4. Methodological Considerations

Wieland Wermke and Gunnlaugur Magnússon

Introduction

In a large-scale, comparative research project like the one this volume presents, the issue of methodology becomes unavoidably complex and multidimensional. We are tasked with using a variety of methods to gather diverse data from different education systems and languages, both literal and metaphorical. This chapter delves into the intricate methodologies of the project, starting with an ontological and epistemological placement in an interpretative research paradigm. We then articulate our perspectives on comparative education methodology. Subsequently, we detail the application of each method in the data collection. We also elaborate on how the materials gathered by project participants have been utilised, provide ethical reflections, and finally describe the legislative framework that has governed the sorting and preservation of empirical materials.

An interpretative research paradigm

This project's starting point is in an interpretative research paradigm. What do we mean exactly with this? In the following, we will for the sake of explanation paraphrase Frederick Erickson's classic work, Qualitative Methods in Research on Teaching, from the 1986 edition of the *Handbook of Research on Teaching*. First of all, we (i.e. humans) do not realise the patterns in our actions as we perform them. Anthropologist Clyde Kluckhohn (in Erickson, 1986) illustrated this with the following aphorism: 'The fish would be the last creature to discover water'. Comparative interpretative research, through its inherent reflectiveness of the contingency of practice, helps us to *make the familiar strange* and interesting again. The commonplace becomes problematic. Everyday events taken for granted can become visible and be documented systematically. This, of course, has consequences for empirical data acquisition. The focus on the context of actions is intrinsic to interpretive research on schools, where interpretative researchers seek to understand

how education professionals and students, in their actions, constitute and understand their environment and one another. While it is universal that regularly interacting sets of individuals possess the capacity to construct cultural norms by which their social ecology is organised – face to face, and in wider spheres up and out to the level of the society as a whole – the particular forms that such social organisations take are specific to the set of individuals involved. Thus, we can say that social organisations have both local and nonlocal characteristics (Erickson, 1986).

The local and the nonlocal

Face-to-face social (local) relations have a life of their own, but the materials for constructing that life are not all created at the moment, within the scene. One nonlocal influence on local action is culture, which can be defined in cognitive terms as learned and shared standards for perceiving, believing, acting, and evaluating the actions of others. Cultural learning profoundly shapes what we notice and believe (Erickson, 1986, p.129). Another source of nonlocal influence is the perception that local members have, both interests or constraints, of the world beyond the horizon of their face-to-face relations. For example, in a school classroom, these influences may come from the educators next door, namely parents, principals, and institutionalised procedures in the federal government regarding allocating special resources to the classroom. The task of interpretive research, then, is to discover the specific ways in which local and nonlocal forms of social organisation and culture relate to the activities of specific individuals in making choices and conducting social action together.

In the words of Eriksson (1986), this search is not for *abstract universals* arrived at by statistical generalisation from a sample to a population but for *concrete universals*, arrived at by studying specific cases in great detail. The assumption is that when we see a particular instance of a certain special education practice, some aspects of what occurs are seen as generic, that is, they apply cross-culturally. That is why, despite immense variations between cases, some aspects of what occurs in any schooling situation can be generalised to many other situations, while other aspects of what occurs in a given instance of special education are specific to that situation's historical and cultural circumstances. Still other aspects of what occurs are unique to that particular event and the particular individuals engaged in it. Erickson (1986) borrows the term *concrete universal* from linguistics. The example

distinguishes between various languages' universal and specific structural features. One cannot study the topic of human language in general. Rather, one finds only specific languages, and only by a detailed understanding of the workings of a specific language, followed by a comparative analysis of each language considered as a system in its own right, can one distinguish what is universal from what is specific to a given language. One can begin distinguishing the universal from the specific by comparing languages with differing structural properties (Erickson, 1986). Therefore, the task of the research in an interpretative research paradigm is to uncover the different layers of universality and particularity in the specific case at hand. The questions are of relevance here are thus: What is broadly universal? What generalises to other similar situations? What is unique to the given instance (Ericksson, 1986)?

The comparative method

In our research project, we have combined the epistemological starting point of interpretative research with employing a comparative research strategy formulated in the work of Jürgen Schriewer (1999), drawing on the work of Niklas Luhmann. We follow four steps of reasoning:

1. *Problem formulation:* What is the *problem*?
2. *Generalisation:* Which solutions are possible? (Theory work/review of research)
3. *Re-specification:* Which solutions are used/feasible in a specific context? (Empirical work)
4. *Configuration:* Which contextual variables (structure/culture) can lead/lead to which problem solution (strategies of contingency coping)

(1) The first step relates to formulating our problem: What will we first and foremost gain knowledge about? This regards the nature of the special educator (SE) professions and how they are conditioned and governed by contextual factors such as large-scale reforms at international and national levels. Here we aim to contribute to theorising the stability and dynamics of education professions and the organisations in which they are active.

(2) For the generalisation step, we can make the following statements: Through the combination of variance in time (our perspective on the

development since the 1990s) and space (the cases of Germany and Sweden), we can see various context-specific particularities and dynamics in respect to our interest, that is, the nature of SE professions. However, we must understand what can be universal to see such particularities. The generalisation step in our work thus builds on a thorough elaboration of theories on the relationship between education professions and education organisations. In the theory chapter of this volume (Chapter 5), we present our theoretical body, adjusted to the special education phenomena.

(3) In the third step, we conduct the process of re-specification. Over time, we have examined our general ideas in two different national contexts. In other words, we empirically focus on the particularities of SEs in context. The empirical re-specification takes place in our empirical chapters (Chapters 6–11), which partly present analyses from each case or existing comparisons. Our reasoning in the specific studies must build on in-depth contextual knowledge. Therefore, from a comparative perspective, we provide an extended description of the German and Swedish school systems and their special education professions.

(4) Finally, the configuration step comprises synthesising and theorising the nature of special education professions and organisations. In addition, juxtaposing various re-specified solutions of local implementation of inclusion makes the particularity of certain solutions first visible. Paraphrasing Kluckhohn's aphorism from above, we are getting the fish out of the water, as comparative research, through its inherent reflectiveness of the contingency of practice, helps us to *make the familiar strange* and interesting again. The configuration step is approached in the last chapter of this volume in Chapter 12.

The combination of various research methodologies in one interpretative research paradigm.

One advantage with a comparative approach that goes as deep as possible into the cases is that it enables the combination of different methodologies, which might open new insights into potential relations.[1]

[1] An example for the sake of illustration: looking mainly at policy documents and their potential changes related to the special education profession will lead to the impression of an ongoing process of juridification at the price of professional autonomy. From

Figure 4.1: Study combination, illustrated through the form of a raspberry[2]

We can describe our case work with the metaphor of a raspberry (see Figure 4.1), in which the form of the berry emerges from a particular number of seeds, that is, various studies. The seeds are arranged around the berry's stalk. The stalk is our object of interest. In other words, we aim to combine

another perspective, namely that of contingency coping, juridification is a process of functional differentiation necessary to solve the issues of a radically decentralised school system. Finally, from a perspective on the individualisation of students, the process can show how other professions rise during the process in focus, that is, special education professions.

[2] Plansch, skolplansch, Hallon by Engleder Botaniska väggtavlor - 1981 - Malmö Museum, Sweden - CC BY-NC-ND. https://www.europeana.eu/item/91658/MM_objekt_1390794

several studies with differing materials and perspectives to get an exhausting picture of this object. We will restrict the number of cases examined (two countries) to investigate as many relations as possible in the chosen cases. Such a cumulative idea of data collection and the relating of several smaller studies to an object of interest has also enabled the engagement of other researchers with material of interest or even students writing their final theses within the project. Concerning the latter, this refers particularly to professionals studying in graduate programmes in special education. However, from an ethical point of view and concerning field access, such a strategy has significant advantages, as Eriksson (1986) also puts forward.

According to him, from an ethical perspective, the risks of psychological and social harm can be substantial when fieldwork is conducted by an institutionally naive researcher who has not adequately anticipated the range of different kinds of harm to which persons of varying social positions in the setting are potentially exposed. A researcher with in-depth knowledge of the context will, however, prevent doing such failures. Access to the field is useless to the researcher without the opportunity to develop trust and rapport, and explicit entry negotiation with all categories of persons likely to be affected by the research can create the necessary trust conditions. Regarding both these aspects, strategic researcher-practitioner partnerships are of high value, where the final thesis acts as a commitment (a sort of clue).

On the use of other researchers' material

As mentioned above, one of our approaches to the research project also used other researchers' empirical material. There is a significant body of methodological literature on the secondary use of survey data, which has been accomplished through many interesting works on re-using qualitative data (Hammersley, 2010). In this section, we present only some of the main methodological issues that must be considered when working with empirical material on professions collected by another researcher. We will thus also make some practical points concerning research ethics in secondary analyses because we believe that some bigger issues might evolve out of the ethical aspects.

The strengths of secondary analyses are, without any doubt, convenience and cost-effectiveness. The limitations, however, are that such data must first

be found, granted access to and then handled appropriately, conceptually, technically and ethically. Johnston (2014, p. 620f.) presents a procedure for secondary analyses of other researchers' empirical material. The first step is to develop the research question. Only a precise research purpose and question make using other data reasonable. It is imperative to find potential material to conduct research ethically, and this leads to the second step: identifying the data set(s). This process is related to identifying relevant literature, and the literature review identifies other researchers on this topic, as well as agencies and research centres that have conducted related studies. Then, the researchers or agencies with interesting data must be contacted. This step also includes the negotiation of the condition for secondary analyses, which is why a precise research question is so important. Written agreements on the re-use limitations, data management and potential publications are recommended. The most convenient way is to cooperate with the researcher, for example, as a co-author, the strategy applied in our project.

In the evaluation of the material of others, we followed the questions Johnston (2014) suggested be asked about the dataset: (a) What was the purpose of this study; (b) who was responsible for collecting the information; (c) what information was collected; (d) when was the information collected; (e) how was the information obtained; and (f) how consistent is the information obtained from one source with information available from other sources. Here, we add g) what is known about the sampling regarding non-respondents. To make a long discussion short, if these questions cannot be answered satisfactorily, the data cannot be used because no secure statements can be made about the data quality and its potential value for generalisation. For all our cooperative studies, the required information existed.

Material

Various materials have been collected in this project, per our research strategy of several smaller studies. Not all empirical material of our project will be reported in the empirical chapters of this volume; each chapter will, however, very briefly present the data used in the particular chapters' analyses. Still, all data collected have contributed to our understanding of the phenomena of interest. Three types of data have been collected to examine special education professions since 1990 from a comparative perspective: (1) articles

from professional education journals in Sweden and Germany, (2) interviews, and (3) survey data.

(1) With an empirical focus on journal articles as presented in Chapters 7 and 8, we have processed a historical analysis of debates, articles and interviews in journals that direct themselves mainly towards an audience of SEs active in schools in Sweden and Germany. In such journals, representatives of the national SE professions express beliefs on the appropriate form of their profession and its role in society and the school system. We examined in Sweden (Chapter 7) the journals 'Specialpedagogik' (Special Education Journal) (since 2000), 'Läraren' (The Teacher) (since 1988) and 'Skolans värld' (The World of School) (since 1988) and in Germany (Chapter 8) the 'Zeitschrift für Heilpädagogik' (Journal for Currative Education) (since 2006). We looked in particular at how the relation between professional standards and bureaucratic structures in the organisation of schools is discussed. Qualitative content analyses (Mayring, 2007) were conducted with the help of Nvivo.

(2) We have in our investigation also employed interview material with SEs and special education students. In our empirical chapters, we used interviews with 20 Swedish SEs and 25 German ones (Chapter 8). We even include a comparison of special education students (Chapter 10). Here, we employ four Swedish interviews and seven German ones. By cooperating with German colleagues, we have processed our comparisons between students in both countries.

(3) We employ survey data in several of the empirical articles. Chapter 9 compares two total-population surveys of SEs in Sweden in 2012 and 2022. Building on the 2012 study by Göransson and colleagues (see Göransson et al., 2015), we conducted a follow-up study using a similar questionnaire in our project. Both surveys have been processed by Statistics Sweden (SCB). In the 2012 study, 3,190 SEs participated out of 4,252 potential respondents, that is, a response rate of about 75%. Ten years later (2022), 4,089 out of 7,208 possible respondents participated, representing a response rate of about 56%. The re-use of the survey was piloted in the fall of 2021 with 512 SEs.

The data from the pilot studies was re-used for a German and Swedish comparison, for which we translated and adjusted the questionnaire from 2012 for the German system (Chapter 6). The authors sent the questionnaire to German and Swedish SEs working in inclusion or special schools. Our

sample consists of 386 German and 526 Swedish SEs who responded to the questionnaires, making a total of 912 responses upon which the findings were based. In this study, the questionnaire link has been distributed to potential respondents by strategic partners via newsletters. That is why we do not know the exact number of respondents to the survey and cannot, therefore, calculate a response rate.

In Chapter 11, we compare teacher-student beliefs concerning inclusive education by employing the inclusion scale developed by Moser and colleagues (2013). We have translated, adjusted and tested this questionnaire, and compare the Swedish data with the data drawn from cooperation with German colleagues. The German sample was received from the Technical University of Dortmund, Germany (data collection 2020–2021). It comprises 424 special education students at this university and the Humboldt University of Berlin. The data collection was conducted in 2022 and 2023, but we have not received a concrete response rate. The total number of respondents in Sweden was 502, corresponding to a response rate of 45% of contacted students. Table 4.1 presents a summary of the data employed.

Regarding our quantitative data, our survey sampling was done in different ways, for example, total population, convenience sampling, and re-using other researchers' material. Still, we have not collected survey data using an independent randomised procedure. Consequently, we are in this volume very cautious about generalisations in statistical meaning. Hence, the generalisations we make are theoretical. For clarification, there are two types of generalisations in scientific theory: statistical/empirical or analytical/theoretical (Maxwell & Chmiel, 2014). The former regards the level of representativity of the sample as representative of the whole population from which the sample is taken, whereas the latter means that the findings can be used to develop, challenge or confirm a certain theory or inform future analyses in similar studies (Moss & Haertel, 2016). As described above, we aim to theorise about the phenomenon in question.

Ethics

We have developed our research project taking consideration for the ethical state requirements provided in our national cases, Sweden and Germany. Both states follow all international agreements on good research (such as

Table 4.1: Data employed in the empirical chapters of this volume

Empirical study	Data employed	Presented in
A comparison of Swedish and German SEs' perspectives on their work and education	Survey in 2023. 526 Swedish SEs and 386 German SEs (N = 912). No response rate is available	Chapter 6
The professionalisation of Swedish SEs since 1990 is mirrored in union journals	Articles in the following journals: 'Specialpedagogik' (Special Education Journal) (since 2000), 'Läraren' (The Teacher) (since 1988) and 'Skolans värld' (The World of School) (since 1988) (N = 163)	Chapter 7
A comparison of German and Swedish SEs' roles and work in general schools	20 Swedish SEs, and 25 German SEs (N = 45) who work in inclusive schools. Interviews conducted in 2020	Chapter 8
A comparison of Swedish SEs' perspective on their work and education, 2012 and 2022	*2012 Survey*: N = 3,190 (of 4,252, response rate: 75%) *2022 Survey*: N = 4,089 (of 7,208, response: 56%)	Chapter 9
A comparison of Swedish and German special education students' perception of special education	Survey 1: 424 special education students at two universities in Germany; Survey conducted in 2020 and 2021 (no response rate) Survey 2: 502 special education students at six universities in 2022 (45% response rate)	Chapter 10
A comparison of German and Swedish SE students' perspectives on opportunities and limitations of inclusion	7 German special education students, 4 Swedish special education students (N = 11) Interviews conducted in 2023.	Chapter 11

the Helsinki or Vancouver agreements) and human rights (all relevant UN declarations); the research ethical rules in our case are also representative of most Western countries, even if this does not mean that formal processes for achieving ethical consent are similar everywhere. As an orientation, the following eight aspects are constitutive of research ethics.

1. You shall tell the truth about your research; 2) You shall consciously review and report the basic premises of your studies; 3) You shall openly account for your methods and results; 4) You shall openly account for your commercial interests and other associations; 5) You shall not make unauthorised use of the research results of others; 6) You shall keep your research organised, for example through documentation and filing; 7) You shall strive to conduct your research without harming people, animals or the environment; 8) You shall be fair in your judgement of others' research. (Swedish Research Council 2024)

For the following studies, an ethical review is still mandatory for the original study and the secondary study.

> An ethics review board shall review a research project if the following conditions exist. Namely, if the project (A) entails physical encroachment on the research subject; will be conducted using a method aiming to affect the research subject physically or psychologically, or that carries an obvious risk of physical or psychological harm to the research subject; entails studies on biological material taken from a living human being and can be traced to this person; entails physical encroachment on a deceased human being entails studies on biological material taken for medical purposes from a deceased human being and can be traced to this person. […]
>
> A research project shall also be reviewed if it (B) entails handling sensitive personal data […], including information on race, ethnic origin, political views or religious conviction. (Swedish Research Council 2017, p. 30–31).

In many studies on professions, the individuals' identity is irrelevant. Quantitative studies in our field often focus on attitudes towards a certain issue over time. In addition, the respondents are adults, educated enough to make well-founded decisions on the consequences of participating in a certain survey. In such situations, researchers can promise anonymity to the respondent, and no strict ethical review is necessary. This makes it easier to pass the study material on to other researchers, as we have exercised in our project and the volume at hand. Besides the ethical issues described above, this project relates to Swedish legislation on ethical consent insofar as the data collected from adult persons did not cover sensitive information such as

ethical background, political opinions, religious or philosophical beliefs, union membership, health, sex life or orientation, or biometric information. We furthermore collected no pictures or videos of persons and have not constructed registries with information about the participating individuals. For these reasons, no ethical vetting was necessary for the data collection. Parts of the German SEs' data have been collected in the German state of Baden-Württemberg, and in this context, a research permit from the Ministry of Cultural Affairs is necessary to conduct studies at schools, where *at schools* means studies that approach teachers during their work time. Here, little ethical consideration is at stake, rather than a focus on data security. Nevertheless, we have employed and received a research permit for our survey study. Interviews with SEs could not be classified as a study at schools. Hence, we approached them via networks of SEs working in inclusive schools.

Data management regulations

The data concerning our participants was collected and stored securely; among other things, this includes the separate storage of raw data and a code list (of participants). Data from the project was archived following the European data security law (GDPR), which means that we have shared interview material, with our students active in the project by first storing audio files (personal data) on the XCloud platform. If needed, this platform provides data storage and data sharing at the highest security levels (S3). Secondly, the files were saved on the responsible researcher's hard disk, secured by individual passwords. For joint analysis work, we only exchanged anonymised transcripts of interviews. In this way, we have also organised the work with our German colleagues. For our analyses, we have exchanged anatomised transcripts.

A critical aspect of our study design is that we also investigated our 'own' students in the Swedish part of our SE education study. Since the researchers in the project are employed at two universities, we could avoid interviewing our students. Due to the research design, the first significant publication of our results on a qualitative level will happen after our participants have finished their graduate programme (i.e. after completing data collection). Concerning our survey data on the study of SEs in Sweden, we employed

Sweden statistics and received an anonymised data file. Here, we had no access to personal data such as postal or email addresses. The same is true for the German special education students' beliefs survey we employed, where we only used an SPSS data file with no personal information. Concerning the collection of survey data on Swedish special education students, we distributed links to the questionnaire via student administration and the programme responsible for students at various Swedish universities. We had no access to any individual data. Rather, we only had access to email addresses for the Swedish and German samples in relation to the comparison of German and Swedish SEs. The survey and reminder links have been sent to the email lists as bulk emails. Hence, answered questionnaires cannot be related to any email address.

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