

PARTICIPANT INFORMATION SHEET (FOR TEACHERS OF PARTICIPANTS)

Bringing Science to a Wider Audience – Generation Tech Case Study:

Your student is being invited to take part in a research project. Before you decide whether to consent for them to take part, it is important for you to understand why the research is being undertaken and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish.

Thank you for reading this.

1. What is the purpose of this research project?

Cardiff University is currently running a final year, undergraduate research project that centres on the importance of bringing science to a wider and more-diverse audience. Science and technology dominate our everyday lives – from the alarms we use to wake ourselves up in the morning to how the entire world responds to a global pandemic. Therefore, student researcher, Jordan Parker, Cardiff University School of Physics and Astronomy, has developed a video resource and interactive exercise as part of their project to investigate the effectiveness with which science is currently being communicated to the general public, particularly youth, by evaluating one of the most popular forms of science communication used today – video content – as a case study.

The aforementioned video resource serves as part of a wider, interactive exercise, aimed at prompting young people to think more acutely about the technological state of the world they inhabit, consequently raising their “science capital” (science capital can be defined as the sum of all the science-related knowledge, attitudes, experiences and resources that an individual builds up through their life). The main target audience for the exercise will be school children of ages 11-16, but the online/interactive nature of it means that it can also be extended to wider audiences, such as children in care and home-schooled children.

Once all data has been collected and analysed, Jordan aims to publish their final report, concluding the extent of success of the project and making proposals for how we can continue to better communicate science to a wider audience going forward.

2. Why have my students been invited to take part?

Your students have been invited to take part in this research because they are young people, between the ages of 11 and 16, currently studying the Welsh Curriculum programme. The invitation has been extended to your students in the hopes that they will benefit from participating in an enriching and stimulating activity that will include them in valuable scientific discussion. As well as this, your students have been invited to take part so that we may collect valuable data that will help us assess how successful our new video resource and exercise are at bringing science to a wider audience by raising participants’ science capital.

3. Do my students have to take part?

No, your students' participation in this research project is entirely voluntary and it is up to them to decide whether to take part. If they decide to take part, we will use their data as outlined in sections 2, 8, 9, 10, and 11 of this information sheet. If your students and school decide to take part, you will be sent a teacher consent form as well as links to the interactive exercise and video.

If they decide not to take part, they do not have to explain their reasons and it will not affect their legal rights. Moreover, if you choose not to give consent for your students to take part, you will also not have to explain your reasons and it will not affect your legal rights.

You and your students are free to withdraw your consent to participate in the research project at any time, without giving a reason, up until the point at which the participant submits their information at the end of the interactive exercise.

If your school is interested in taking part in this research, please contact one of the individuals outlined in section 15 of this sheet.

4. What will taking part involve?

Your students will be asked to watch a short video about technology that is used for daily living and to take part in an interactive questionnaire that seeks to investigate the way they interact with and think about technology in their life – as well as gathering their thoughts on the video and exercise as a whole.

The video will be included as a part of the interactive exercise which will be made up of a “before watching the video” section of the questionnaire, an embedded copy of the video to be watched, and an “after watching the video” section of the questionnaire. An alternative version of the exercise is available which will contain only the “before” and “after” questionnaires, and you will be provided with a secure link via which you can play the video to your class all at once, should you wish.

Please note that the interactive exercise or “questionnaire”, whether the version embedded with the video or not, will take the form of a single Microsoft Form. Printed versions of the form are available, if necessary, but there will still only be one document for participants to complete.

5. Will I or my students be paid for taking part?

No. You should understand that any data your students give will be as a gift and you/they will not benefit financially in the future should this research project lead to the development of a new teaching method/test/assessment.

6. What are the possible benefits of my students' taking part?

Other than participating in an enriching and stimulating activity that will include them in valuable scientific discussion, there will be no direct advantages or benefits to your students from taking part. However, their contribution will help us understand how well young people currently interact with and think about technology in their daily lives and it will also help us evaluate our video resource to measure whether it is successfully meeting its intended aims.

7. What are the possible risks to my students for taking part?

There should be no risks, to your students or yourself, associated with taking part in this exercise.

8. Will my students' taking part in this research project be kept confidential?

All information collected from (or about) your students during the research project will be kept confidential and any personal information you provide will be managed in accordance with data protection legislation. Please see 'What will happen to my Personal Data?' (below) for further information.

9. What will happen to my students' Personal Data?

All Personal Data being collected during this project will be totally anonymised using a Microsoft Form. The data collection process has been designed in such a way that it will not be possible to trace any single piece of data back to an individual student. Therefore, although Personal Data is being collected, it will not be identifiable to the research team or anyone reading the final project report.

Cardiff University is the Data Controller and is committed to respecting and protecting your personal data in accordance with your expectations and Data Protection legislation. Further information about Data Protection, including:

- your rights
- the legal basis under which Cardiff University processes your personal data for research
- Cardiff University's Data Protection Policy
- how to contact the Cardiff University Data Protection Officer
- how to contact the Information Commissioner's Office

may be found at <https://www.cardiff.ac.uk/public-information/policies-and-procedures/data-protection>.

As this is an undergraduate research project, the data collected will be retained for a minimum of one year from the date of collection. As data may be collected up until the project deadline in May 2022, the final date that data needs to be held by the research student will be the 31/05/23.

10. What happens to the data at the end of the research project?

After the 31/05/23 has passed, Dr Chris North and Cardiff University School of Physics and Astronomy will take full control of any collected data and can opt to archive it if they believe it would be beneficial to do so. Otherwise, the data will be promptly deleted at that time.

11. What will happen to the results of the research project?

It is our intention to publish the results of this research project as part of a final year undergraduate student's dissertation report. Participants will not be identified in any report or presentation. Verbatim quotes entered in the Microsoft Form may be used but there will be no way to identify which individual they were made by.

12. What if there is a problem?

If you wish to complain, or have grounds for concerns about any aspect of the manner in which you or your students have been approached or treated during the course of this research, please

contact Dr Chris North (NorthCE@cardiff.ac.uk) or Jordan Parker (ParkerJ16@cardiff.ac.uk). If your complaint is not managed to your satisfaction, please contact the Cardiff University Complaints Team via <https://www.cardiff.ac.uk/help/contact-us/complaints>.

If you or one of your students are harmed by taking part in this research project, there are no special compensation arrangements. If you or a student are harmed due to someone's negligence, you may have grounds for legal action, but you may have to pay for it.

13. Who is organising and funding this research project?

The research is organised by Dr Chris North, School of Physics and Astronomy Cardiff University and Jordan Parker, final year Physics student, completing their dissertation project at Cardiff University. Cardiff University are also providing the funding for this project as part of their Innovation for All grant scheme.

14. Who has reviewed this research project?

This research project has been reviewed and given a favourable opinion by the School Research Ethics Committee, Cardiff University.

15. Further information and contact details

Should you have any questions relating to this research project, you may contact us during normal working hours:

Dr Chris North (NorthCE@cardiff.ac.uk), Cardiff University, Wales
Jordan Parker (ParkerJ16@cardiff.ac.uk), Cardiff University, Wales

Thank you for considering taking part in this research project. If you decide to participate, you will be given a copy of this Participant Information Sheet and a signed consent form to keep for your records.