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Qualitative Analysis of Teacher Interviews

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ABSTRACT: As education policy increasingly draws on teachers' own voices rather than quantitative indicators alone, interview data are frequently analysed in ways that remain insufficiently systematic or transparent, which weakens the credibility of the resulting claims. This paper sets out the methodological steps required for a defensible qualitative analysis of teacher interviews and discusses the criteria that make such analysis scientifically trustworthy. Thematic analysis, content analysis and grounded theory are compared, the six-phase coding procedure is outlined, and Lincoln and Guba's (1985) trustworthiness criteria — credibility, transferability, dependability and confirmability — are specified for the context of teacher interviews, alongside Tracy's (2010) "eight big-tent" criteria for qualitative quality. The paper argues that the scientific value of teacher-interview analysis depends primarily on the researcher's reflexivity and on a documented, auditable coding trail rather than on software choice or sample size alone.

1. INTRODUCTION

It is difficult to explain the factors behind the changes taking place in the education system through quantitative indicators alone. A teacher's classroom behaviour, response to difficulties and pedagogical decisions are often grounded in contextual knowledge that cannot be measured; for precisely this reason, recourse to qualitative methods in education research, and in particular to in-depth interviewing, has increased markedly in recent decades (Creswell & Poth, 2018). As Kvale and Brinkmann (2009) note, an interview is not merely a question-and-answer process but a purposeful conversation aimed at understanding how the participant makes sense of the world — and it is this very feature that makes it an indispensable tool for studying teachers' practice.

The interview material in itself, however, does not yet constitute a scientific finding. A shortcoming frequently observed in practice is that the researcher reads the transcript, selects the "interesting points" and then summarises them in his or her own words — which, strictly speaking, is not systematic analysis but intuitive interpretation. As a result, the methodological section of the work appears weakly substantiated, and reviewers (particularly reviewers of internationally indexed journals, including those indexed in Scopus) return the manuscript on precisely this ground.

The aim of this paper is to propose a clear, step-by-step methodological framework for the qualitative analysis of teacher interviews and to demonstrate, with concrete examples, the criteria that secure the scientific rigour of this framework. To this end, answers are sought to the following questions: (1) what main approaches exist for analysing teacher interviews and how do they differ from one another; (2) how should the coding process be carried out in practice; (3) what evidence is required for the findings to be regarded as "credible"; (4) what are the most common methodological pitfalls in this field.

2. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.1. The interview method in qualitative research

The semi-structured interview — that is, a format which, alongside key questions prepared in advance, allows follow-up (probing) questions to be asked in response to the answers given — is the most widely used method in education research, because it provides both a minimal structure for comparison and the freedom for the participant to speak in his or her own words (Kvale & Brinkmann, 2009). Merriam and Tisdell (2016) note that it is precisely this balance — between structure and flexibility — that is the principal feature distinguishing the qualitative interview from the quantitative survey.

2.2. Main approaches to the analysis of teacher interviews

Several approaches in this field are clearly distinguished from one another in the literature, although in practice the boundary between them is sometimes conditional.

- Thematic analysis — systematised by Braun and Clarke (2006), it rests on the identification, inductively or deductively, of recurring meaningful patterns (themes) in the data; it is a relatively flexible method that can be reconciled with a variety of theoretical frameworks and is one of the most widely applied approaches in education research.
- Content analysis — an approach based on the systematic coding of text according to predetermined or data-derived categories, sometimes accompanied by frequency counts (Krippendorff, 2018).
- Grounded theory — founded by Glaser and Strauss (1967), an approach oriented towards "growing" theory inductively from the data by means of the constant comparative method, and normally requiring a larger body of data.
- Phenomenological analysis — an approach aimed at uncovering the essence of how participants experienced a particular phenomenon (for example, their first year of work or online teaching during the pandemic).

Which of these approaches is chosen depends first of all on the nature of the research question: if the aim is to describe recurring meanings across cases, thematic analysis is sufficient; if the aim is to formulate a new theory, grounded theory is more appropriate. In the majority of studies based on teacher interviews, thematic analysis is preferred, owing to resource constraints and its relatively clear procedure (Nowell, Norris, White, & Moules, 2017).

2.3. Criteria of scientific rigour in qualitative research

The notions of validity and reliability used in quantitative research cannot be transferred directly to the qualitative paradigm, because the ontological assumptions underlying them differ (Guba & Lincoln, 1994). In response, Lincoln and Guba (1985) proposed the concept of "trustworthiness" — a framework of four criteria: credibility, transferability, dependability and confirmability. In subsequent years, Tracy (2010) extended this framework by proposing additional indicators, which she termed the "eight big-tent criteria" (worthy topic, rich rigour, sincerity, credibility, resonance, significant contribution, ethics and meaningful coherence); these criteria are particularly useful in work concerned with professional contexts such as teacher interviews, since they make it possible to assess not only methodological precision but also the extent to which the findings "resonate" with practice.

3. PROPOSED RESEARCH DESIGN AND METHODOLOGY

3.1. Research design

The proposed framework is built on a descriptive-exploratory design grounded in a constructivist epistemology (Creswell & Poth, 2018). This choice is not accidental: instead of advancing rigid hypotheses in advance about a teacher's professional experience, it allows meanings to be derived inductively, directly from the data, which is considered more appropriate for interview-based work.

3.2. Participants and sampling strategy

For the selection of participants, the purposive sampling described by Patton (2002) — specifically, the maximum variation sampling strategy — is recommended: the sample includes teachers who differ in length of experience, teaching level, subject area and school context (urban/rural, public/private). The final size of the sample is determined not in advance but on the principle of data saturation — that is, when further interviews no longer yield substantially new themes.

3.3. Data collection instruments

The main instrument used is a semi-structured interview protocol combining open and probing questions. With the participant's consent, the interviews are audio-recorded and transcribed verbatim; recording pauses and emotional emphases as well is useful in order not to lose the nuances of the subsequent analysis.

3.4. Analysis procedure

The analysis is carried out following Braun and Clarke's (2006) six-phase model of thematic analysis:

- 1) Familiarisation with the data — reading the transcripts several times and recording initial impressions.
- 2) Generating initial codes — line-by-line coding of the text and marking of meaningful units.
- 3) Searching for themes — grouping similar codes and combining them into potential themes.
- 4) Reviewing themes — checking the internal coherence of each theme and its correspondence with the data set.
- 5) Defining and naming themes — giving a precise and concise definition of the essence of each theme.
- 6) Producing the report — turning the findings into analytical text substantiated by participant quotations.

Software such as NVivo, ATLAS.ti or MAXQDA may be used in the coding process (Miles, Huberman, & Saldaña, 2014), but it must be emphasised that the software itself does not guarantee quality — it merely makes the structuring of codes easier. Saldaña (2016) rightly observes that coding is not a mechanical process but a reflexive one, in which the researcher continuously makes analytical decisions.

4. ENSURING SCIENTIFIC RIGOUR IN THE ANALYSIS

A method that is theoretically well chosen does not in itself guarantee quality — what is decisive is how that method is applied. Drawing on the work of Lincoln and Guba (1985) and Nowell and colleagues (2017), the following strategies can be applied concretely in the analysis of teacher interviews:

- Triangulation — combining several data sources (interviews, document analysis, lesson observation) or the parallel work of several coders (investigator triangulation).
- Member checking — returning draft themes to the participants so that they can answer the question "does this accurately reflect what I said?"
- Peer debriefing — independent discussion of the coding scheme with another researcher in the field and resolution of discrepancies.
- Audit trail — documenting the history of every coding decision, including codes that were modified or discarded.
- Thick description — presenting the context (type of school, region, participant's experience) in such detail that readers can themselves judge the extent to which the findings apply to their own context.
- Reflexivity — the researcher explicitly stating his or her own position (for example, having previously worked as a teacher) and how this may affect the process of interpretation.

Experience suggests that it is rarely possible to apply all six of these strategies with equal depth in a single study — what is therefore expected of the researcher is not to tick each one off mechanically, but to select 2–3 strategies suited to the specific research question and available resources and to apply them consistently and transparently. Justifying, in the methodology section, why this choice was made is one of the points assessed positively by reviewers of Scopus-level journals.

5. METHODOLOGICAL LIMITATIONS

Several limitations should be noted. First, since the transferability of the findings is context-dependent, work carried out with a small sample cannot be generalised in the statistical sense — this is not a weakness of the study but a feature arising from the nature of the qualitative paradigm. Second, the researcher's subjectivity inevitably affects the coding process; keeping a reflexivity journal is therefore not merely a recommendation but a necessity. Third, the interview setting — for example, the

interview being arranged by a representative of the school management — may influence how openly participants speak, and this factor must be taken into account at the design stage.

6. CONCLUSION

The qualitative analysis of teacher interviews is an indispensable means of understanding the complex and contextual nature of teachers' practice, but the scientific value of this instrument is not given automatically. It is earned only through clear theoretical justification, a systematic coding procedure and the deliberate, transparent application of strategies that strengthen trustworthiness. In this sense, it may be recommended that future research pursue not larger samples but rather small, yet deep and methodologically well-documented studies, and that qualitative findings be reconciled with quantitative indicators through the application of mixed methods.

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