

CASE STUDY FOR ENGLISH LANGUAGE TEACHING

Summary paper by:

Rohmani Nur Indah

A. DEFINING CASE STUDIES

Basically, a case study is an in depth study of a particular situation rather than a sweeping statistical survey. It is a method used to narrow down a very broad field of research into one easily researchable topic¹.



The case study research design is also useful for testing whether scientific theories and models actually work in the real world. For psychologists, anthropologists and social scientists, they have been regarded it as a valid method of research for many years. The following are some definition of case study in some disciplines:

¹ "<http://www.experiment-resources.com/scientific-method.xml>"> .

- A careful study of some social unit (as a corporation or division within a corporation) that attempts to determine what factors led to its success or failure².
- A method for learning about a complex instance, based on a comprehensive understanding of that instance, obtained by extensive description and analysis of the instance, taken as a whole and in its context³.
- An uncontrolled observational study involving an intervention and outcome for a single person (synonyms: anecdote, case history, single case report)⁴.
- A written or recorded, detailed analysis of some targeted stress factor(s), for the purpose of noting success or failure to used as a benchmark for education, research, and/or planning⁵.

In the above definitions, the particular situation as the object of investigation is not only one individual. However, case studies may deal with single small units such as family, class, school, etc., most of which arise from endeavors to solve problems⁶. It explores a single entity or phenomeon bounded by time and activity and collects detailed information by using a variety of data collection procedures during a sustained period of time⁷.

² wordnetweb.princeton.edu/perl/webwn .

³ www.epa.gov/evaluate/glossary/c-esd.htm .

⁴ www.sahealthinfo.org/evidence/c.htm

⁵ www.msdnaa.net/curriculum/glossary.aspx

⁶ Donald Ary et.al, *Introduction to Reseach in Education*. Sydney: Holt, Rinehart and Winston.

⁷ Merriam, 1988 and Yin, 1989 in John W. Creswell. 1994. *Research Design: Qualitative and Quantitative Approach*. London: SAGE Publications.

B. GENERAL CHARACTERISTICS

Case study resembles ethnography in its philosophy, methods and concern for studying phenomena in context. However, it is generally more limited in scope than an ethnography. The focus of the research is also different. Ethnography essentially concerned with the cultural context and cultural interpretation of the phenomena under investigation. Whereas, this is not necessarily true of case studies⁸.

When to use case study method? There are at least three conditions exist. *First*, the type of research question: typically to answer questions like “how” or “why”. *Second*, the extent of control over behavioral events: when investigator has a little/no possibility to control the events. *Third*, the general circumstances of the phenomenon to be studied: contemporary phenomenon in a real-life context.

As an empirical inquiry, the focus of case studies is on a contemporary phenomenon within its real-life context in which boundaries between phenomenon and its context are not clearly evident. Therefore, it is suitable for studying complex social phenomena. The procedural characteristics involved in the situation to be investigated include: many variables of interest; multiple sources of evidence; theoretical propositions to guide the collection and analysis of data.

The type of case studies might be: explanatory; exploratory; descriptive. Its designs can be single- or multiple-case studies. In addition, the method used can be qualitative, quantitative, or both⁹.

⁸ David Nunan. 1992. *Research Methods in Language Learning*. Cambridge: Cambridge University Press.

⁹ Summary from *Case Study Research: Design and Methods* (1994, Second edition. Thousand Oaks: Sage) By Robert K. Yin.

C. THE ARGUMENT FOR AND AGAINST THE CASE STUDY RESEARCH DESIGN

Some argue that a case study is such a narrow field that its results cannot be extrapolated to fit an entire question and that they show only one narrow example. On the other hand, it is argued that a case study provides more realistic responses than a purely statistical survey. It is probably best to try and synergize the two approaches. It is valid to conduct case studies but they should be tied in with more general statistical processes. For example, a statistical survey might show how much time people spend talking on mobile phones, but it is case studies of a narrow group that will determine why this is so.

The other main thing to remember during case studies is their flexibility. Whilst a pure scientist is trying to prove or disprove a hypothesis, a case study might introduce new and unexpected results during its course, and lead to research taking new directions¹⁰.

Some criticize case study because it is lacking of systematic handling of data, therefore it is suggested to manage systematic reporting of all evidence on the particular situation investigated. This study is assumed to have no basis for scientific generalization, while it is important to be noted that the purpose is to generalize to theoretical propositions, not to population as in statistical research. The result of case study might take too long, end up with unreadable documents. Accordingly, it is crucial to consider that the time limits and writing formula depend on the choices of investigators¹¹.

However, there are six principal advantages of case studies. *First*, it is strong in reality. *Second*, one may generalise from a case. *Third*, it represents a multiplicity of viewpoints and can offer support to alternative interpretation. *Fourth*, it provides database of materials which may be reinterpreted by future researchers. *Fifth*, the insight yielded can be put to immediate use for various

¹⁰<http://www.experiment-resources.com/scientific-method.xml>>

¹¹ *Case Study Research: Design and Methods* (1994, Second edition. Thousand Oaks: Sage) By Robert K. Yin.

purpose. *Finally*, its data are usually more accessible than conventional research report¹².

D. HOW TO DESIGN A CASE STUDY

The advantage of the case study research design is that one can focus on specific and interesting cases. This may be an attempt to test a theory with a typical case or it can be a specific topic that is of interest. Research should be thorough and note taking should be meticulous and systematic.

The first foundation of the case study is the subject and relevance. Therefore, in the design of a case study, it is important to plan and design by making a short list of 4 or 5 bullet points to try and address during the study¹³. Research design links the data to be collected and conclusions to be drawn to the initial questions of the study – it provides a conceptual framework and an action plan for getting from questions to set of conclusions.

The starting point is deciding between explanatory, exploratory and descriptive designs. It depends on the richness of the theories related to the topic of the study. To do this, one needs to review literature, discuss with investigators, ask challenging questions, think what is to be learned from the study.

The researcher should identify the typology of the case study design. The first type is neo-ethnographic in which the in-depth investigation is done to a single case by a participant observer. The second one is evaluative, an investigation carried out in order to evaluate policy practice. Third is multisite, a study carried out by several researchers on more than one site. And, action as an

¹² Adelman et.al., 1976 in David Nunan. 1992. *Research Methods in Language Learning*. Cambridge: Cambridge University Press.

¹³ "<http://www.experiment-resources.com/scientific-method.xml>">

investigation carried out by a classroom practitioners in his or her professional context¹⁴.

The next step concerns with selection of the cases which should reflect characteristics and problems identified in the underlying theoretical propositions or conceptual framework. There are two kinds of case namely single cases – if the case seems to represent a critical test to existing theory; rare or unique events; and multiple cases – if a “replication logic” is supposed to reveal support theoretically. Whereas, the unit of analysis consists of holistic and embedded designs. Holistic design includes a single unit of analysis; if aim is to study the global nature of the phenomenon. Embedded design includes multiple units of analysis; study may include main and smaller units on different levels to look for consistent patterns of evidence across units, but within a case.

In this case, it is important to note that the flexibility of case study design is in selecting cases different from those initially identified, not in changing the purpose or objectives of the study to suit the cases¹⁵.

E. HOW TO CONDUCT CASE STUDY¹⁶

There are some desired skills of the investigator:

- Good knowledge of the phenomenon
- Sensitivity for novel and unexpected issues in data collection
- Asking good questions
- Being a good “listener”
- Adaptiveness and flexibility

¹⁴ Stenhouse, 1983 in David Nunan. 1992. *Research Methods in Language Learning*. Cambridge: Cambridge University Press.

¹⁵ Summary from *Case Study Research: Design and Methods* (1994, Second edition. Thousand Oaks: Sage) By Robert K. Yin.

¹⁶ Ibid.

In every case study project a case study protocol should be an essential part. It contains not only the instrument for the research, but also the procedures and general rules that should be followed using the instrument as follow:

- Overview of the study project (objectives, issues, readings, literature and research)
- Field procedures (access to field sites, sources of information)
- Case study questions posed to investigators; key classifications; suggestions for likely sources of evidence (not the literal questions to be asked)
- A guide for the case study report

In conducting the research, it is also important to identify different levels of questions:

A) Single case -level

1. Questions asked of specific interviewees
2. Questions asked of the individual case

B) More general levels

1. Findings across multiple cases
2. Findings across an entire study (including reviewed literature)
3. Normative questions about policy recommendations and conclusions

F. RELIABILITY AND VALIDITY OF CASE STUDY¹⁷

The reliability and validity are just as important for case study as for any other type of research. There are four critical test confront the researcher:

1. Construct validity (establishing correct operational measures for the concept being studied).

¹⁷ Yin, 1984 in David Nunan. 1992. *Research Methods in Language Learning*. Cambridge: Cambridge University Press.

2. Internal validity (establishing causal relationship).
3. External validity (establishing the domain or population to which the findings can be generalised –if possible).
4. Reliability (demonstrating that the study can be replicated with similar results).

G. HOW TO COLLECT THE DATA¹⁸

There are six sources of evidence:

- 1) Documents (letters, agendas, progress reports)
- 2) Archival records (Service records, organizational charts, budgets etc.)
- 3) Interviews (typically open-ended, but also focused, structured & surveys are possible)
- 4) Direct observations (formal or casual; useful to have multiple observers)
- 5) Participant observation (assuming a role in the situation and getting an inside view of the events)
- 6) Physical artefacts

Three principles of data collection cover:

- 1) Use multiple sources of evidence or triangulation which is employed to search converging findings from different sources. It increases construct validity.
- 2) Create a case study database containing:
 - Case study notes (clear and available for later use)
 - Case study documents
 - Tabular materials (collected and created)
 - Narratives (initial open-ended answers to the study questions suggested by investigators)

¹⁸ *Case Study Research: Design and Methods* (1994, Second edition. Thousand Oaks: Sage) By Robert K. Yin.

3) Maintain a chain of evidence by considering the following:

- The link between initial study questions and case study procedure should be pointed out in the case study protocol, as also the circumstances of the evidence to be collected
- Putting the data collection to practice on the basis of the protocol
- Actual evidence storage in the database for later checks (specific collection circumstances indicated)
- Sufficient citing of the case study data base and evidence in the final report and conclusions to be drawn

H. HOW TO ANALYZE THE RESULTS¹⁹

Analysis of evidence is one the least developed and most difficult aspects of doing case studies. Most important is to have a general analytic strategy, which helps to choose among different techniques. In absence preliminary techniques – matrixes, tabulation of frequencies, temporal schemes etc. – can be tried out to get the analysis started.

There are two general analytic strategies namely theoretical propositions and case description. The first involves theoretical orientation guiding the analysis; following theoretical propositions that have formed the design of the case study. It helps to focus attention on certain data and to ignore other data. The later is developing a descriptive framework for organizing the case study; analysis organized on the basis of description of the general characteristics and relations of the phenomenon in question.

Analytic techniques to be used as part of the general strategy consist of pattern matching, explanation-building, and time series matching. In pattern matching (which is explanatory or descriptive), the researcher compares empirically based patterns with predicted one(s). The kinds of pattern are:

¹⁹ Ibid.

- a) *Expected outcomes* as a pattern: comparing if the initially predicted results have been found and alternative patterns are absent
- b) *Rival explanations* as patterns: searching if some of the theoretically salient explaining conditions might be articulated in empirical findings; then the presence of certain explanation should exclude the presence of others
- c) *Simpler patterns*: pattern matching is possible also with only few variables, if the derived patterns are predicted to have enough clear differences

In explanation-building (which is mainly explanatory), the researcher should note that analyzing case study data is done by building an explanation about the case and identifying a set of causal links. In addition, the explanation is a result of series of process below:

Initial theoretical statement -> Comparing findings of an initial case -> revising statement -> Comparing details of the case -> Revising -> Comparing to other additional cases

Employing time-series analysis, the researcher explains “how”- and “why”- questions about relationships and changes of events over time. The identification of theoretically proposed sequences of an event that are expected to lead to a certain outcome; and identification of events must be done before the onset of the investigation. The researcher also compares this trend with the trend of empirical data points or compares with some rival trend to rule alternatives out.

A good analysis of case study should: show that it relied on all the relevant evidence; all major rival interpretations are dealt; most significant issue of the study is addressed; prior expert knowledge is brought to the study.