



Participant Information Statement – Teachers

COVID-19 pandemic's disruption of primary school mathematics and science education: challenges and successes

Researchers:

Associate Professor Lena Danaia – School of Teacher Education, Charles Sturt University, Bathurst
Associate Professor Amy MacDonald – School of Education, Charles Sturt University, Albury
Dr. Jacquie Tinkler – School of Education, Charles Sturt University, Wagga Wagga
Mr. Steve Murphy – School of Education, Charles Sturt University, Wagga Wagga

Invitation

You are invited to participate in a research study on the impact of the COVID-19 pandemic on primary school mathematics and science education. The study is being conducted by the above named researchers from Charles Sturt University. Before you decide whether or not you wish to participate in this study, it is important for you to understand why the research is being done and what it will involve. Please take the time to read the following information carefully and discuss it with others if you wish.

1. What is the purpose of this study?

COVID-19 has disrupted the education of an estimated 1 billion children world-wide. School closures have required the adoption of unfamiliar at-home learning practices to continue children's education. Mathematics and science education are particularly at risk of impact at this time, given that previous research demonstrates that effective education in these learning areas require hands-on activities, and some primary teachers and parents/caregivers can have relatively low confidence in these disciplines. At the same time, some teachers and parents/caregivers are responding to the current conditions in new and creative ways, with some authorities believing the COVID-19 crisis will lead to improvements in education. So, while COVID-19 poses a threat to students' mathematics and science education, it has the potential to generate innovative approaches to teaching these challenging disciplines.

This project aims to understand how at-home learning of mathematics and science is facilitated, and to identify new practices believed to be effective. The findings from this study will be used to inform parents/caregivers and teachers using at-home learning, and to inform future improvements in mathematics and science education.

2. Why have I been invited to participate in this study?

Participants in this study are being recruited through social media. We are seeking teachers working in Australian primary schools, who have been involved in facilitating at-home science and mathematics education, to participate in this research. This invitation has been sent to you as someone in your social media network felt you may be suitable and interested in participating in this research. If you are both an eligible teacher and a parent/caregiver you may join either or both groups. If this is the case we ask that your posts align to the role of the group you are contributing too (i.e. posts to the teacher group relate to your experiences as a teacher, and posts in the parent/caregiver group relate to your experiences as a parent/caregiver).

3. What does this study involve?

If you agree to participate, you will be asked to join a Facebook group with members who are all teachers working in Australian primary schools who have been involved in facilitating at-home mathematics and science education, and who have agreed to be involved in this research. To join the group you will be asked to complete a request to join the group form on Facebook to: confirm that you are a teacher working in an Australian primary school; confirm your consent to participate in the research described in this information statement; and agree to abide by the guidelines of the group about appropriate behaviour and maintaining confidentiality.

Between Thursday 25/6/20 to Wednesday 2/9/20, you will be able to post about your experiences of at-home mathematics and science education, and comment on the posts of other teachers in the group. At the conclusion of this period, all of the group's data will be removed from Facebook and the group will be deleted. As with standard Facebook posts, these posts may include texts, images, and/or video. The research team and other participants in your group may comment on your posts and you are encouraged to respond to these comments. The research team will also post polls (1-3 multiple choice questions) to the group up to three times each week about specific aspects of at-home mathematics and science education. You are encouraged to post, comment, and complete poll questions as often as you would like, and any information you share will be used by the research team to understand how at-home learning of mathematics and science is facilitated, and to identify new and effective practices in this area. As with all Facebook posts, you will have the option to review, edit or delete your posts and comments at any time. Deleting posts will remove them from the newsfeed of the group and the research data. Please note, your participation in any, or all, of these activities is entirely optional.

4. Are there risks and benefits to me in taking part in this study?

We cannot promise you any benefit from participating in this research. Any potential benefits of participating in this group will be through the exchange of experiences and ideas related to at-home mathematics and science education with other teachers.

Every effort will be taken to minimise the risk of harm to participants. Group participants are asked to agree to abide by a set of guidelines to ensure appropriate behaviour in the group prior to joining the group. A research assistant will be employed 16 hours per week to help moderate the group. Posts and comments will be moderated by the research assistant or other members of the research team three times each day – once in the morning, once in the afternoon, and once in the evening – to ensure that offensive, harmful, or abusive material is removed and any offending group members are ejected from the group. There is potential that the behaviour of other group members may still cause distress. Further, poll questions, posts and comments are focused upon at-home mathematics and science education. This subject area may cause anxiety for some participants.

5. What should I do if I need support or if I am not managing during the research?

If you are finding participation in this research stressful or you are not coping in any way you can reduce or cease your participation in the group at any time and without any explanation. Ceasing participation can be done through Facebook by selecting the group from the Groups menu and selecting Leave Group. Further, please seek support if you need it. The eSafety Commissioner offers advice on managing cyber abuse at <https://www.esafety.gov.au/key-issues/adult-cyber-abuse>. The Commissioner also recommends contacting Beyond Blue (1300 224636) or Lifeline (13 11 14). Beyond Blue can support with counselling and support for any issues that may arise during this research, and Lifeline can provide crisis counselling if required.

6. How is this study being paid for?

This research is being funded by the Charles Sturt COVID-19 Research Grant Program.

7. Will taking part in this study (or travelling to) cost me anything, and will I be paid?

There will be no cost to you for participating in this study. You will not be paid.

8. What if I don't want to take part in this study?

Participation in this research is entirely your choice. Only those people who give their informed consent by requesting to join the Facebook group will be included in the project. Whether or not you decide to participate, is your decision and will not disadvantage you.

If you do decide to participate, you may withdraw from the project at any time without giving a reason and you have the option of deleting any or all of your posts or comments from the group as you would in any Facebook group. You will not be able to delete any of your responses to poll questions as these are collected anonymously.

9. What if I participate and want to withdraw later?

The Facebook groups will be active until 2/9/20. At this time, the research team will copy all posts and comments in the group and the group and its contents will be deleted. This information will be made non-identifiable by replacing names with pseudonyms and permanently obscuring all faces and/or identifying features in photos and videos. No data will be kept to allow re-identification. Given this, withdrawal of your data after the group has been deleted will not be possible.

10. How will my confidentiality be protected?

The Facebook group is a closed group. Only members of the group will be able to view the posts and comments you make within the group, and you will be identifiable to other group members by your Facebook user name. Group members will agree to guidelines prior to being given permission to join the group, including rules prohibiting sharing the content of the group newsfeed or membership of the group. However, you should keep in mind that group members may infringe these rules, potentially by sharing your posts, comments, or username outside of the group. You should consider this before making posts and comments. All group content will be deleted at the conclusion of this research after August 2020, so will no longer be accessible to group participants after this time. All polls you complete as part of the group are anonymous and it will not be possible to identify you from your answers.

Your posts and comments collected for analysis will be made non-identifiable by the research team, using pseudonyms and by permanently blanking out faces and identifiable features in images and video, so you will not be able to be identified using this data. Data will be secured for a period of five years after the last publication about the study and, after that time, the computer file deleted, in line with Australian Code for the Responsible Conduct of Research guidelines. All information will be password protected on a university computer with only the researchers having access to the information. Any publications and presentations resulting from this research will include no identifying information. Participants' details and consent agreements collected prior to joining the group will be securely stored separately from other data collected and coding used during data collection. The research team will be the only people with access to this password protected information, and the only people able to share non-identifiable information with other researchers. Any use of your information will be limited to the use of your non-identifiable information by researchers who agree to preserve your confidentiality and accessed through the agreement of the original research group.

11. What will happen to the information that I give you?

The results of the analysis of the posts, comments and poll responses of all participants will be used to create a summative report for Charles Sturt University. This report will be made publicly available by 31 January 2021, including through the Facebook newsfeeds of the researchers. Participants will be able to access the report through the Facebook pages of the researchers. The findings will also be used in papers for publication in academic journals, professional magazines, and conferences. Individual participants will not be identified in any of these publications. Pseudonyms will be used in reporting any findings, and any images or video used will be de-identified by blacking out faces and any identifying features.

The information you contribute, in non-identifiable form may also be used in future education research projects that extend on, or are related to, this project.

12. What should I do if I want to discuss this study further before I decide?

If you would like further information please contact Steve Murphy at the School of Education, Charles Sturt University, Locked Bag 588, Wagga Wagga, NSW 2678. Phone: (02) 693 32491. Email: smurphy@csu.edu.au

13. Who should I contact if I have concerns about the conduct of this study?

Charles Sturt University's Human Research Ethics Committee has approved this project. If you have any complaints or reservations about the ethical conduct of this project, you may contact the Committee through the Ethics and Compliance Unit via the following contact details:

The Governance Officer
Human Research Ethics Committee
Ethics and Compliance Unit
Locked Bag 588
Wagga Wagga NSW 2678
(02) 6933 4213
Email: ethics@csu.edu.au

Any issues you raise will be treated in confidence and investigated fully and you will be informed of the outcome.

**Thank you for considering this
invitation. This information sheet is for
you to keep.**