

## DATA COLLECTION AND ANALYSIS

Dull though the title of this assessment mode may sound, it will, surprisingly, offer you both intellectual adventure and joy of discovery. This is where research really begins. It is here that you can demonstrate your forces of creativity and keenness of observation.

### Setting off

The starting point, when **choosing the methods** for data collection, must always be their fitness for the purpose. This means that you must keep in mind your original question (or the task you have given yourself) when choosing your method tools, and throughout your research journey.

Choosing the right methods for a discovery journey is a crucial part of your “masterliness”, as it shows that you know where you are heading! Precise focus in the form of structured questionnaires gives different data than that emerging from open-ended, unstructured interviews. Part of the journey into Mastery is that you also keep in mind the fact that you may not be aware of what you don’t know – this will hopefully add to your respect for your respondents, and your openness in an observed situation. This, together with **awareness of your own bias** are part of the **reflexivity** characteristic and necessary in modern research.

### Two Approaches

Scientific research has traditionally been associated with the value free, neutral measuring of phenomena, that is: collecting and interpreting **quantitative data**. The quantitative approach produces data that are easier to describe in figures (as numerical information) and easier to present in clear statistic forms. Soulless though it may seem, this provides a basis of external facts and facilitates generalisation. You may wish to use a quantitative survey method in order to collect background information or to build a general basis for your own specific case study.

The **qualitative data**, on the other hand, aim for sensitive knowledge of the specific, allowing your own responsive person to be an acknowledged part of the interview procedure as well as of the observed situations.

Generally speaking we can state that the two approaches complement each other, qualitative data giving richness and colour, quantitative data providing structure.

### Ways of Finding Data

One of the great surprises, when one starts looking for **background data** (“existing data”), is the amount and the variety of the information sources that

exist around us. Reports, documents, letters, information sheets, agendas and minutes all offer valuable insight into the history, practice and ethos of an institution, if they are critically analysed in their context.

Collecting “existing data” can be compared to a detective’s work. It is crucial in the process leading to understanding of the present situation of a school community and, surprisingly, often not well known by its members.

“**Creating new data**”, means collecting information with the help of method tools (qualitative and/or quantitative) designed by you. This brings you, the researcher, into an active position where you are always intruding into the lives of the respondents – no matter whether you ask them to fill in a simple questionnaire or to let you in as an observer in their class-room. We cannot stress too much the importance of ethical awareness in research. Those who make your research possible are to be acknowledged as subjects, not objects of the process, and as active, not passive data providers.

### **Data Analysis**

The next step is the interesting phase of data analysis where you also must evaluate the methods you have used. Did they fit their purpose? The process of weaving between “**immersing yourself**” in the data and “**standing back**” from it will lead you into the stage of analysis where you finally **break your data into units** or pieces which are easy to present and clear to grasp. You then move **from the specific towards the general** in order to produce your **conclusions**, and **make possible recommendations** for future actions based upon your findings.

The results and impact of your research, the outcomes of your discovery journey, depend on the validity of the method tools chosen for it and the critical scrutiny you have demonstrated when analysing it.

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