

What Constitutes Knowledge Claims

Creswell's book makes us understand that philosophical assumptions about what constitutes knowledge claims; general procedures of research called strategies of inquiry, and detailed procedures of data collection, analysis, and writing, called methods (Creswell 2003). He also states that the knowledge claims, the strategies, and the method all contribute to a research approach that tends to be more quantitative, qualitative or mixed. Hence, Creswell gives some definitions to quantitative, qualitative and mixed approaches for more clarification, these definitions are as follows:

A quantitative approach is one in which the investigatory primarily uses postpositive claims for developing knowledge (i.e., cause and effect thinking, reduction to specific variables and hypotheses and questions, use of measurement and observation, and the test of theories), employs strategies of inquiry such as experiments and surveys, and collect data on predetermined instruments that yield statistics data.

Alternatively, a qualitative approach is one in which the inquirer often makes knowledge claims based primarily on constructivist perspectives (i.e., the multiple meanings of individual experiences meanings socially and historically constructed, with an intent of developing a theory or pattern) or advocacy/participatory perspectives (i.e., political, issue-oriented, collaborative, or change oriented) or both.

It also uses strategies of inquiry such as narratives, phenomenologies, ethnographies, grounded theory studies, or case studies. The researcher collect open-ended, emerging data with the primary intent of developing themes from the data.

Finally, a mixed methods approach is one in which the researcher tends to base knowledge claims on pragmatic grounds (e.g., consequence-oriented, problem-centered, and pluralistic). It employs strategies of inquiry that involve collecting data either simultaneously or sequentially to best understand research problem. The data collection also involves gathering both numeric information (e.g., on instruments) as well as text information (e.g., on interviews) so that the final database represents both quantitative and qualitative information.

Further information about the three approaches (Creswell 2003):

Quantitative approach: postpositive knowledge claims, experimental strategy of inquiry, and pre-and posttest measures of attitudes. In this scenario, the researcher tests a theory by specifying narrow hypotheses and the collection of data to support or refute the hypotheses. An experimental design is used in which attitudes are assessed both before and after an experimental treatment. The data are collected on an instrument that measures attitudes, and the information collected is analyzed using statistical procedures and hypothesis testing.

Qualitative approach: constructivist knowledge claims, ethnographic design, and observation of behavior. In this situation the researcher seeks to establish the meaning of a phenomenon from the view of participants. This means identifying a culture-sharing group and studying how it developed shared patterns of behavior over time (i.e., ethnography). One of the key elements of collecting data is to observe participants' behaviors by participating in their activities.

Qualitative approach: participatory knowledge claims, narrative design, and open-ended interviewing. For this study, the inquirer seeks to examine an issue related to oppression of individuals. To study this, the approach is taken of collecting stories of individuals oppression using a narrative approach. Individuals are interviewed at some length to determine how they have personally experienced oppression.

Qualitative research is a holistic approach that involves discovery. Qualitative research is also described as an unfolding model that occurs in a natural setting that enables the researcher to develop a level of detail from high involvement in the actual experiences (Creswell, 1994). One identifier of a qualitative research is the social phenomenon being investigated from the participant's viewpoint. There are different types of research designs that use qualitative research techniques to frame the research approach. As a result, the different techniques have a dramatic effect on the research strategies explored. What constitutes qualitative research involves purposeful use for describing, explaining, and interpreting collected data.

Leedy and Ormrod (2001) alleged that qualitative research is less structured in description because it formulates and builds new theories. Qualitative research can also be described as an effective model that occurs in a natural setting that enables the researcher to develop a level of detail from being highly involved in the actual experiences (Creswell, 2003).

Qualitative research is conducted within a poststructuralist paradigm. There are five areas of qualitative research: case study, ethnography study, phenomenological study, grounded theory study, and content analysis. These five areas are representative of research that is built upon inductive reasoning and associated methodologies.

Creswell (2003) describes how these methods meet different needs. For instance, case studies and the grounded theory research explore processes, activities, and events while ethnographic research analyses broad cultural-sharing behaviors of individuals or groups.

Creswell (2003) defines case study as "researcher explores in depth a program, an event, an activity, a process, or one or more individuals" (p. 15). Leedy and Ormrod (2001) further require a case study to have a defined time frame. The case study can be either a single case or a case bounded by time and place (Creswell, 1998). Creswell (1998) suggests the structure of a case study should be the problem, the context, the issues, and the lessons learned.

The data collection for a case study is extensive and draws from multiple sources such as direct or participant observations, interviews, archival records or documents, and audiovisual materials. The researcher must spend time on-site interacting with the people studied. It is very important to understand this first starting part of research. In addition to the case study, Creswell sees that ethnography study differs from a case study. Creswell (2003) defines “ethnographies, in which the researcher studies an intact cultural group in a natural setting over a prolonged period of time by collecting, primarily, observational data” (p. 14). The focus is on everyday behaviors to identify norms, beliefs, social structures, and other factors.

The case study studies a person, program, or event while ethnography studies an entire group that shares a common culture (Leedy&Ormrod, 2001).The initial step in the ethnography process is to gain access to a site. Second, the researcher must establish rapport with the participants and build trust. Third, the researcher starts using the big net approach by intermingling with everyone in order to identify the key informants in the culture (Leedy&Ormrod, 2001).

Mixed methods approach: pragmatic knowledge claims, collection of both quantitative and qualitative data sequentially. The researcher bases the inquiry on the assumption that collecting diverse types of data best provides on understanding of a research problem. The study begins with a broad survey in order to generalize results to a population and then focuses, in a second phase, on detailed qualitative, open-ended interviews to collect detailed views from participants.

The mixed methods approach to research is an extension of rather than a replacement for the quantitative and qualitative approaches to research, as the latter two research approaches will continue to be useful and important (Johnson &Onwuegbuzie, 2004). The goal for researchers using the mixed methods approach to research is to draw from the strengths and minimize the weaknesses of the quantitative and qualitative research approaches (Johnson &Onwuegbuzie). There are three broad classifications of quantitative research: descriptive experimental and causal comparative (Leedy and Ormrod, 2001). The descriptive research approach is a basic research method that examines the situation, as it exists in its current state. Descriptive research involves identification of attributes of a particular phenomenon based on an observational basis, or the exploration of correlation between two or more phenomena.

Through our reading in Creswell’s Book entitled Research Design and from our questionnaire given to Professor Creswell we inform our readers that the suitable approach method used these days is the mixed method approach. The latter combine between both methods qualitative and quantitative in analyzing and interpreting the results as well as report writing in different ways qualitatively. Because our research is about a new experience we are undergoing in our country in particular at Mostaganem University and Sidi Bel Abbes University and the documents (bibliography) are not many as well our informants are not really well familiar with the experience they are undertaking in the LMD system, we need more accuracy and much effort to following

and doing investigation to make accurate questions to obtain the answers needed concerning this experience. So how to make this experience successful and which technique we should follow. The answer is very simple to that. We have based our research on mixed method using the suitable interviewing technique called In-depth interviewing.

2.2 In-depth Interviewing

In-depth interviewing, also known as unstructured interviewing, is a type of interview which researchers use to elicit information in order to achieve a holistic understanding of the interviewee's point of view or situation; it can also be used to explore interesting areas for further investigation. This type of interview involves asking informants open-ended questions, and probing wherever necessary to obtain data deemed useful by the researcher. As in-depth interviewing often involves qualitative data, it is also called qualitative interviewing. (See <http://www.leeds.ac.uk/educol/documents/000001172.html>).

Because our research required formal questions given to our students in order to elicit as much data as possible from them about their opinions on learning and teaching foreign languages in the Algerian universities under the various system implementation, it was necessary to make a good questionnaire including formal and not informal interviews so that the informants would think carefully of their answers. To make our questionnaire successful the next point is devoted to provide us with more information about the questionnaire.

2.3 Questionnaire

The questionnaire is a very interesting tool we deal with in doing our investigations. It serves to give a straightforward explanation to the readers and researchers. The questionnaire must include the main issues to be addressed in the research topic to make readers well read and understanding. For that reason, we need to know how we design, simplify and clarify the questionnaire we intend to give to our informants (interviewers).

According to Louis Cohen, Lawrence Manion and Keith Morrison (2007) the good design and order made for the questionnaire must be followed are as follows:

1- Ethical issues: Interviews have an ethical dimension; they concern interpersonal interaction and produce information about the human condition. Although one can identify three main areas of ethical issues here – informed consent, confidentiality, and the consequences of the interviews – these need to be unpacked a little, as each is not unproblematic (Kvale 1996: 111–20).

2-approaching the planning of a questionnaire: At this preliminary stage of design, it can sometimes be helpful to use a flow chart technique to plan the sequencing of questions.

In this way, researchers are able to anticipate the type and range of responses that their questions are likely to elicit.

3-operationalizing the questionnaire: The process of operationalizing a questionnaire is to take a general purpose or set of purposes and turn these into concrete, researchable fields about which actual data can be gathered. First, a questionnaire's general purposes must be clarified and then translated into a specific, concrete aim or set of aims. Thus, 'to explore teachers' views about in-service work' is somewhat nebulous, whereas 'to obtain a detailed description of primary and secondary teachers' priorities in the provision of in-service education courses' is reasonably specific. Having decided upon and specified the primary

objective of the questionnaire, the second phase of the planning involves the identification and itemizing of subsidiary topics that relate to its central purpose.

4 - structured semi-structured and unstructured questionnaires: The researcher can select several types of questionnaire, from highly structured to unstructured.

5 types of questionnaire items: There are several kinds of question and response modes in questionnaires, including, for example, dichotomous questions, multiple choice questions, rating scales, constant sum questions, ratio data and open-ended questions. (see also Wilson 1996)

6- closed and open questions compared: They enable respondents to answer as much as they wish, and are particularly suitable for investigating complex issues, to which simple answers cannot be provided.

7- Scales of data: The questionnaire designer will need to choose the metric – the scale of data – to be adopted. This concerns numerical data, and we advise readers to turn to Part Five for an analysis of the different scales of data that can be gathered (nominal, ordinal, interval and ratio) and the different statistics that can be used for analysis. Nominal data indicate categories; ordinal data indicate order ('high' to 'low', 'first' to 'last', 'smallest' to 'largest', 'strongly disagree' to 'strongly agree', 'not at all' to 'a very great deal'); ratio data indicate continuous values and a true zero (e.g. marks in a test, number of attendances per year) <http://www.routledge.com/textbooks/9780415368780> – Chapter 15, file 15.3. ppt). see also

See Louis Cohen, Lawrence Manion and Keith Morrison (2007: 322).

8- the dangers of assuming knowledge or viewpoints : There is often an assumption that respondents will have the information or have an opinion about the matters in which researchers are interested. This is a dangerous assumption. It is particularly a problem when administering questionnaires to children, who may write anything rather than nothing. This means that the opportunity should be provided for respondents to indicate that they have no

opinion, or that they don't know the answer to a particular question, or to state that they feel the question does not apply to them.

9- dichotomous questions: A highly structured questionnaire will ask closed questions. These can take several forms. Dichotomous questions require a 'yes'/'no' response, e.g. 'Have you ever had to appear in court?', 'Do you prefer didactic methods to child-centred methods?'

(see <http://www.routledge.com/textbooks/9780415368780> – Chapter 15, file 15.4. ppt).

The layout of a dichotomous question can be thus:

Sex (please tick) : Male Female

The dichotomous question is useful, for it compels respondents to come off the fence on an issue. It provides a clear, unequivocal response. Further, it is possible to code responses quickly, there being only two categories of response. See Louis Cohen, Lawrence Manion and Keith Morrison (2007: 322).

10-multiple choice questions:

To try to gain some purchase on complexity, the researcher can move towards multiple choice questions, where the range of choices is designed to capture the likely range of responses to given statements (see <http://www.routledge.com/textbooks/9780415368780> – Chapter 15, file 15.5. ppt). For example, the researcher might ask a series of questions about a new chemistry

scheme in the school; a statement precedes a set of responses thus:

The New Intermediate Chemistry Education (NICE) is:

- (a) a waste of time
- (b) an extra burden on teachers
- (c) not appropriate to our school
- (d) a useful complementary scheme
- (e) a useful core scheme throughout the school
- (f) Well-presented and practicable.

The categories would have to be discrete (i.e. having no overlap and being mutually exclusive) and would have to exhaust the possible range of responses. Guidance would

have to be given on the completion of the multiple-choice, clarifying, for example, whether respondents are able to tick only one response (a single answer mode) or several responses (multiple answer mode) from the list. See Louis Cohen, Lawrence Manion and Keith Morrison (2007: 323).