



Annex A – Studentship Application Form

<p>Title of proposed research – Education pathway</p>
<p>Developing a youth-centred methodology for the co-creation of Climate Change Education through collaborative, interdisciplinary approaches</p>
<p>Your research proposal.</p> <p>IMPORTANT: There is a strict 1300-word limit, fully inclusive of everything except references. This includes all the written text, quotes, in-line citations, section headers, captions, the contents of tables and any foot-/endnotes. Each figure/graphic should be counted as equivalent to 200 words. Tables should be counted as the number of words they contain. Proposals that are found to be overlength will be rejected. Remember that if you are applying to one of our interdisciplinary programmes, a clearly articulated interdisciplinary approach should be evident.</p>
<p>Introduction</p> <p>This project will develop a methodology for the co-creation of Climate Change Education (CCE) through collaboration between young climate activists (YCAAs) and in-service teachers. The methodology developed will be a valuable contribution to the field of CCE, which lacks substantial evidence of interdisciplinary and youth-centred approaches. This study will be informed by a theoretical framework of critical pedagogy study. Teachers and young people will be positioned as co-creators of pedagogy, with the young people bringing the specialist knowledge of climate justice, as well as their own experience and understanding of pedagogy. The research will examine both the experiences of the participants in this collaborative, youth-led process of curriculum making in relation to CCE, as well as the outcomes of that process in the form of novel pedagogical approaches. It is crucial to the integrity of this project that the YCAAs are meaningfully involved in every stage of the project, hence elements of Youth-led Participatory Action Research (YPAR) will influence the methodology.</p> <p>Rationale and Research Aims</p> <p>There is a consensus across the education community on the need for effective CCE (DfE, 2021; UNFCCC, 2018; Reid, 2019). The Department for Education recognises the responsibility of the education sector in preparing young people for the future challenges they will face as a result of climate change (DfE, 2021). The main aim of this study is to develop a methodology for the co-creation of CCE with young people as collaborators, following the recent surge in youth climate activism which has seen the mobilisation of young people on an unprecedented scale informing themselves about the climate crisis and taking action (Han & Ahn, 2020). This form of community learning through youth-led movements is often inspired or informed by critical pedagogies (Morales-Doyle and Fraustro, 2021). This study will draw on existing participatory studies to tap into pre-existing wells of knowledge by collaborating with youth-led organisations. For example, Tanner (2010) shows how participatory methodologies can provide a counter-narrative to dominant narratives of children’s vulnerability in climate discourse, thereby giving young people power and agency.</p> <p>Approaches to CCE tend to be science-dominated (Rousell and Cutter-Mackenzie-Knowles, 2019), with the result that environmental education tends to be discussed from the perspective of teachers’ knowledge of the science of climate change, rather than their preparedness to confront the ethical and political questions around how we transition to a just, sustainable future (Boon, 2016). Wise (2010) suggests that professional development in CCE should use interdisciplinary approaches and Hawkey et al. (2019) showed the value of examining problems such as climate change through an interdisciplinary lens. This study seeks to address both the scientific and social issues within CCE by working with secondary teachers across subject specialisms. Furthermore, working with YCAAs will help to frame the climate and ecological emergency as a social justice issue which intersects with other issues faced by youth today, in line with the call from Henderson et al. (2017) to make climate justice a keystone in the educational research community’s justice ethos.</p>



Research Design

This study will adopt a Freirean lens of critical pedagogy to explore how young people can be positioned at the centre of a collaborative approach to co-creation of CCE. Existing literature and ongoing projects will provide a basis from which the precise methods will be elaborated, such as Feierabend and Eilks (2011); Morales-Doyle and Fraustro (2021). Elements of Youth-led Participatory Action Research (YPAR) will influence the methodology, such as sharing power with young people and creating opportunities for them to influence the direction of the research (Ozer, 2017; Hill, 2006). Valuable experience and pilot data will come from the ongoing 'Stories of Hope' project (a GW4 crucible seed project), which the researcher is involved in and which involves working collaboratively with YCAs to co-create a workshop, with a focus on eco-emotions.

Initial research questions

RQ1: How do educators and young people experience the process of collaboration in the co-creation of CCE?

RQ2: What are the outcomes of this process in terms of teachers' approaches to CCE?

Methods: This study will engage secondary school teachers from the local Bristol area in a youth-centred process to collaboratively develop novel approaches to CCE. A group of approximately three YCAs (aged 18-25) will be recruited to participate in a series of workshops on climate justice, in which they work collaboratively with the teachers to explore the issue and develop ideas to trial in the classroom. The YCAs will be selected for their active involvement in the climate justice movement. The teachers will represent different subject specialisms, resulting in an interdisciplinary approach. The researcher will study the process of collaboration. Furthermore, the research will look at how this process influences the teachers in their attitudes to CCE and their ongoing practice through follow-up observations and interviews.

Ethical Considerations

Jolivéte (2015) refers to our 'sacred responsibility to take our role as researchers as seriously as possible when we work with individuals and communities to produce social change' (p. 7). Working with young people as collaborators raises many ethical questions, in particular about the demands on young people's time, which will require remuneration. Kara (2018) points out that research is not truly participatory unless participants have been involved from the very start of the design process, which cannot happen as ethical approval must be sought before work commences. Hence, as the researcher, I have a responsibility to mitigate for this imbalance once the work begins. In order for the research to be as participatory as possible, power relations will need to be carefully managed (Ozer, 2016). Furthermore, access to teachers through schools will need to be ethically negotiated and impacts of participation on teachers will need to be considered, as well as my own working relationship with the schools involved.

Finally, McCarry (2012) suggests that our duty of care towards children and young people means that full involvement in the research process may not always be ethically responsible if it exposes them to experiences of violence. Given the high prevalence of eco-anxiety amongst young people (Marks et al., 2021), I suggest that over-exposure to the realities of the climate crisis could be harmful to young people and therefore I will need to rigorously consider the emotional burden of engagement in the study to avoid negative impacts on contributors. In the development of this proposal, I have consulted with Dr Elizabeth Marks (Senior Lecturer of Psychology at the University of Bath) regarding the issue of eco-anxiety and I will continue those discussions throughout the ethics process and beyond.

Collaboration

This project involves the collaboration of a local youth organisation campaigning for climate justice, such as the Avon Schools Eco-Network which I was a founding member of. The involvement of local teachers will occur through collaboration with a Multi-Academy Trust. The CEO of the Lighthouse Schools Partnership has expressed interest in potential collaboration on this project. Outcomes in the form of teaching approaches will be disseminated to the wider education community through existing platforms, such as the Resource Hub of the Global Goals Centre. Furthermore, the work will link in to existing



projects through the Climate Change Education Research Network, which I have worked on as an RA since its creation in November 2020.

Word count (please complete):

References (Bibliography) (not included in your Word count)

Clayton, S. & Karazsia, B. T. (2020). Development and validation of a measure of climate change anxiety. *Journal of Environmental Psychology*, 69, 101434.

<https://doi.org/10.1016/j.jenvp.2020.101434>

Department for Education (DfE). (2021). Sustainability & Climate Change: A draft strategy for the education & children's services system

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1031454/SCC_DRAFT_Strategy.pdf [accessed 04/12/2021]

Devine-Wright, P., Devine-Wright, H. & Fleming, P. (2004). Situational influences upon children's beliefs about global warming and energy, *Environmental Education Research*, 10:4, 493-506, DOI: 10.1080/1350462042000291029

Feierabend, T. & Eilks, I. (2011). Innovating science teaching by participatory action research-reflections from an interdisciplinary project of curriculum innovation on teaching about climate change. *CEPS Journal*, 1(1), 93-112.

Han, H. & Ahn, S. W. (2020). Youth Mobilization to Stop Global Climate Change: Narratives and Impact. *Sustainability*, 12(10), p. 4127

Hawkey, K., James, K. & Tidmarsh, C. (2019). Using Wicked problems to foster interdisciplinary practice among UK trainee teachers, *Journal of Education for Teaching*, 45:4, 446-460, DOI:

[10.1080/02607476.2019.1639263](https://doi.org/10.1080/02607476.2019.1639263)

Howard-Jones, P., Sands, D., Dillon, J., & Fenton-Jones, F. (2021). The views of teachers in England on an action-oriented climate change curriculum. *Environmental Education Research*, 1-20. doi:10.1080/13504622.2021.1937576

Hill, M. (2006). Children's Voices on Ways of Having a Voice: Children's and young people's perspectives on methods used in research and consultation. *Childhood*, 13(1), 69-89. doi:10.1177/0907568206059972

Hudson, S. J. (2001). Challenges for Environmental Education: Issues and Ideas for the 21st Century: Environmental education, a vital component of efforts to solve environmental problems, must stay relevant to the needs and interests of the community and yet constantly adapt to the rapidly changing social and technological landscape, *BioScience*, 51(4), 283-288,

[https://doi.org/10.1641/0006-3568\(2001\)051\[0283:CFEEIA\]2.0.CO;2](https://doi.org/10.1641/0006-3568(2001)051[0283:CFEEIA]2.0.CO;2)

Jolivéte, A. (ed.) (2015). *Research justice: methodologies for social change*. Bristol: Policy Press.

Kara, H. (2018). Democratizing research in practice. In *The sage handbook of qualitative research ethics* (pp. 103-112). SAGE Publications Ltd, <https://www-doi-org.bris.idm.oclc.org/10.4135/9781526435446>

Marks, E., Hickman, C., Pihkala, P., Clayton, S., Lewandowski, E. R., Mayall, E. E., Wray, B., Mellor, C. & van Susteren, L. (2021). Young People's Voices on Climate Anxiety, Government Betrayal and Moral Injury: A Global Phenomenon. Available at SSRN: <https://ssrn.com/abstract=3918955> or <http://dx.doi.org/10.2139/ssrn.3918955>



- McCarry, M. (2012). "Who Benefits? A Critical Reflection of Children and Young People's Participation in Sensitive Research," *International Journal of Social Research Methodology*, 15(1), pp. 55–68. doi: 10.1080/13645579.2011.568196.
- Morales-Doyle, D. & Frausto, A. (2021). Youth participatory science: a grassroots science curriculum framework, *Educational Action Research*, 29:1, 60-78, DOI:10.1080/09650792.2019.1706598
- Ozer, E. J. (2016). Youth-Led Participatory Action Research: Developmental and Equity Perspectives. *Advances in Child Development and Behavior*, 50, 189-207 .
- Rousell, D. & Cutter-Mackenzie-Knowles, A. (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*, ISSN 1473-3277
- Selby D. & Kagawa F. (2010). Runaway Climate Change as Challenge to the 'Closing Circle' of Education for Sustainable Development. *Journal of Education for Sustainable Development*, 4(1), 37-50. doi:10.1177/097340820900400111
- Tanner, T. (2010). Shifting the Narrative: Child-led responses to climate change and disasters in El Salvador and the Philippines. *Children and Society*, 24, 339-351.
- UNFCCC. (2018). ACE Decision. Ways of Enhancing the Implementation of Education, Training, Public Awareness, Public Participation and Public Access to Information so as to Enhance Actions under the Paris Agreement. https://unfccc.int/sites/default/files/resource/cp24_auv_L3_edu.pdf.
- Wise, S. B. (2010). Climate Change in the Classroom: Patterns, Motivations, and Barriers to Instruction Among Colorado Science Teachers, *Journal of Geoscience Education*, 58:5, 297-309, DOI: 10.5408/1.3559695