**Podcast to accompany ‘Data collection’ (Chapter 11) of Wilson’s edited book *School-based Research***

Having decided on the focus of your research, the research questions you want to answer, and the overall strategy you want to use then the next stage is to consider what data you need to collect to help you to answer the research questions.

There are three possible approaches to obtaining evidence about schools and classrooms.

Firstly, you can record what is happening through observation of students and teachers at work .

Secondly, you could ask about what students or teachers think is going on, which could include finding about what they value and/or believe and their attitudes and/or motivations.

Thirdly, you could look for traces of other evidence to help you gain a richer understanding of whatever you are interested in finding out about.

Chapter 11 ‘Data collection’ provides an overview of the methods associated with each of these approaches. It outlines the advantages and disadvantages of each method including, as examples of further data: documents, visual images, diaries as data sources and visual mapping techniques and considers how they might be built into a research design.

In classroom-based research, using more than one method is usually an advantage as different methods offer different insights to addressing your research questions. Integrating across different data sources will increase the quality of your research by providing richer evidence to back up the claims you make. By collecting different, but related, data you will be able to look for convergence, where one source of data backs up and supports another. You can also use these other data sources to look for puzzles or contradictions, so that you are not lulled into thinking that one set of data presents something as the ‘truth’. Where inconsistencies appear in the data this becomes an opportunity and a challenge to you as the researcher. A good study will report these insights as puzzles and you might consider sharing these with your key informants as a way of developing further accounts from their perspective. The strategy of building in multiple data sources to offer multiple perspectives on a question is called triangulation.

The most common form of triangulation by educational researchers is, as discussed above, **between methods** so, using different data collection methods to try to address the same research question. This could be collecting and comparing qualitative with quantitative datasets or different forms of qualitative data. It is possible, although usually with quantitative data, to perform triangulation **within methods**. This is an approach that analyses the same data in different ways and is used often when evaluating the validity of a questionnaire. A third form of triangulation is possible by collecting and comparing data from **different sources**, for example collecting the views of students and teachers on the same subject or, as another way of thinking about this, collecting data from the same participants but at different times.

A further approach to triangulation is to consider analysis of the same data **across researchers.** If different researchers come to the same conclusions as a result of analysing the same data this strengthens the trustworthiness of these conclusions. This is something you might consider, for example having collected videos of observational settings, where you and colleagues might watch and interpret the video record together.

To map out how data sources will relate to your research questions planning grids are helpful and an example is offered in Chapter 11.

However, as you reflect on what data collection would best help you address each research question you need to remember that your study needs to be manageable. The more data collection methods you use, the more time you will need to carry out your research. Triangulation will require further work on the analysis of data, covered in Chapter 14, as you compare data sets with one another and/or perform further analysis. There will no doubt be constraints to your study and these need to be realistically taken into account at the planning stage. As well as your own time, there might also be access issues to certain types of data which you would ideally like to use. For example timetabling might mean that you cannot observe particular classes or, when approached, parents might not be happy for you to interview particular children. Some of these constraints might relate to ethical considerations which are important to respond to. For example, although you might ideally want to interview your colleagues for an hour and know that this is feasible if you ask them to devote a non-contact period to talking to you, it might be less intrusive and more respectful if you only ask for them for half of this period and adjust what you will ask them accordingly.

One of the most valuable tools to a researcher, to allow you to be reflexive about the research process you are involved in, is to keep a research diary or journal. Although you might be able to generate a highly structured format in advance of starting the project this is by no means essential to completing a journal. Provided you are clear about what you will record in the diary and date entries you should find it a useful resource. In terms of your developing research design you can record the options you have considered, your thoughts about these and the decisions you made. You can also use it as a supplement to data collection to record informal conversations or spontaneous thoughts which appear relevant in some way to your research questions. Activity 11.1 suggests the possible uses of a research diary for you to consider. Once started, you may want to review the diary from time to time and colour code or use sticky notes to highlight sections that relate to one another. To allow for this it is always a good idea to leave space for later comments or additions. Research diaries are not always used solely by the main researcher but may be something you want to consider as a data collection method, asking participants to maintain a diary as a source of data. This is discussed in Chapter 11.

What is important to remember as you reflect on your study is that whichever methods you choose will involve selecting what data you collect. During the process of becoming data, even when words are transcribed from audio or video, selection will have taken place. The relationships between participants and the non-verbal behaviours or cues might not form part of the eventual record of the observation or interview. What you choose to observe or ask about already relates to what you have decided to focus on. To some extent this will have been as part of a conscious decision, for example to ignore some aspects of the classroom dynamic, however, it can also take place accidentally, as a result of your own unconscious prejudices, or some known or unknown bias of the methods chosen. You also need to remain aware of further selection as it takes place during the process of analysis and interpretation. This is where multiple perspectives on the data can be useful to explore assumptions being made and clarify what to pull out as relevant to addressing the research questions. Attention to these aspects of the research process, reflected in your writing of the study, will increase its trustworthiness.

**In summary, the key ideas of this chapter are that there are a range of data collection methods you could use to collect evidence to help answer your research question(s). These methods are usually identified during the research design stage and the advantages and disadvantages of each method considered. You need to plan into the study to do as much as you can to reduce the limitations imposed by each particular method. A research diary is a useful place to reflect on the research as it progresses.**

**This podcast lasts 8min 32 seconds.**