"From Anxiety to Insight to Action – How can we best support young people from diverse backgrounds to make their own response to the Climate and Ecological Emergency?"

Introduction

There is clear evidence that the Climate and Ecological Emergency (CEE) is causing emotional distress among young people from all backgrounds. The voices of young people in these circumstances with regard to the CEE are underrepresented in the literature and in public discourse. The relative lack of success of social movements which engage in climate change activism to capture the interest of marginalised young people is evident. For example, Extinction Rebellion, despite concerted action on their part to encourage diversity, has been criticised as a relatively white middle class organisation. This research focused on a group of neurodiverse young people in Bristol known as the Listening Partnership and was facilitated by a grant from the Brigstow Institute, a funding body of the University of Bristol which brings people together to undertake new experimental inter-disciplinary and co-produced research projects and partnerships exploring what it means to live well in the 21st century. The research connects specifically with the issue of "living well with uncertainty".

The research team (see below) was comprised of academic staff from the university, together with staff at We The Curious (WTC), a science and arts centre and educational charity in Bristol, and the Creative Youth Network (CYN), a charity that supports young people to reach their potential and lead fulfilling lives.

The research team:

- 1. **Joe Hill**, Artist in Residence, the team member from CYN whose artistic and creative abilities produced the major creative element of the research.
- 2. **Amanda Colbourne**, Participation Catalyst at We The Curious who brought extensive experience and expertise in outreach work and in facilitating events and exhibitions that capture the interest of young people.
- 3. **Dr Myles-Jay Linton**, CPsychol, Vice Chancellor's Fellow in Young People's Mental Health, Bristol Medical School & School of Education, whose interest in the project lay in the effect of the CEE on the wellbeing and mental health of young people, and how those effects can be mitigated.
- 4. **Lauren Hennessy**, PhD student in the School of Education, local teacher and XR activist whose work focuses on young people's responses to the CEE.
- 5. **Dr David Sands**, Lecturer in Leadership and Policy, School of Education, whose interest was in how marginalised young people can develop their own ideas regarding appropriate responses to the CEE.
- 6. **Emma Cook**, Evaluation and Experience Developer at We The Curious who oversaw the initial team formation and institutional agreements.
- 7. **Dr Oscar Berglund**, Lecturer in International Public and Social Policy, School for Policy Studies, whose interest was in how young people develop political agency and non-violent forms of contestation within a climate change context.
- 8. **Professor Richard D. Pancost**, Head of School Earth Sciences, whose interest in relation to the project was in how scientific knowledge can best be deployed so that marginalised young people can make well informed and future- facing decisions concerning the CEE.

The research sought to develop new knowledge about how young people can best be supported to make their own response to the Climate and Ecological Emergency and how arts-based experiences

can facilitate this. It did this within a distributed leadership paradigm founded on trust and equity among team members and participants. Evaluative and reflective opportunities for all involved were an essential feature of the research design so as to enable the articulation of newly coined learning in relation to the issue. The team developed and undertook a project that combined mainstream research with creative research activity whose final outcome was a computer game. In terms of research questions, we wished to explore:

- . The current mindset of neurodiverse young people from diverse backgrounds regarding the unfolding climate and ecological disaster;
- ii. The types of knowledge and understanding they feel would enable them to better deal with the issue in their own way;
- iii. How they would like to learn and experience this knowledge and understanding;
- iv. How arts-based experiences can facilitate learning about the climate and ecological emergency in these young people.

Methods

We wanted to avoid attempts to elicit responses from the young people which might lead to a low response rate compromising reliability and validity. Instead, we sought an opportunity to approach potential participants when they were settled in an environment conducive to reflection. This was achieved through attendance at the group's regular weekly meetings. Because of Covid -19 this was initially virtual and then face to face in their customary setting.

University team members designed the initial mixed method research into the current state of mind of the young people regarding the climate and ecological emergency; the areas they wanted to learn more about; and their ideas and preferences about how they would like to experience this learning. Issues around wellbeing, mental health and anxiety were also explored. The findings were used to analyse what forms initial inputs could take in developing scientific, political and educational knowledge and understanding, based on what these young people would like to know and understand. Through reflection and discussion among team members, an arts-based experience that facilitated enjoyable learning in neurodiverse young people about the climate and ecological emergency was created. This took its final form as a computer game. Joe Hill, as an artist in residence at CYN with prior experience of designing and creating successful installations, took primary responsibility for the creation of this learning experience.

Participants and procedure

Through discussions informed by WTCs prior experience of working with a wide range of youth groups, the team decided that the Listening Partnership, a group for young people aged between 13 and 25 with any disability, was an appropriate group for this research. Initial permission was requested from the group's parent organisation, the West of England Centre for Inclusive Living (WECIL), a user led charity run by and for disabled people in Bristol and the surrounding areas. On receiving permission to approach the group, contact was made with their leader who facilitated written permissions from the young people and their carers, using information sheets and consent forms designed for this group.

At the beginning of the meetings, the purpose of the research, and what participation would entail, was explained to the young people orally, based on the written information sheet distributed previously with the consent form. Participants were asked whether they wished to participate and, if so, to indicate their consent. Participants were assured that individuals would remain anonymous and that the findings would be used purely for research purposes. In line with standard ethical

guidelines (BERA, 2018), researchers remained sensitive and open to the possibility that participants might wish to withdraw their consent after the meetings had started. Accordingly, participants were reminded that their participation was entirely voluntary and that they might also, without consequence, withdraw from the discussions at any time. The research received ethical approval according to the procedures of the University of Bristol Research Committee.

Findings

The research process was comprised of three phases:

- 1. Online focus group discussion.
- 2. Face to face trial and feedback of prototype computer game at groups usual venue
- 3. Interactive event at WTC to experience the finalised game and give feedback

Phase 1

Current mindset

Regarding their mindset towards Climate Change, the young people initially reported feeling worried and anxious to varying degrees, but frustration with what they saw as the lack of progress in terms of behavioural change dominated latter part of the discussion. The group were very well informed about the issue, focussing on the need to move to renewables energy and electricity, and to move away from fossil fuels as quickly as possible. The adverse effects of Climate Change, specifically global warming and flooding, were cited using examples from their own experience (Venice and Bristol). Comparisons were made between different countries including Germany, France, the UK and China. Amsterdam was held up as a model for other cities to emulate.

In terms of their feeling of vexation, this was expressed in statements such as;

"We need to get the word out to save the planet"

And:

"I don't know how many years [are] left before we can make the changes."

One member of the group opined that community based action, rather than single decisions by individuals, would be a more efficient method to effect the changes needed. This was reflected in later comments about greater urgency being needed in society generally. More leadership and encouragement by the authorities was called for through, for example "posters" and "reminders".

The group were clear that a more decisive approach was needed. For example one member said: "Every new car needs to be electric within 2 years"

What they wanted to learn about and how they wanted to learn it

The young people felt there was lack of information available e to them, exemplified by the comment:

"At the moment there's not really been a main public conversation...like people have forgotten about it a tiny bit...so I'd like a recap on everything."

Others were more focussed on developing a greater knowledge and understanding of "What it is" and, significantly, "How we can help".

In terms of preferred learning experiences, the discussion developed a brief for the designer. Initial ideas such as "little videos", "short animated videos", "film animations", "cartoons", "fun animations" were developed into "like a show, but you make it like a series, and each episode you learn something different." The final agreed format was for a computer game of some kind.

Phase 2

With COVID restrictions being lifted, a face to face workshop was organised, taking place at the Listening Partnership's usual meeting place. In the workshop, as well as trialling the prototype computer game, the young people made posters, developing ideas for "Climate Superheroes", which included 'The Polar Bear who sucked up CO2' and Mr Sub-zero and his laser gun'. The trial demonstrated that the game engaged all the young people, although familiarity with gaming appeared to be a factor in how confident they each were in navigating and understanding the game. Some issues with vocabulary were identified which had implications for comprehension. It was suggested that verbal instructions would help here.

Phase 3

Using the feedback from the trial, Joe developed the game into its final format. This was trialled by the young people at a special event which took place at We The Curious and organised by Amanda Colbourne, Participation Catalyst for that charity.

Concluding remarks

This group of neurodiverse young people demonstrated an acute understanding of the effects of Climate Change on the planet, along with a strong sense of frustration and urgency about the need to act to mitigate these effects. They also displayed a clear sense that leadership at all levels of society was lacking, and that communal, rather than individual, effort was needed. In terms of their own learning, they showed a strong desire to know and understand more and had clear ideas about how they best learn. Their feedback to Joe was sure and certain, and enabled him to produce an enjoyable and engaging learning experience tailored to their needs. Overall the project demonstrated the importance of creating a space where all young people can develop their own ideas regarding appropriate responses to the CEE, as active, critical citizens of a democratic society.