

# Educational Research

An African approach



Edited by Chinedu Okeke • Micheal van Wyk

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## **Educational Research**

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## Case study: Understanding critical research



Ms Tennyson, a Life Orientation teacher at a high school in a South African township has become increasingly worried by the behaviour of some of her learners. It seems that a good number are engaging in delinquent activities, notably drug abuse and petty crime. This is affecting their performance at school. She is determined to change this trend but realises that, first, she has to understand why learners are behaving in the way they are, and second, that this is a complex societal problem whose causes go far beyond her class and the school. For these reasons she needs a plan that would bring together the major stakeholders in ways that would enable them to take control of their lives. Ms Tennyson discusses her concerns with the school principal who supports her desire to get to the root of the problem. In short, she needs to do research – not just for the sake of gathering information but to bring about change among the learners, as well as in the community at large. Such research has to be critical and transformative. She soon finds that she needs to engage in critical action research. But first, she has to understand critical research and its methodologies.

## Introduction

This chapter looks at one of the major research paradigms in educational research, the critical research paradigm. It is important that all research students read this chapter very carefully as it introduces a research paradigm that one needs to be aware of before undertaking any research. The critical research paradigm is markedly different from the other research paradigms that you have been introduced to in the preceding two chapters, namely the positivist and interpretivist paradigms. Critical research, as discussed in this chapter, draws from two schools of thought: critical theory and Afrocentrism. The two schools are concerned with promoting a different view of reality and ways of knowing that can help change society for the better. As the case study illustrates, many teachers who seek to change their communities are attracted to the critical research paradigm for reasons that will become clearer as you read this chapter. The chapter explains the basic theories of critical research and Afrocentrism. In addition, action research is discussed as a research method. We invite you to read this chapter whether your intended research will follow this paradigm or not, as doing so is certain to broaden your understanding of all the other research paradigms, thus making you an effective researcher.

### 4.1 What is critical research?

The opening case study is typical of the range of problems that many teachers face in classrooms across southern Africa. It also demonstrates the commitment of many teachers who continually seek to improve the ways in which they teach in order to transform existing situations and thereby enhance the performance of the learners they teach. We believe that you, too, are such a committed teacher who is always seeking ways of improving what to teach and how to teach, as well as the circumstances in which we all work and live. This concern is at the heart of what has come to be known as **critical research**. Three major points clearly distinguish critical research from both the positivist and interpretivist paradigms, as follows:

- ▶ Critical research is broadly concerned with not only understanding the world, but also changing it.



- ▶ Critical research assumes that knowledge does not merely exist for its own sake, but is aligned to particular groups or interests in society.
- ▶ Knowledge is never neutral but always serves particular groups, while denying other groups their right to knowledge.

Before reading any further, let us pause here and reflect on the case study by answering questions in the following activity. We suggest that you re-read the case before attempting the questions.

## Stop and reflect

Read the case study again and answer these questions:

- 1 What problem does the teacher face?
- 2 Why do you think this is a problem that is worthy to research?
- 3 What issues stand out as being characteristic of critical research?
- 4 Do you find any similarities between the story narrated above and your own work experiences?

The case study gives an example of a teacher who is drawn to the critical research paradigm because of its potential to bring change and transformation in society. We can deduce four major points from the case study to help us understand what critical research involves:

- ☒ Critical research arises from a lack of satisfaction with the existing situation.
- ☒ The concern is with the real-life experiences of real people that we can easily identify with.
- ☒ Action is involved as the teacher realises that she has to act in order to change the circumstances she lives and works in.
- ☒ The underlying implication is that people have to become involved because of what they do know and do, and this cannot be separated from their lives.

A concern with transformation makes it particularly suitable for use in African contexts, as well as educational settings, where we face many problems inherited from the past.

## 4.2 Overview of paradigms in research

All research is guided by assumptions or beliefs about the world, and what is perceived as real or the truth. These assumptions are important because they influence the conduct of research, and what may be considered as evidence, as well as the relative importance of evidence. Simply put, a paradigm is a way of looking at the world, or a worldview, that shapes what we hold to be true.

A paradigm establishes particular ways of engaging in research as it provides what we may call lenses through which an investigation is carried out and its findings presented. The concept is defined in detail in Thomas Kuhn's (1962) work, *The Structure of Scientific Revolutions*.

In order to understand what paradigms are concerned with, we need to be aware of two terms that are often used in research. The terms are epistemology and ontology.



### 4.2.1 Epistemology

Epistemology is concerned with the question: What is knowledge? Through this notion we find that different paradigms tend to hold different views of what is considered knowledge.

### 4.2.2 Ontology

Ontology is concerned with questions such as, What is truth? and What is real? Similar to epistemology, the concept ontology makes us aware that different paradigms hold different views of what truth is. This is best illustrated in the case of each paradigm, as discussed in the following sections.

There are at least four major paradigms in research that this chapter deals with, namely:

### 4.2.3 Positivist paradigm

This is the oldest of the major paradigms. It has its origins in the scientific world of what has come to be known as the 'hard' sciences, e.g. physics, chemistry, biology. It is usually associated with quantitative research methods. Positivism views the truth as empirical, that is, it is subject to testing through the laws of natural science, and hence it is also called the empiricist paradigm. It is an evidence-based approach to research that focuses on a single reality in which results are neutral and value-free, owing to the supposed objectivity of the researcher and the methods used. It rejects as invalid anything that cannot be tested through the laws of science. More recently, this paradigm has been undergoing revisions, resulting in what is called post-positivism. Positivism is also described as foundationalist because it presupposes that there are certain universal laws that define what truth is. For a detailed understanding of these issues, revisit Chapter 2.

### 4.2.4 Interpretive paradigm

This paradigm arose partly as a reaction to the positivist views that argued that there was an objective reality that existed independently of people's ideas and perceptions. It draws on what are called qualitative research methods, as opposed to quantitative methods. In contrast to positivism, interpretivism tries to interpret and understand social reality in its own terms. As a naturalistic and interpretivist paradigm it uses different ways to find out about and understand reality or the social world. This is reality as a social construction which individuals experience and construct. To interpret, understand and represent perceptions of this reality, the researcher has to be positioned in it as in a natural setting, and to use a variety of methods to uncover it in the least disruptive way. The objective is to develop a shared understanding of this reality that is together created by the researcher and participants. The researcher makes sense of the meanings that participants attribute to their world. It is called the interpretive paradigm because it argues that facts do not make sense on their own, but need to be interpreted in the context of people's lives. In other words, the interpretive paradigm states that there is no objective reality that exists on its own 'out there'. Rather it sees all knowledge as socially constructed by people and hence subject to change. It is sometimes called the hermeneutic, phenomenological or symbolic paradigm. For a detailed understanding of these issues, revisit Chapter 3.

### 4.2.5 Critical paradigm

The critical paradigm began as a paradigm that was opposed to the establishment of 'grand narratives', especially the narrative of positivism. In other words, it was opposed to the view that the world could be interpreted through a single truth. For this reason, it is also described as anti-foundationalist in that it argues that there can be no one basis on which the truth



or the world is founded. Instead, it sees the world as founded on many truths that are all influenced by human interests. The rest of this chapter explains this concern and the implications for research in detail.

#### 4.2.6 Afrocentric paradigm

This is a relatively new branch of research which we view as an extension of the critical research paradigm. The Afrocentric paradigm is closely associated with **indigenous knowledge systems** and has developed explicitly as a way of challenging Western ways of knowing. One of its key assumptions is that traditional African ways of viewing the world are useful in helping us interpret the world we live in today. Like the critical paradigm, the Afrocentric paradigm is committed to changing society by empowering people to take control of their lives.

### 4.3 Aims of critical research

As its name suggests, critical research aims to be critical in that it seeks to find out what cannot be accepted as socially or politically responsible in our world and what we can do to change it. The word 'critical' has its origins in the Greek word, *krinein* which means to discern, reflect and judge. Used in research, it means taking a set of ideas and questioning them, making them problematic by subjecting them to analysis, in order to identify ways of changing them without distorting their essence or meaning. We can therefore see that research carried out under this paradigm does not just seek to describe or understand social phenomena but also to change them.

The aim of critical research is to critique and transform the dominant structures within society. Critical research is also concerned with the broad social and historical context in which phenomena are interrelated. As the case study shows, problems experienced at school can be seen to extend beyond the boundaries of the school. In this way, critical research focuses on the important societal issues with a view to finding solutions that result in improvement. The critical thinking challenge will help you focus on the important characteristics of critical research.

#### Critical thinking challenge

The major characteristics of critical research include the following:

- ▶ The desire to achieve **transformation** of society
- ▶ The desire for **emancipation** as an envisaged outcome
- ▶ **Advocacy** and **activism** are identified as characteristics of the researcher
- ▶ Advocacy and activism imply **political commitment** on the part of the researcher
- ▶ The researcher has a clear idea of the transformations that are needed

Pay special attention to the terms in **bold** above and reflect on what they mean. Now try to answer the questions that follow, and again later when you have read through the whole chapter.

- 1 Explain the meanings of the terms that are in bold in the above section. Use other sources to first get a literal meaning of the word.
- 2 Explain what the terms imply in the context of critical research.
- 3 Compare the implications of these terms with the goals of research as given in the positivist and interpretive paradigm. (Refer to Table 4.1 for more information, as well as the earlier chapters in this book.)



Most of the highlighted terms that you have just discussed in the critical thinking challenge are drawn from critical theory. Now that we have a sense of what critical research is about, let us find more about the role of critical theory in guiding this type of research.

#### 4.4 Critical theory and research

The aims of critical research are best understood by looking at critical theory whose key assumptions help us in defining critical research. It is important to bear in mind that critical research, like the other paradigms, is defined by what it views as the nature of knowledge and what knowledge is valid. For example, positivism draws its notions of knowledge from logical empiricism while interpretivism draws from hermeneutics. To remind yourself of these important concepts we suggest that you re-read Chapters 2 and 3 when you finish reading this chapter.

Critical research draws its key concepts from a school of thought known as critical theory. This school of thought developed at the Frankfurt Institute of Social Science Research in Germany in the 1930s and became known as the Frankfurt School. Its leading members included Max Horkheimer, Theodor Adorno and Herbert Marcuse. As founder member and one of the early directors of the School in 1931, Horkheimer believed strongly that the purpose of the Frankfurt School was to pursue social philosophy “as the source of important questions to be investigated”, and to critique ‘positivism’ or ‘empiricism’, which he associated with the logical positivism of the Vienna Circle (see Bottomore, 2002). In his 1937 milestone paper, ‘Traditional and Critical Theory’, Horkheimer (1937:222) writes that “critical theory is in contradiction to the formalistic concept of mind which underlies such an idea of the intelligentsia”. He argues that “the concept of necessity in the critical theory is itself a critical concept; it presupposes freedom, even if a not yet existent freedom” (Horkheimer, 1937:230). He argues too that “the transmission of the critical theory in its strictest possible form is, of course, a condition of its historical success”, and that “critical theory is incompatible with the idealist belief that any theory is independent of men and even has a growth of its own” (see also Rush, 2004, on contemporary critical theorists). Amongst these theorists, more recently Jürgen Habermas has emerged as the leading thinker in critical theory, with what he calls “knowledge-constitutive interests”.

Habermas uses the term knowledge-constitutive interests to illustrate that knowledge is not neutral but is determined by the historical and social conditions in which it is produced. As a result, knowledge tends to serve particular interests because it is particular people who determine what knowledge is, in order to defend their interests. Knowledge-constitutive interests thus explains the mode or science of discovering knowledge and whether the knowledge claims that they make are warranted or not. There are three major knowledge-constitutive interests that correspond to ways of knowing paradigmatically. These fall within:

- ▶ the empirical-analytical sciences, which are concerned with the cognitive aspects of an individual
- ▶ the historical-hermeneutic sciences, which are guided by a practical cognitive interest
- ▶ critically oriented sciences, which are informed by an emancipatory cognitive interest.

The information box summarises these key points of critical theory, as developed by both the Frankfurt School theorists and Habermas. We recommend that you read it carefully as it helps us to establish what are considered valid forms of research in the critical paradigm.



## Key points of critical theory

- ▶ Critical theory does not only describe, but seeks to promote social change by providing insights about power relations in society.
- ▶ Critical theorists aspire to a more just and democratic society.
- ▶ Critical theorists view reality as a product of differing social and economic forces, political, ethnic and gender values.
- ▶ Critical theorists argue that reality cannot be separated from those who know.
- ▶ Critical theorists argue that there is no one truth but many truths. For this reason, the critical paradigm is sometimes described as anti-foundationalist because it rejects grand narratives on which all knowing can be based.
- ▶ Critical researchers therefore believe that social reality is historically constituted and that it is produced and reproduced by people.
- ▶ From the critical theory perspective, knowledge always reflects interests of one kind or another.

Now let us pause to think for a moment about the key points of critical theory. As we carry out research within the critical paradigm, it is important for us always to bear in mind that there is no one truth, but multiple ones. This means that in the process of doing research, there is a need to use data-gathering instruments that can capture different forms of data. This concept is further developed in later chapters.

It is also important to note that knowledge is not neutral, but is linked to interests and power. Therefore, research within the critical paradigm is aimed at shattering the taken-for-granted assumptions that often define what we believe, see and do. In educational research, shattering the taken-for-granted assumptions means asking questions about the content we teach and the methods we use to teach. In short, it requires that we pose questions such as:

- ▶ What counts as knowledge?
- ▶ Whose knowledge matters in education?
- ▶ How is knowledge determined?
- ▶ Whose interests are best served by the knowledges we teach?
- ▶ How do we engage in more democratic ways of teaching?

These questions are the major concerns of critical research in that they aim at transforming existing practices. The questions also point out the major differences between the positivist and interpretivist paradigms. When applied to research, these terms denote a form of political action, which aims at self-reflective understanding that enlightens people by explaining why the conditions under which they operate are the way they are, oppressive or emancipatory; and suggesting the sort of action that is required if transformation is to occur. In this case, the overriding concern of critical theory is to emancipate people from the domination of their own understandings and actions. The major epistemological and ontological assumptions of critical theory are summarised in the information box. We suggest that you read this information carefully as it prepares you for understanding the use of critical theory in educational research that follows.

## Stop and reflect

Summarise the main tenets of the critical research paradigm using your own words, by answering the following questions:

- 1 In what ways can you say the critical research paradigm differs from the other research paradigms presented in this book?
- 2 What aspects of critical research do you find most suitable for investigating an educational problem of your choice?



### What are the major assumptions of critical theory?

The major epistemological and ontological assumptions of critical theory are:

- ▶ Existing ideas are influenced by power as whoever has power determines the knowledge that is considered useful.
- ▶ Ideas do not exist 'out there' on their own but are closely linked with human interests and the powers that they serve.
- ▶ There is no fixed reality out there that exists independently of the people who know it.
- ▶ Reality is continuously shaped and made by people as they interact in their day-to-day lives
- ▶ Language is the medium through which meaning is made and remade.

## 4.5 Critical research and education research

Now that we have discussed the theories that guide critical research, we can move on to see how it can be applied to educational contexts. In this context, critical research focuses on diverse areas that may include some of the following:

- ▶ Examining and interrogating the relationships between school and society;
- ▶ Interrogating how schools perpetuate or reduce inequality;
- ▶ Examining the social construction of knowledge and curricula;
- ▶ Examining who defines worthwhile knowledge, and what ideological interests this serves;
- ▶ Examining how power is produced and reproduced in society;
- ▶ Examining whose interests are served by education and how legitimate these are.

Let us pause for a moment here, and reflect on these issues as critical research focuses on them. We are likely to make the following pertinent observations:

- ▶ The issues that critical research focuses on are political in the sense that they have to do with contested issues in society; for example, the relationship between school and society is never a simple and straightforward matter.
- ▶ The issues have to do with power and control; for example, questions about who defines knowledge and whose interests are served by such control or influence.
- ▶ These issues do not lead to definite and conclusive answers as is usually the case particularly in the positivist paradigm, and to a lesser extent in the interpretivist paradigm.
- ▶ These issues, as subsumed in the questions, present notions of knowledge and truth that are quite different from those of other paradigms; for example, the reference to the social construction of knowledge is a marked departure from the assumptions of an objective truth that exists out there in the world, as we saw in Chapter 2.
- ▶ Concerns with ideology, vested interests, and unmasking whose interests are served, is what makes critical research potentially dangerous since it challenges the status quo and seeks to empower people to emancipate themselves from coercive structures.



The following section introduces the second purpose of this chapter which is to explain the Afrocentric paradigm as a methodological approach in critical research. Methodology in this case refers to a strategy or plan of action which informs the nature of the investigation that one intends to do. For example, it answers questions such as why, what, from where, when and how data are collected and analysed. Guba and Lincoln (1994:108) explain that methodology asks the question: how can the inquirer go about finding out whatever they believe can be found?

#### 4.6 Critical research paradigm and Afrocentric paradigm as an approach in critical research

The **Afrocentric paradigm** is an important example of critical research in that it challenges the dominance of the traditional Eurocentric research paradigms. We are particularly interested in this paradigm because both its major theories, post-colonialism and indigenous knowledge systems, are relevant to understanding and improving African conditions. Both these theories emphasise that Western ways of knowing are not the only valid ways of knowing. Instead, they remind us that African experiences ought to operate alongside Western scholarship. When applied to educational research the aim of the Afrocentric paradigm is to change, enlighten within the classroom and facilitate overall improvement through democratic practice

The major difference between critical research in general and research from an Afrocentric perspective is that the Afrocentric perspective requires that we interrogate events from the standpoint of Africans as actors in their own destiny and not passive victims of outside forces, especially European colonialism.

Afrocentricity, as a paradigm has gained recognition mainly through the works of Molefi Kete Asante (1992), Ama Mazama (2001), Marquita Pellerin (2012), and Micheal van Wyk (2014), among others. Its main thrust is that Africans have the right to define what are worthwhile ways of knowing in their context. In short, the paradigm seeks to promote African ways of knowing, thinking and of viewing the world. In this way, indigenous knowledge systems become an important basis for challenging and interrogating Western ways of thinking and seeing the world.

Some of the key tenets of the Afrocentric research paradigm are that:

- ▶ it focuses on local phenomena with an interest in understanding how this impacts on the local and not the global;
- ▶ it makes use of locally relevant constructs, methods and theories, derived from local experiences and indigenous knowledge;
- ▶ it is not opposed to Western ways of knowing as it is integrative, that is, combining Western and indigenous theories;
- ▶ knowledge is seen as relational, that is, truth is informed by the set of multiple relations that one has within a context.

At this point let us stop for a moment to reflect on the factors that make the Afrocentric paradigm a critical research paradigm. The following issues stand out:

- ▶ The African paradigm is concerned with social and cultural factors that influence the ways in which knowledge is produced, for example, what we teach in schools and universities
- ▶ The Afrocentric paradigm is concerned with critical inquiry to emancipate and liberate people from all forms of oppression.