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Subjective ≠ invalid: Insights into a qualitative-explorative case study

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1. Introduction

Researchers of different fields and disciplines have been debating advantages and disadvantages of qualitative and quantitative research designs for decades. The two paradigms are characterised by quite different approaches and research objectives. Yet many terms that are often referred to as quality criteria for research in general, such as objectivity, representativeness, validity and reliability, rather relate to quantitative than to qualitative studies. The reason for that might be rooted in the different constitutions of the two research traditions. Whereas the standards on how to measure the quality of quantitative studies seem to be rather clear-cut and agreed upon across different disciplines, the quality criteria for qualitative research are neither consistent, nor accurately defined.

In this paper, I will outline some common misconceptions about the quality criteria of good research by addressing selected aspects of a qualitative-explorative case study. First, I will discuss three quality criteria of research, objectivity, reliability and validity, and their relevance for and applicability to qualitative studies (section 2). Afterwards, I will briefly introduce the topic of my research project and provide an overview of the context in which the aforementioned case study was conducted, namely a foreign language teacher education programme in Germany (section 3). Then, I will present the research questions and the methodological framework of the case study (section 4), which focuses on the professional development of language teachers through engaging in action research and how this process is perceived by the teachers themselves. I will conclude by arguing that a case study, in spite of its small scale and its context-dependency, can make a valuable contribution, not only to the field of foreign language teacher education, but to other fields of study as well (section 5).

2. Objective? Subjective! Quality criteria of qualitative research

Defining the standards of good research, especially considering the great variety of possible research designs of quantitative, qualitative or mixed-methods studies, is not easily done. The terms mentioned above, objectivity, reliability and validity are without doubt important quality criteria - at least for quantitative research studies. However, can they also be applied or adapted to qualitative research? As Dörnyei (49) points out, it is very problematic to simply transfer the standards of the quantitative research tradition to qualitative studies as "there are no straightforward parallels in the two research paradigms." Studies that are subjective, interpretative and explorative in nature, such as the case study referred to in this paper, will most certainly not meet the quality criteria of objectivity, reliability and validity in their traditional quantitative sense and yet, they are by no means invalid. Dörnyei (55) states that "[q]uantitative researchers sometimes criticize the qualitative paradigm for not following the principles of the 'scientific method' (for example, the objective and formal testing of hypotheses or having too small sample sizes, but these concerns miss the point as they, in fact, say that the problem with qualitative research is that it is not quantitative enough." When talking about qualitative research we need to bear in mind that principles and methods applied in this paradigm might be very different from what is considered 'scientific' from a quantitative point of view. Measuring qualitative research with quantitative quality criteria will inevitably lead to a false estimation of the value of the study. In the following, I will take a closer look at three major quality criteria of the quantitative paradigm, objectivity, reliability and validity, and will question their applicability or adaptability to qualitative research designs.

One of the most common misconceptions about research is that it always has to be objective. Payne and Payne (1) explain that the principle of objectivity postulates that researchers "remain distanced from what they study so findings depend on the nature of what was studied rather than on the personality, beliefs and values of the researcher." In a qualitative study though, especially in case study research, "in which one or a few instances of a phenomenon are studied in depth" (Blatter 1), the researcher may not be able 'to remain distanced' from their field of interest and the respondents of the study. In contrast to a quantitative researcher conducting a large-scale study using an electronic questionnaire for example, a qualitative researcher very often operates within the context he or she is examining and takes an inside or subjective rather than an outside or objective perspective. This was also the case in the case study described in section 4.

Along with the role of the researcher and his or her position in the research process, also the research instruments need to be taken into consideration. The data collection instrument itself, e.g. observation, questionnaire, interview, group discussion, does not constitute a quantitative or a qualitative study, but rather the relation or interplay between the instrument(s) and the researcher. As Patton (14) nicely puts it, for a quantitative researcher it is important to optimise the research instruments, whereas in a qualitative study, "the researcher is the instrument." This quote is not completely accurate, as the instruments in qualitative research need to be considered and prepared carefully as well, but it underlines the importance of the researcher him- or herself in the qualitative research process. More than the quantitative researcher, the researcher in a qualitative study needs to be aware of his or her role during the research. Preparing the study thoroughly and constantly reflecting upon his or her own role and position throughout the research process is crucial for a qualitative researcher for several reasons. Making the process transparent as well as "identifying potential researcher bias" (Dörnyei 60) is important in order to ensure research integrity and awareness of ethical issues. In other words, the researcher needs to reflect his or her subjectivity in the research process. Involving other scholars and exchanging ideas and opinions in interpretation groups might be very supportive of this reflective process. This form of investigator triangulation makes subjective-interpretative studies tenable and credible for others (Dörnyei 61). Hence, not objectivity, but rather credibility or trustworthiness would be quality criteria suitable for qualitative studies.

Moreover, it is difficult or even impossible to measure the reliability or repeatability of instruments in qualitative research designs. Freeman explains that a basic feature of qualitative research is that "it focuses on questions that examine the relationships between information about people's actions and phenomena, and the setting in which they do these things" (39). This holds true particularly for case study research, in which a very limited number of participants is studied in a specific context, as mentioned above. It would not be of any value to ask whether or not the results are repeatable or persistent over time in order to ensure the reliability of the research instruments, as re-testing is not even possible. The research setting of a case study is unique and can by no means be rearranged in exactly the same way. In order to ensure reliable or credible results, the concept of method and data triangulation (Dörnyei 61) can be applied. By incorporating different data sources, research instruments and analysis tools, the qualitative researcher can examine the subject matter from different angles and generate credible results.

Furthermore, if validity is only given when a research instrument "accurately measures what it was supposed to measure" (Vogt 1) many qualitative studies would have to be labelled invalid. This is due to the very nature of qualitative research. In general, qualitative approaches seek to generate hypotheses and theories rather than proving or verifying pre-formulated hypotheses. In traditional 'grounded theory', as Glaser and Strauss suggest in 1976, the researcher is not even supposed to have any presumptions or hypotheses before exploring the data. However, this strict view has rightly been criticised as being unrealistic, as every researcher brings prior knowledge and assumptions to a research project (Miethe 150-153).

In sum, the quality criteria used to measure quantitative research do not seem to be applicable for qualitative designs. Terms that are more suitable as quality criteria of qualitative are for example trustworthiness and credibility, which are achieved through the systematic development of a suitable research design, data and method triangulation, as well as investigator triangulation. In order to illustrate the aspects discussed in this section, the contextual framework as well as the methodological design of a qualitative-explorative case study conducted in the field of foreign language teacher education in Germany will be introduced below.

3. Research Context: Foreign language teacher education

The qualitative-explorative case study referred to in this paper was conducted within an M.A. teacher education programme in Germany, called E-LINGO – Teaching English to Young Learners (henceforth E-LINGO). Even though the programme is set up in Germany, it is operated in a blended-learning format which comprises online modules and face-to-face meetings. This organisational structure allows participants from all over the world to take part in the course. The modules cover various topics concerning foreign language teaching and learning and feature different task types that have to be completed either individually or cooperatively. One of the core components of E-LINGO is the systematic integration of theoretical and practical aspects of teaching through the concept of action research (Schocker-von Ditfurth 68-77). Before describing the methodological design of the case study (section 4), I will briefly comment on foreign language teacher education in general and explain the concept and the purpose of action research.

In the majority of teacher education programmes, not only in Germany but in other countries as well, the theoretical foundations of teaching are laid at university with few opportunities for student teachers to practice the act of teaching itself. Farrell (182) assumes that "teacher education programs are unable to reproduce environments similar to those teachers face when they graduate." In other words, when entering the profession, many novice teachers experience difficulties in coping with the complex demands of a modern classroom. The theories and concepts of teaching which they have acquired during their studies cannot be simply transferred into practice. As mentioned above, E-LINGO features a unique approach to foreign language teacher education by integrating an action research component into the programme in order to interlace theoretical and practical aspects of teacher education from the very beginning. Originally derived from the field of social psychology, the concept of action research has gained widespread recognition in teacher education all over the world within the last 20 years. According to Burns (2) action research "involves taking a self-reflective, critical, and systematic approach to exploring your own teaching contexts." Thus, student teachers in E-LINGO learn to systematically investigate and reflect on their teaching experiences referring to relevant literature in the field of foreign language teaching and learning. The goal of this approach is promoting professional development through practice and reflection. According to Burton (298) "[b]eing reflective assists teachers' lifelong professional development, enabling them to critique teaching and make better-informed teaching choices." In order to find out if and how student teachers develop professionally, the M.A. programme E-LINGO was chosen as an object of investigation for the case study introduced below.

4. Research Methodology: Composition of a case study

As stated above, the M.A. programme E-LINGO with its action research approach is unique among teacher education programmes worldwide. For the case study referred to in this paper, I accompanied a cohort consisting of twelve student teachers through their course of studies over a period of time of two years. The students had various cultural and educational backgrounds: some had teaching experience already, others had never taught before entering the programme. During their studies, they cooperatively engaged in three action research projects conducted in real language learning environments at pre-school or primary school level. The student teachers presented their results at the respective face-to-face-meetings and discussed their findings with peers and tutors.

Since this approach is quite innovative, I am interested in the effects of action research on student teachers professional development. The research questions guiding the case study are the following: What happens when student teachers engage in action research within a blended-learning environment? Which, if any, indicators can be isolated that action research supports the process of professional development? (How) does action research foster professional development of the individual student teachers? To answer these questions, three types of data materials will be analysed. All in all, 19 semi-structured group interviews were conducted throughout the course of studies. In the interviews, the student teachers had the opportunity to talk about their experiences with the concept of action research and reflect on their self-perception as (future) teachers. The student teachers' online learning logs as well as their final portfolios, tools to reflect on critical learning incidents, form supplementary data sources.

Considering the case described above, it becomes obvious that a quantitative design with an objective approach would not have been conducive to answer the research questions. The process of professional development is very complex and unfolds individually different (Kubanyiova). Taking up an inside perspective, as discussed in section 2, by establishing a personal relationship, learning about the participants biographies, and creating a trustful atmosphere in the interviews were necessary to obtain answers to the research questions listed above. In order to further illustrate this, the method of data analysis will be outlined below.

For the analysis, I will apply the Documentary Method, a tool to reconstruct a person's practical or implicit knowledge. In contrast to theoretical or explicit knowledge, which is connected to cognition, practical or implicit knowledge is based on a person's personal experience and guides their actions (Bohnsack 321). In order to understand the complexity of a teacher's professional development, the implicit or practical knowledge is highly important. Evers states that the documentary method is "especially suitable for connecting cognitive and emotional development with biographical contexts as well as for capturing processes and effects of intercultural experiences." The case study aims at finding indicators for individual professional development and outline different types of development by systematically interpreting the student teachers utterances and reflections. As Nohl (51) clarifies, in the documentary method, the researcher does not assume to know more than the respondents, but rather that the latter do not know what they know, as their practical knowledge is implicit, i.e. they are not aware of it. This knowledge can only be unlocked through a systematic interpretation and comparative analysis of the participants' utterances (Bohnsack 325-329). In other words, a subjective-interpretative approach is the only way to bring out this implicit, practical knowledge and make it tangible.

5. Conclusion

The quality criteria for quantitative research cannot be transferred, maybe not even adapted, to qualitative research designs as the two approaches differ immensely with regards research methodology and objectives. There are no clearly defined and generally accepted quality criteria to measure the value of qualitative research. The reason for that is that qualitative studies highly depend on the unique modalities of the research project and the quality criteria may differ from case to case. The validity or rather credibility or trustworthiness of subjective-interpretative research is given, if a well-structured design and a systematic data analysis are applied. Moreover, the researcher is responsible for making the research process transparent and thoroughly reflecting on his or her role.

In the case study presented in this paper, a subjective interpretation of the student teachers' utterances is not only justifiable but necessary in order to find out, how student teachers perceive their individual professional development, as their knowledge on this is implicit and based on personal experiences. The triangulation of data, methods and investigators make a small-scale study credible, trustworthy and inter-subjectively comprehensible.

The findings may be of relevance for others fields and disciplines in many ways. First of all, the concept of 'action research' is applicable to other professions and disciplines as it aims at

exploring and improving social situations in general. Thus, the concept cannot only be applied to teaching, but to any context involving interacting people. Secondly, the analysis tool of the 'Documentary Method', which takes a very systematic approach to qualitative research and thereby helps make subjective-interpretative studies credible, is transferable to other qualitative research designs as well. Thirdly, my findings on how teachers develop professionally and learn to systematically integrate theory and practice might inspire other research projects and could, in the long-run, bring about change in the overall organisation of teacher education programmes.

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