



CASE STUDY APPROACH IN SECOND LANGUAGE LEARNING RESEARCH ¹.

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Abstract: *The purpose of this article is to discuss methodological issues of the case study as an approach in second language learning research. It firstly analyses the position of case study in the continuum of research design. It then discusses the advantages of using the case study approach to examine L2 learning, and highlights some types of research questions that can be addressed using this approach. Furthermore, the limitations of case study will be examined and the ways to deal with them will be discussed. Finally, this article analyzes samp'le case studies recently conducted to provide insights on how this approach can be applied usefully in the context of second language learning.*

Key words : *case study, qualitative design, quantitative design, second language learning*

INTRODUCTION

One of the research approaches that have contributed to the development of studies in second language (L2) learning is the case study.

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According to Johnson (1992:76), a case study is used to “describe the case in its contexts”. The case study researcher attempts to answer a research question by examining aspects of situations regarding the case. The case study has become an important approach to investigate aspects of L2 learning (Johnson, 1992; Nunan, 1992). Although the case study has some limitations, there are some means available for the researcher to enhance the reliability and validity of this research approach.

CASE STUDY AS A RESEARCH APPROACH

Research can be identified in a continuum of designs ranging from the qualitative designs to the quantitative designs. Although a number of researchers consider the case study as a qualitative type, many of them agree that it shares the characteristics of the two designs. Merriam (1998:12), for example, classifies the case study as a qualitative type and she argues that it can be combined with any other common types of qualitative research such as ethnography. She also points out that the case study differs from any other types of qualitative research because it deals with a ‘single unit’ or a ‘bounded system’, emphasizing a limited scope of research.

Seliger and Shohamy (1989:125) assert that the continuum of research design extends from qualitative design at one end to experimental design at the other, with descriptive design in the middle of the continuum. Classifying the case study into the descriptive design, they state that the case study bears the characteristics of both the qualitative and experimental designs. The case study is similar to the qualitative design because it is concerned with phenomena that occur naturally. Whereas, it resembles the experimental design for it starts with a preconceived hypothesis.

According to Nunan (1992:75), the case study is partly qualitative and partly quantitative. Stipulating that the case study might be confused with ethnography, Nunan emphasizes that, unlike ethnography, the case study is more restricted in the area to be studied. Nunan, furthermore, argues that the case study differs from ethnography in that it does not deal with the cultural context of the phenomena examined. In Nunan’s view, the case study resembles the quantitative design because it can employ statistical methods. Like Merriam (1998:19), Nunan asserts that the important characteristic of the case study is that it deals with a ‘single instance’ or a ‘bounded system’. The bounded system can be an individual learner, a classroom, or even a construct.

ADVANTAGES OF USING CASE STUDY

The use of case study approach offers researchers a number of advantages. Adopting the work of Adelman, et al., Cohen and Manion (1994:123) suggest several advantages of case study approach in the educational field. First of all, the case study represents reality very closely and, therefore, can be a natural source of data. Furthermore, focussing on an instance with its complexity, the case study enables the researcher to provide a generalization about the instance. Moreover, the products of the case study can be a rich source of material for users and other researchers. The case study also presents evaluation data suitable for different audiences.

In the context of L2 learning, the case study has been a useful approach as it allows researchers to focus on the limited scope of an issue. For example, a number of researchers have examined cases of simultaneous acquisition of two languages in children; acquisition of a second language to young children; and second language acquisition of adult learners (Hatch, 1978). Issues relating to the role of instruction, as Johnson (1992:76-83) highlights, include the relationship between scaffolding and L2 development; strategies used to read L2 texts; and learner strategies in learning a language. Duff, as quoted by Nunan (1992:79), adds other issues for research such as: fossilization in L2 acquisition, various points of interlanguage development, the characteristics of more successful language learners, and the relationship between instructional methods and L2 learning.

Similar findings from different case studies can contribute to a clearer understanding of a particular issue. The case studies of Shapira (1978) and Schumann (1978) can be used to illustrate this advantage. Shapira carried out a case study on simplification in adult L2 acquisition. In line with Shapira, Schumann investigated pidginization in adult learners' L2 learning. Shapira's subject was Zoila, a 25-year-old Guatemalan, while Schumann's subject was Alberto, a 33 year-old Costa Rican. Shapira concluded that Zoila's English did not develop sufficiently as her expressions contained numerous examples of simplification. Schumann found that although Alberto was successful in carrying out his communicative needs, there was evidence of pidginization in his utterances. The two case studies support the proposition that processes of simplification and reduction occur in the utterances of adults who learned L2 from exposure rather than instruction.

In addition, the relatively long period of time in the case study (Brown, 1988:2) enables the researcher to describe the processes and outcomes of

the research in a detailed manner. Leopold (1978), for example, investigated the acquisition of English and German of his child, Hildegard. The results were reported in four volumes and they have been considered the most complete record of a child's acquisition of two languages. A second example is that of Schmidt (1983), who examined the relationship between social and interactional variables on the acquisition of communicative competence. His subject was Wes, an adult Japanese person who possessed positive personal and social characteristics. Schmidt provided intensive analyses of Wes's communicative competence. Therefore, the research of both Leopold and Schmidt illustrate some of the advantages of the case study method.

The case study, moreover, provides useful insights for applications in the field of language teaching. Fregeau (1999), for instance, used case study method to evaluate approaches that had been used to improve the writing skills of Potentially English Proficient (PEP) students as a preparation for ESL college writing. Her subjects were Betsy from a Liberal Arts course and Bozena from a Science course. She interviewed the two students and analyzed their English compositions. Fregeau suggests that among the approaches used so far to improve PEP student writing skills, process writing was the most effective one. She states "Since conducting this research I have become an advocate of a process-oriented approach for teaching writing to PEP students and native speakers of English" (p. 11).

DEALING WITH LIMITATIONS

As a research approach, the case study has some limitations in relation to its reliability and validity. In terms of reliability, the applicability of the findings to other cases is questionable. According to Yin (1994:40), reliability can be achieved by using case study protocols and by developing a case study database. The protocols outline the same procedures in more than one case, or in a study carried out by different researchers. The database serves as a means to differentiate the collected evidence from the manuscript of the case study. Merriam (1998:106-107) argues that the researchers can enhance the reliability of a case study by using triangulation, clarifying the theory behind the study, and explaining how the results are gained.

In terms of validity, Yin (1994:39-40) argues that a case study should be developed by considering construct validity, internal validity, and external validity. Construct validity is concerned with whether operational measures for the case can be established correctly. In order to deal with the potential

limitation of using instruments which are not as accurate as desired, Yin suggests that case study researchers use multiple instruments to measure the same construct in the same case study.

Internal validity deals with whether the insights resulting from a case study match the reality. Because the main instrument for the data collection in a case study is the researcher, as Cohen (1994:111) points out, there may be the fear that the researcher's judgment is subjective and unable to reflect the reality. To increase the internal validity of a case study, the researcher may use a number of procedures. In this case, Merriam (1998:204) suggests the researchers clarify the theoretical basis from the beginning of the study and to use triangulation, peer examination, and member check.

External validity is concerned with whether the findings can be generalized. Nunan (1992:80) states that problems related to external validity are usually raised by the proponents of a quantitative approach. They believe that inference should be derived from a sample that is representative of the population, not from a particular instance. As far as Merriam (1998:211-212) is concerned, the external validity of a case study can be enhanced by providing a thorough description of the research situation and the typicality of the case, and by applying multiple designs.

In the following sections, two recent case studies are reviewed in the light of the methodological concerns. The first one focuses on students as the case, while the second one presents a collective case study involving six teachers.

SAMPLE CASE STUDY 1

Thorson (2000) investigated the relationship between first language (L1) and foreign language (FL) writing processes. Using a computerized program, *Trace-It*, she focused on whether students studying a foreign language use the same processes and writing strategies in FL and L1 writing in two genres: letter and article. This study involved 18 students of the University of Arkansas at Little Rock enrolled in two levels of German courses. The first course is an intermediate language course and the second one is an upper-level culture course. Two English and two German assignments were given to students in each course. These students were required to write directly on the computer during class time. Thirty minutes were allocated for letter writing and 40 minutes for newspaper article writing.

The findings suggest that each individual has undergone different writing processes and revision strategies. Overall, each student wrote more words in English assignments than in German assignments. Furthermore, the students revised more frequently in the German assignments rather than in their English assignments. To focus on the writing process and strategies in detail, Thorson examined in detail the compositions of two students. Student A completed the assignments for the intermediate course, while student B for the culture course. Analysing the type of revisions in English compositions of student A, the study reveals that many of the revisions were surface-level corrections intended to fix spelling and typographical errors. Investigation of his German compositions indicates that this student wrote his ideas first in the form of a skeleton and then added further information. On the other hand, student B revised significantly less and she attempted to compose straight through, making no major revisions in English assignments. With regard to German assignments, student B used different strategies in the two assignments. In the letter writing, she wrote all the ideas first with occasionally putting English words, and then went back to revise the English words. In the article writing, she wrote ideas sentence by sentence and paragraph by paragraph with revision of words and phrases, and addition of information as she went along.

Thorson's case study addressed research questions dealing with processes and strategies in L1 and FL writing across genres. Thorson has demonstrated that the use of computer software resulted in a reliable and replicable case study. It is reliable in the sense that the use of computer has provided a way of recording writing strategies that were unobtrusive. Furthermore, the use of the computer has reduced the subjectivity of the judgment from the researcher and, therefore, made the results close to the reality. It is replicable since the computer serves as a research tool that makes it easier for other researchers to collect data and to share information. Although Thorson's study has not provided a conclusive description of the processes and strategies in L1 and FL writing, it has successfully laid both methodologically and theoretically important foundation for further research relating the first and foreign language writing.

SAMPLE CASE STUDY 2

Sarroub (2001) examined the implementation process of the *Nebraska K-12 Foreign Language Frameworks* and the impact it has on FL learning

and teaching in primary and secondary schools. The *Frameworks* were issued following the publication of the *National Standards for Foreign Language Learning: Preparing for the 21st Century* in 1996. The standards require students in the United States who are equipped linguistically and culturally to communicate successfully in a pluralistic society and abroad. The major aims of the *Frameworks* were then to draft and review the standards, to implement the standards in the form of statewide workshops, and to train approximately 400 teachers to be workshops staff.

The case study was carried out in the Lincoln Public School District, an urban school district of Midwest. It involved six teachers: two elementary, two middle school, and two high school teachers. Data for this study were collected through different methods that include semi-structured interviews, audiotaped classroom observations, and Frameworks-based lesson plans from each teacher.

The findings reveal that although there were similarities and differences in the perception of the *Frameworks* and in the implementation process, all the teachers implemented the *Frameworks* in their classrooms. The teachers are of the opinion that the Frameworks serve as a guide and have affected the teaching and learning in a positive way. The implementation process of a teacher differed from another one because of difference in length of teaching experience and period of involvement in the application of the Frameworks. Although in the beginning stages of implementation there was an interference from the traditional instruction, the implementation of the Frameworks have resulted in improvement in the teaching practice and assessment. The findings also suggest that the implementation process of the Frameworks could be made easier when factors such as technology, extra time, and class size are taken into consideration.

Sarroud's case study focussed on the implementation process of a national policy on education and the effects on the teaching and learning of foreign language in Nebraska. As an instrumental case study, the aim was not to analyze the teachers who were interviewed and observed, but to examine another bound system, i.e. the *Frameworks*. The use of various techniques in the data collection (triangulation) was likely to increase the validity of the case study. Furthermore, by examining six teachers from six different places, Sarroud attempted to present six cases collectively. By doing so, the generalizability of the case study was likely to be increased.

The review of the two case studies suggests that both Thorson (2000) and Sarroub (2001) have attempted to solve the limitations of case study as a research approach. Problems related to reliability and validity were taken into account in the stages of data collection, analysis and interpretation of the case studies. The review also indicates that case study is a useful research approach that can be applied in a classroom or a broader context of second language teaching and learning.

CONCLUSION

The case study is used to examine a unit or a system within a boundary such as an individual learner, a classroom, an event, or a construct. The two case studies reviewed in the end of this article have shown how a student and a process of implementation can be a bounded system and how limitations of case study approach can be handled. As a descriptive approach, the case study bears the characteristics of both qualitative and quantitative designs. The case study approach offers a number of advantages. In the context of L2 learning, case studies have contributed to a more comprehensive understanding of issues in L2 learning and development, and have provided useful insights for pedagogical purposes in L2 instruction. However, the case study does have some limitations in relation to reliability and validity. To minimize these limitations, certain procedures can be implemented in the planning stage of the study, and in the stages of collection, analysis, and interpretation of the data.

BIBLIOGRAPHY

- Brown, J. D. *Understanding Research in Second Language Learning*. Cambridge: Cambridge University Press, 1988.
- Cohen, L., and Manion, L. *Research Methods in Education*. London: Routledge, 1994.
- Fregeau, L. A. 'Preparing ESL Students for College Writing: Two Case Studies'. *The Internet TESOL Journal* 5,10.1-12. Retrieved in March, 2002, from <http://iteslj.org/Articles/Fregeau>, 1999.
- Hatch, E. M. *Second Language Acquisition: A Book of Reading*. Rowley, MA: Newbury House, 1978.
- Johnson, D. M. *Approaches to Research in Second Language Learning*. New York: Longman, 1992.

- Leopold, W. F. "A Child's Learning of Two Languages". In E. M. Hatch (Ed.), *Second Language Acquisition: A Book of Readings*. Rowley, MA: Newbury House, 1978.
- Merriam, S. B. *Qualitative Research and Case Study Applications in Education: Revised and Expanded from Case Study Research in Education*. San Francisco: Jossey-Bass, 1998.
- Nunan, D. *Research Methods in Language Learning*. Cambridge: Cambridge University Press, 1992.
- Sarroub, G. J. "A Collective Case Study of the Implementation Process of the Nebraska Foreign Language Frameworks by Six Teachers". *The Modern Language Journal*, 85(4), 499-511, 2001.
- Schmidt, R. "Interaction, Acculturation and the Acquisition of Communicative Competence: A Case Study of an Adult". In N. Wolfson and E. Judd (Eds.), *Sociolinguistics and Language Acquisition*. Rowley, MA: Newbury House, 1983.
- Schumann, J. "Second Language Acquisition: The Pidginization Hypothesis". In E. M. Hatch (Ed.), *Second Language Acquisition: A Book of Readings*. Rowley, MA: Newbury House, 1978.
- Seliger, H. W., and Shohamy, E. *Second Language Research Methods*. Oxford: Oxford University Press, 1989.
- Shapira, J. H. "The Non-learning of English: Case Study of an Adult". In E. M. Hatch (Ed.), *Second Language Acquisition: A Book of Readings*. Rowley, MA: Newbury House, 1978.
- Thorson, H. Using the Computer to Compare Foreign and Native Language Writing Processes: A Statistical and Case Study Approach. *The Modern Language Journal*, 84(2), 155-170, 2000.
- Yin, R.K. *Applications of Case Study Research*. Newbury Park: Sage, 1994.