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RESEARCH PARADIGM AND THE PHILOSOPHICAL FOUNDATIONS OF A QUALITATIVE STUDY

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Abstract

This paper principally describes the link between the research paradigm (constructivism) and the philosophical basis (ontology, epistemology and methodology) of a qualitative study. This article begins with an overview of qualitative study which consists of its meanings and features followed by the definition of research paradigm. The constructivist paradigm is explained alongside the example of my own qualitative research project. This paper also discusses how the constructivist paradigm relates to the ontology, epistemology and methodology of a qualitative study. It is hoped that this article will facilitate novice researchers particularly to know what the meaning of each philosophical term is, how the research paradigm is interwoven within the philosophical basis of a qualitative research and how different research paradigms serve different research purposes.

Keywords

Constructivist Paradigm, Qualitative Research, Ontology, Epistemology, Methodology

1. Introduction: Qualitative Research

The development of qualitative study stems from a few noteworthy contributors namely Barney Glaser and Anselm Strauss who published *The Discovery of Grounded Theory:*

Strategies for Qualitative Research in 1967 and Egon Guba who published *Toward a Methodology of Naturalistic Inquiry in Educational Evaluation* in 1978. The book by Glaser and Strauss (1967) focused on building the theory (inductive method) on a social phenomenon under investigation, rather than testing the theory (deductive method). The manuscript written by Guba (1978) highlighted what happens and what is discovered in a real-world context without controlling and manipulating what is being explored. Following these publications, qualitative research or qualitative inquiry has been widely applied in the anthropology and sociology fields and beyond, including education with numerous ways of adopting the qualitative study approach (Merriam & Tisdell, 2016) based on the objectives and theoretical positioning of research (Lincoln, Lynham & Guba, 2011).

Qualitative research can be interpreted as "an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem" (Creswell, 2014, p. 32). Merriam and Tisdell (2016) further affirmed that the aims of qualitative research are to reveal the meaning of an occurrence for people who are involved in it. In conducting a study qualitatively, researchers are concerned with identifying how people describe their own experiences, "how they construct their worlds, and what meaning they attribute to their experiences" (Merriam & Tisdell, 2016, p. 6). Offering another explanation, Braun and Clarke (2013) suggested that qualitative research "uses words as data… collected and analyzed in all sorts of ways" (pp 3-4). This is different to quantitative study which examines the relationship among measured variables to test objective theories. Quantitative study is also utilized to determine "cause and effect, predicting, or describing the distribution of some attribute among a population" (Merriam & Tisdell, 2016, p. 5). The data in a quantitative study is then analyzed statistically to produce the results of the study (Creswell, 2014).

According to Merriam and Tisdell (2016), a qualitative study approach incorporates several salient characteristics. First, the aim of the study is to understand the experiences that people have. Second, the instrument for data collection and data analysis is primarily the researcher. Third, the data from the study is analyzed inductively. In other words, from the data the researcher will generate explanations in the form of concepts, hypotheses, or theories. Finally, rich description will be produced from multiple sources of data such as documents, field notes and interviews.

In the dissertation research project that I have been conducting, I adopted a qualitative study approach, with the aim to explore struggling readers' experiences with English language (henceforth EL) reading at home and in the classroom. The objective was accomplished by investigating the way in which parents and teacher worked with struggling readers and the issues that parents and teachers faced while working with this group of children. Moreover, struggling readers' perceptions towards EL reading and their engagement with the activity were obtained. As the main instrument myself, I collected and analyzed data from the interviews, observations and documents to gather information from and concerning struggling readers, their parents and the classroom English teacher to meet the objectives of my study. The methods were selected because I intended to discover the participants' attitudes, thoughts and feelings; therefore, I can provide a rich description from the investigation. The findings of the study were also analyzed inductively and several themes were emerged and discussed. Numerical data such as percentage or frequency which are often generated from questionnaires or surveys from a quantitative study approach was not produced as the output or findings of the study.

2. What is Research Paradigm?

The term paradigm is derived from Greek meaning pattern (Kivunja & Kuyini, 2017) and has been broadly defined by many academics. For example, paradigm is perceived as "a way of seeing the world that frames a research topic" and influences the way that researchers think about the topic (Hughes, 2010, p. 35). Fraser and Robinson (2004) further argued that a paradigm is "a set of beliefs about the way in which particular problems exist and a set of agreements on how such problems can be investigated" (p. 59). Paradigm is also described as "sets of beliefs that guide action" (Guba, 1990, p. 17) which is embedded in all educational research (Brooke, 2013). It is also argued that "all social scientists approach their subject via explicit or implicit assumptions about the nature of the social world and the way in which it may be investigated" (Burrell & Morgan, 1979, p. 1). Hughes (2010) further asserts that a research is undergirded by paradigm, or a specific way of "seeing the world and making sense of it" (Mukherji & Albon, 2015, p. 24). Every researcher has particular understandings on what is knowledge and what is truth (Chilisa & Kawulich, 2012). Such understandings shape researchers' thoughts and views about themselves and other people as much as the researchers' thoughts and views about the world (Schwandt, 2001).

In essence, paradigms represent the researchers' beliefs and values about the world, the way they define the world and the way they work within the world. In relation to research, the researcher's thoughts and beliefs about any issues explored would subsequently guide their actions. In other words, the paradigm adopted directs the researchers' investigation which includes data collection and analysis procedures. Paradigm therefore has important "implications for every decision made in the research process" (Kivunja & Kuyini, 2017, p. 26)

3. Constructivist paradigm in relation to my study

As explained in the introduction section of this paper, my study revolved around struggling' readers' experiences with EL reading in their homes and in the classroom. To this end, I took the students, the parents and the classroom English teacher on board as the research participants. I believe that the experiences of the participants of my study could be constructed into knowledge through interpretations and reflections. Even though interactions with multiple participants in this study is important in understanding the struggling readers' reading experiences, my personal opinions and judgments also play a role. Such an explanation concurs in that how I perceive the world and the way I view how knowledge is constructed are echoed within the constructivist paradigm. This paradigm is alternatively known as a naturalistic (Guba & Lincoln, 1989) and interpretive paradigm (Guba & Lincoln, 1989; Merriam & Tisdell, 2016).

Guba and Lincoln (1989) further stated that the following are essentially connected to a research paradigm: ontology, epistemology and methodology. These views reflected the opinions from Hitchcock and Hughes (1995, p. 21) who stated that, "ontological assumptions will give rise to epistemological assumptions which have methodological implications for the choice of particular data collection techniques". In other words, the epistemological explanation is limited by the ontological explanation of a research. The methodological explanation is further obliged by the epistemological and ontological explanation of a research (Lincoln & Guba, 2013). Such an explanation alludes to the point that different ontologies and epistemologies that a researcher adopts require different kinds of methodology (Cohen, Manion & Morrison, 2000). In the next sub-sections, I will attempt to describe constructivism in relation to the three dimensions of research process or philosophical foundations namely ontology, epistemology and methodology which will be discussed in turn.
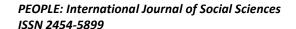
4. Ontology

Ontology is concerned with the nature of existence (Crotty, 1998), or social entities (Bryman, 2012) or reality (Hammersley, 1992). In discussing ontology, Cohen et al. (2000, p. 5) posed the following question for us to ponder, "Is social reality external to individuals – imposing itself on their consciousness from without – or is it the product of individual consciousness?". Other explanations were put forth by Antwi & Hamza (2015) who described ontology as "the way the investigator define the truth and reality". Ontology according to Lincoln and Guba (2013, p. 39) deals with the questions, "What is there that can be known?", or, "What is the nature of reality?".

The constructivist paradigm mentioned that realities are multiple (Guba & Lincoln, 1989). The ultimate truth has been regarded as not existing and reality is subjective and changing (Bunnis & Kelly, 2010). Proponents of constructivism also believe that "entities exist only in the minds of the persons contemplating them" (Lincoln& Guba, 2013, p. 39). According to Cresswell (2014), constructivism deals with the development of subjective meanings and understandings of one's personal experiences concerning specific topics based on their social and historical background. Understandings about the world are constructed and interpreted by people (Crotty, 1998).

The positivist paradigm, in contrast, believe that reality is "hard, real and external" (Cohen et al., 2000, p. 6). Reality is also claimed as "objectively given and measurable" or "objective and quantifiable" (Antwi & Hamza, 2015, p. 218). In this respect, the world is instructed towards a principal objective truth (Bunnis & Kelly, 2010). Reality is perceived as unchanging and dependent on universal laws (Hughes, 2010) beside from "static and fixed" (Bunnis & Kelly, 2010, p. 361). The positivist paradigm is often associated with the quantitative research approach in which the purposes are to predict, control and generalize the findings through surveys, questionnaires or experimental methods.

5. Epistemology

Epistemology deals with the sufficient and valid kinds of knowledge (Gray, 2014). The questions related to epistemology is, "Is knowledge something which can be acquired on the one hand, or, is it something which has to be personally experienced?" (Kivunja & Kuyini, 2017, p. 27). Epistemology has been explained as the process by which the investigator comes to know the truth and reality or, put another way, how do we know what we know? As such,

epistemology examines the relationship between the inquirer and the inquired into (Guba, 1990, p. 27). With regards to the constructivist paradigm, reality is something relative as described in the previous section on ontology. The multiple realities that exist are built between the researcher and participants (Bunnis & Kelly, 2010). Varied interpretations of the world are "constructed and not discovered" (Gray, 2014, p. 20) between both parties, researchers and participants. Corty (1998) further claimed that the meaning of the world that one experiences is generated through social interaction among people. The generation of meanings could be influenced by many factors such as "one's prior experience and knowledge, political and social status, gender, race, class, sexual orientation, nationality, personal and cultural values" (Lincoln & Guba, 2013, p. 40).

Positivism, on the other hand, reflects "truth is possible to discover" (Mukherji & Albon, 2015, p. 24). This is because "Human behaviour is predictable, caused and subject to both internal pressures (for behaviorist psychologists) and external forces (for positivistic sociologists)" (Hitchcock & Hughes, 1995 p. 22). The positivist paradigm also "assume the possibility of some kind of unmediated, direct grasp of the empirical world and that knowledge… simply reflects or mirrors what is 'out there'" (Schwandt, 2007, p. 38).

6. Methodology

Methodology has been defined as "the method used in conducting the investigation" (Antwi & Hamza, 2015, p. 218). Methodology has also been described as, "How should we study the world" (Kawulich, 2015, p. 1). The fundamental question related to methodology is "How does one go about acquiring knowledge?" (Lincoln& Guba, 2013, p. 39). The methodological aspect of a research must agree with the ontological and epistemological stances of the research. In relation to the constructivist paradigm, it is known that there is no single reality and the construction of multiple realities are made through interactions. In addition, social, cultural and historical perspectives play an important role in shaping people's sense about the world (Crotty, 1998).   Therefore, the constructivist paradigm believes that the methodology utilized in a research should explore "the minds and meaning-making, sense-making activities" (Lincoln & Guba, 2013, p. 40) as is often practiced in qualitative research (Creswell, 2014) such as the case study approach that uses methods including interviews and observations.

In contrast, positivism argues that reality must be examined by utilizing the "rigorous process of scientific inquiry" (Guba, 2014, p. 20). The paradigm is also "characterized by the use of the quantitative methodological approach which emphasizes the need to generalize about the world and the need for accurate measurement" (Mukherhi & Albon, 2015) p. 24. As human behaviour can be 'observed', 'identified', 'predicted' and 'measured' (Hitchcock & Hughes, 1995 p. 22), the use of surveys and experiments have been put forth by Cohen, et al. (2000) as examples in relation to the methodological aspect of a research.

7. Conclusion

In conclusion, this paper presents the research paradigm of a qualitative study and its connection to ontology, epistemology and methodology. By highlighting constructivism and putting forth my own research project as an example, it is hoped that the readers will obtain a clear picture of how each paradigm serves particular research purposes which essentially leads to the way the researcher approaches their study. It is further hoped that the explanation of each philosophical term which might sound complex to some researchers increases their understanding of the definitions so that they can apply them in their own study.

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