



RESEARCH INFORMATION SHEET

Project title: The use of digital resources in mathematics education among undergraduate students in the UK

Researchers' name: Dr. Oleksii Voronkin and Dr. Peter Woods

Before you decide to take part in this study it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Take time to decide whether or not you wish to take part.

Purpose of the study: This study will investigate the use of digital technologies by UK undergraduate students enrolled in mathematics courses. In particular, the study will explore:

- (a) The digital resources students use both in and out of their lectures and seminars
- (b) The kinds of support provided by these tools
- (c) The motivations for using these tools
- (d) The ethical considerations of students using these tools
- (e) The strategies students and teachers have to integrate these tools into their educational experiences

This study will take place from February to June of 2025.

Why have I been chosen: You have been asked to participate in this research study because you are an undergraduate student currently enrolled in a mathematics course at a UK university. We are interested in learning about the digital resources you use in this program and your opinions about those tools.

What do I have to do: Participating in this study will involve two different components.

1. You will be asked to complete a survey about the digital resources you use in your mathematics course. This survey will include some multiple choice questions and some open ended questions. We suspect the survey will take 20 minutes to complete. Your responses will be collected anonymously and no personally identifiable information will be attached to your responses.
2. At the end of the survey, you will be asked if you want to participate in an additional interview. We will then select around 15 participants total to complete this part of the study. The interview will last approximately 60 minutes and be conducted online via Microsoft Teams. Interviews will be recorded and transcribed for further analysis

Do I have to take part: Taking part in this research study is entirely voluntary. You can continue to fully participate in your university course without participating in this study. Refusal or withdrawal will involve no penalty or loss, now or in the future. You may withdraw from the study at any point before you have submitted the survey, at which point we will no longer be able to identify your data as yours.

What will happen if I take part: After completing the activities described above, the researcher will analyze the data for future publications. Interview transcripts that may identify you will be censored through the use of pseudonyms or broad categories. For example, your name will be changed in interview transcriptions and universities will be described in general terms only (e.g., "a university in a medium sized city in the Midlands of the UK"). A key that links participant names to pseudonyms will be stored separately on a university Sharepoint. Audio and video recordings of interviews will be deleted and destroyed once transcripts have been made and checked for accuracy. You will be provided with the opportunity to read through your transcript, at which time you can check for accuracy and request that any pieces of data involving you directly be removed. You must do so before the end of the project timeframe (October 1st, 2025). All data will be stored on a secure SharePoint hosted by the University of Nottingham.

Possible disadvantages and/or risks of participation: We do not anticipate any serious disadvantages and/or risks resulting from your participation. While participating in the interviews will take time and sharing critical opinions about your university and the technologies you use may feel uncomfortable at times, we suspect that these will be minor inconveniences that are overshadowed by the benefits of participation.

Possible benefits of participation: By participating in the interviews, we suspect that you will acquire a deeper understanding of the role that technology plays in your university learning experience. This will provide you with the opportunity to reflect on your own learning process and better engage with technology as you participate in your course.

Confidentiality: Data collected in this project will only be accessible to the researchers in this project and participants who request to see their interview data before analysis occurs. All survey data will be collected anonymously, and interview data will be anonymized as soon as possible. All names and identifiable information will be removed from the interview transcripts. Segments of anonymized data (i.e., interview quotes) will be included in future publications along with aggregated analyses of survey results. When drafts of these publications are being written, they may be shared with colleagues for feedback before publication. Only the data included in the publication draft will be viewable by these colleagues and no personal data will be included. Editors or reviewers of publication outlets (journals, etc.) may request access to the full, anonymized data set as well.

GDPR compliance: All participants will be provided with a separate privacy notice to explain how this project complies with GDPR regulations and your rights related to data you generate in this research study.

Research results: We expect to present findings from this research at conferences and in academic and professional journals. All data will be anonymised so no participants will be able to be identified in these presentations or papers.

Research funding: This research project has not been funded.

Ethical review of the study: This research project has been approved by the School of Education Research Ethics Committee at the University of Nottingham

Contact details: Should you need to share any information with the researcher or the university, or have further questions, you can contact both parties at the following email addresses:

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