Understanding qualitative data

**What is qualitative data?**

Qualitative data is data that is not easily reduced to numbers. Qualitative data tends to answer questions about the ‘what’, ‘how’ and ‘why’ of a phenomenon, rather than questions of ‘how many’ or ‘how much’.

In a school setting, qualitative data may include:

- Notes from classroom observations
- A student’s work sample with comments from their teacher
- Feedback from a teacher about a student’s progress
- A transcript from a focus group with parents
- Audio/visual recordings of a class
- A transcript from a staff meeting

Qualitative data can be collected through a range of methods, described below.

**What are qualitative methods?**

There are numerous qualitative research methods that can be used when conducting qualitative research. These can include (but are not restricted to):

- Interviews
- Focus groups
- Surveys*
- Case studies
- Observation
- Document analysis

**What are the benefits of qualitative analysis?**

Qualitative analysis allows for a detailed examination of the thoughts, feelings, opinions and/or experiences of individuals, groups or communities. By taking into account the local context, qualitative analysis can assist in developing solutions that are tailored to the particular context.

Qualitative research allows for flexibility and adaptability when undertaking research, so a study can be adapted and tailored in response to emerging issues, problems or trends. It provides the opportunity to collaborate with participants and include them as an active part of the research process.

Qualitative analysis can also be useful for providing a narrative around quantitative data. Quantitative data (e.g. test scores) may tell you that your student’s NAPLAN scores have improved over time. You may then want to use qualitative data (e.g. classroom observation, a focus group with teachers) to determine how and why scores have improved.

**What are the limitations of qualitative analysis?**

Qualitative data can be harder to analyse than quantitative data, as the data collected is not inherently objective, and thus can be open to multiple interpretations.

Qualitative data is also context-specific, so it is not always possible to use the data to say something about situations outside of that context. This differs from quantitative analysis, in which a robust sample can be used to make generalisations about a population.

The collection and analysis of qualitative data can also be time-consuming.

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More information about different types of qualitative research methods can be found on the Future Learning Unit’s website.

The usefulness and appropriateness of different qualitative research methods will vary depending on the context and purpose of the research. In qualitative research, the focus is not so much on the ‘robustness’ of one instrument versus another, but choosing the most appropriate instrument for the information that you are seeking.

The size of the sample will also vary depending on the context and purpose of the research. There is no overall ‘optimal’ sample size.

*Note, surveys can provide both qualitative and quantitative data. Generally, surveys that use scales (e.g. strongly agree – strongly disagree) or ratings, such as Tell Them From Me, provide quantitative data. Surveys that allow for free-text responses provide qualitative data.
How do I analyse qualitative data?

Qualitative data analysis involves the identification, examination, and interpretation of patterns and themes in data and determines how these patterns and themes help answer the research questions at hand.

Qualitative analysis focuses on cases (rather than variables). A case could be an individual person, a whole class of students or an instance of a particular phenomenon (e.g. bullying). Comparative analysis between and across cases can be a powerful way of identifying patterns in the data.

Questions that can be considered when analysing qualitative data include (but are not limited to):

- What patterns/common themes emerge around specific items in the data?
- How do these patterns (or lack thereof) help to shed light on the broader study question(s)?
- Are there any deviations from these patterns?
- If, yes, what factors could explain these atypical responses?
- What interesting stories emerge from the data?
- How can these stories help to shed light on the broader study question?
- Do any of the patterns/emergent themes suggest that additional data needs to be collected?
- Do the patterns that emerge support the findings of other corresponding qualitative and quantitative analyses that have been conducted?

Methods of analysing qualitative data usually include (but are not limited to):

- Documentation of the data and the process of data collection
- Organisation/categorisation of the data into concepts/themes
- Connection of the data to show how one concept/theme may influence another
- Testing theories, by evaluating alternative explanations and searching for negative cases.

The final report of any qualitative analysis may include a number of formats such as text, maps, charts, images and/or sound.

How do I know if qualitative data is ‘high-quality’?

While there is not a single set of criteria to assess the quality of qualitative research, there are some existing markers that qualitative research is commonly judged against (see: Tracy, 2010; Anfara, Brown & Mangione, 2002). Criteria that can be considered when attempting to assess quality include:

- Credibility – are the results of the research credible or believable from the perspective of the participant in the research?
- Transferability – has the researcher adequately described the research context and the assumptions that were central to the research?
- Dependability – have the research methods accounted for changes in the research setting and how have these influenced the research?
- Confirmability – has the researcher acknowledged their own position in the research? Have the findings been triangulated with other data to confirm and strengthen the findings?

The quality of the data is usually also a reflection of the skills and rigour of the researcher. The researcher needs to be involved in every step of the analysis, be responsive, flexible and a good listener, and able to reflect on their own role in the research.