to seize the moment and to examine what really matters through participatory, interdisciplinary, creative and affect-driven approaches to climate change education which involve young people in responding to the scientific, social, ethical and political complexities of climate change. Educators are alive to this call and believe that young people should be educated about climate change, but teachers require support when implementing education for environmental sustainability, particularly in the early phases of their professional development (Walshe and Tait 2019; Rushton 2021). Our research has shown that online participatory workshops can provide researchers with a powerful methodological tool when conducting collaborative research with groups such as teachers and youth and has generated knowledge on what young people and their teachers think are priorities for climate education and climate action. Beyond the not insignificant logistical benefits, the online nature of the participatory workshops provides researchers and participants with a range of opportunities including, (1) co-produce outputs with large numbers of diverse participants, (2) build a sense of community amongst participants and, (3) develop constructive intergenerational dialogue. We highlight how the workshop design and facilitation allowed participants to be on a more 'equal footing' with the researchers, and to perceive their own perspectives to be important, valued and visible. This 'equal footing' was achieved by sharing our priorities at the outset (i.e. to find out what perspectives exist amongst the youth and teacher participants), avoiding knowledge-sharing presentations led by researchers or facilitators, by creating space within the workshops for participants to define the problem and

suggest solutions (including in whole group and small group discussions, and opportunities to add ideas asynchronously), and by creating opportunities for participants to respond to research summaries and other written outputs generated from the workshops. However, there is a need in the broader climate and educational policy sphere to pay greater attention to the expertise and priorities of teachers and young people and to share decision-making with them. As we noted at the outset, a youth climate summit has taken place ahead of COP26, rather than creating space within the conference for youth voices. Similarly, in education policy, there exist few opportunities for teachers and young people to participate in decisions about how the climate and environment feature in school curricula beyond individual choices. In common with previous research (Walker 2020), we note the persistent challenges relating to widening the diversity and increasing the visibility of young people's everyday climate crisis activism. We highlight how efforts to diversify these spaces have, to date, rightly focused on the important contexts of race and ethnicity but have frequently overlooked the inclusion of young people with AEN and the valuable insights their communities bring to these debates. We acknowledge the vital contribution that teachers frequently make in ensuring that students, particularly those with AEN, are able to access climate activities such as the workshops we outline in this study. Whilst the online nature of workshops can go some way to reducing the under-representation of some groups through providing a variety of ways that people can contribute, this approach can only be part of the solution. As researchers, we value the opportunity to be part of young people's everyday locations (including schools and colleges) and, we argue for further research focused on the challenges and affordances of methodological approaches (including but not limited to online participatory workshops) that form part of future considerations of young people's everyday climate crisis activism. This will allow for richer, diverse and more nuanced understanding of this important, emerging field.

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## References

- Blake, C., S. Calvert, C. Declé, K. Dhassi, R. Edwards, V. Garpova, G. Malaj, et al. 2021. "Geo-engineering: A Climate of Uncertainty? Youth Guide and Policy Brief." <https://georoutesuk.files.wordpress.com/2021/06/geoengineering-2.pdf>.
- Börner, S., P. Kraftl, and L. L. Giatti. 2020. "Blurring the '-Ism' in Youth Climate Crisis Activism: Everyday Agency and Practices of Marginalized Youth in the Brazilian Urban Periphery." *Children's Geographies* 19 (3): 275–283. doi:10.1080/14733285.2020.1818057.

- Collins, R. 2020. "Great Games and Keeping it Cool: New Political, Social and Cultural Geographies of Young People's Environmental Activism." *Children's Geographies* 19 (3): 332–338. doi:10.1080/14733285.2020.1853677.
- Cornwall, A., and R. Jewkes. 1995. "What is Participatory Research?" *Social Science & Medicine* 41 (12): 667–1676. doi:10.1089/env.2012.0017.
- Dunlop, L., L. Atkinson, D. Mc Keown, and M. Turkenburg-van Diepen. 2021a. "Youth Representations of Environmental Protest." *British Educational Research Journal*. doi:10.1002/berj.3737.
- Dunlop, L., L. Atkinson, J. E. Stubbs, and M. Turkenburg-van Diepen. 2021b. "The Role of Schools and Teachers in Nurturing and Responding to Climate Crisis Activism." *Children's Geographies* 19 (3): 291–299.
- Dunlop, L., and E. Rushton. 2021. "Why we Need a Manifesto for Education for Environmental Sustainability." *British Educational Research Association Blog Post*. <https://www.bera.ac.uk/blog/why-we-need-a-manifesto-on-education-for-environmental-sustainability>
- Edwards, R., and T. Brannelly. 2017. "Approaches to Democratising Qualitative Research Methods." *Qualitative Research* 17 (3): 271–277. doi:10.1177/1468794117706869.
- Læssøe, J. 2017. "Environmental Activism." *Encyclopaedia of Educational Philosophy and Theory Edited by M. Peters*. Springer. doi:10.1007/978-981-287-532-7\_443-1.
- Mannion, Greg. 2012. "Intergenerational Education: The Significance of Reciprocity and Place." *Journal of Intergenerational Relationships* 10 (4): 386–399.
- Mason, J., and S. Danby. 2011. "Children as Experts in Their Lives: Child Inclusive Research." *Child Indicators Research* 4 (2): 185–189.
- Navne, D. E., and M. Skovdal. 2021. "'Small Steps and Small Wins' in Young People's Everyday Climate Crisis Activism." *Children's Geographies* 19 (3): 309–316. doi:10.1080/14733285.2021.1887817.
- Nolas, S.-M. 2021. "Childhood Publics in Search of an Audience: Reflections on the Children's Environmental Movement." *Children's Geographies* 19 (3): 324–331. doi:10.1080/14733285.2021.1906405.
- Nussbaum, M. 2011. *Creating Capabilities*. London: The Belknap Press of Harvard University Press.
- O'Brien, K., E. Selboe, and B. Hayward. 2018. "Exploring Youth Activism on Climate Change: Dutiful, Disruptive, and Dangerous Dissent." *Ecology and Society* 23 (3): 42. doi:10.5751/ES-10287-230342.
- Partridge, L., J. Astle, S. Grinsted, and F. L. Strong. 2018. *Teenagency: How Young People Can Create a Better World*. Lancashire: RSA Action and Research Centre.
- Rousell, D., and A. Cutter-Mackenzie-Knowles. 2019. "A Systematic Review of Climate Change Education: Giving Children and Young People a 'Voice' and a 'Hand' in Redressing Climate Change." *Children's Geographies* 18 (2): 1–18. doi:10.1080/14733285.2019.1614532.
- Routes – The Journal for Student Geographers. 2021. *Provocations*. <https://routesjournal.org/projects/bera/>.
- Rushton, Elizabeth A.C. 2021. "Building Teacher Identity in Environmental and Sustainability Education: The Perspectives of Preservice Secondary School Geography Teachers." *Sustainability* 13 (9): 5321.
- Skovdal, M., and M. C. Benwell. 2021. "Young People's Everyday Climate Crisis Activism: New Terrains for Research, Analysis and Action." *Children's Geographies* 19 (3): 259–266. doi:10.1080/14733285.2021.1924360.
- Testa, I. 2017. "Dewey's Social Ontology: A Pragmatist Alternative to Searle's Approach to Social Reality." *International Journal of Philosophical Studies* 25 (1): 40–62.
- Thiery, B. W., S. Lange, J. Rogelj, C. F. Schleussner, L. Gudmundsson, S. I. Seneviratne, and Y. Wada. 2021. "Intergenerational Inequities in Exposure to Climate Extremes." *Science* 374 (6564): eabi7339. <https://www.science.org/doi/10.1126/science.abi7339>.
- Walker, C. 2020. "'Generation Z' and 'Second Generation': An Agenda for Learning from Cross-Cultural Negotiations of the Climate Crisis in the Lives of Second Generation Immigrants." *Children's Geographies* 19 (3): 267–274. doi:10.1080/14733285.2020.1817334.
- Walsh, N., and V. Tait. 2019. "Making Connections: A Conference Approach to Developing Transformative Environmental and Sustainability Education Within Initial Teacher Education." *Environmental Education Research* 25 (12): 1731–1750. doi:10.1080/13504622.2019.1677858.
- Wilkinson, C., B. Carter, C. Satchwell, and L. Bray. 2021. "Using Methods Across Generations: Researcher Reflections from a Research Project Involving Young People and Their Parents." *Children's Geographies*, 1–13. doi:10.1080/14733285.2021.1951168.