
COVID-19: Alternative Research Strategies – Advice for Students

On 30th March, the University's Academic Board approved the document "[COVID-19 Pandemic: Continuity of Research and Research-Related Activity](#)" comprising guidance for the conduct of research during the period of the COVID-19 pandemic. The central instruction included in this guidance is:

All primary research and research-related activities involving face-to-face human participation must cease with immediate effect. Wherever possible all research and research-related activities must now be carried out remotely/virtually. Where this is not possible the activities must be suspended.

As students on taught and research programmes, you may be affected by this guidance in different ways depending on the stage you have reached in your research or research project. Many of you will be in the fortunate position of having your data – and you're into the analysis and writing up stage. Some of you may be wondering if you have enough data or even may be worried that your data collection has been thwarted. Others might not be able to access specialist resources or facilities that you needed to complete your research. We have therefore put together this advice with a range of strategies that you can use to supplement any work so far, or to help you develop a new project.

There is a guide for deciding whether your research can continue at the start, followed by some generic resources and suggestions. These are followed by some more subject specific suggestions, and finally by suggestions for Desk Based Research and Action Research.

However, do speak to your supervisor before making changes and ensure that the proposed project complies with the requirements set out in your programme handbook and in the new COVID-19 guidance on Continuity of Research and Research-Related Activity.

CONTENTS

DECIDING WHETHER RESEARCH CAN CONTINUE	3
GENERIC INFORMATION.....	6
ARTS AND HUMANITIES	8
BIOLOGICAL AND HEALTH SCIENCES.....	9
SOCIAL SCIENCES AND HEALTH.....	10
EDUCATION	12
SUGGESTIONS FOR DESK BASED RESEARCH.....	14
SUGGESTIONS FOR ACTION RESEARCH.....	18

DECIDING WHETHER RESEARCH CAN CONTINUE

Please note that the below questions are a guide only and you should seek advice from your Supervisor on the best course of action for you.

<p><i>Q1: Can my research continue without face-to-face data collection/interactions?</i></p> <p>Points to consider:</p> <ul style="list-style-type: none"> • Why was the data collection format chosen for this project? • How does the original data collection format link to the research question? • What data is needed for analysis? • What is lost/changed by conducting data collection in a different way? 	
<p><i>Q2: Does my research <u>exclude</u> interactions with participants from schools and other education settings or the health sector?</i></p>	
<p>YES</p>	<p>NO</p>
<p><i>Is there a remote data collection alternative to face-to-face data collection for my research?</i></p> <p>Points to consider:</p> <ul style="list-style-type: none"> • What are the remote alternatives to primary data collection that do not involve face-to-face contact with individuals? • What are the alternatives that are closest to my original data collection methods? • Which remote data collection methods allow me to collect the data I need for analysis? • How long will alternative data collection methods take? What are the implications for the timelines of my research? 	<p><i>Is my research <u>essential</u>, with potentially significant and meaningful impact and relevance in the current situation?</i></p> <p>Points to consider:</p> <ul style="list-style-type: none"> • How crucial to the organisation's current circumstances is your research? • Could the focus and questions be approached differently, to avoid gathering data from participants in school or other settings? (suggestions below) • If you did not involve any participants and used alternative approaches for your research, would this negatively affect the organisation(s)? • What creative ways could you use to investigate your focus?
<p><i>Q3: Is my preferred remote data collection method feasible in the current climate?</i></p> <p>Points to consider:</p> <ul style="list-style-type: none"> • What do I need to put in to place to successfully use an alternative data collection method? • If research participants are to be involved, will they be able to take part? • Does the research require technology that only a limited number of participants will have access to? • Is it reasonable to ask participants to make arrangements for this data collection? 	

I answered 'YES' to all 3 questions what should I do?

You should adapt your research to remote data collection methods. Unless the changes made to the way in which you interact with participants result in a substantial change to protocol, or involve participants considered high risk in terms of COVID-19, you will not need to submit an ethics amendment request. However, you will need to keep a record of any changes made for audit purposes. Please note that this is a temporary change to the University Ethics Policy and only applies for the duration of the COVID-19 related restrictions.

I answered 'NO' to one or more of the 3 questions what should I do?

You have two options:

1. Suspend your research. You must remotely inform your participants that the research has been suspended. This communication should provide as much information as possible e.g. describe how any actively enrolled participants will be managed, particularly concerning any safety monitoring/follow-up etc. where applicable.
2. Given the timescales that may apply to you, you may wish to consider changing/adapting your research project to the use of secondary data only i.e. research that does not require ethical approval or interaction with any participants. Talk with your Supervisor to discuss suitable alternative research projects.

If you are a student on a taught programme and it is not possible to change to approaches using secondary data or remote participant interactions (as relevant to your programme), or if you do not have the necessary access to IT or other facilities to complete your research project, the [COVID-19 Agreed Postponed Assessment](#) process provides the option to you to defer until such time that data can be collected, or facilities accessed, for your studies to be completed. Please note an agreed postponed assessment may impact on timescales for progression to the next level of study or award.

If you are a research student, please refer to the further [guidance for PGR students](#) on registration, extensions and interruptions provided by the Dean of the Graduate College on 9th April 2020.

PLEASE NOTE: with effect from 30th March 2020, and until further notice, the continuation or commencement of any primary research or research-related activity involving interaction with participants in:

- (i) schools, the wider compulsory education system (including with teachers or students) and other educational settings (e.g. early years) will require the explicit prior permission of the Pro Vice-Chancellor (Research & Enterprise). ***THIS WILL ONLY BE GRANTED IN THE MOST EXCEPTIONAL OF CIRCUMSTANCES***
- (ii) the health sector will require re-confirmation of continuing ethical approval from the relevant external ethical review body.

GENERIC INFORMATION

Any advice contained within the suggested links within this document must be subject to published policies and advice in the order of precedence below:

1. ***Government legislation, advice or guidance relating to measures to combat COVID-19***
2. ***The University statement on [Continuity of Research and Research-Related Activities](#)***
3. ***Policies, procedures, guidance and advice under the University Research & Enterprise Integrity Framework.***

There are a number of alternative research strategies that you could consider. For example:

- Analysis of existing media content
- Qualitative and quantitative analysis of archival data and texts
- If your project is empirical, but due to data collection being foreshortened, discuss with your supervisor:
 - Whether any alternative/additional data analysis procedures could be applied
 - Whilst you do not have sufficient statistical power to carry out your original data analysis, whether sufficient data is available for a more limited analysis and this can be acknowledged in the thesis
- Meta-analysis of published studies
- Systematic literature review

General guides and useful links when carrying out remote/online data collection

Deborah Lupton of the University of New South Wales (Australia) has started a crowdsourced document titled "[Doing Fieldwork in a Pandemic](#)". This is a useful document that contains a lot of helpful tips and links to online resources.

Other useful links are included in the table below:

Title and link	Author/Organisation	Published	Last modified
Online data collection	The UK data service	2005	10 Mar 2020
Phone Interviewing as a Means of Data Collection: Lessons Learned and Practical Recommendations	Lisa A. Burke (Louisiana State University) & Monica K. Miller	May 2001	N/A
Using Phone Interviews	Annie Irvine (University of York)	November 2010	N/A
Ethics Guidelines for Internet-Mediated Research	The British Psychological Society	2017	N/A
Researcher Protection and Practices in Internet-Mediated Research	The British Psychological Society	24 August 2018	N/A
Good Practice in Research: Internet-Mediated Research	UKRIO	December 2016	N/A
Health Research Authority guidance related to projects conducted in NHS settings	NHS Health Research Authority	March 2020	N/A
Mental health and psychosocial considerations during the COVID-19 outbreak	WHO	18 March 2020	N/A
COVID-19 Public Monitor <i>(Includes information about COVID-19, peoples experiences of the global pandemic and data that helps understand the spread of the virus)</i>	YouGov	Updated regularly	

ARTS AND HUMANITIES

Examples and possible ideas for alternative research strategies:

- Analysis of professional/artistic practices in their field
- Meta-analysis of relevant literature and research in their field
- Review the knowledge thus far in a specific field
- Develop or test out a methodology or method that can be applied virtually
- New analysis of available secondary data
- Analysis of archival data
- Alternative data collection and/or method that can be carried out online/virtually; e.g.:
 - content analysis or textual analysis or other types of methods to study text available online (e.g. via database or capturing 'live' data)
 - online interviews with participants
 - If original work involved ethnography and field work to observe interactions in a real live setting, consider whether those interactions could be observed online, e.g. discussion group, social media
 - Practice based research - alternative practice work that can be carried out at home and/or virtually
 - Practice based/artistic interventions online

BIOLOGICAL AND HEALTH SCIENCES

Examples and possible ideas for alternative research strategies:

- DNA sequence data- phylogenetic or phylogeographic analyses. Lots of free and public data available.
- Species distribution modelling. Records online from many species, and climatic variables. Computer and internet needed.
- Online questionnaires- people perceptions towards animal reintroductions, etc.
- Digital repositories (like DRYAD) with different data from ecological studies. Mostly (all?) published but could be re-analysed. We would need some kind of disclaimer explaining data was not collected by student.
- Bioinformatic analysis of existing genomic data.
- Structural biology.
- Secondary analysis of species distribution catalogues.
- Secondary Analysis of existing databases related to radiography, biomedical and stem cell research etc.
- Systematic reviews of evidence in relation to radiography, biomedical and stem cell research etc.
- Bioethics and aspects of research related to COVID-19 crisis – review of evidence from previous pandemics

SOCIAL SCIENCES AND HEALTH

Examples and possible ideas for alternative research strategies:

- Discourse analysis of existing archival text, e.g. Hansard reports, media, websites etc.
- Sharing individual data collected through apps such as fitness trackers
- Observational analysis using either existing publicly available video, or remotely asking people to submit video data (may require ethical approval)
- If your project is empirical, but due to data collection being foreshortened, discuss with your supervisor:
 - If any alternative data analysis procedures could be applied, in addition to those planned.
 - If now statistically underpowered, if the project can still be submitted, with acknowledgement of this, rationale given and consequential limitations discussed.
- Ask if supervisors have any secondary data sets available, or any other data they have access to which could be analysed.
- Intervention studies of online self-help interventions
- Experimental studies using online platforms, such as Qualtrics
- Critical literature review or systematic reviews on chosen topic in place of empirical study
- Consideration of COVID-19 crisis (using secondary research and data) in relation to chosen research topic and more specifically in relation to:
 - accessing reliable information about the current situation (for public, professionals and key stakeholders such as local authorities and NHS Trusts)
 - being aware of ways to cope with the crisis (e.g. finding reliable advice/help)
 - being supported to cope with the crisis (e.g. formal/informal mechanisms of support, online support etc)
 - understanding the impact of the crisis at personal, organisational and institutional/governmental level (e.g. analysis of social media coverage, guidance issued by regional/national/international bodies, role of self-

- help/mutual aid networks, protective factors for staff morale/resilience in crisis etc)
- planning for post-crisis restart/rebuild of services/systems/policies (e.g. published reports or analysis on post-crisis management in relation to previous pandemics)
 - Critical literature review or systematic reviews on chosen topic in place of empirical study

EDUCATION

Examples and possible ideas for alternative research strategies:

- Carry out a documents analysis of curriculum documents. Here is an example [Billingsley, B., & Ramos Arias, A. \(2017\). Epistemic insight and Classrooms with Permeable Walls. *School science review*, 99\(367\), 44-53. \[click to view\]](#)
- Review school websites for language, layout and vision – or analyse and compare how they present their school curriculum.
- Add a section that looks at your question historically and compare what research says now and what was said in the past.
- Lots of museums and galleries have collections online - so consider analysing objects that relate to your topic.
- Write your own session plan or design a new educational tool and review it against existing research to explain how it addresses a current gap or overcomes a barrier.
- Use a comparison approach - list the factors that seem relevant to your research question - but 'wear two different hats' to do so. So (for example) answer as a student teacher in school, then answer as if you are a private tutor or class teacher or another role that you sometimes have. Analyse and discuss the comparison
- Choose a lesson that you would have taught in school and revise it for delivery electronically, drawing on the literature for ideas.

Epistemic Insight

The EI Initiative is a Faculty wide priority area of research that values and promotes the research you do ... if you haven't yet thought about whether your research has something to contribute to this national and international agenda - here's another invitation to do so! Browse the www.epistemicinsight.com website for ideas. Some EI related additions to existing work could include:

- Review your lesson plans or a lesson you observed for links to EI and include a write up of these.

- Work across different disciplines to create an EI lesson on one of the topics you taught this year.
- Review a tool or article on the epistemicinsight.com website

SUGGESTIONS FOR DESK BASED RESEARCH

There is a huge amount of information and sets of guidelines for desk based (DBR) research on line. Here are a few of the many sites that could give you an idea of how much help there is and also some exemplars:

- <https://www.oxbridgeessays.com/blog/how-to-dissertation-secondary-research-4-steps/>
- <https://scholarsarchive.byu.edu/cgi/viewcontent.cgi?article=5365&context=etd>
- <https://www.userfocus.co.uk/articles/desk-research-the-what-why-and-how.html>
- <https://www.b2binternational.com/publications/desk-research/>

DBR is an opportunity to engage with the huge amounts of data that can gathered from the materials that schools, universities and Government produce. Researchers can either analyse the content of the data or the implicit messages and meaning that may be embedded within that data. There are also numerous opportunities to research resources that are used in education; digital books , worksheets, revision booklets, schemes of work, TES materials, websites provided by school, toolkits, learning journals, BBC bitesize, materials produced by the exam boards.

Focus and methods – Four examples:

Focus/Area	Examples	Possible methods/methodologies
1. Identifying themes in Government policy on an issue or subject area.	<p>Changing notions of gender inequality in guidance for PE.</p> <p>Or</p> <p>An analysis of the Home Office guidance on extremism and radicalisation in schools.</p>	<ul style="list-style-type: none"> ○ Content Analysis ○ Critical Discourse Analysis ○ Systematic Review ○ Critical Race Theory ○ Logical Framework Analysis ○ Literature reviews

		<ul style="list-style-type: none"> ○ Systematic reviews – these analyse the literature within a set time frame and with rigid boundaries. They can either do a meta synthesis (using non statistical methods) or meta-analysis, (using statistical approaches)
2. Critiquing the content of resources, these could include; online resources, TES resources, tool kits, lesson plans and schemes of work, digital textbooks etc.	<p>Identifying dominant issues and pedagogies on online maths resources.</p> <p>Or</p> <p>Bible stories and conflict in Primary Religious Education</p>	<ul style="list-style-type: none"> ○ Textbook analysis ○ Pingel's textbook analysis tools. ○ Historiographical Analysis
3. Using University and school web pages	<p>A survey of images and references to diversity and difference in outward facing web pages in two universities.</p> <p>Or</p> <p>An analysis of the minutes of governor meetings within a large Academy Trust in the North East of England.</p>	<ul style="list-style-type: none"> ○ Semiotic analysis ○ Textual analysis models.
4. Visual representations of education	<p>Representations of sport and exercise in recent policy</p>	<ul style="list-style-type: none"> ○ Visual content analysis ○ Visual Discourse analysis

	<p>for the early years.</p> <p>Or</p> <p>Images of schoolrooms: comparing classrooms in France and the UK in online newspapers.</p>	
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Media Data

Both digital and print media offer a wealth of opportunities for data collection, that we often don't consider to be data, from newspaper comments sections (online & in print) to blogs, Facebook posts and twitter feeds. In this section we will consider three types of textual data (a) media comments sections, (b) blogs, and (c) online discussion forums.

All of these textual sources offer opportunities to examine "everyday" understandings of issues, as well as (in the case of blogs and discussion forums) professional reflections on changes within the educational landscape, professional practice etc. All forms discussed below allow the opportunity to easily/ unobtrusively capture participants' thoughts in their own words.

How can I use it?

There are two key types of research question that are particularly suited to media data collection:

- those that research the relationship between the media portrayal (of groups, events etc.) and lived experience; and
- those that focus on the impact of media narratives.

The first approach approaches examine the interaction between the "reality" we experience and the media's representation of that reality. For example, this article & exhibition that challenge media portrayals of black men and teenagers <https://www.theguardian.com/global/2020/mar/18/photographs-black-teenage-boys-prejudice-stereotypes>. This could be used to explore representations of particular social

groups in education stories (or their lack of inclusion); portrayal of events e.g. strikes, march for education, student climate strikes; or investigating public opinion of education changes etc. The focus is on the relationship between portrayal and lived experience (for example you may choose to compare media portrayal with blogs/ twitter feeds of those on strike).

The second approach doesn't look at the relationship but instead focuses on the "construction" of media narratives. For example, such approaches could be used to examine questions such as "how are female and male teachers' experiences of leadership represented differently?" "Might these representations sustain unequal gender balances and other inequalities (and how)?" The focus here is on the media's narrative and how this might perpetuate inequality, negative social behaviour/prejudice.

Ethical considerations: Open access mainstream news sites can be considered "public spaces" and it is often appropriate to say that participants view their posted data as "public" and "non-sensitive". This means it is appropriate to collect the data without informed consent, **however**, recognise that the data has been created for a specific context and purpose. The terms and conditions of any site used for this purpose must be checked to determine whether the data can be used. In addition opinions are personal data so ethical review is required for this as our definition of 'human participants' includes the processing of personal data. It is good practice to ensure that data is anonymized using pseudonyms and identifying data is removed. You may also choose, for additional protection to only use websites where it is possible to post anonymously/ without using legal names.

Example of anonymised town data:

Instead of giving town names these can be replaced with descriptions	
Town	Description
Ashbury-by-Sea	Coastal town with significant unemployment and low HE participation rates
Blakestone Town	Small town (1,000-10,000 pop.) mixed socio-economic status
Crankford	Rural village with affluent population and high levels employment
Dorlington	Large town/city (100,000+) with local government intervention in provision of after school services

SUGGESTIONS FOR ACTION RESEARCH

Although there are many different approaches, interpretations and models, action research is normally carried out within your own organisation to support improvements in practice. This can enable you to contribute positively at times of pressure and change, whether working across the whole organisation or community, leading a team of colleagues, or working with a class or small group of children in schools. It is important to avoid burdening your organisation and making additional demands on colleagues and learners by giving them extra information, seeking consent for research and gathering data from them. Nevertheless, there are many different ways of investigating your chosen area of focus that can still help to support the organisation in moving forwards, can develop your own understanding and can help with adaptation to new and different ways of working that nobody had envisaged.

It is sometimes difficult to distinguish between professional and organisational developments and action research. Activities that would normally take place, such as audits, collaborative planning, meetings, policymaking, review and evaluation of learning and teaching, are still likely to be taking place, albeit in different circumstances, and all provide information that could be used as secondary evidence (remember not to use evidence that can be attributed to individuals – for example you could draw out the main issues from a meeting or highlight priorities from an audit but don't name individuals). This fits easily into models of action research (often set out in a 'cycle' or stages or steps). As the action researcher you can incorporate the ideas outlined above for desk-based research, and use this information to inform leadership of development work to support your organisation.

There are many reflective methods that can be used where you cannot gather information from people first hand, where you can use your own experience as evidence. There is plenty of literature about how you can use reflective journals (about practice / leadership as well as research), critical incident analysis, analysis of your own blogs, tweets and emails and so on. A critical reflexive account of your process of improvement is critical to action research and becomes even more important where the circumstances change. In your account, demonstrate your responsiveness, sensitivity, awareness of opportunities and limitations, your methodological creativity, decision making in

unpredictable circumstances and self-awareness of positionality (the way in which you in your role affect the action research). This will help you to aim high academically.

Use the methodological texts to help you articulate all of this. Action researchers expect to adapt to changing circumstances, indeed it is quite unusual for things to go according to plan. Try not to be too worried about having 'enough data' – aim to do something creative and useful with what you've got. Remember to talk everything through with your supervisor as they will suggest ideas to help you.

Examples of adapting your research when you cannot gather first hand data from participants in schools are provided in the table below:

Focus	Evidence already available	Additional methods
<p>How can I lead the enhancement of provision for students with dyslexia, in my role as a SENCO</p>	<p>Audit of current provision</p> <p>Current school policies</p> <p>National policies and provision</p> <p>Issues drawn from correspondence with parents</p> <p>Anecdotal feedback from staff at staff meeting that suggests issues in current provision</p> <p>Research evidence from the literature and research reports</p>	<p>Identify areas of need from analysis of evidence available.</p> <p>Using research evidence, draw up a CPD plan for online sessions for all staff.</p> <p>Run and evaluate the sessions using the school's normal feedback form and summarise key points</p> <p>Take notes of meeting with team reviewing confidence in provision having done the training</p> <p>Write a development plan for the next academic year incorporating new approaches</p> <p>Keep a leadership journal as you go along, with a separate column for later reflections</p>
<p>Improving mathematics confidence in Year 9 as Key Stage 2 subject leader</p>	<p>Student results</p> <p>Literature and research reports on secondary mathematics teaching and on learning confidence / disposition</p> <p>Anecdotal evidence from student and parent conversations</p>	<p>Reflect on practice by identifying a set of critical incidents from your own classroom and from staff conversations that highlight the issue of confidence in mathematics amongst year 9.</p> <p>Read the literature and use the knowledge gained to review</p>

	<p>Minutes from department meetings</p> <p>Schemes of work and lesson plans</p> <p>Observations with subject area</p>	<p>lesson plans and schemes of work.</p> <p>Write a discussion paper putting suggestions for amendments to team and take notes on their feedback to revise the plans.</p>
<p>Supporting staff wellbeing during academisation, in your role as a deputy head.</p>	<p>Papers, briefing documents, minutes of staff meetings.</p> <p>Relevant national and academy policy documents</p> <p>Anecdotal evidence from your own experience of conversations</p> <p>Literature including case studies on academisation and professional implications.</p>	<p>Keep a reflective journal in which you focus specifically on your role in implementation of academisation in relation to staff wellbeing issues and how they were addressed.</p> <p>Write a fictional account of 6 scenarios that 'could have happened', drawing on your experience.</p> <p>Analyse each one's implications in relation to a framework of aspects of professionalism derived from the literature.</p>
<p>Investigating personal vision and values as a woman head teacher</p>	<p>Experience of your professional online interactions with colleagues and learners, which have radically changed since your school has shut.</p> <p>News from the media about the current unusual circumstances and the way</p>	<p>Keep a sketchbook in which you represent in words, phrases and pictures, your own personal experience of teaching, learning and leadership, and responses to external coverage, in the new circumstances.</p> <p>Interrogate the sketchbook for themes to analyse in relation to the literature.</p>

	<p>schools and teachers have been portrayed.</p> <p>Previous writing for your National Professional Qualification for Headship and personal statement from your interview</p> <p>A set of self portraits from your PGCE with art specialism.</p> <p>Literature on school leadership, women leaders, professionalism and identity.</p>	<p>Reflect back on earlier writing and artwork to consider whether your ideas and views have changed.</p>
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