An ethnographic case study in educational research

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The authors present an analysis and description of one of the most unique social research strategies – a case study approach to education science and practice. Using Zygmantas’ recent work in which an ethnographic case study was implemented, along with Yin’s and Stake’s constructivist ideology while grounding a case research design, the main principles, phases, and methodology are discussed. Even though the case study research was mainly based on the areas of economy, law and business, the education field is open also for implementing such a research strategy and as the didactic approach. An example of a case study research in education is presented in the 3rd chapter of this paper revealing obvious strengths and advantages of such a thorough investigation of social phenomena.

Keywords: case study, methodology, research strategy, education.

Introduction

As Postlethwaite (2005) would stress, within the realm of educational planning, many things are always changing: the structure of the education system, curriculum and textbooks, modes of teaching, methods of teacher training, the amount and type of provisions to schools such as science laboratories, textbooks, furniture, classroom supplies, etc. These changes may lead to an improvement of the quality of an educational system. There are many types of educational research studies and there are also a number of ways in which they may be classified. Studies may be classified according to topic whereby the particular phenomena are used to group the studies (Postlethwaite, 2005; Shuttleworth, 2008; Stam, 2008).

Thus, among the various types of educational research, such as historical, descriptive, correlation, causal, experimental, ethnographic, and research development, a case study research (other authors as Yin, 2003 and Stake, 1995 would name strategy as a case study, having in mind all its methodological set, distinctive instruments and research principles along with all logical sequence) plays a rather controversial role – on the one hand this kind of
research is usually taken by many as one of the most convenient research designs as anything fits within it (Stam, 2008); on the other hand, this type of educational research may be seen as quite unique with its logical sequence, procedure hierarchy, and finally as a separate research strategy within social sciences, i.e. among quantitative, qualitative and mixed methods (Yin, 2003).

A case study research in education, according to Postlethwaite (2005), generally refers to two distinct research approaches. The first consists of an in-depth study of a particular student, classroom, or school with the aim of producing a nuanced description of the pervading cultural setting that affects education, and an account of the interactions that take place between students and other relevant persons, e.g., an in-depth exploration of the patterns of friendship between students in a single class. The second approach to case study research involves the application of quantitative research methods to non-probability samples – which provide results that are not necessarily designed to be generalizable to wider populations, e.g., a survey of the reading achievements of the students in a rural region of a particular country (Postlethwaite, 2005).

Despite the advantages and strengths that may be obvious and quite clear at the first glance, choosing the case study approach in education real-life contexts, there are quite a few accusations for such type of research: one would be convenience, and the second that a case study could be identified as an unscientific methodology because of limited generalizability (Stam, 2008). Thus problematic aspect could be seen through the importance of showing both the sides of a case study research design, especially for educationalists – one might say that all types of research include a case, but not every case could be seen as a case study research. Contextualization is one of the main features in education science and also this peculiarity is a strong characteristics within a case study approach, especially having in mind local (Lithuanian) research traditions where a case study strategy is a rather new one.

Consequently, the object (main focus) of this paper is a case study research design description with all its methodology set and peculiarities in education science and the possible ways to implement such a strategy for educationalists.

The goal of this paper is to present, analyse, and describe the case study research methodology within education science and practice and to make a clear distinction between the case study research and other research strategies existing in education.

Main methods that have helped to reach the goal are scientific literature analysis, interpretation and comparison and the content analysis of a recent work-in which the ethnographic case study research design was implemented.

1. Description of case study design

The theory underlying case studies has been discussed by several authors in the past decades (Shaw, 1978; Stake, 1978, 1994, 1995; Guba and Lincoln, 1981; Boggs, 1986; Wolcott, 1992; Merriam, 1998; Andre, 2002; Yin, 2003). As pointed out by André (2002), case studies have been used in several areas of knowledge, such as medicine, psychology, nursing, social work, in which the usual focus is that of an individual for diagnostic purposes.
and follow up during a specific treatment. In addition, case studies can also be conducted in business or law, the former being aimed at determining structural changes in institutions and the latter at providing a thorough description in the course of investigations of a specific legal problem. In education, it has been widely used for describing a specific unit, such as a school, a teacher, a student, or a classroom.

Recent studies (Zygmantas, 2011) reveal that one of most comprehensive research on case studies was that conducted and updated by R.K. Yin (2003). According to this author, case studies can also be considered as a research strategy adopted to investigate a phenomenon in its real-life context. Moreover, they can be designed as single or multiple case studies. A single case study can be designed when it represents a unique or rare circumstance and can serve a revelatory purpose. In Yin’s (2003) words, “this situation exists when an investigator has an opportunity to observe and analyse a phenomenon previously inaccessible to scientific investigation” (p. 42). Moreover, a single case study must be significant: it should be ‘unusual’ and of general public interest; it should entail issues which are nationally important in theoretical or practical terms. When a study contains more than one single case, it is normally labeled as a multiple-case study. Such a study can be used for a comparison of the units under investigation. It can also require “extensive resources and time beyond the means of a single student or independent research investigator” (p. 47).

Philosophically, both Stake (1995) and Yin (2003) base their approach to case study on a constructivist paradigm (Baxter, Jack, 2008). Constructivists claim that truth is relative and that it is dependent on one’s perspective (Atkinson et al., 2000). Constructivism is built upon the premise of a social construction of reality (Atkinson et al., 2000). One of the advantages of this approach is a close collaboration between the researcher and the participant while enabling participants to tell their stories; consequently, participants are able to describe their views of reality, and this enables the researcher to better understand the participants’ actions (Baxter, Jack, 2008).

As a means of constructing reliability and validity, Yin (2003) has stated that a good case study will employ multiple sources of evidence to collect data, followed by data analysis. When we conduct a case study, we are relying on analytical generalization rather than on statistical one, which normally happens in a survey study. By statistical generalization, it is meant that one has in mind a specific population and, consequently, a sample, which is considered for gathering empirical data. It relies on quantitative formulas which may be applicable to populations and samples, and it is by far the most common way adopted if one is doing a survey study or analysing data from archives. On the other hand, analytical generalization is to be understood as if one had to conduct a new experiment. In this sense, the investigator chooses a topic and searches a theory that has been previously developed but can be further used as “a template with which to compare the empirical results of the case study” (p. 32–33).

Furthermore, if two or more cases support the same theory, then, as Yin (2003) puts it, “replication can be claimed” (p. 33). In other words, what we are actually doing is generalizing the results obtained to some
broader theory. That is the reason why the author contends that case studies “are generalizable to theoretical propositions and not to populations or universes” (p. 10). Therefore, a researcher’s aim would be to “generalize theories (analytical generalization) and not to enumerate frequencies (statistical generalization)” (p. 10). As a consequence, the findings will be reported by means of literary techniques rather than relying exclusively on numerical data.

And most importantly, Yin (2003) argues that the “analogy to samples and universes is incorrect” (p. 37), as case studies do not represent a sample. The author stresses that cases are not “sampling units and should not be chosen for this reason” (p. 32). So, a researcher “should try to aim toward analytic generalization in doing case studies” while also avoiding “thinking in such confusing terms as ‘the samples of cases’ or the ‘small sample size of cases’” (p. 33). The reason is that every case is unique and as such cannot be replicated; however, if similar or analogous cases are analysed, the same theoretical constructs may be used to analyse the data yielding similar results.

2. Ethnographic case studies and their application in education: the main theoretical framework

As previously mentioned, case studies have been employed in educational contexts for almost 40 years now, considering the classic work of Wolcott (1973). However in this paper we mainly draw on the extensive work of Merriam (1998) and on qualitative studies conducted in instructional settings by André (2002), and also to some findings by Zygmantas (2011). Case studies in education are more likely to be qualitative as opposed to quantitative. One of the reasons is that the outcome is expected to foster change in policies, pedagogical practice and research, as noted by Merriam (1998):

A case study design is employed to gain an in-depth understanding of the situation and meaning for those involved. The interest is in process rather than outcomes, in context rather than a specific variable, in discovery rather than confirmation. Insights gleaned from case studies can directly influence policy, practice, and future research. (p. 19)

The author went on to state that, when applied in educational contexts, a case study that has its focus on “the culture of a school, a group of students, or classroom behavior”, can be labeled as an ethnographic case study (Merriam, 1998: p. 34). Similarly, according to André (2002), the case studies that can be referred to as ethnographic-like should not only provide a thick description of a unit (a school, a program, an institution, a teacher, a student, or a classroom), but also understand its particularities. Findings will further inform decision-making in terms of educational policies and pedagogical practices. It is important, however, to note that in this case, the principles of ethnography are also to be considered: the researcher gets closer to the situation and the participants in order to make a thick description. Several instruments can be used to collect data and only then will the theory be searched and used to analyse the data and arrive at the findings. The study is inductive and the hypotheses are likely be generated at the end. When this is the case, they can be used to structure the further research in the same field.

When ethnographic case studies are employed within instructional settings,
considering that the educational institution – especially the classroom – is a place where knowledge is socially constructed, the researcher plays a vital role when collecting and analysing data. In this sense, the method is that when the researcher becomes a full participant, i.e. he or she becomes a participant observer (Freire, 1970; Spradley, 1980; Nunan; 1992; Merriam, 1998; André, 2002).

According to Spradley (1980), being a participant observer means “participating in activities, asking questions, eating strange foods, learning, a new language, watching ceremonies, taking field notes (…), interviewing informants, and hundreds of other things” (p. 3). This author has added that very often the researcher becomes a student because his or her main task is to “discover the insider’s view” (p. 4). The researcher is expected to observe and interact within a social situation comprised of a physical place, people and activities. The complete participation is essential, considering that the final product – the ethnographic report – “consists of field notes, tape recordings, pictures, artifacts, and anything else that documents that social situation”; this is supposed to provide a “record of events of a given society within a given period of time” (p. 63).

Having said this, we can state that the ethnographic case studies in education are performed by a specific method – participant observation – which in turn requires data to be gathered via multiple sources: context analysis – observation followed by field notes concerning the educational institution, the classroom and its equipment and objects; content analysis of documents, such as lesson plans, institutional files, websites, teaching materials, posters (Merriam, 1998; Genzuk; 2003). Questionnaires are also often used to collect data and assess students’ needs and views (Nunan, 1992). Interviews are another usual type of instrument employed in ethnographic studies. Spradley (1979) provided a model for conducting an interview which aims to obtain an insider’s view. First and foremost, it is vital to show a genuine interest in the participants and tell them the reason for conducting such an interview. Only after obtaining their consent should the questions be asked (and recorded).

According to Spradley (1979), ethnographic questions can be grouped into descriptive, structural or explanatory, and contrast questions. Descriptive questions are the basis of ethnographic interviewing, as they often require the participant to describe an event, person or circumstance. Structural or explanatory questions are used to obtain the further clarification on a specific aspect of a descriptive question, expanding and asking for elaboration on what was said before. Finally, contrast questions provide the researcher with a greater possibility to discover the meaning behind the words used, by means of semantic relationship (the meaning of words), the principle of use (as opposed to its definition), the similarity principle (providing a synonym), and the contrast principle (finding out what things are not or how they can be different or opposites).

Considering that ethnographic studies fall within the scope of qualitative research, a qualitative analysis is carried out. Spradley has (1979) noted that the meaning of words can be obtained by conducting a relational analysis, based on the following premise: “The meaning of any symbol is its relationship to other symbols” (p. 97). Such an analysis was put forward by Glaser and
Strauss (1967) in their theory. According to these authors, comparative analysis is a method that can be applied to social units of any size, in large or small contexts; in their studies, they gathered evidence from wards in hospitals and classes in a school. In addition, they went on to elaborate on this discovery process:

“One generates conceptual categories or their properties from evidence; then the evidence from which the category emerged is used to illustrate the concept. The evidence may not necessarily be accurate beyond a doubt (nor is it even in studies concerned only with accuracy), but the concept is undoubtedly a relevant theoretical abstraction about what is going on in the area studied. Furthermore, the concept itself will not change” (Glaser and Strauss, 1967: 23).

By the same token, for Spradley (1979), categories are placed in a domain: all the members in this domain have “at least one feature of meaning” (p. 100). The domain can have a cover term followed by included terms. Moreover, a term may be included in a certain domain, or the list of categories can be delimited or may be excluded given the semantic relationship. For instance, the cover term DRINK could have as included terms the following: tequila and lime, beer and tomato juice, among others, considering that they are a kind of drink (p. 105).

It is important, however, to note that the list of categories can be delimited. According to Glaser and Strauss (1967), when the information gathered only adds bulk but no new aspect is brought about, the list of categories becomes theoretically saturated, i.e. a saturation point is reached and no more relevant information can be added. Furthermore, the authors emphasize that the theory is a constant process of being generated and at this stage should not be seen as a “perfected product” (p. 32). A clear view of the categories will only be reached with the coding and analysis of all data, along with the integration of the theory that is searched or created. In their own words: “A discovered, grounded theory, then, will tend to combine mostly concepts and hypotheses that have emerged from the data with some existing ones that are clearly useful” (p. 46, emphasis added).

3. Ethnographic case study in action: an illustration

Upon discussing the main theoretical framework underlying ethnographic case studies and their application in education, the following text will illustrate their design and implementation in recent research (Zygmantas, 2011) conducted in the realm of language education aimed at identifying the perceived difficulties of adult newcomers in learning Lithuanian at a host country. The course was offered at a higher education institution in the capital city and was taken by visitors, permanent and temporary residents, such as summer and Erasmus students, apart from adults living and working in the country (Zygmantas, 2011).

Given the lack of previous research from an educational perspective, with a focus on adult learners’ difficulties, the choice for a single case study was made. The researcher – a non-native speaker of Lithuanian and a newcomer to the country – became a participant observer: not only did the author conduct the research by using several instruments to gather data, but also was enrolled at the same institution as a language learner one year before as a summer student and at the beginning of the scientific inquiry. Such a ‘first-hand
experience’ and the triangulation of data were essential in obtaining an insider’s view.

With regard to the data-gathering instruments, the following were used: a questionnaire comprised of open and closed questions; in-depth interviews (e.g. see table 1), context analysis at macro, meso and micro levels (i.e. the country, institution, classroom), including audio-recorded lesson observations, and content analysis of documents, policies, official websites, learning programs, supplementary materials and course books. For illustrative purposes, concerning the ethnographic questions asked during the interviews, the examples below are used for illustrative purposes (Zygmantas, 2011: 30–31).

Table 1. Ethnographic case study in interviews

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<th>DESCRIPTIVE QUESTIONS (asking for a description)</th>
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<td><strong>Researcher:</strong> OK...so first of all... I would like to ask you about your foreign languages... you speak English... And how did you learn it?</td>
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<td><strong>Student 11:</strong> Humm... I learnt a little bit back home in [student’s country]... but I think I learnt most of my speaking when I was in Chicago... I spent almost four... three years in Chicago</td>
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<tr>
<td><strong>Researcher:</strong> And... in [student’s country]... how did you learn that?</td>
</tr>
<tr>
<td><strong>Student 11:</strong> At school... like we learn Lithuanian here... it is not so intense... just a few classes a week... and you normally... it didn’t require speaking a lot... you just had to read and take the test... so most about grammar</td>
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<th>STRUCTURAL OR EXPLANATION QUESTION (asking for an explanation)</th>
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<td><strong>Researcher:</strong> And as far as your difficulties... for example... doing your homework... you said “endings... starting questions” [stated on the questionnaire, in one of the open questions]... can you elaborate on that?</td>
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<td><strong>Student 28:</strong> Just for Lithuanian... it’s all the tenses and endings... I have difficulty with... you know... the genitives... the locatives... all the different... when it comes to the homework... I still don’t... I have difficulty doing that...</td>
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<th>CONTRAST QUESTION (finding out how something can be different)</th>
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<td><strong>Researcher:</strong> (...) You say you can’t remember... so what could you do in order to remember?</td>
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<tr>
<td><strong>Student 36:</strong> To remember? Just speak... speak with people again and again... practicing... I guess there is no miracle in the language... If you don’t practice it... then you don’t learn anything... I mean... if I go home and speak with my parents who speak only [student’s first language]... If I stay here... If I don’t go out... If I don’t speak with anybody... after six months I will only speak [student’s first language] and that’s it... it’s practicing all the time...</td>
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In analysing the data obtained from the open questions of the questionnaire and the answers given in the interview, a relational and comparative analysis was done. Furthermore, the preliminary findings were used to search for theories that could be used to critically analyse the data. Thus, the researcher employed several theoretical perspectives considering the target group and the causes given for their difficulties in the learning process. In other words, the whole process of the scientific investiga-
tion was thoroughly conducted to address the research questions, arrive at the main findings, formulate hypotheses and make recommendations (see Figure 1).

**HYPOTHESES & RECOMMENDATIONS**
Tentative explanations to be further tested
Suggestions for course redesign

**CONCLUSIONS**
An overview of adults’ perceived difficulties in light of aforementioned theories

**THEORETICAL FRAMEWORK**
Causal Attribution
Adult Education & Learning
Task-Based Language Education

**SOCIO-CULTURAL CONTEXT ANALYSIS**
Data Gathering & Analysis
Grounded Theory

**METHODOLOGICAL APPROACH**
Etnographic Case Study
Participant Observation
Critical Pedagogy
First step

**Figure 1. Ethnographic case study steps**
(Zygmantas, 2011: 33)

As shown in Figure 1, the first step was deciding on the methodology to be employed: an ethnographic case study – conducted *in loco*, aiming at obtaining the insider’s view, by the method of participant observation, as previously described. It was also based on the philosophical principles put forward by Freire (1970, 1974, 1998) in his critical pedagogy, considering the need to investigate man’s thinking, the limit-situations adult learners perceive as obstacles to their further development in the context into which they are inserted.

Next, a socio-cultural context analysis was done at macro, meso and micro levels, including the content analysis of documents, official websites, educational policies and educational resources. All the data gathered, including those obtained from the questionnaire, in-depth interviews, and audio-recorded lesson observations, were analysed on the basis of a grounded theory as previously highlighted.

The third step entailed searching for a comprehensive theoretical framework which provided answers to the questions raised in an attempt to critically analyse the limit-situations – the perceived difficulties formed by adult newcomers who took part in the study, as shown in Table 3. In this sense, from social psychology, causal attribution and its application to second / foreign language education was used to investigate learners’ perceptions. This was an essential step in understanding to what extent learners themselves could make any changes in the learning process. Considering their nature and age-groups, the underlying principles of adult education and learning were important in achieving a better understanding of how courses and materials targeted at adults should be designed. Finally, the developments of research in foreign / second language education and the role of tasks in the learning process were also taken into account. This was essential in identifying a theoretical-methodological approach that could be used to redesign courses and materials aiming at the social inclusion of newcomers, learning a less-widely used and taught European language, such as Lithuanian, in a host country for personal, study or work purposes.

Conclusions were then drawn, based on the aforementioned theories and, as preliminarily designed, hypotheses were generated so that future researchers could
carry on the investigation, given the lack of previous studies in the field.

On balance, the scientific investigation designed as an ethnographic case study, applied in instructional settings, aimed at laying the foundations for foreign and second language education, can be an effective educational tool in terms of meeting the needs of adults engaged in lifelong learning contexts, facilitating their inclusion in a new environment.

Conclusions

1. A case study is frequently employed as a research strategy. In contexts where no previous research was carried out, it is normally designed as a single-case study, being unique and having a revelatory purpose, of a national significance.

2. Validity within a case study is mainly supported by several sources of data collection and analysis, based on different theoretical perspectives. Reliability will be obtained through data analysis, which is carried out by analytical generalization – a theory is searched and used for comparing the empirical results.

3. When applied to education, the aim is to construct a new understanding of a particular phenomenon, and not to test hypotheses. The findings are expected to inform educational policies and pedagogical practices, and facilitate the process of change according to the new reality.

REFERENCES


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