



How to:

Plan an Education Research Project

Lesley Pugsley

Recent policy initiatives have led to the formalisation and accreditation of the role of clinical teachers. In consequence there are now a variety of postgraduate courses for medical educators. This has seen a rise in the number of research projects being undertaken to explore the effectiveness of a variety of teaching and learning events. However, experienced clinical researchers may have received minimal formal training in social sciences research. In consequence much of what is produced and reported is at the level of small scale evaluation rather than robust research. Such studies, poorly conceived and executed contribute little to the evidence base for medical education.

In order to engage with educational research it is vital to consider some basic guidelines. Undertaking research in educational settings requires the researcher to have the right knowledge about the research process and also the appropriate skills necessary to undertake the study. Research is concerned with *understanding*, not just with *describing* a set of events or experiences. A project should only be conducted once a very clear research question has been articulated. Care should be given to ensure that only those questions that are worth answering are asked. All too often valuable time is wasted addressing meaningless questions using inappropriate or ill used methods.

Educational research requires the researcher to first question their own epistemological beliefs – what is the nature of the knowledge that is being generated? What kinds of statements are we trying to establish? As researchers we should also be clear about the methodology of the study, how can we discover and validate what we study? And what methods of data collection will be utilised?

The following guidelines should help ensure both a good research experience and a successful outcome for a novice educational researcher.

Stages in the research Process

Stage	Focus
1	Define the problem and the aims of the research
2	Review the relevant educational literature
3	Plan - consider the philosophical base, methodology and methods
4	Conduct the study – collect the data
5	Analyse the findings
6	Consider their significance
7	Implications of the research and its findings for learning and teaching
8	Assessing the project reflecting on the process – what next
9	Dissemination

Planning the Research Study

Before the research proposal is written it is essential that you undertake a focused literature search to assist with the formulation of the research question. The research question(s) should be clear and precise and you should ensure that your research focus is worthwhile. Think about the ethical issues of the proposed study. Any research act is disruptive, a spotlight, however discreetly angled, causes dissonance to those in its field. The research process must be ethical and learned societies such as the BMA, and the British Sociological Society publish guidelines on how to do research. . Remember that there are legal rules – for example if you are using the computer you might run foul of the Data Protection Act. Find out first, before you break the law! Good research practice demands you always ensure that you have received 'informed consent'. The participants in any research have the right to know that they are being researched, and for what purpose. You should be explicit in providing them with clear assurances regarding the uses, which will be made of the findings from any study, you undertake. Participants should also be free to withdraw their consent and their co-operation at any time during the research process and should be made aware of this at the outset. If the research continues over a period of time, it may be necessary for the researcher to renegotiate of consents.

The most important thing in any study is to protect the identities of the places, people and events you are studying. Even if the people you study say that they are happy to be named – protect them. Be aware of the power differentials in the research process. If you hold a position of seniority or influence over those you are researching; it essential that you are sensitive to their possible concerns. You need to reassure them of the confidentiality of the research, earn their trust and **guarantee** to protect them.

Consider the roles of pseudonyms in research. On the whole it is easier to read a text which is about 'Four Winds Hospital', 'Dr Jenny Williams' and patient 'Philip Jones', than one about Hospital #7, Dr 032 and Patient 451(m). Getting access to do your research may be time consuming, needs care and must be documented.

Points to note

- ▶ Does your study need to go to an NHS ethics committee (time consuming and potential for long delays), or a University ethical review?
- ▶ Who are the 'gatekeepers' for your research?
- ▶ Remember access is a process not a single event
- ▶ Don't make promises that you can't / won't keep.
- ▶ Keep a diary of the process and keep copies of all documents.

Avoid sexist and racist language in your writing. In particular don't use male nouns and pronouns to refer to males and females. This cannot be dismissed as an insignificant literary convention for it inevitably gives the impression that women are absent, silent or simply less important than men. Anti racist language guidelines have also been published. The Commission for Racial Equality has produced a list of 'Ethnic Classifications' but recognise that no single classification system will be relevant to all contexts.

Be prepared to revise the plan a number of times, researching social settings can be problematic. But always remember if you are to sustain a piece of work it must focus on an area of interest. Does the research topic 'grip' you? You have to be strongly motivated to complete a piece of research and so you need to choose something which interests you and fires your imagination. Think to of the timeframe. Draw up a timetable and think about designing a project that fits into the time frame which you have available to you. Remember to allow for 'slippage', data collection and analysis will be time consuming and you should be working to a deadline.

Do ensure that you completely understand the methods that you chose. Questionnaires are very easy to administer and generate large data sets which can be readily analysed. However they are difficult to design. Asking questions in a format that is readily understood, unambiguous and provides for a full range of options is challenging and the study will require considerable efforts in terms of wording, layout, pre-coding and piloting prior to their administration. Qualitative research methods too demand rigour both in their application, a qualitative interview is a 'conversation with a purpose' not an opportunistic chat with a colleague.. Discuss your ideas and your work in progress with colleagues, this way you can obtain feedback on your study as you engage with it.

Having undertaken a piece of research it is important that the findings are disseminated to as wide an audience as possible. In order for this to happen, it needs to demonstrate rigour in the design and execution of the study, evidence of theory in the discussions and conclusions that can be generalized to a wider population. Ask yourself why readers in a different part of the UK, or abroad, who work in different specialties to your own, or even in other professions, would wish to read your account. Ask yourself is the study meaningful and does it have a wider appeal? If the answer is no – how can you address the shortcomings? If yes, where is the best place for it to be submitted, a specialist journal, a medical education journal or a mainstream educational journal? Once you decide, do make sure that the format of the article is appropriate.

Finally remember:

Only rigorous research is worth doing

All rigorous research is time consuming

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ISBN: 978-1-907019-06-7