

Engaging with postgraduate research: education, childhood youth



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Introduction

‘Doing research’ is a process. It is a flexible one that is likely to be reworked, modified, changed and revised along the way. It usually, but not exclusively, starts with a problem which raises questions that then might then be revised and refined, or even discarded. Any process of investigation is complex and any one stage might expose further questions and require further decisions to be made as it progresses. Each stage of the research depends on decisions made in the previous stage: the process is cumulative but not always sequential.

In this free course, *Engaging with postgraduate research: education, childhood & youth*, you will build on your understanding of how to evaluate research by thinking about a fundamental part of the research process: research perspectives and approaches. Some of the different ways of researching situations that can arise when working in education and working with children and young people will be examined. You will explore distinct and influential ways in which people think about and study the complexities around working with children and young people, the practices involved in learning and teaching and the structures that support and impact on them.

You will also become familiar with the different theoretical tools used in research, which will enable you to begin to interrogate research literature and the research process itself.

The way research is conceptualised is informed by the decisions a researcher takes about how the research will be designed and undertaken. Therefore, in this course you will also consider what lies behind researchers’ decisions – the research questions they formulate and the choices they make – what they have chosen to pay attention to and how they have decided to do this.



Who is this course for?

Open to all, this course can be studied on its own or, if you are already studying or have studied a Masters qualification in Education, Childhood or Youth, it will secure your understanding and help challenge your thinking about research, taking it to the next level.

The course has relevance for anyone interested in research and who may want to further develop and expand on their knowledge and understanding of the research process and how research theory is used and applied. It especially explores research approaches through the lens of education, childhood and youth studies and has been designed to sit alongside and feed into postgraduate (level 7) accredited modules in the Faculty of Wellbeing, Education and Language Studies. It may also be useful to those interested in embarking on Masters-level study, or interested in finding out more about research methodology and ways of knowing.

Click on these links to find out further information about the [Masters in Education](#) and [Masters in Childhood and Youth](#) at The Open University. Or you can email WELS-ECYS-Masters@open.ac.uk.

Regardless of whether you study this course on its own or as part of a Masters qualification, on completion you will be eligible for an OpenLearn Statement of Participation certificate.

This OpenLearn course provides a sample of postgraduate level study in [Education, Childhood & Youth](#).

Learning Outcomes

After studying this course, you should be able to:

- appreciate why theory is relevant to and important for research
- recognise how research perspectives offer ways of linking theory to the practice of research
- understand what a research paradigm is and how paradigms can be distinguished from each other
- recognise how the choice of a research paradigm and its associated research methodology relates to how a research problem or enquiry is conceptualised
- understand how different research positions have led to different views about what counts as evidence and, as a consequence, what is judged to be valuable or reliable evidence in research
- appreciate how having a clear view of the theories and concepts informing a study offers a useful framework for research.

1 The meaning of theory

The first section of the course will explore the role of theory in research. But first, it is important to acknowledge that the word 'theory' conjures up some strong feelings for practitioners, not all of them positive. You will explore this in Activity 1.

Activity 1 Thinking about theory

Allow approximately 15 minutes

What thoughts and feelings does the word 'theory' conjure up for you? Does it make you smile, groan, or something in between? And if so, why do you think that is? Make a note of your thoughts.

Discussion

If the word 'theory' has negative associations for you, it may be because it suggests abstract ideas that seem to have little relevance to your day-to-day practice, or possibly it suggests ideas you find difficult to understand. Alternatively, if you are excited by 'theory', it could be because you find exploring complex ideas stimulating. Or it may be that you recall an experience of being introduced to a particular theory – for example about children's learning or young people's lives – that transformed your practice. However, it is probably true to say that most people have mixed feelings about theory, perhaps a combination of curiosity and wariness. At this stage, you may be interested in finding out more about what it means but may be a little sceptical about its relevance to the research that you want to carry out.

So, what exactly is meant by 'theory'? The next activity invites you to reflect on the role of ideas and concepts in everyday professional practice.

Activity 2 Theory and practice

Allow approximately 20 minutes

1. Think about the work that you do every day, whether it's in education or with children or young people in some other context. Now think about some of the ways in which you are aware that practice has changed in that context over (say) the past 20 years or so.

What are some of the things that a practitioner working in that kind of setting 20 years ago might do that today's practitioners would not do? And what are some of the things that practitioners do today that would not have happened two decades or so ago? Make a note of two or three changes of this kind.

2. Now reflect on *why* practice has changed in the ways you noted. What do you think led to those former practices being discontinued or new practices introduced? Make a note of your thoughts.

Discussion

You may have reflected that the changes you identified occurred simply because former practices weren't effective, and new practices were introduced because they

were tried and found to be more beneficial. However, even if this were the case, it's likely that behind these changes in practice were changes in thinking – for example about how children learn, or how young people develop. When you reflect on how practitioners in your context went about their work in the past, you probably reflected that they thought differently, for example about the nature of education, or the needs of children and young people.

Activity 2 demonstrated that practice often changes when ideas change. The next activity invites you to think about particular ideas or concepts that have been important in your own experience of professional practice.

Activity 3 Ideas in practice

Allow approximately 20 minutes

Think of one or two new ideas, or sets of ideas, that have become popular or influential in your practice context in recent years. Make a note of your thoughts.

Discussion

You may have thought about ideas around children's and young people's rights, or the importance of children's voices being heard in decisions that affect them. You may have thought of ideas about gender (see Section 1.1); about ethnicity and discrimination; about the purpose of education or the role of assessment in education; or about how approaches to leadership may have had consequences for your practice.

These ideas reflect theories, for example about how people learn, about children's and young people's lives and identities, about individual rights, or about power relationships in society. Ideas of this kind are the subject of constant debate, societal influences and continuing change, but are important because they inform our thinking about the world and shape our day-to-day work.

If you are tempted to think that, as a practitioner, you could manage without something called 'theory', and simply rely on common sense, then think how you would feel about a new recruit coming into your workplace *without* a grasp of the kinds of key ideas that you noted above, or who was still operating with the assumptions that you identified as common a couple of decades ago. Theory can be the building blocks of practice or it can lead and inform changes to practice. In the next section you will consider an example of theory in practice.

1.1 An example of theory in practice: gender

Whatever the context in which you work, you will find yourself working with individuals who have a particular and perhaps personal understanding of their gender – whether as male, female, non-binary, gender fluid or transgender. Given the close link between theory and practice as discussed in Section 1, it is likely you will also have your own ideas about gender difference. It therefore follows that your perceptions could have some influence over the way in which you respond to and engage with individuals.

This example, once again, shows that relying on 'common sense' is not sufficient. After all, only a few decades ago it was 'common sense' that certain kinds of work were 'men's

work' while other jobs were defined as 'women's work'. Similarly, it was assumed that caring for children was women's 'natural' function: that women were 'naturally' better at caring roles than men. These common-sense assumptions had a definite influence on practice.

Activity 4 Gender in theory and practice

Allow approximately 15 minutes

Think again about your own practice context. How have ways of working with children and young people, changed in the past 20 years or so? In what ways do these changing practices reflect changing ideas about gender roles?

Discussion

If you work in education, you may have noted that, in schools, girls and boys used to be encouraged to take different subjects, with boys being directed towards those that required scientific reasoning and girls towards those that required so-called 'softer' skills. When it came to learning manual skills, boys were directed towards woodwork and metalwork and girls towards cooking and sewing (so-called 'domestic science'). If you work with young people, for example in social work or youth work, you may have noted that there used to be very little encouragement for boys and young men to take on caring responsibilities.

The examples given in Activity 4 reflect changing ideas about gender roles, and the influence of new thinking – new theories – about gender gaining ground. For example, outdated ideas about rigid and innate gender differences have been replaced by theories that emphasise and challenge the role of environment, culture and social conditioning in determining gender roles.

1.2 Theory, practice and research

Based on the reflections of the role of theory in everyday practice considered so far in Section 1, it is possible to conclude that no practice is 'theory-free'. Even if you are not aware of the theories you are drawing on moment to moment as you go about your daily practice, the ways in which you work are, in fact, shaped by theory. Not only that, but theories – about the nature of learning, or the needs of children and young people – are constantly changing and open to contestation and debate. In order to be critically aware and effective practitioners, you need to be aware of the theories that shape practice and be ready and able to challenge and change your own and others' assumptions.

The same is true when it comes to research. Academic research can also be seen as a 'practice', a set of activities informed, either implicitly or explicitly, by a set of assumptions. These assumptions can ultimately be traced back to theories, which are, once again always up for debate. There is no one 'right' way to do research, and the ways in which researchers decide to explore a topic will always be guided by particular theories, for example about the nature of knowledge.

Theories on what constitutes knowledge about the world and the best way of going about gaining it will determine the kind of research questions that a researcher decides to explore, and the methods they select in order to explore it. Those theories will also shape the way they analyse any data they collect, and how they reflect on their own role in producing knowledge from that data.

The next section will explore some of the theories that are important in research, and the role they play in the research process.

2 The role and nature of theories

In this section you will explore the theoretical tool kit that is an essential part of engaging in postgraduate research in education and childhood and youth studies. You will consider theories and the work they do, drawing on two that are widely used in education and childhood research. You will also be introduced to key terminology that you are likely to come across as part of Masters level study.

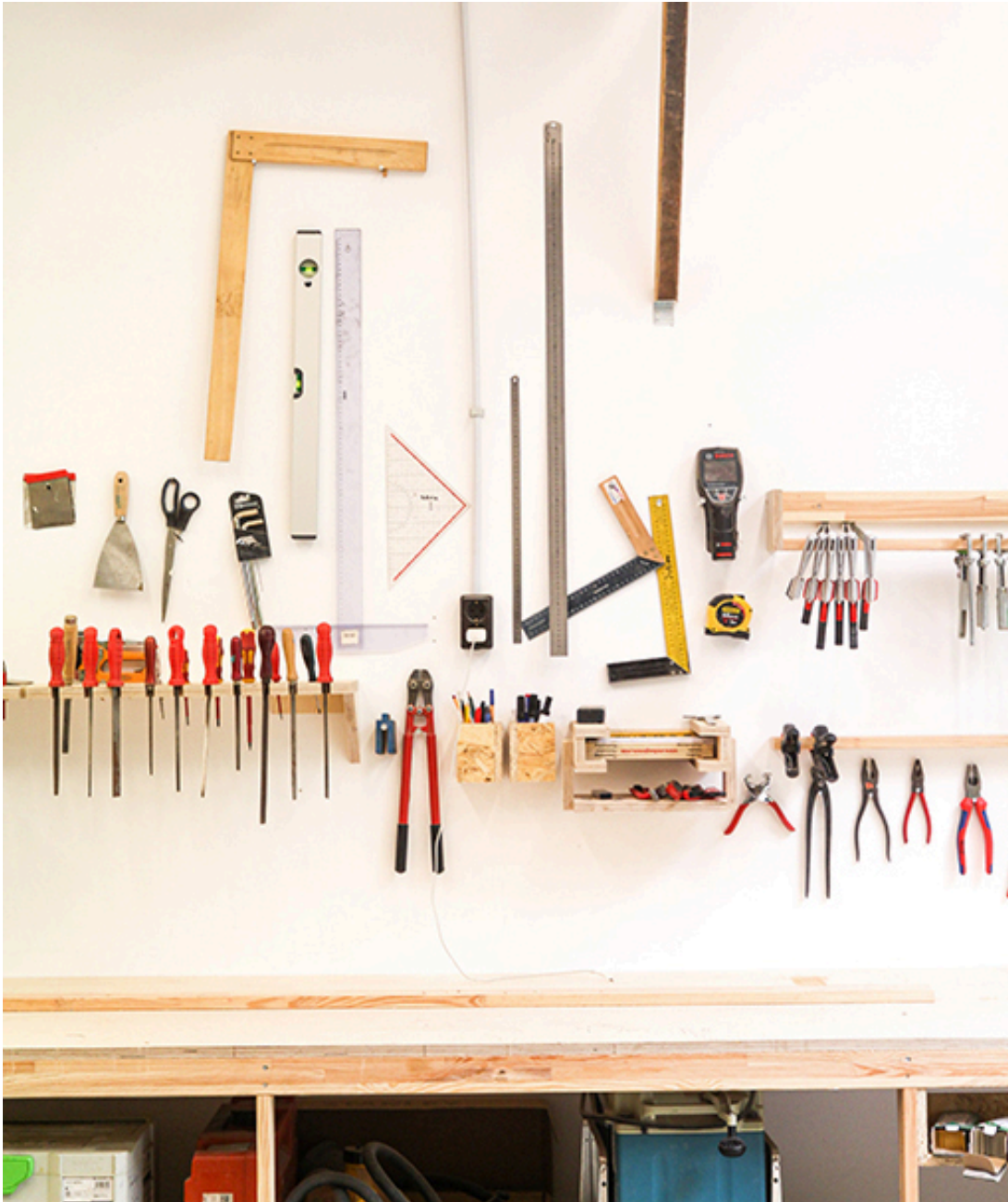


Figure 1 Theoretical tools can help you on your research journey

For the purpose of this short course, you will explore four key terms:

- research paradigm
- ontology

- epistemology
- methodology.

You will look at each of these in turn next. You may find it helpful to start a glossary of research terms and note your emerging understanding of key ideas.

2.1 Research paradigm

A term you will meet widely in research literature, which is commonly used to mean *world view* or, as Thomas (2009, p. 77) describes, ‘positions on the best ways to think about and study the social world’, is **research paradigm**. A paradigm involves a system of beliefs and practices that draw on theoretical assumptions and justifications. A research paradigm influences:

- what is considered problematic, i.e. what warrants researching;
- the types of questions that follow from this;
- the approach to generating data;
- the kind of data, and therefore the kind of methods, chosen;
- how the data is analysed.

A world view, or paradigm, is broad based. What distinguishes paradigms from each other are the beliefs and theoretical perspectives that are drawn on. Paradigms are discussed in more detail in Section 3.

Within research paradigms, you draw on theories that relate to the complexity of knowledge and reality. In essence, research paradigms are made up of two main components, which you will look at next.

2.2 Ontology and epistemology

Ontology refers to what a researcher thinks about reality: is it singular, fixed and definitively describable? Or are there multiple realities that are subjective and complex depending on individual viewpoints?

Theories about reality that are relevant to research in education or with children and young people, concern how you understand reality, which also involves people and their interactions. Ontological theories are concerned with how you understand the social world, what it is, and what you should pay attention to in order to better understand it.

Epistemology is the term used to describe theories about *what* you know about the world and *how* you know it. Epistemological theories explore ideas such as whether knowledge and reality are measurable using specific research tools. They are a matter of perspective, or are subject to individual perspectives and interpretation, constructed through social interactions.

Activity 5 Exploring your world view

Allow approximately 20 minutes



Figure 2 A researcher's world view can be as individual as the way they like their tea

Figure 2 shows a photo of a cup of tea. Consider for a moment how the person who made the cup of tea in the photograph learned how to do it. Reflect on the following questions.

1. Is there a single '*right*' way to make a cup of tea?
2. If there is more than one way, why do you think there are different ways to make a cup of tea?
3. How might you find out the different ways that people have been taught to make tea?

Discussion

Making a cup of tea is something that a range of people will experience, but their experiences and approaches may differ. Deciding if one believes there is a fixed single way of making a cup of tea or that there are multiple ways of making a cup of tea, will inform the approach taken in an investigation into *what* those different ways might be and *why* there are different ways.

The thinking behind a research ontology works in a similar way: single reality versus multiple realities. Epistemology then follows a path toward exploring the single or multiple ways using a particular theoretical approach, depending on whether one considers tea-making to be a very individual or predetermined experience.

As you develop as a researcher, you will become more confident and clearer about your ontological and epistemological position.

Epistemological and ontological theories determine how research problems and questions are framed from a collection of ideas (conceptualised), and how they should be

addressed. The logic behind the investigation or enquiry that follows these theoretical positions are typically referred to as **research methodology**. After identifying what a researcher believes about reality, and how they are able to know it, the researcher decides what information (data) is needed in order to find out what they want to know.

2.3 Research methodology

Research methodology is defined by Teddlie and Tashakkori (2009) as a broad approach to enquiry 'specifying how research questions should be asked and answered' (p. 21). The design of the research and the specific research methods used are determined by the overall methodological approach.

Different ontological and epistemological positions lead to different methodologies. Thomas (2009) describes the relationship between ontology, epistemology and methodology in the following way.

- **What** is there to study (ontology)?
- How can you **know** about it (epistemology)?
- How do you **find** what you are looking for (methodology)?

These three aspects are related and are nested within a **research paradigm**. Awareness of these theoretical aspects of the research process is important, whether it is to evaluate research literature or to investigate practice.

2.4 Beginning the research process

Figure 3 shows the relationship between ontology, epistemology and methodology.



Figure 3 Relating ontology, epistemology and methodology

In reading Figure 3 and thinking about 'doing' research it is helpful to consider a paradigmatic position as something that evolves as a researcher makes explicit their ontological and epistemological positions. This can be achieved using the research literature as a tool. It is also the case that over time, as ontological and epistemological positions evolve and a researcher 'learns', then they may change their methodology or indeed their paradigmatic position completely.

Figure 3 highlights the important relationships and decision points you need to be aware of either in doing research or reading research. However, it is important to recognise that your overall approach carries a degree of flexibility. For example, deciding on research

questions and the purpose of a study can precede the paradigm exploration, but will then be refined after that. That is why the research questions are located centrally in Figure 3. Similarly, once the methodology is considered, research questions may be refined further in light of thinking about how to answer them. This reflects the iterative nature of the research process. In literature, the research process is typically represented more sequentially to show the logic underneath the process engaged in. It is worth remembering this distinction between the process engaged in and how it is then represented.

2.5 Thinking about epistemological positions

In this section you will explore two dominant theoretical positions and locate them in their particular research paradigm.

Activity 6 Personal views about theory and practice links

Allow approximately 30 minutes

Consider your own professional or chosen research context and write down your thoughts in response to the following questions.

- What is there to know in your professional context that could potentially be the subject of your research? (Be guided by what you would be interested in finding out).
- Where might you look in order to investigate it? Why? (Consider whether you think there is a single reality to be identified and measured, or multiple realities that might require unpacking or interpretation).
- What does your response to the above suggest about how you see the relationship between theory and practice?

Your responses to this activity will hopefully have steered you towards thinking constructively about the role theory can play in your research. The next activity asks you to stand back from your own position as a researcher and consider how researchers are held accountable in terms of their use of theory. What are the expectations of you about why, how and when theory should inform your research?

Activity 7 Theory – practice links

Allow approximately 1 hour 30 minutes

Go to the link below to review the Teaching and Learning Research Briefing No. 80, 'Quality criteria for the assessment of education research in different contexts' (TLRP, 2009). Please note that this article has much broader appeal beyond educational research and is also relevant to postgraduate researchers of other disciplines outside of education.

You do not need to read all of this paper. Instead you should ensure you have sufficient familiarisation with the topic to be able to appreciate the context for the text outlined in the boxes in the briefing. We suggest starting with the introduction (pages 1-2), then reviewing the criteria for judging journal publications (Box 1.1) and the funding of developmental and practice-based research (Box 2.3).

As you read, look for, and make notes on, where 'theory' and 'practice' are directly referred to, as well as 'rationale', 'conceptual' and words starting with the stem 'methodolog...'. Then make notes on the similarities and differences between the criteria in these respects, using the questions below as a guide.

- In what ways are theory and practice referred to?
- What do these references suggest to you about expectations of researchers in relation to their use of theory and practice?
- How are conceptualisation and methodology helpful in making a case for research when publishing in a journal and/or applying for research funding?

You should open the paper in a new tab or window by holding down Ctrl (or Cmd on a Mac) when you click on the link.

[Quality criteria for the assessment of education research in different contexts](#)

Discussion

When researchers publish, there is an audience which expects quality in what they produce. One aspect of this is ensuring that the work relates to previously published work and is building on this. This includes taking ideas and being clear about how they are being used. This involves a researcher making explicit their theoretical position, the meaning they are applying to the use of particular words, and showing how this has led them to apply a certain approach to gathering evidence and/or presenting their research. These points relate to whether research is being presented in a journal (as covered in Box 1.1 of the briefing) or proposed to funders (as covered in Box 2.1 of the briefing).

In your own reading of journal articles, you might already have become aware that papers need not be based on data (called empirical papers) but can also be theoretical position pieces which set out a case and present lines of argument. Both can be said to make original contributions to academic knowledge. Both can also be argued to make contributions to practice knowledge as well. The latter would be particularly expected in publications with a stated practitioner or policymaker audience.

Funders too need to be convinced that the study they are being asked to fund will make a significant and original contribution and will be of high quality. They also need to be convinced that the study proposed does not ignore previously published ideas about theory and practice but will still offer a new approach and insights. They will need to be reassured that the researcher is clear how they are both using theory and contributing to its advancement.

2.6 Thinking about ontological positions

In the TLRP briefing document you looked at in Activity 7, you might have noticed that there was explicit reference to a scientific methodology at points in the document. This might have made you feel that a particular epistemological stance might be expected from researchers. However, making assumptions about the research perspective when reading research literature is not straightforward. It is important therefore to dig beneath the surface and to scrutinise the research design and methodological choices made in order to clearly understand the researchers' intended stance, rather than making assumptions at purely a surface level.



Figure 4 Sometimes you have to dig a little deeper in the literature

Language is very important in conveying which position you are adopting and, if terms are being used with particular meaning, they need to be explained to a reader. In the TLRP document, although 'scientific' is used at several points, the studies they are referring to as being judged for the various purposes included in the paper would not necessarily be expected to adopt a 'scientific' approach. If they are not adopting a 'scientific' approach and yet are being evaluated on this basis, a researcher needs to take especial care in offering a clear rationale for the position of their study in the academic landscape.

In the next activity, you will consider ontological and epistemological positions and the significance of different theoretical perspectives for how practice is understood.

Activity 8 Identifying ontological positions

Allow approximately 30 minutes

Part 1

Watch Video 1.

Video content is not available in this format.

Video 1 Social media in the lives of youth with disabilities in Kenya



The research described in Video 1 relates to young adults with disabilities and their sense of agency via social media. The researcher asked her participants to describe the impact of people and institutions on their lives. Consider for a moment the ontological and epistemological frame the research is positioned within and respond to the following questions.

- What does the researcher think about reality (ontological position)?
- Make a note of what the researcher says about how she intends to investigate her topic. What does this suggest about the researcher's epistemological position?

Part 2

Now listen to the following extract of an interview with Gill Adams, an academic at Sheffield Hallam University. In the interview she is asked to reflect on her doctoral research studying Maths' teachers and describes the approach she took.

Audio content is not available in this format.



Audio 1

- Make a note of what Gill says in relation to what she wanted to find out. What does this suggest about the ontological position behind her research?
- Do Video 1 and Audio 1 make your personal theoretical views about the relationship between theory and practice clearer?

Discussion

These researchers explain how they have developed methods to collect data as ways of coming to know the world (their epistemological view). Both hold views that the

world is social and that the human experience is personal, likely to be unique and related to their complex histories and experiences.

In Video 1, Alice wanted to come to know how young people with disabilities used social media and needed to find ways for them to express their experiences, taking into account their disabilities.

In Audio 1, Gill wanted to find ways to support her participants reflect on their experiences to date and explore how it was informing their present.

Both worked with their participants to create spaces to reveal new insights, new both to the participants and to the researchers. These are subjective realisations, which mean that what the participants said or reported will have depended on what they were asked, how they were asked and how safe they felt when they were asked. They might also have been influenced by what was said or done prior to the data collection. If these factors had been different, they might have offered different insights. This view of the world is in contrast to objective views of the world as stable and measurable in repeatable ways. What do you think about the world in relation to the topics you are interested in?

In this course so far, you have been introduced to some key terms and concepts that are used when people engage with the research process, either through reading literature or undertaking an enquiry. You have explored the meanings of ontology and epistemology and how they are the theoretical roots of research paradigms. You have also seen how sometimes these theoretical roots are assumed, and not discussed, in the research literature. The next section will build on this learning and take you through an exploration of the language and ideas behind paradigms and paradigmatic positions.

3 Competing paradigmatic positions

In this section you will look at two paradigms which can be considered to be mutually exclusive and therefore potentially competing – positivism and interpretivism. After this, an alternative will be presented. Thinking about the differences between each paradigmatic position might help you to identify the stance with which you most identify. However, before developing an understanding of ‘paradigms’, you will first reflect on the origins of this term.

What is a paradigm?

The philosopher Kuhn (1970) argued that knowledge relies on those within a discipline or field agreeing on broad, shared concepts which are anchored by particular studies that are treated as exemplars. These concepts and exemplars make up what he referred to as a paradigm, indicating both what is already known and ‘puzzles’ that require further work. He saw sciences (e.g. physics), or particular fields within the sciences, as being dominated in any one period by a single paradigm.



Figure 5 People can hold views that can be considered in opposition to those of others

In the social sciences, however, within which some argue education and childhood and youth research sits, it can be argued that there can be simultaneously held paradigms. You will look at the first paradigm, positivism, next.

3.1 Scientific theory and the positivist paradigm

Over the course of the twentieth century, the approach to social research, such as educational and childhood and youth enquiry, emerged and treated theory as factual, referring to *how things are* rather than how they *could be*. This interpretation of theory derives in large part from the influence of the study of science as a model.

From this point of view, theory tends to be seen as a system of laws that explain the occurrence of particular types of events in particular types of circumstance – for example, by identifying the mechanisms involved. Scientific knowledge, in contrast to everyday knowledge, was viewed as value-free and, therefore, objective. Science looks for relationships between variables to explore and explain natural phenomena. In particular, science, concerned with cause and effect, was seen as capable of showing why a policy or practice might work in some circumstances, or in relation to some people, and not others. This is known as **positivism** – a research paradigm associated with scientific theories that strongly influences the social sciences.

Those who hold this view of the world might call themselves positivists. Positivists apply scientific methodology as the way of understanding and researching social and psychological phenomena. They believe that the success of natural science in modern times has stemmed from scientists' refusal to go beyond what can be supported by empirical evidence, especially evidence derived from careful observation of phenomena and/or experimental manipulation of them. Positivists have high hopes that a science of human social life will pave the way for substantial social and political progress, by undermining beliefs and practices that are based solely on superstition or tradition and replacing them wherever possible with ones founded on scientific evidence.

3.2 Features of positivism

Here are ten things you might find helpful to know about positivism.

1. Positivists have a strong tendency to use forms of experimental method, and/or the forms of statistical analysis modelled on it to engage in the careful measurement of phenomena.
2. Positivists favour quantitative data.
3. Positivists seek causal or statistical relationships among variables.
4. Because of this, ontologically, people and their behaviours are considered variables.
5. Positivists treat individuals as separate units, as the objects or subjects of a study.
6. Positivists aim for what is known as 'procedural objectivity'. This means explicit or transparent procedures or methods are required to produce sound knowledge.
7. Because of this transparency and objectivity, positivists believe that research can and should be replicated to test whether the knowledge produced is sound, or whether it has been distorted by error or bias on the part of the researcher.
8. Epistemologically, positivists believe that there is an external, objective reality and what you see, and experience is stable across contexts and people. Items in a questionnaire, for example, are assumed to be understood in the same way by all the respondents.
9. The assumptions of positivism have been challenged within science as misrepresenting the way that scientific thinking and knowledge develops (Kuhn, 1970). Kuhn emphasised the social character of science research, within the scientific research community, and challenged positivists to acknowledge this.
10. Kuhn (1970) also proposed that sometimes you need to be prepared to shift from one way of seeing the world (paradigmatic position) to another and challenged positivists to be prepared to do so. He gives examples of such 'scientific revolutions' which were caused by finding alternative ways of resolving the puzzles existing within one way of thinking – for example, the move from Newtonian to twentieth-century physics

or accepting Darwin's views of evolution. These needed new ways of rationalising the world.

Activity 9 Taking a positivist perspective

Allow approximately 10 minutes

Go back to the idea of making a cup of tea introduced in Activity 5, but this time adopt a positivistic perspective to focus on the image of a cup of tea in Figure 6.



Figure 6 An alternative look at the cup of tea, from a positivist's perspective

Make notes in response to the following questions.

1. What might a positivist assume about the cup of tea?
2. What might they want to know?
3. How might they go about finding out about it?

Discussion

You may have thought about how a positivist might be interested in the structural features of the cup of tea (the nature of the cup, the size of cup, how full it was, the type of tea, perhaps even how hot it was or its colour) as these could be measured and compared across different contexts.

Positivists might also be interested in features of the process of making the tea and of drinking it. All these aspects of tea-drinking could be easily recorded, especially if captured through observation or, as a secondary option, through self-reporting by the tea drinker. Positivists may also be interested in knowing about the situation for the tea drinking, such as the time of day, the location, whether individuals were alone or drinking the tea with others.

In the next section you will look at some critiques of the positivistic approach and how alternatives ways of thinking fuelled paradigmatic debates.

3.3 Paradigm wars?

Nathaniel Gage (2007), in his chapter 'The paradigm wars and their aftermath', chose 1989 to reflect on paradigmatic positions in educational enquiry because, in that year, there was an 'International Conference on Alternative Paradigms for Inquiry' in the USA. At the conference, more than 200 participants debated paradigm issues and the debates were 'characterized by jockeying for position and the carving out of territory' (Gage, 2007, p. 164). Gage summarises critiques of the scientific, or positivist, approach that emerged in these debates. He labels the first the 'antinaturalist critique' and the second the 'interpretivist critique'.

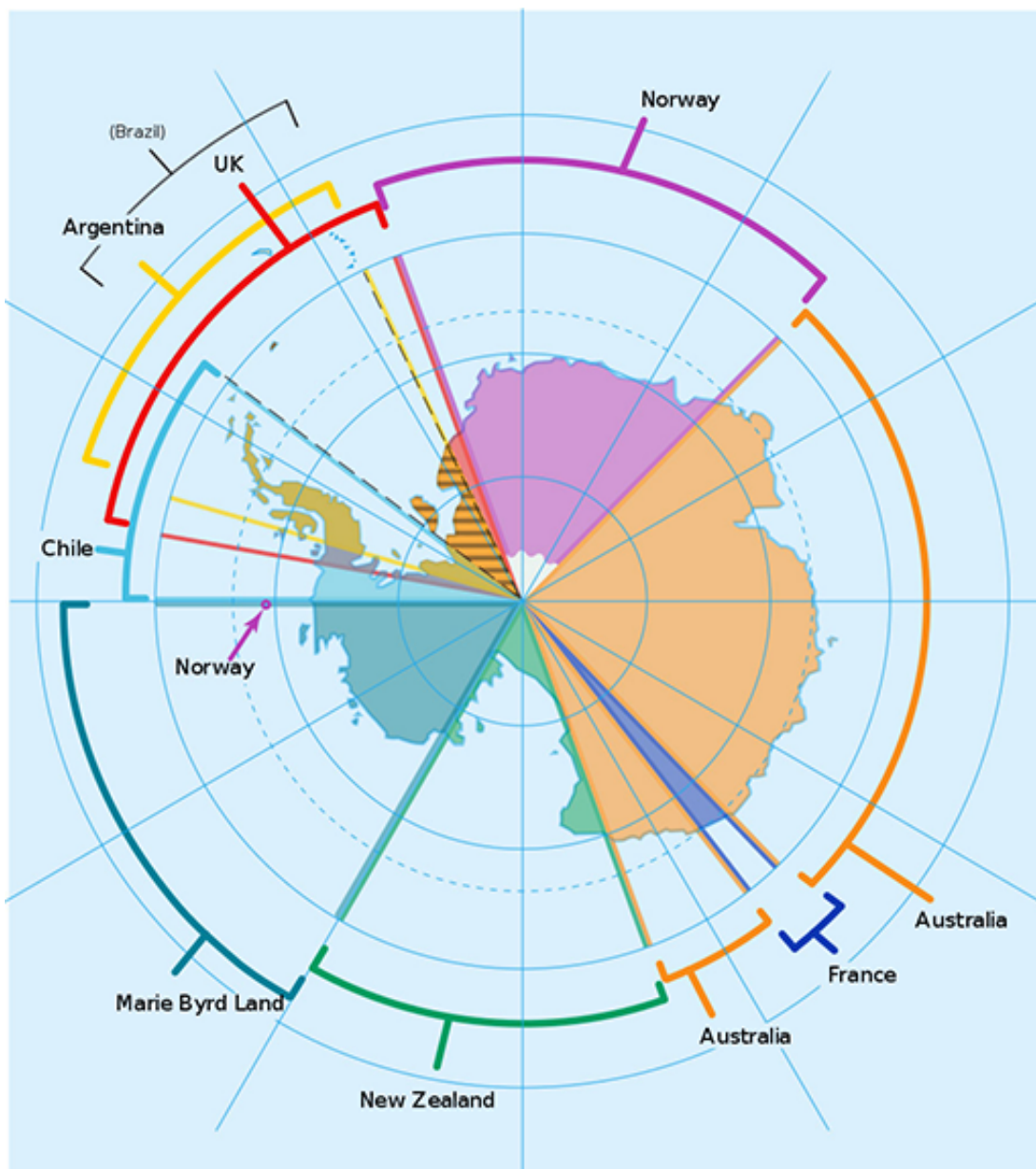


Figure 7 Can education and childhood and youth research be carved into territories as amicably as the continent of Antarctica?

In Activity 10, you will read more about these critiques and the debate. It is worth noting that reference to the scientific method in this debate refers to scientific study of the natural world, hence natural science or naturalist. Gage's reference to 'antinaturalism' is therefore directly against this perspective.

Activity 10 An alternative paradigm

Allow approximately 20 minutes for each part. There are three parts.

Part 1

The following summarises the antinaturalist critique presented by Nathaniel Gage for the failure of positivist-based research on teaching. Make notes on whether you think the basis of their critique is:

- ontological (the view of the world);
- epistemological (the view of how to come to know the world); or
- or methodological (the view of which approaches to use to study the world).

The antinaturalist position is that human affairs simply cannot be studied with the scientific methods used to study the natural world. Thus, they argue the term 'social science' has two ideas which cannot be combined and hence is an oxymoron. The reasons given are:

1. Human affairs are inextricably involved with the intentions, goals, and purposes that give them meaning.
2. A science is involved with direct, one-way causal links, but there are no such 'billiard-ball' causal connections between teacher behaviour and student learning or adult behaviour and a child's development.
3. Scientific methods can be applied only to natural phenomena that are stable and uniform across time, space, and context in a way obviously untrue of the spheres of education and children and young people's experiences and development.

Therefore, the critics assert, in teaching you should not search for the kind of prediction and control that scientific method aims for but rather for the kind of insight that historians, moral philosophers, novelists, artists, and literary critics can provide.

As evidence to support this view, Gage refers to Tom's (1984) description of teacher planning, though what he writes is also true of the day-to-day experience of youth workers or childcare workers, for example:

the teacher may change objectives from month to month or from week to week; unforeseen events – a hot day or one student's open cruelty to another – may necessitate revising plans; the demands people place on the schools can change from year to year, from community to community ... so that the teacher cannot necessarily construct his battle plan in 1984 for 1985, in September for May, on Monday for Friday, or during the second hour for the third hour.

(Tom, 1984, p. 71)

Part 2

Nathaniel Gage (2007) also presented an interpretivist critique by another group of researchers who challenged the use of positivism in educational enquiry.

Again, be prepared to consider the basis for the argument and how this differs from an antinaturalistic critique of positivism.

Interpretivist researchers reject positivist views of the world because:

1. They reject the assumption of uniformity in nature – the assumption that phenomena would occur in the same way in different places and times.
2. They reject the use of linear causal models applied to behavioural variables as a basis for inferring causal relations among the variables. These models presuppose fixed and obvious meanings of certain types of actions for example by teachers or adults.
3. They reject that the kinds of prediction and control that can be achieved in the natural sciences are not possible in human affairs.

They propose a phenomenological perspective [one which examines particular phenomena - events or situations which can be observed to exist or happen] or needs to be taken to understand human behaviour which allows for the situation that different interpretations of the world are held by different people which create the possibility that people may differ in their responses to the same or similar situations.

Gage talks about his suggested response to this realisation.

... So it [positivistic research] ought to be supplanted by interpretive research ... which would examine the conditions of meaning created by students and teachers as a basis for explaining differences among students in their achievement and morale.

(Gage, 2007, pp. 153–4)

Part 3

Note any similarities between the two critiques and then consider any differences.

How do you view these criticisms? Are they ontological, epistemological or methodological in nature?

Discussion

It might be important to note that Gage is discussing the situation in the USA particularly, but the paradigm debates he describes were ongoing in many other countries. The antinaturalist argument is that there is no one-way causal link between teachers and their students. This criticism applies to any learning relationship where one person is trying to support and guide another. Interpretivists argue that human behaviour and ways of knowing are context dependent or situated. They reject the notion of stability across contexts, which underpin certain theories of knowledge and of learning and assessment practices and policies discussed earlier in the course. You

can see links between some ontological and epistemological theories behind educational and childhood-focused policies and practices and positivist assumptions.

The epistemological stance of interpretivism is clearly articulated in Gage's discussion when he comments that individuals are understood to construct their own social reality, rather than having reality external to individuals as the 'determiner of the individual's perception' (Gage, 2007, p. 153). This distances interpretivists from ontological positions which see learners as passive receivers, and from epistemological positions where what we know and how we know is governed by an external objective reality that is somehow transmitted and received by individuals.

Both of the critiques outlined by Gage in his chapter – the antinaturalist and the interpretivist critiques – can be regarded as being derived from the same source. Importantly, the interpretivist epistemological perspective denies that symbols carry meaning; rather, symbols are interpreted and meanings, as a consequence, are multiple. This altered, ontologically, what was paid attention to in educational enquiry and in particular the direction taken by childhood and youth researchers.

In the next section you will look more closely at interpretivism to help you continue to consider the paradigmatic debate.

3.4 Interpretivism

The conflict between positivism and interpretivism dates from at least the middle of the nineteenth century, although it emerged within the field of educational research and in childhood and youth studies during the second half of the twentieth century.



Figure 8 Different people will have different responses to and take away different meaning from the same pieces of art

Interpretivism's starting point is its insistence on differentiating between the nature of the phenomena investigated by the natural sciences and the nature of those studied by historians, social scientists, childhood and youth and educational researchers. In the next section you'll look at some of the features of interpretivism.

3.5 Features of interpretivism

Here is a summary of ten things you might find helpful to know about interpretivism.

1. Interpretivists argue that people – unlike non-human forms of life – interpret their environment and themselves in ways that are shaped by the particular cultures in which they live. These distinctive cultural orientations shape what they do, and when and how they do it. Thus, quite different ways of life and associated beliefs about the

world can be located at different points in history and also coexist (peacefully or in conflict) at any one time.

2. Interpretivists recognise that not only are there differences between societies but there is also significant cultural variation within the large, complex societies in which most of us now live.
3. Interpretivists argue that we cannot understand why people do what they do, why particular institutions exist and operate in characteristic ways, without grasping how people interpret and make sense of their world – in other words, the distinctive nature of their beliefs and attitudes.
4. This emphasis on the importance of perceptions, intentions and beliefs does not in itself mark off interpretivism from all forms of positivism. A great deal of positivist quantitative research has been concerned with documenting things that are not directly observable, such as levels of intelligence or types of attitude, albeit seeking to do this through observable indicators like responses to tests and questionnaires. Positivists have generally assumed that it is possible to document recurrent or standard patterns of relationship – first between people's background experiences and their attitudes, and then between their attitudes and their behaviour. By contrast, interpretivists suggest that these relationships are much more contingent and diverse, in the same way that historians have emphasised the uncertain course of history. It is not simply the playing out of a set of universal laws.
5. By rejecting 'the assumption of the uniformity of nature' and 'linear causal models' (Gage, 2007), interpretivists need to employ different ways of investigating people's perceptions and attitudes, how these are shaped by cultural contexts, and how they inform people's actions.
6. In doing so, interpretivism has encouraged a shift towards qualitative methods. This shift in methods occurs because the questions asked within an interpretivist paradigm differ from those asked within a positivist paradigm and, therefore, require different data.
7. Interpretivists should adopt an exploratory orientation, one that tries to learn what is going on in particular situations and to arrive at an understanding of the distinctive orientations of the people concerned.
8. The data should be structured as little as possible by the researcher's own prior assumptions but, conversely, acknowledge the subjectivity which the researcher brings to the questions asked in a study and the attention paid to data.
9. Even more than positivism, interpretivism has stimulated a range of different kinds of research, for example narrative and biographical designs, as well as participatory approaches which involve the participants themselves taking a role in research design and conduct.
10. As Gage indicates, during the second half of the twentieth century, educational research in many Western societies moved away from positivist ideas about methodology, towards what might be called post-positivist approaches.

Activity 11 Taking an interpretivist perspective

Allow approximately 10 minutes

You are now going to return to the scenario of making a cup of tea that you encountered in Activity 5 and Activity 9, for the final time. This time you will use the information in Sections 3.4 and 3.5 to adopt an interpretivist perspective on it.



Figure 9 A further look at the cup of tea, this time from an interpretivist's perspective

Make notes in response to the following questions:

1. What might an interpretivist assume about the cup of tea?
2. What might they want to know?
3. How might they go about finding out about it?

Discussion

Interpretivists would not want to make assumptions about the cup of tea. Instead, they would probably want to explore different aspects of the background to the tea drinking before focusing on the act itself.

You might have thought about how they would want to know a lot about the person making the tea, whether this was the same person drinking the tea, and why they came to make the tea at this point in time and place. This would probably involve thinking about the relationship between all people involved, their previous experiences of tea drinking and how these have led to the tea-drinking scenario at this place and time. It might also involve thinking about the choice of tea, the mode of making the tea and how this might be linked to personal and/or wider cultural practices of those involved.

Interpretivists are very likely to want to talk to individuals and ask them questions linked to their interests. This may even involve going back to individuals more than once after speaking to others and eliciting different insights, which then prompts the need for further discussion.

You will have come to appreciate that taking a paradigmatic position will impact on all aspects of a researcher's decision making. In the next section, you will see that researchers are not faced with a simple choice between adopting one of two alternative positions and that the debate about which paradigms should underpin research remain.

3.6 So, is there a resolution to the paradigm wars?

Despite the paradigm wars, as Gage (2007) predicted, no one paradigm has 'won' and the influence of positivism has not disappeared. The political climate for education nationally and globally that demands we are accountable for how we educate our citizens, favours easily measurable outcomes such as student academic performance and completion rates. The same is similarly true for debates about the needs of children and young people more generally. This is why there is an appetite for measuring, in particular, the impact of initiatives which can be captured through evaluative designed studies that draw on positivistic approaches.

Government and local authority research funding is heavily weighted at the moment to such evaluative research. This driver for measured outcome can affect how children and young people experience the settings in which they find themselves – such as childcare, youth centres and so on – because of the emphasis on measured outcomes and the expectation that people believe a cause can be linked to an effect. In response, there is a tendency to look for evidence of practices which 'work' (Slavin, 2004), and the expectation that people believe a cause can be linked to an effect.

Randomised control trials which are considered the 'gold standard' for research in healthcare (Hariton and Locascio, 2018) are now being advocated in countries like the UK as the preferred model for educational research (Torgerson and Torgerson, 2012; Connolly *et al.*, 2017). Psychological and neuroscientific studies, based on scientific, positivistic premises, also have a role to play in generating understandings about children's development and learning (Goswami, 2006; Bruer, 2016; Juvonen and Gross, 2005). This leads to the question as to how these contributions to knowledge can be recognised in a post-positivist world of research?

3.7 Pragmatism

One alternative to thinking about positivism and interpretivism as being mutually incompatible is to embrace them as offering two different ways to see, and hence study, the world. Rather than competing, they can be seen as complementary. A study can be planned which seeks to look for the synergies between different ways of studying a situation, for example positivists and interpretivists. This means different researchers can be brought together and different methodologies applied within the same study. This practical or pragmatic approach to gaining insights about social science phenomena has been coined as a Mixed Methods methodological approach (with deliberate capitalisation to separate it from 'multiple method' research designs).

Mixed Methods researchers explain that they are using pragmatism as their theoretical foundation, which does not preclude working with those holding different personal paradigmatic positions within the same project (Biesta, 2010).

Pragmatism views reality as fluid and somewhat indeterminate, and open to multiple interpretations.

Charmaz, 2014, p. 263

Therefore, by adopting a pragmatic approach the researcher can focus on finding ways to examine experience, action and its consequences, rather than 'arguing about whether something is true or not', or about the nature of reality (Morgan, 2020, p. 65).

The Journal of Mixed Methods Research was launched in 2007 as a home for discussing and reporting Mixed Methods research designs and their applications. An analysis of the first ten years of this journal's content identified that researchers were defining this as a pragmatic, alternative paradigmatic position by explaining how it related to decisions about 'research questions, perspectives, training, data analysis, paradigms, integration, and challenges for mixed methods research' (Molina-Azorin and Fetters, 2017, p. 144). Examples of research designs within this paradigmatic stance might include (Creswell, 2003):

- *Sequential explanatory* designs, in which quantitative data is collected as a first stage of a study from a broad sample. The quantitative data is analysed and then qualitative data collected which seeks to identify key factors affecting the patterns identified in the first stage, with a smaller sample in a second stage.
- *Sequential exploratory* designs, in which qualitative data is collected from a small sample in the first stage of a study to identify some likely key themes and issues. The study is then scaled up in a second phase to collect quantitative data from a much broader sample.
- *Concurrent study* designs, when quantitative and qualitative elements of the study take place simultaneously and an analysis phase needs to integrate the findings.

Note here that quantitative data is being considered a proxy for positivist-based elements to the study, and qualitative data for the interpretative-based elements. You will probably appreciate by now that there is not such a stark divide as to which paradigmatic stance generates which form of data and that methodological decision-making is more nuanced than this.

In Mixed Methods research, the emphasis is taken away from naming the paradigmatic stances underpinning the type of data generated. Instead it focuses more on which kinds of data are useful in offering different insights to a research focus and answering different aspects of a research project. Often multiple research questions will be set within such projects, for example a positivist-based question, an interpretative-based question and an overall question that requires integration of the other two. It was noted earlier that such designs are different to those using 'multiple methods'. Many designs collect data from different data collection tools – for example surveys, interviews, observations and/or documents – each of which might generate quantitative or qualitative data, or a mix of the two even in the same method. The data is triangulated between the tools but this is usually within the same paradigm stance and overall ontology, epistemology and methodology.

As a postscript, please note that it has not been possible to cover all the paradigmatic positions taken by researchers in Education, Childhood and Youth research in this course.

4 Bringing it all together!

In Section 2.4, you were introduced to the purple, second section of the diagram below as Figure 3. You may be interested to see in Figure 10 (below) how this might fit within a wider view of the research process. There is a prior section which relates to decisions about its purpose and a following section which covers the design frames associated with the methodological position taken.

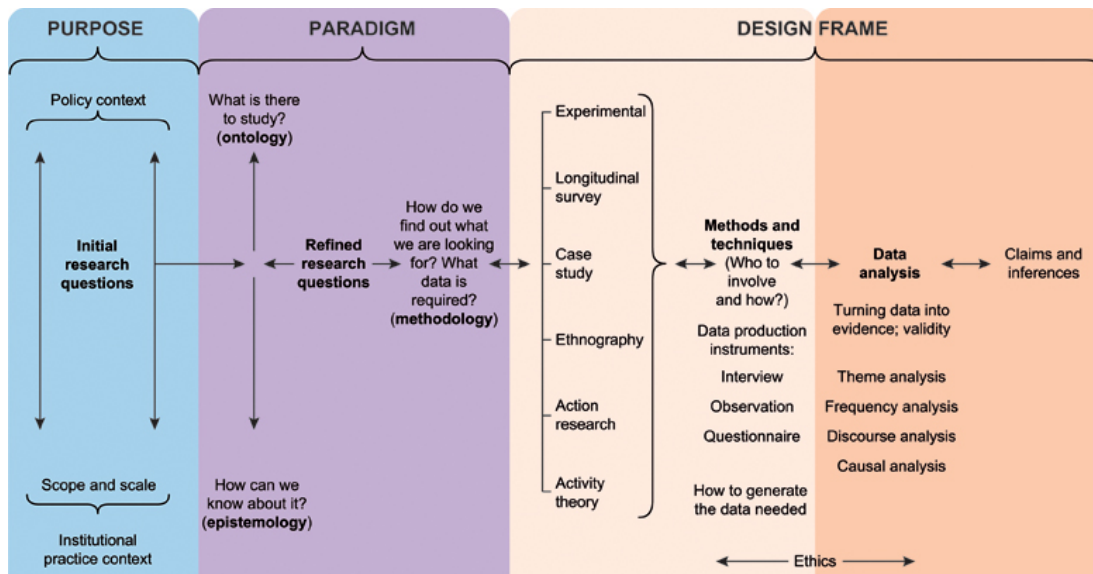


Figure 10 An overview of the research process

You will have come to realise that methodology and hence research design can often require the researcher to adopt different data gathering and analytic approaches, which then elicit different types of data and findings. Sometimes more than one approach is needed, and multiple method studies are common, but fundamentally it is about determining and justifying the appropriateness of the decision making needed to answer the research question(s) you wish to explore.

As a researcher you may well be asked at some point in your research career '*what is your conceptual framework?*', which you will have referred to in the reading in Activity 7. It is useful to reflect on what this means and how it relates to the overall research process and so in this concluding section you will consider the elements that go to formulating what is known as your 'conceptual framework'.

To help you do this, you should reflect on what has been covered so far. You have:

- explored the meanings of ontology and epistemology and how they are the theoretical roots of research paradigms;
- seen how sometimes these theoretical roots are assumed, and not discussed, in the research literature;
- examined distinct and influential ways in which people think about and study the complexities around working with children and young people and the complexities of education;
- reflected on the practices that are involved in learning and teaching childhood and youth related work and the structures that support them.

The way in which research is conceptualised and understood throughout the research process is informed by the decisions that have been taken by the researcher on the research approach itself.

The discussions shared in this course have introduced you to the concept of research paradigms and the complexities of that decision-making process. Paradigms ebb and flow over time just as debates about 'what is research evidence?' can challenge thinking about the purpose and value of research. It is for this reason, as a researcher, you need to be clear on what ideas, theories and concepts – for example, about learning, about childhood, about knowledge, about a world view – you have engaged with to inform your thinking about your topic and what it is you wish to investigate. These ideas make up your 'conceptual framework'. In order to be able to articulate them you need to consider the following.

- What theorists have influenced your thinking about your topic?
- How have you chosen to position yourself in relation to relevant debates about your topic area?
- What methodology have you chosen to engage with?
- What does that methodology say about the role of the researcher?

Bringing together the choices and decisions you have made will enable you to describe and explain the conceptual framework that underpins your research. Your conceptual framework is about the process of designing and undertaking research rather than it representing an actual product. Thinking through how the theories, concepts and positions interrelate will give you a framework for communicating how you have chosen to move forward from the research process and how it has informed the development of your research.

Conclusion

As researchers, you need to pay attention to the ontological and epistemological positions that underpin the research you read about. This is not as straightforward as it seems because these views are often not explicitly written into published work. To identify the position taken in a study, it is helpful to look carefully at the methodological approach, to look carefully at the decisions that have been taken about the research process and think about what the researcher appears to consider to be valid knowledge.

As researchers, you should take responsibility to be transparent about your own positions when conducting and designing your own research. You will have seen how important this is in judging the quality of research, as covered in Activity 7 with regard to journal articles and applications for funding. Developing the understanding and language to offer these rationales is supported in Masters and Doctoral level study and this course has been designed to offer an introduction and explanation for the value of this.

You should now be able to:

- appreciate why theory is relevant to and important for research
- recognise how research perspectives offer ways of linking theory to the practice of research
- understand what a research paradigm is and how paradigms can be distinguished from each other
- recognise how the choice of a research paradigm and its associated research methodology relates to how a research problem or enquiry is conceptualised
- understand how different research positions have led to different views about what counts as evidence and, as a consequence, what is judged to be valuable or reliable evidence in research
- appreciate how having a clear view of the theories and concepts informing a study offers a useful framework for research.

We hope you have found the ideas in this course interesting and that this has whetted your appetite to take your interest in research further! This course only starts you off on your journey to understanding how to evaluate research, by thinking about one fundamental part of the research process. If you want to know more there are various ways in which you can follow up your interest.

This OpenLearn course provides a sample of postgraduate level study in [Education, Childhood & Youth](#).

Find out more about Postgraduate study with The Open University by [visiting our online prospectus](#).

Further reading

If you have access to a Higher Education library, you might find the following useful further reading.

- Ball, S.J. (1995) 'Intellectuals or technicians? The urgent role of theory in educational studies' in Hammersley, M. (ed.) *Educational Research and Evidence-based Practice*, London, Sage/Milton Keynes, The Open University.
Although now a dated text, after reading this article you might like to conclude whether you think the argument is still urgent.
- Biesta, G. (2010) Pragmatism and the philosophical foundations of mixed methods research. *Sage handbook of mixed methods in social and behavioral research 2*, pp.95-118.
If you were interested in the pragmatic alternative paradigm presented in the course, Gert Biesta's explanations are recommended.
- Ripley, A. (2005) 'Who says a woman can't be Einstein?', *TIME*, vol. 165, no. 10, pp. 50–60.
If you were interested in theory and gender, the following article might stimulate further reflection on the importance of different ontological, epistemological and methodological positions for drawing conclusions. This article is open access.

Educational research

Learners interested in educational research might be interested in reading further about how randomised control trials have been used in education research by consulting this open access article by Connolly, P., Keenan, C. & Urbanska, K. (2018).

'The Trials of Evidence-Based Practice in Education: A Systematic Review of Randomised Controlled Trials in Education Research 1980-2016', *Educational Research*, 60(3), 276. <https://doi.org/10.1080/00131881.2018.1493353>

You can reflect on whether you think they collect useful evidence and should be considered the 'gold standard' methodological approach for education. What is your view of what evidence is needed to inform education?

Childhood and youth research

Learners interested in childhood and youth research might be interested in reading about the rise of childhood studies research and its critique of older paradigms used for researching children by consulting the following article by E. Kay, M. Tisdall and Samantha Punch (2012). In order to view you will need access to a Higher Education library.

'Not so "new"? Looking critically at childhood studies', *Children's Geographies*, 10(3), pp. 249-264. doi: 10.1080/14733285.2012.693376.

What conclusion do the authors come to about the 'newness' of this approach, and how do you think it relates to the discussion about positivism and interpretivism?

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Activity 7: Quality Criteria for the Assessment of Education Research in Different Contexts, September 2009 Number 80, Teaching and Learning Research Briefing, www.tlrp.org.

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