

Section 1 INTRODUCTION TO EDUCATIONAL RESEARCH

Textbooks are seldom read cover to cover; instead, the reader may opt to dip into the book as and when they need to. While normally we would actively encourage this, we strongly recommend that you read this first section fully as it will help 'frame' the rest of the book. Consequently, Section 1 provides a foundation for all educational research, which enables you to make informed decisions as to the relevance of subsequent chapters.

Chapter 1 provides an introduction to both education and research, before analysing what is meant by 'educational research'. The various features for each chapter are introduced with an explanation as to why they have been included. Reasons for engaging in educational research are explored before progressing to a discussion about the uniqueness of the area. Contemporary research is also introduced to provide future directions for educational research engagement, followed by a core assertion that educational research requires an understanding of the sociocultural **context**. Furthermore, Chapter 1 explores why educational research is important, illustrated through two topical issues.

Chapter 2 discusses why philosophy is integral to educational research, while specifically exploring the concept of 'truth'. In other words, are there any universal truths within education that are accepted by everyone? If not, why not? Different ways of analysing the truth are discussed through correspondence, coherence,







2 ESSENTIALS OF RESEARCH METHODS IN EDUCATION

consensus and pragmatic approaches, which in turn progress to discuss perspectives and paradigms in research. We then invite you to consider your research philosophy before returning to the concept of truth.

Chapter 3 explores why the sociocultural context is inseparable from educational research, through exploring what is meant by society, culture, context and civilisation. The academic discipline of anthropology is introduced, specifically analysing how the discipline is central to educational research. Two key figures within anthropology are analysed, Malinowski and Geertz, and how their work provides the background to educational anthropology. By the end of the chapter, you will not look at society and culture in the same way. You may also appreciate why it is not okay to indicate that you are okay, why comparative education may be found lacking, that, depending on the context, words can get you into trouble, what it means to 'go native' and how a ritualistic combative engagement can leave you with a wry smile.

Chapter 4 integrates the previous chapters before introducing the W5H2 framework for research. This provides the basis for the hourglass model, a model that characterises the research process and from which the remainder of the book develops.







1 INTRODUCTION

CONTENTS

Chapter overview	2
ntroduction	
	2
The quest allegory	į
ramework for this book	(
Starting with you	7
Uniqueness of educational research as a discipline	1
Contemporary issues and trends in educational research	15
Inderstanding the importance of the cultural context	17
So why is educational research needed?	19
The transformative effect of educational research	22
Lessons learnt the hard way	22
Core points	24
Checklist for your understanding	24
-urther reading	25





CHAPTER OVERVIEW

The purpose of this chapter is to explore what is meant by 'educational research'. While both words are somewhat easily defined, when combined they can cause trepidation. Indeed, educational research can appear surrounded by a range of myths and mystery. This can cause research to be unfathomable. However, opposed to being daunted by such myths, the approach throughout this chapter, and the book, is to embrace them and to turn them into a quest – your quest – where you are the lead adventurer.

We will progress to explore what is meant by both 'education' and 'research', through exploring the different contexts in which they occur. By this, we will explore contemporary issues and trends in educational research to highlight a range of research, from both an applied perspective and an academic perspective. This chapter really sets the foundation from which all educational research develops.

INTRODUCTION

Research can appear cloaked in mystery, with the perception that only university professors can engage with 'proper' research. Perhaps 'proper research' only relates to projects that appear in high-profile journals. Or perhaps 'proper research' requires a team of researchers under the direction of a professor on a project spanning years. Yet mysteries and misconceptions about research are common and are often the result of a) an academic saying how tough it is to do research, get published, and so forth; b) an academic in some way belittling other research, other researchers, junior staff and students; or c) the mythology of research being based on student misconceptions about how tough it is. This is not designed to be an exhaustive list, but rather to illustrate the point that if you feel research is going to be tough, then guess what: it is.

One of the purposes of the book is to dispel these myths, among several others. For example, the use of the title 'professor' sounds grandiose. Yet some professors have very little research or few publications to their name and are given the title by a university for their position in the academic hierarchy. Conversely, some academics may have spent a lifetime researching and publishing, really igniting the imaginations of their students, yet are not bestowed with such honours. Even within academia, myths abound – for example, that a person is made a professor after a certain number of publications have been written. The one thing to make clear is that the **value** of any academic is their ability to help guide you through the myriad of research approaches, methodologies, methods and the unnecessarily large words that surround these, to enable you to find your own way. Alas, others may disagree. And this brings us to the point that for every perspective, there is normally one or many counter perspectives. What is important is for you to find the 'truth', or at least attempt to move closer to the truth, a theme we will return to in the next chapter.

Perspectives are fundamental in research. For example, consider the best way to teach a lesson of your choice to a group of students. You may consider se\veral approaches basing







your decision on a myriad of factors: the time of day, the resources available, how they got on in the previous lesson, how you are feeling, whether it is snowing outside, and so on. Even during the lesson, you are likely to adapt and evolve if the students are really interested in one aspect, or they are finding something tricky. Ultimately, it is a continual balance of perspectives. Research is no different. Although you can come up with a stringent research plan, you may need to adapt this as your research progresses.

From this Introduction, the main point is that research can be 'cloaked' in myth and mystery. Guardians of the secrets of research carefully seclude this in a veil of misconceptions and mystical words. We will keep to this theme about the myth and mystery of research and provide an allegory to help you understand that research is more than identifying a problem, investigating it, then writing it up as you may read in other books on writing projects and dissertations. Let us take you on a quest.

THE QUEST ALLEGORY

We have questioned whether to use an allegory to illustrate the research journey for various reasons, predominantly it is a little 'twee' – that is, excessively quaint. Yet time and again when working with students, we question the use of exploring the **quest allegory** (normally at the culmination of a student's degree, whether undergraduate or postgraduate), and time and again, students report that this was a memorable point in their studies when they could look back over what they had achieved and how far they had progressed. We trust that this may equally resonate with you.

An **allegory** is a representation, either visually or through narrative, where the features (such as the characters, the locations, the symbols, and the incidents and events) embody other, deeper meanings, such as morality and abstract concepts (Copeland and Struck, 2010; Fletcher, 2012). From Plato's *Republic* (specifically his use of the cave allegory), through to allegories used by secret societies, from C.S. Lewis's *Alice in Wonderland* through to George Orwell's *Animal Farm*, allegories can convey concepts far better than merely describing the concept. If, for example, you are told that one powerful regime can overthrow another, you may remember this. Yet hide this in the framework of a barnyard of animals and the concept is more powerful and has a greater effect, leaving a lasting memory.

The quest allegory relates to the collected works of Joseph Campbell (1904–87), a professor of literature, who investigated the parallels between myths and religions in what is known as **comparative mythology**. Campbell is perhaps best known for his concept of the **monomyth**, or the similarities that heroes or heroines encounter throughout various myths globally, in his 1949 book *The Hero with a Thousand Faces*. If you consider the vast array of literature or films where a hero or heroine faces challenges, is aided by others, overcomes their greatest fear or enemy, while realising that they need to draw upon their inner depths to overcome this, then these all follow a similar pattern to Campbell's monomyth. Many examples through film or literature existed prior to Campbell's work. Furthermore, some authors and directors have explicitly acknowledged the influence of Joseph Campbell on their own work, yet







from classical Chinese texts such as *Journey to the West* by Wu Cheng'en (one of the four classic novels of Chinese literature), through to *Harry Potter* by J.K. Rowling, from *Star Wars* to the *Lion King*, or from the *Wizard of Oz* to *The Lord of the Rings*, the elements of each are remarkably similar.

These elements are essentially: a call to a journey; disequilibrium to the individual causing them to 'step over the threshold' and leave on a literal or figurative journey; meeting with friends and allies; some sort of talisman that has mystical powers; a variety of challenges; the 'abyss' (a challenge that appears insurmountable); reaching 'within' to draw upon one's inner depths or to tap into a mystical power; defeating the abyss (which is often the individual's own self); becoming 'transformed'; and ultimately returning home to bestow a gift on others (such as knowledge, freedom, and so on).

REFLECTION

Spend a few minutes considering the elements of Campbell's monomyth in relation to a book, film or TV series. Can you identify all the above elements from the previous paragraph?

Now consider how this applies to your life. What has called you on a journey? Who have you met along the way? What challenges have you encountered, and so forth?

*(*7)

Throughout this book, we will make reference to the monomyth to help you on your research quest. Through adopting the quest allegory, we are not implying that research is unnecessarily challenging and that you will have to fight a range of demons. However, it is more about understanding what to do if challenges occur and how to negate these, or who to ask for help.

FRAMEWORK FOR THIS BOOK

While the monomyth will appear throughout this book, more practical features will help you find what you need, when you need it. In keeping to the monomyth, the book is essentially a grimoire providing the information you need when you need it. Indeed, with textbooks such as this, it is unlikely that you will read from one page to the next, instead working through different chapters as and when you need them. The least we can do is to help guide you beyond a mere contents list, appendix or index. Consequently, each chapter is written in ways to help you find the information easily and consists of:









Academic explanation: Each chapter will provide a detailed academic explanation of the concepts. This will help you if you need to refer to the original sources to deepen your understanding about any particular concept.

Practical engagement: This is where you will be provided with guidance on how to turn the academic content into something more practical that you can use through a range of reflections, activities and handy hints.

Examples and case studies: Examples and case studies are provided to allow you to understand how the concepts covered in the chapter have been used in a range of research. These are generally found in the chapter section 'Contemporary issues and trends in educational research'.

Visual representations: Each chapter will have a variety of representations, diagrams and illustrations to provide clear summaries of the content, along with processes to engage with.

Handy hints: These are sporadically spread throughout the book providing practical guidance based on experience.

Ten-stage approach: Where possible, ten-stage approaches have been provided to help structure your research. These are mainly found in Section 3 of the book.

Lessons learnt the hard way: These are some of the issues we have come across through either our own research, or through supporting others, with an explanation of how such issues were resolved.

Core points: This is a concise summary of the chapter. These are provided to help aid your understanding so that you can review the points before moving on.

Checklist for your understanding: Each chapter will culminate with a checklist so that you can monitor your developing understanding and reflect on what your next stage is, or review content by seeking an additional explanation, either through reading more widely or discussing this with another.

Further reading: Here, you are provided with some core texts to deepen your understanding on specific issues, if they are relevant to your research.

STARTING WITH YOU

What do you already know about educational research? Rather humbly, you may think that you know little. However, you have not lived in a vacuum all your life; everything you have experienced has been processed in some way, shape or form to make you, you. The word 'experience' is used here to encompass the variety of sensory inputs and how these in turn relate to your previous accumulation of sensory inputs, along with how these have been interpreted. In a long-winded way, you are not a blank







slate or a *tabula rasa* (a concept that dates back to the work of Aristotle, yet cited by many others, including René Descartes, John Locke and Jean-Jacques Rousseau).

To this extent, your experiences mean that you have engaged with a significant range of 'education' both formally and informally, but also a significant range of research. Consider a young child. They are naturally inquisitive. Provide a baby with a new object and they can stay mesmerised for hours, sensing the texture through touch, through taste, and so on. Are they not 'researching'? Arguably, have you ever stopped researching, from finding the next time a bus or train leaves, through to the best deal when shopping for an item? It is the same with 'education'. So why, when the two words are placed together, does 'educational research' appear to be a daunting concept?

No doubt you would have engaged with research prior to reading this book. You would have spoken to others, found out their views on a topic, through to conducting surveys in mathematics lessons and other areas of the compulsory curriculum. Similarly, your understanding of education is significantly profound as both a product of the education system and someone working within the education system. Admittedly, education is far more than school, university, the early years, etc., in the same way that research is more than just finding out something. Opposed to progressing to define educational research for you, we would like you to engage in the next activity.

ACTIVITY

Imagine you are making a documentary about 'educational research' for a mainstream television audience. What would your opening paragraph be to ensure that the viewer will keep watching? How are you going to 'hook' them into your programme and not change to another channel?

A few minutes into the programme, you need to define what 'educational research' is. Aim to write your definition in one sentence.

Finally, what would you call your documentary?

Well done if you have completed the above activity. What you have written is probably better than what any other textbook can muster in defining educational research. Indeed, we are going to prove you right by drawing together what other authors have discussed prior to offering our own interpretation.

If you ask most people to define education, they will probably reply that it is something to do with the transmission of knowledge, schooling, coaching, teaching and similar types of responses. Fewer are likely to respond that it is a complex, multifacted, social phenomenon, drawing upon a range of academic disciplines to further the







learning of both oneself and another. Heck, that was a good sentence – lots of big words that sound vaguely intelligent. Does it actually provide a coherent definition or is it just clouding what education is through attempting to sound intelligent? We leave it to you to consider that last question. Yet, consider how often such concepts are clouded through such use of language; also, how and why authors choose to use such language.

While there are many definitions about education, it is worth noting Matheson's (2004) warning that the concept of education is a difficult concept to grasp with a multitude of definitions, which can mean whatever the person wants it to mean. Irrespective of this, we will provide a few definitions here to illustrate Matheson's point.

According to Shavelson and Towne (2002), **education** is a practical profession requiring specialist skills, such as: a complicated exchange of **interactions** to engage students with the concepts being covered; balancing students' previous knowledge, their existing ideas and their varied backgrounds; and the ability to engage and endure with the content. To assist with this process, Shavelson and Towne (2002) discuss the complexity for educators in regulating a range of relationships, practical wisdom, the values of the educator (and others), along with scientifically **grounded theory** and evidence. This is informed through a variety of academic disciplines, ethical considerations and understanding about relationships.

Taking a more 'formal' definition, the United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2022: online), defines education as 'the process of facilitating learning or the acquisition of knowledge, skills, values, beliefs and habits', while explaining that education can take place in formal, non-formal and informal contexts. Matheson (2004) identifies further criteria extending upon the UNESCO definition, providing four domains that unite to form education:

- **Intention:** the 'what' of education, as in what should be facilitated, such as knowledge, values, skills?
- **Transmission:** the 'how' of education, as in how should the focus of the intention be facilitated? What processes would be most appropriate? Also, the 'where', 'when' and 'by whom'?
- **Worthwhile-ness:** the 'why' of education, as in why should whatever the intention is be covered?
- Moral acceptability: this encompasses the previous three points in relation to the cultural or societal norms.

Research is an easier concept to define, generally relating to finding something out, a sense of discovery and, through this, expanding existing knowledge. In returning to Matheson's (2004) criteria, the intention, transmission, worthwhile-ness and moral acceptability similarly apply to research through determining what needs to be discovered, how, why and whether the research is morally acceptable. Verma and Mallick (1999) describe four different ways that research may be conducted:







- Pure or basic research: the development of theory and the discovery of fundamental truths to extend knowledge.
- **Applied or field research:** the application of new knowledge to everyday problems and situations.
- **Action research:** where specific everyday situations are researched by practitioners to solve problems, suggest solutions, then review these solutions.
- Evaluation research: this is the assessment of the effectiveness of a specific project to understand whether the original project aims have been achieved.

While 'educational research' therefore combines the definitions for education and research, one of the best definitions is provided by Opie (2004: 3), who defines educational research as 'the collection and analysis of information on the world of education so as to understand and explain it better'. One of the 'classic' definitions of educational research was written by Bassey (1990: 39), who defined the concept as entailing 'systematic, critical and self-critical enquiry which aims to contribute to the advancement of knowledge'.

- **Enquiry:** research has a purpose.
- **Systematic:** collecting and analysing data methodically.
- **Critical:** research data is presented as accurately as possible.
- Self-critical: the researcher needs to continually reflect on their methods for collecting, analysing and presenting the results.
- Advancement of knowledge: the understanding of events and processes through descriptions, explanations, interpretations and identification of values.

In synthesising the various definitions, educational research is the collection and analysis of information relating to education in an attempt to explore, explain and enhance the profession.

REFLECTION

Review the definition you provided for 'educational research' at the start of this chapter.

Having read through some of the definitions above, how would you rate your definition? Do you feel that it stands up well against those cited? Is there anything you could add to your definition or remove from it?

 m_{1}







UNIQUENESS OF EDUCATIONAL RESEARCH AS A DISCIPLINE

While we doubt that this chapter has revealed any major revelations about educational research, our intention has been to explain that educational research need not be a complex, mythical area. It is likely that you may already be thinking about areas you could research or that you have reflected on research you have previously conducted. What is unique about educational research is that it tends to be an applied field of study, where the research findings impact on people's lives, adding to the fundamental understanding of phenomena related to education, while also informing practical decision making (Shavelson and Towne, 2002).

Although Shavelson and Towne (2002) discuss that educational research is predominantly applied, in finding solutions to educational problems to inform practice, Anderson and Arsenault (1998) discuss the academic approach to educational research, specifically finding 'truth' either through establishing educational theory or modifying existing theories. While the applied research approach tends to be conducted by a researcher in practice, such as a teacher, the academic approach is more likely to be conducted by a researcher for their postgraduate or doctoral work (Anderson and Arsenault, 1998). We would suggest that these divisions are not as distinctive as necessarily made out; rather, we would suggest that the perspectives from applied to academic, problem-focused to theory-focused, can be placed at opposing ends of two continua, and that rarely is research so polarised (see Figure 1.1). Instead, it is likely to be somewhere along each of the continua.

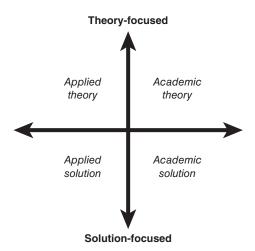


Figure 1.1 The interplay of applied, academic, problem- and theory-focused research





From Figure 1.1, four quadrants are generated with no quadrant being more important than the others. However, the quadrants help to differentiate and identify the focus of any research articles you have read, or indeed, where your own research may be located.

REFLECTION

Review Figure 1.1. Consider the last piece of research you have read. In which quadrant would you place the research and why?

Now consider an example of research that could be conducted in each of the quadrants related to your own interests in education.

Do any of the quadrants 'speak' to you more loudly than the others? Can you envisage how research could be conducted and progressed if you did select this quadrant for a research project?

To help understand the difference between applied and academic research, please read through the **case studies** below from the research we have conducted in our careers.

CASE STUDY 1: ACADEMIC THEORY

Abraham Maslow (1908–70) was an American psychologist, partly responsible for developing the fields of humanistic psychology and transpersonal psychology, while also influencing the development of positive psychology. He is perhaps best known for the 'hierarchy of needs', a series of deficiency needs that need satisfying (such as safety, food, water, shelter, security, love, belonging, esteem) and being needs (such as the cognitive and aesthetic needs, culminating in self-actualisation). The hierarchy of needs is found in many academic disciplines, such as nursing, business, education, etc. and is relatively coherent to understand: the deficiency needs require addressing before a person can progress to the being needs.

While this makes conceptual sense, in that if a person is cold and hungry, they are not going to focus too much on learning, there are several criticisms. For example, the artist working on their masterpiece who forgets to eat or goes without sleep. Another example is the ballet dancer who pushes their body to the extreme, sacrificing their safety in the quest for aesthetic beauty of movement (Sule, 1987). The main criticisms, however, came from Maslow himself, his main criticism being the over-emphasis placed







on self-actualisation (Maslow, 1970). Instead, he furthered his theory, suggesting ignoring self-actualisation and instead focusing on self-transcendence as characterised by the plateau experience. Unfortunately, Maslow died before he could advance this theory, only characterising what consisted of the plateau experience (Cleary and Shapiro, 1995; Krippner, 1972). Only six sources commented on the plateau experience prior to 2011, five of which were very similar in describing the sixth source.

In the mid- to late-2000s, we started conducting research into the plateau experience, developing a psychometric based on the characteristics that Maslow defined. A psychometric measure was developed using close to a thousand respondents to assess their level of mindfulness, serenity and death anxiety, and the measure has been subsequently used to investigate the effect of shinrin-yoku with education professionals (Buckler, 2011/2020; Buckler and Moore, 2021).

This research is an example of the academic theory (see Figure 1.1), in that it sought to take an existing theory and assess whether the theory was valid and worth investigating further.

CASE STUDY 2: APPLIED SOLUTION

During the COVID-19 pandemic, schools were closed to many of the students, and effectively schools, students and their parents were required to take large-scale reactive measures to ensure the continuity of learning. This resulted in the increased expectation that students could use electronic devices from games consoles to mobile phones to access learning. The problem was that despite this expectation, nobody really knew the extent to which students could access learning, with Alsop (2020a, 2020b) suggesting that while 88 per cent of the UK **population** had access to a home computer, only 36 per cent had a device that they could adequately use for e-learning, possibly due to others in the home requiring access for work or sharing the device between siblings. Similarly, only 89 per cent of students had reliable, accessible internet access (ONS, 2019). Consequently, computer ownership and internet access did not necessarily equate to being able to access e-learning.

Within our learning community, we needed to investigate how many had access to e-learning, along with the potential issues that negated access, so that we could ensure effective alternative provision.

Our findings indicated that 52 per cent (N = 131) of those who replied (N = 252 out of a sample of 833 potential responses) were sharing devices so that children in the home could engage with e-learning. Indeed, 30 per cent (N = 75) of children shared a device with a parent/guardian who was working from home (Moore and Buckler, 2022). Although this is a small summary of our findings, due to the prevalence of sharing devices, we advised the school that asynchronous e-learning, such as using pre-recorded lessons, would be preferable to using synchronous e-learning, such as live lesson streaming, despite an increased challenge to move to the latter.







However, the government did supply additional devices and mobile broadband which resulted in being able to offer synchronous learning during subsequent lockdowns.

This is an example of the applied solution (see Figure 1.1), through seeking to find solutions to educational problems.

CASE STUDY 3: HYBRID APPROACH

Both of us practise the martial art, Wing Chun. Through research for Scott's PhD thesis, training in the martial arts was deemed to be transformative to the participant – for example, providing significant psychotherapeutic benefits. However, to date only limited research has been conducted with students, and most of this research is dated, uses small samples or lacks proper use of control samples.

Various techniques were taken from both Wing Chun and Ba Gua/Pa Kua, which in turn were simplified and made both safe and fun to train, without students being able to use the techniques practically outside the sessions as we had removed elements that made the techniques 'effective'.

An **experimental group** engaged with the martial arts programme and were compared with a **control group** on two measures of self-esteem, prior to the twice-weekly sessions that took place over eight weeks. Both groups completed the self-esteem measures at the end of the eight weeks.

A one-way between-groups analysis of covariance (ANCOVA) demonstrated a statistically significant improvement in both trait and state self-esteem for the experimental group, while both the state and trait self-esteem for the control group diminished. From a qualitative perspective, the experimental group reported many positive attributes, such as relaxing, calming, absorbing, etc.

Full statistical reporting has not been included here for brevity. However, this provides an example of the hybrid approach in that the martial arts programme stemmed from academic theoretical perspectives. These were carefully developed through applied theory into an easily taught programme. Again, please refer to Figure 1.1 to understand how the quadrants of research relate.

ACTIVITY

Review the research you have read or actually conducted. It could be from an engaging module you have previously studied or an area that you would like to study. Consider which quadrant from Figure 1.1 the research would be situated in.

Try to identify four research papers related to an area of interest, each paper relating to a different quadrant of Figure 1.1.







From the three case studies provided above, along with those that you have identified from the activity, hopefully you have been able to appreciate how research conforms more to an academic or applied nature. Through the activity, we would also hope that you can start thinking about your own research and the category your proposal is likely to come under.

Never be thrown off by the difference between attempting any of the approaches in the quadrants. By this, some of the educational theories that have been held up and regurgitated for years in lecture theatres (such as Maslow's hierarchy of needs) are not necessarily as stable as made out. While you may feel from a mythical sense that this is insurmountable (after all, who are you to question theories held in such high regard?), every researcher has probably felt this way with any piece of research they have conducted. Remember that educational research is akin to holding that candle in a corner of a large room, as discussed in the Preface.

CONTEMPORARY ISSUES AND TRENDS IN **EDUCATIONAL RESEARCH**

Research does not have to lead to earth-shattering revelations. As long as you have gained greater insight into a topic through your research, then this is, at the very least, a great achievement. The research you have conducted (or are about to conduct) may gather momentum over the coming years, or it may just stay waiting to be discovered in decades to come by other researchers.

HANDY HINT 1: LISTEN TO YOUR SUPERVISOR WITH **CAUTION**

One of the worst pieces of advice a supervisor can offer in relation to your proposed research is to say, 'That's been done before', or 'You won't find anything new', or 'That theory is as old as a mountain', or 'Why don't you do this instead?'. We have both experienced such comments in the past and from reviewing these experiences, they are more to do with either the supervisor's lack of experience in an area, their own limited beliefs, or perhaps they may have actually analysed research into the potential topic and can fully justify their assertion. It could be that the potential research may be impractical within the duration you have to complete the research.

Consequently, always ask your supervisor for a justification if they appear to be steering you away from a proposed research area, then carefully consider whether their advice is acceptable. Also consider whether the proposed focus could be revised in some way.





If you review research over a period of time, you will come to understand that there is an array of issues and trends relating to research in general; this is also true of educational research. For example, in the last ten years or so, Rosenshine's 'principles of instruction' have made a resurgence, probably due to the emphasis on the 'knowledge-based curriculum'. This phase will pass as the pendulum is likely to swing back towards a more 'skills-based curriculum' or it will gravitate somewhere in between. For more information, see Rosenshine (1995/2012), and Rosenshine et al. (1996). Are Rosenshine's principles just being given the proverbial 'dusting off', are they being changed in some way, are others challenging Rosenshine's work and suggesting new principles, or are Rosenshine's principles just being shared because that is what other schools are doing?

From a wider perspective, research trends have been identified by various organisations for this very reason of others just recycling theories without any degree of critique. For example, Stace (2020) suggested that the five top educational trends to be aware of in 2021 were:

- Nanolearning: where the information age has resulted in a decrease of attention
 due to screen fatigue, and the usual run of notifications and alerts that can
 increase cortisol levels, and with that, stress. Consequently, nanolearning consists
 of small chunks of information provided to learners over a shorter period of time.
- Virtual reality and augmented learning: providing immersive experiences that
 can be interacted with for field trips, experiencing virtual careers, experiencing
 high-tech training, and also for being immersed in language learning.
- Project-based learning: using real-life contexts to learn practically, with teachers
 facilitating the learning process. Through project-based learning, students develop
 a range of skills for example, creativity, critical-thinking, communication and
 collaboration.
- **Experiential learning:** similar to project-based learning, experiential learning provides practical experiences in 'real-world' situations.
- **Online learning:** specifically, the cost-effectiveness and flexibility that online learning provides.

Similarly, an array of researchers working for The Brookings Institution (a non-profit public policy organisation in Washington, DC) suggested the following educational trends, some of which are listed as: an increased focus on data-informed decision-making; families supporting children's learning; social and cultural inequalities; the development of skills, specifically with digital technology; early childhood provision with limited resources; how education systems can prepare for future disruptions; the educational trajectories of girls along with an increased focus on girls' and women's rights; how countries treat their teachers and how teachers are portrayed by parents, the media, policy-makers, and so forth; social-emotional development of children following various lockdowns; how school closures during lockdowns have potentially







affected student learning loss and their future careers and earnings; parent-teacher relationships, among others (Gustafsson-Wright et al., 2022).

The theme of how education can benefit humanity on a global scale is similarly discussed by the Organisation for Economic Co-operation and Development (OECD, 2022). From their biennial research report, the future research trends in education should be directed towards growth, specifically economic growth and how to address the widening socioeconomic inequalities through enabling social mobility through life-long educational opportunities; the impact of digital technologies and family structures on living and working, whereby there has been an increased prevalence of flexible working, along with moving towards greater gender equality; working with the increased, abundantly available digital information and being able to navigate potentially misleading information in a rapidly changing context, also how best to utilise our collective intelligence; the development of greater ethics, transparency and accountability through education; understanding who we are and where we belong in a global and digital world; how human well-being can be enhanced through societal and environmental processes, specifically in relation to food production to digital communications, and interpersonal relationships; finally, preparing for the unexpected.

In summarising the potential research themes through The Brookings Institution and the OECD, the following areas are advocated:

- Developing great social, economic, cultural and gender equality through educational research.
- The role of life-long learning, while expanding the learning context.
- Preparing for unexpected future disruptions to learning.
- The impact of technology on learning.

Taking the last point about the impact of technology on learning, this was an area originally discussed by Jones (1957). Perhaps technological advances will still be a research trend a hundred years from now?

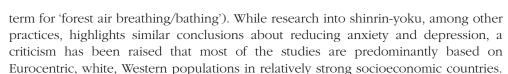
UNDERSTANDING THE IMPORTANCE OF THE CULTURAL CONTEXT

In the media, there appears to be a mindset of 'I'm right, you're wrong', with polarised views on a range of issues. Research appears to also be heading this way, in that 'I'm right, which means you must be wrong', when actually, a variety of perspectives may be correct. This is explored further in Chapter 2.

One such recent example relates to the increased amount of research into the health benefits of being out in forests and parks, such as 'shinrin-yoku' (the Japanese







The criticism from a leading academic centre on such research is that it does not provide an accurate picture, specifically that indigenous populations in South America have different relationships with nature from those in the cited studies of shinrin-yoku. Essentially, the criticism raised by the author is that the benefits of such practices cannot be applied universally. This is known as **generalisability**. Almost every piece of research highlights the sample that the research is conducted with. Indeed, research also highlights that although the findings apply to the sample investigated, further research with other populations is needed, thereby addressing the issue of generalisability.

What this demonstrates is the way in which criticisms of research can unfairly be applied when research specifies the population the research was conducted with. It would be wrong to conduct research on a small population sample – for example, a school – then seek to apply this across all schools in the country, given that schools vary in size, the philosophy, the values, the experience of teachers and other staff, and so forth. While the person generating the critique may be an expert in their field, it is important to be aware of any counter-arguments that can be raised and not to be daunted by someone's credentials, title, who they work for, and so on. Furthermore the 'lens' through which we, as researchers, structure and conduct our research is clouded by a range of perspectives and assumptions.

An example of the cultural context through which research is generated is illustrated by the graffiti subculture. Our perspectives may be somewhat clouded if we had our homes daubed with paint or walk through an underpass and witness a group using spray cans. Consequently, looking into this 'world' from our position would be different from being part of the graffiti group and their subculture.

However, research has been conducted into this predominantly male-dominated 'world' by an outsider, Nancy Macdonald, in her PhD thesis, exploring concepts of youth, masculinity and identity in both London and New York (Macdonald, 2001). Her book provides many insights – for example, the position of a 'tag' (a mark of personal identification) in relation to another artist's tag, where if the tags are close together, it suggests that one wants to be friends with another artist; if placed below, it indicates respect for the other artist. Even though Macdonald remained an 'outsider', her insights were highly respected and accurately portrayed, according to those she was writing about.

While educational research can have a predominantly Euro- or Western-centric lens, there can be stark contrasts and similarities throughout the world. Consequently, being mindful of cultural sensitivities and who you are as a reader of educational research, while considering the research population, the methods employed and the interpretation of results, etc., are all viewed through a specific cultural lens and only provide a limited perspective. Another person may read the research in a different way. Again, this is illustrated through the candle in the large room discussed in the Preface, and,









as a result of the various perspectives in relation to educational research, and indeed, education in general, there is a need to engage in constant discussion in an attempt to discover the truths of education, as discussed in the next chapter.

While this is a brief overview of the way in which the cultural context applies to educational research, Chapter 3 explores this area in far greater depth.

SO WHY IS EDUCATIONAL RESEARCH NEEDED?

The simple answer to this question is to make a change. It may bring about a change to your own or others' working practices, or it may just sit there in your mind until you need it at some point in the future. It may ultimately bring about a change on a far larger scale long after you have passed, or help to progress other research in the future.

Educational research has long been criticised by several authors (e.g., Bennett, 2013; Didau, 2016; Hargreaves, 1996; Tooley and Darby, 1998, among others). Ofsted published a report about the quality of educational research (Tooley and Darby, 1998) which criticised the lack of clear focus, mediocre methodology, and the politically and ideologically driven nature of educational research. However, Tooley's research has been criticised by others in relation to the report's bias, methodology, analysis and validity of the conclusions, along with problems related to Tooley's distinction between empirical and non-empirical research, and also the distinction between quantitative and qualitative empirical research (Clark, 2000; Goldstein, 2022). While the Tooley Report prompted a more rigorous approach to research by evaluating the quality and impact of research conducted within Higher Education Institutions (HEI) through, for example, the Research Assessment Exercise (1986–2008) and the Research Excellence Framework (2008–22), both were aligned to the generation of research income. However, these have been criticised for various reasons – for example, how 'impact' is defined and measured; the relative value of publishing a book versus a journal article, while also excluding those who work outside the academy (that is, are not employed by HEIs); and the number of fractional appointments to HEIs, along with 'REF poaching' or headhunting prolific academics prior to the REF (Jump, 2013). The ethics of research in HEIs will be explored further in Chapter 7.

Returning to a more practical criticism, the way that research can be used uncritically in education is problematic (Bennett, 2013; Didau, 2016). For example, Barak Rosenshine (whose principles of instruction have previously been discussed) lived from 1930 to 2017, with the foundation to his principles established in 1970. However, it is only recently that his work is achieving recognition.

Although we have discussed Rosenshine's resurgence under the heading 'Contemporary issues and trends in educational research', arguably Rosenshine's work is not contemporary given that his principles of instruction evolved from his 1970 publications (e.g., Rosenshine, 1970a, b, c). The problem is that there are some in education who will cite the first source they see – for example, the recent version of







Rosenshine's work from 2012 (Rosenshine, 2012). Despite artwork and effective formatting, which provide the illusion that this is recent research with the earliest reference to Rosenshine's original work in the reference list to 1992 (Rosenshine and Meister, 1992), arguably it does not provide the full perspective.

When lecturers tell you that your references need to be current and relevant, unless a seminal work, it is tempting to just cite 'Rosenshine, 2012'. However, further academic exploration will highlight that Rosenshine's work is over fifty years old. Other research makes no secret of how dated the foundation may be, for example, Maslow's musings of the plateau experience date back to the early 1970s (Krippner, 1972). However, only in the last decade has his concept started to garner research attention, although research into the plateau experience often cites Krippner's work.

There is nothing wrong with using research that appears dated as long as it is analysed and applied through the current context. Yet it is the educational 'blinkedness', where an individual insists that 'this is the way' to do something based on a 2012 article that we have problems with: it does not provide the full perspective. Always read around the area and question, as we will discuss more in Chapters 2 and 5.

As an example, we witnessed an associate head in a secondary school introducing the 2012 Rosenshine article, which they had covered in a recent lecture for their Master's degree at a local university. The associate head told the assembled staff that they would expect to see as many principles as possible in each lesson, and that each curriculum subject was to investigate one of the principles and feedback in a future staff meeting. Nobody challenged whether they could analyse the wider perspective or whether, without adopting the principles, students would still make the same learning gains, and so forth.

A different example is a wonderful way to spend £10.7 million. For a number of years, there has been a teacher recruitment and retention drive, given that while many enter the profession, it is difficult to retain teachers beyond five years. Another issue related to trying to help military service personnel into employment once they decide to leave the armed forces. By mixing both of these areas together within the UK's Department for Education (DfE), a new initiative was launched, 'Troops to teachers' (DfE, 2013: online).

The rationale, or reasons, behind this initiative were discussed by the Education Minister, David Laws, citing: 'Many members of our inspiring armed forces possess the skills and expertise relevant and transferable to the classroom – leadership, discipline, motivation and teamwork. Every child can benefit from having these values instilled in them. We want to capture the ethos and talents of those leaving the armed forces and bring this experience into teaching. We know that our highly skilled servicemen and women can inspire young people and help raise educational attainment' (DfE, 2013: online).

Alas, the ideals proposed by the DfE were not fully realised. According to reports, the programme only recruited 363 trainees, of which only 298 completed (Camden, 2019), while others report the figure at 267 trainees, with only 202 completing









(Allen-Kinross, 2018). Based on the 298 completers, their training would have cost £36.6k per person, or, based on the 202 completers, their training would have cost £53.9k per person. This is a completion rate of 76 per cent to 82 per cent, compared to the average completion rate of 91 per cent from the initial teacher training profile for the academic year 2019/20 (unfortunately recent data is not yet available) (Gov.UK, 2021: online). What is not known is the amount of time or money Initial Teacher Training providers invested in providing staffing to support this scheme.

While the United States' version, 'T3', was cancelled in 2020, it reappeared in 2021 (Dantes, 2022; US Army, 2021). Within the UK, a £40k training bursary has been reinstated for potential recruits (Swain, 2021). We shall see how successful this approach is in future years.

What is not known is the extent to which the Department for Education conducted research on the number of potential recruits who may have been interested. However, it may have saved money in the longer term to have conducted an initial survey or provided potential troops with school experience prior to engaging with the course.

With the two examples, Rosenshine's Principles and Troops to Teachers, there are three important points for maintaining a critical perspective in relation to educational research:

- Read widely around an area opposed to just citing the most recent research.
- 2. Old theories can be good theories.
- 3. Proper research can save both time and money.

A further justification for engaging with research, irrespective of whether it is widely disseminated or not, is that it can lead to professional change. Within education, the concepts of action learning and experiential learning have become prevalent. Action learning relates to learning through problem solving (Revans, 1980, 1998), while experiential learning relates to learning through doing (Kolb, 1984; Kolb and Fry, 1975). Both forms of learning have been used synonymously, especially that both elicit or prompt meaning making through their respective process, despite conceptual differences between the concepts and how they operate (Yeo and Marquardt, 2015). Furthermore, both the concepts of action learning and experiential learning relate to the many different models of professional reflection (e.g., Pollard, 2014; Schön, 1983, 1987). In returning to action learning, the process is closely aligned to the **literature review**. Action learning occurs when a complex problem exists, which involves an interplay of enquiry and reflection on what has been discovered, leading to action, with this action provoking a possible solution (Revans, 1998).

In returning to the opening sentence of this section, educational research serves a twofold purpose through developing your understanding of an area, while also helping others to understand. With this in mind, the interplay of educational research and education in general is inseparable for the future of the profession. When we first started out on this book, a person close to us jokingly referred to it as 'the most boring







book in the world'. Our job is to challenge this perspective by advocating that 'research methods books are probably one of the most important types of book in the world' because they can help to change the world for which they are written by advocating research which, in some way, can leave an imprint on the researcher and the area of research. This is explored below in the next section.

THE TRANSFORMATIVE EFFECT OF EDUCATIONAL RESEARCH

If you cast your mind back to 2019, it was a year like no other. It was probably the last 'normal' year that the world experienced, prior to the COVID-19 pandemic, the war in Ukraine, the impact of both on the global economy, among many other changes. No year is just 'normal'. However, since 2019, things have seemed far less certain than in the previous couple of decades. Trying to work out how education can address such challenges and potential future challenges is critical to our profession and area of interest. Education transforms. Yet, do we really know what to do for the best in the foreseeable future?

An aspect that is important to remember throughout this book is that 'research transforms the researcher, who in turn transforms society'. Although we will revisit this theme in greater depth in Chapter 15, the transformative effect of engaging with research has been discussed by others, notably Anderson and Braud (2011). By this, the interplay of research, practical application, and personal growth occurs through educational research, whereby, as your perceptions and understanding of education transform, you transform as a professional, in turn influencing and affecting others such as colleagues, students or wider society. Consequently, you are fundamental to the future of education and will experience many changes throughout your career, while also leading change. However, central to this is a full appreciation of high-quality research in supporting your perspective or in challenging other perspectives.

LESSONS LEARNT THE HARD WAY

It is never too soon to start thinking about any research you want to conduct. The only limitation is what you think is possible. Similarly, do not be swayed by what some people say is possible and what others say is impossible. You may need to adapt your work, but that should not stop you researching what you are interested in.

Through this chapter and throughout the book, we will provide examples from research concerning lessons learnt the hard way. These are provided so that you can avoid the same issues or as aspects to consider as you engage with your research. All names have been changed to protect identities.









LESSON 1: YOUR SUPERVISOR MAY NOT BE ALIGNED TO YOUR INTERESTS

Rebecca spent four years trying to find a focus for her research. Different supervisors were trying to direct her into their fields, when actually Rebecca wanted to explore a mixture of fields and research traditions to develop a wider perspective on the area. It was only when Rebecca took ownership of what she wanted to do that she actually made progress and developed a project that she was delighted to drive forwards.

LESSON 2: DON'T BE SWAYED BY WHAT APPEARS DIFFICULT

For Elizabeth's research, she wanted to explore perceptions about how anxious people were in relation to death. Having narrowed down a range of measures, she needed to justify to the ethics coordinator how to protect research participants who may have recently been bereaved.

Elizabeth developed a paper-based questionnaire with the measure and a detachable set of puzzles like Sudoku, word searches, dot-to-dot puzzles, and so on, along with support helplines should the research trigger any unwarranted aspects. This meant that opposed to a respondent walking out of the room if they did not want to complete the questionnaire (although they could if they chose to), or noticeably sit at a desk without looking as if they were completing the questionnaire, they could attempt the puzzles instead. If they had walked out or just sat there, it would be likely that well-meaning individuals in the room may have asked what the matter was. Additionally, all respondents had a puzzle sheet with support helplines that they could take with them should they need this at a later stage.

LESSON 3: DON'T BE PUT OFF BY PERCEIVED 'EXPERTS'

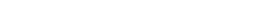
For a PhD to be accepted as a viable project, there are various hurdles to get over. At one stage you are invited to defend your proposal to a board of academics, all 'experts' in their fields. When Sophie was proposing her research, a professor of sociology asked why the feminist perspective was not a core focus for the thesis. A lot of large words were being used, none of which Sophie had heard of before. She felt as if her proposed project had been ripped to shreds before she had begun.

When she discussed this meeting with her supervisor, he responded, 'Ahh, welcome to academia. It is harder to propose an original idea than to completely destroy someone else's', and with that, chuckled to himself. This lesson stayed with Sophie throughout her research and her subsequent career, and has been advice that has seen her progress through academia, similarly sharing such wisdom with others when they have experienced setbacks or prior to engaging with similar meetings.









CORE POINTS

- Research is surrounded by a range of myth and mystery. These myths can cause research to appear unfathomable. Opposed to being daunted by these myths, the approach to this book is to embrace them and to turn them into an allegorical quest – your quest, where you are the lead character.
- The quest allegory is a monomyth proposed by Joseph Campbell. The monomyth details a range of stages in the research process.
- You will have your own perspectives on educational research. Education is wider than just schooling and covers the knowledge, skills, values, beliefs and habits in formal, non-formal and informal contexts.
- Research perspectives can be viewed on a continuum of applied to academic research and an intersecting continuum of solution-focused to theory-focused research.
- There are a range of contemporary issues and trends in educational research that
 can be summarised as developing great social, economic, cultural and gender
 equality; the role of life-long learning, while expanding the learning context; preparing for unexpected future disruptions to learning; and the impact of technology
 on learning.

CHECKLIST FOR YOUR UNDERSTANDING

Table 1.1 Chapter 1 checklist

understand	Tick if you agree	What I will do next
understand	lick if you agree	wnat i wiii do next

That there is a variety of myths about educational research.

The core stages of the monomyth.

That there is a range of competing perspectives in educational research.

That research perspectives can be located on different continua and these determine the type of research to conduct.

That research takes place in a specific social and cultural context.

That no single piece of research will conclusively demonstrate or prove a point, but that it will help to illuminate an issue.





2/28/2023 5:01:55 PM



FURTHER READING

Hoveid, M.H., Ciolan, L., Paseka, A. and da Silva, S.M. (2019) *Doing Educational Research: Overcoming Challenges in Practice*. London: Sage Publications.

This book presents challenges and their resolutions in relation to a range of research methodologies conducted throughout different educational contexts across Europe. Specifically, the book highlights and challenges culturally dominant research perspectives in education.

Nutbrown, C. (2018) Early Childhood Educational Research: International Perspectives. London: Sage Publications.

You cannot go wrong with one of Cathy Nutbrown's books. She is widely respected in education and specifically, this book provides issues for research design, types and trends in methodological approaches, ethics, and much more.

Opie, C. and Brown, D. (2019) Getting Started in Educational Research: Design, Data Production and Analysis. London: Sage Publications.

This book provides a range of checklists, exercises and case studies in which to approach a range of research methodologies.

Suter, W.N. (2011) Introduction to Educational Research: A Critical Thinking Approach (2nd edn). Thousand Oaks, CA: Sage Publications.

Suter's book encourages the reader to think clearly and critically about the research process, and illustrates how easily research can be misinterpreted by providing the reader with relevant reading and thinking skills.







PERSPECTIVES AND PHILOSOPHY

CONTENTS

Chapter overview	27
Introduction	27
The quest allegory	29
Philosophy as truth	30
Perspectives and philosophy within education	32
Perspectives and philosophy within research (paradigms)	36
The positivist paradigm	37
The interpretivist paradigm	38
The eclectic paradigm (or pragmatic paradigm or reconciliationist paradigm)	40
Your educational research philosophy	40
A return to the candle analogy	41
Contemporary issues and trends in educational research	41
Lessons learnt the hard way	42
Core points	43
Checklist for your understanding	43
Further reading	44







CHAPTER OVERVIEW

Philosophy is central to all educational research. What you think about education, how you think education should evolve, what you decide to research, the ways in which you conduct your research, are all based upon your philosophy.

This chapter will explore what philosophy is, specifically in an attempt to find the meaning of 'truth' through a range of perspectives. Core themes within philosophy are introduced with an explanation of how these relate to educational research. In turn, your philosophy will shape the decisions you make in relation to your research as you read each subsequent chapter.

INTRODUCTION

'Philosophy? I thought this was a book about educational research!'

One of the central themes of philosophy is an attempt to discover the truth. As the chapter progresses, the link between philosophy and research will be made more explicit. However, for now let us define philosophy as a way of looking at or thinking about something. Furthermore, philosophy is concerned with a range of perspectives or ways of seeing things in an attempt to find the truth. Take, for example, Figure 2.1. What do you think it represents?

Figure 2.1 What is it?

You may have just answered that Figure 2.1 is a dot or you may have allowed your imagination to leap into unknown bounds as something more abstract. Actually, it is a zoomed-in image of Figure 2.2. Only through changing perspective can the full picture be seen.

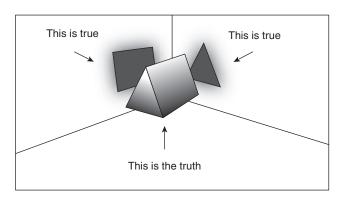


Figure 2.2 Only by taking a step back and appreciating different perspectives do we see the truth







Figure 2.2 is a pictorial representation of how perspectives can be 'true' depending on the vantage point. However, it is only when wider perspectives are analysed that the 'truth' can be seen. But with this comes a problem. Please refer back to Figure 2.1: if zoomed out too far, the image will be indeterminable and will appear as a dot. Similarly, if you zoom in fully, only one part of the picture can be seen and again this will just appear as a dot.

REFLECTION

From both Figure 2.1 and Figure 2.2, how would you relate this to 'truth'?

Can you therefore think of where such polarised perspectives have occurred in the mainstream media?

Can you think of where such polarised perspectives have occurred in education?

In exploring perspective further, take, for example, a classroom where a teacher is engaging a class of students, while a mentor is observing how the lesson is progressing. Consequently, you have three different perspectives: the mentor, the teacher and their students. Who has the most accurate perspective on how the lesson is progressing? Is it the teacher as they have a 'feel' for their class, the content already covered, and those who seem to be working well and those who require additional support? Is it the mentor who is perhaps clouded by their experience on what makes a good lesson or has observed numerous lessons and has established a clear benchmark on what they want to see? Or is it the students, whether they are engaged with their lesson, and can understand and apply the concepts?

It is only through a detailed analysis of all three perspectives (the teacher, the mentor and each individual student) that a fair assessment can be made as to the success of the lesson. Yet here again, we have a problem: how do you define 'success'? Is it a checklist of competencies based on Rosenshine's principles that the mentor may be using? Is it the ICALT-3 observation schedule (the International Comparative Analysis of Learning and Teaching, a 35-item measure used to assess teachers in over 19 countries; (André et al., 2020; Maulana et al., 2020). Is it based on what they 'think' a good lesson is or the extent to which they engage the teacher to reflect on their own lesson? Similar questions can be proposed in relation to the teacher and students.

Consequently, when there are two or more options to consider, determining the best way to investigate a situation results in needing to think, to analyse and to discuss. It is this process that is central to philosophy.







THE QUEST ALLEGORY

As discussed in the introduction to this chapter, philosophy may be seen as the quest for truth. This directly links to the quest allegory adopted in the book. After all, it could be argued that all quests are in some way a quest for truth. From Neo uncovering the truth behind *The Matrix* to Tang Sanzang (or Tripitaka) discovering the truth from collecting scriptures in *Journey to the West*, the truth is an elusive concept. By elusive, again please review the candle in the large darkened room from the Preface. The world continues to evolve, as does our understanding of it, along with the understanding of ourselves.

Within this chapter, the stage of the quest relates to what Campbell refers to as 'the call to adventure', characterised by being requested to engage with a quest, or an accident or misjudgement, or an aspect that lures the hero away from the frequented paths of others to obtain or achieve something that may not always at first be apparent, like Alice's observation of the white rabbit (Campbell, 1949/2008). In other words, something disrupts the character's perspective. This relates to the research process, where one's attention about the everyday world of education becomes focused on a specific element, an element overlooked by others.

REFLECTION

Consider what has dramatically challenged your perspective in the past.

Perhaps it was a strange experience that you could not comprehend, something seen out of the corner of the eye, a feeling, a coincidence, etc.

Perhaps it was the misheard lyric from a song that you have been singing along to for years, unaware of the correct lyrics.

Perhaps it was something you have previously studied but have gained a fresh insight into.

How have any of these challenged you? How have any of these changed you?

This call to adventure can sometimes be ignored. In Campbell's monomyth, the 'refusal of the call' can occur for many reasons – for example, a sense of inadequacy, insecurity, fear, or for any other reason, resulting in a sense of lived meaningless to the character (Campbell, 1949/2008: 49). Consider the choice that Neo has in *The Matrix* of taking the red or blue pill, where the red pill will dramatically change Neo's worldview, or the blue pill that allows Neo to stay within the prison confines of ignorance. Indeed, consider how the sense of inadequacy, insecurity, fear, and so forth can inhibit the research process.







HANDY HINT 2: YOUR TRUE FOCUS IS ONE THAT TRULY RESONATES WITH YOU

While there are many reasons to engage with educational research (as discussed in Chapter 1), perhaps the greatest driver is one that naturally comes from within, the 'want' to actually engage with something that in some way causes trepidation. The task is to turn that sense of trepidation into a sense of excitement.

Try to identify several areas that you could research and, from this, consider which of the areas has the greatest trepidation. Quite possibly, it is this area that will lead to some of the greatest research you will ever engage with.

PHILOSOPHY AS TRUTH

A core theme within philosophy relates to what truths are, along with what, if anything, makes them true (Glanzberg, 2021). Yet hidden behind such simple statements are encyclopaedic depths, if not a library full or texts, exploring what the truth is. Yet what is 'truth'?

The concept of 'truth' has its roots in the Greek philosophers – for example, Socrates' approach was to enable others to seek their own truth through his Socratic method of continually asking questions. As Socrates (470-399 BC) stated: 'I cannot teach anybody anything - I can only make them think' (Stanton, 2015). Aristotle (384-22 BC) progressed the search for truth further, discussing how the quest to establish the universal truth (sophia) required engaging with theory (theoria). Theoria is then rationally examined – for example, through discussion (phronesis) with others. This leads to the promotion of knowledge (poiesis) which is used to inform ethical action (praxis) (Blackson, 2011). Consequently, praxis is what should be strived for within education and, indeed, educational research. It is this informed ethical action, based on theory, in an attempt to move closer to the universal truth, that is central to educational research. Through reading, researching, discussing, then trying things out based on the best information available, the concept of praxis is realised in the education profession. It is through both Socrates' and Aristotle's philosophical approaches that educational research has developed, and a reason why praxis should be one of the highest ideals central to the education profession. After all, can education be called a profession without such informed, ethical action?







REFLECTION

Spend a few moments considering these three questions in relation to the 'truth':

What do you hold to be an absolute truth?

What do you hold to be generally true?

What do you consider to be true depending on how you look at it?

Can you provide your reasons for your responses for each of the above questions?

There are a range of philosophical perspectives or theories to explore the concept of truth. The first theory of truth is correspondence theory. This theory is characterised by the fact that, whatever we claim to be true relates to, or corresponds to, the facts. A second theory of truth is coherence theory. Within this theory, what is held as the truth occurs if propositions are logical and coherent in nature. Here, the emphasis of the propositions are that statements are generally 'accepted' or long established and fit into a wider worldview of other beliefs. Such accepted, long-established statements are known as axioms. A further theory is the consensus theory of truth, where the truth is what everyone believes to be true. Finally, the pragmatic theory of truth is based upon 'what works' or what is useful (Cottingham, 2021; Grayling, 2020; Kenny, 2012).

To summarise, correspondence is whether we have observed something working, coherence is where an argument has been made to support the claim, consensus is where others tend to agree, while pragmatic is whether it is useful to you in some way. The various philosophical perspectives can be demonstrated through the following example.

My cat, Merlot, likes a certain brand of cat food. I have read a review about an improved formula from the same company. From the correspondence perspective, my cat likes the brand of food; from the coherence perspective, the arguments made about the improved nutritional balance seem coherent; in relation to consensus, several cat nutritional experts appear to support the improved formula; finally, my cat likes the new improved formula.

With educational research, these claims to truth can similarly be used practically, especially when reading through journal articles and research reports. However, they can also help when framing your own research.







HANDY HINT 3: USE PHILOSOPHY TO HELP ANALYSE LITERATURE

Philosophical perspectives can be used when analysing literature - for example:

Correspondence: Do the conclusions from the research correspond to my personal experience or are there examples that do not correspond?

Coherence: Is a logically coherent argument made from what has been claimed through to the conclusion?

Consensus: Are there other sources I have read that provide similar results and conclusions?

Pragmatic: Do I believe what has been presented? Can I see it working in my context? Are there possible alternative explanations? Are there other ways I can see if what has been claimed is true?

PERSPECTIVES AND PHILOSOPHY WITHIN EDUCATION

While we have looked at philosophy as an attempt to discover the truth, a greater discussion of philosophy is required due to the place it has within educational research.

So, what is philosophy? Philosophy derives from the Greek word *philosophia: philo* meaning 'love of' and *sophia* meaning 'wisdom'; consequently, philosophy can be defined as the love of wisdom (Audi, 2006; Honderich, 2005).

While there are many definitions of philosophy, Warburton (2012: 1) summarises the answer as 'What is philosophy? This is a notoriously difficult question', while the authoritative 1,000-page or more book, *The Oxford Companion to Philosophy*, defines philosophy as 'thinking about thinking' (Honderich, 2005: 702). Nagel (1987: 5) suggests that the aim of philosophy is 'to question and understand', while both Blackburn (1999) and Bailey (2010) discuss how philosophy is useless unless the person applies it to their life. Perhaps a more rounded perspective we can offer is that **philosophy** is a collective attempt by a group of individuals to make sense of themselves, their purpose and their environment, through experience and reasoning.

From this array of definitions, philosophy relates to applied thinking in an attempt to understand. This is important for the subject of education in order to continually challenge any assumptions, concepts or ideas, theories, and so forth, as without such questioning, we could be left with ineffective, expensive systems and processes







(Suissa, 2006). It is this questioning which ultimately links to five core areas central to all research. These areas are defined by words that appear inaccessible at first, given that they are seldom used in everyday language: **metaphysics**, **ontology**, **epistemology**, **axiology** and **logic**. As you are likely to have heard of logic, we will start with exploring that word first.

The Greek word *logos* means 'word' and 'reason', leading to the common word, logic. Logic is the use of an argument to make sense of an idea or concept. For example, if you know the length and width of a garden, with logical reasoning you can work out the area by multiplying the length (I) by the width (w) to give an area (a). Any assignment you have written in the past will have a main argument, or **thesis**, which has been developed through using a range of smaller arguments and evidence to support your thesis.

There are two forms of an argument central to logic – **deductive reasoning** and **inductive reasoning**. Deductive reasoning is similar to correspondence in the previous section, whereby a preposition or statement is made and evidence is provided to support the statement. An example of this is: 'All dogs are animals. Poppy is a dog. Therefore, Poppy is an animal.'

The other form of logical argument is inductive reasoning, where an argument is based starting from a question or an observation, through which the related evidence and issues are examined to develop a theory. An example of this is: 'Niamh is rich and drives a big car. Jasper is rich and drives a big car. Therefore, rich people probably drive big cars.'

The word *meta* is the Greek word for 'beyond' or 'after' and is the root word for 'metaphysics'. Metaphysics is based on questioning the general nature of reality or existence – for example, asking questions like 'What is reality?' or 'Why are we here?' (Honderich, 2005; Nicholson, 2016). While these questions may appear quite abstract, metaphysics relates to education through asking questions such as 'How many people share a belief about what education should be?' or 'What do we consider to be the valuable skills and knowledge within a curriculum?' or 'What do we think is the best way for teaching?'

A related word to metaphysics is 'ontology'. Ontology derives from two Greek words, with *onto* meaning 'being' and *logia* meaning 'study' or 'logical discourse/discussion'. While metaphysics is concerned with the general nature of reality, ontology is concerned with how we study and classify what exists in the world and also how we can acquire this knowledge.

There are two ways in which the nature of this reality can be viewed, either objectively or subjectively (Bryman, 2016; Clark et al., 2021). The objective reality (also known as a **realist ontology**) is external and independent of the observer and, through this, there is one single, universal reality that can be experienced and analysed which is external and independent of humans. The subjective reality (also known as the **relativist ontology**) is where there is no singular reality; instead, reality is devised by human understanding and is relative to the time, place and context.







From a relativist ontological perspective, we perceive through our senses and from this, they are turned into our concept of reality once the brain perceives and processes these. Reality is subsequently discussed with others in an attempt to explain what is happening.

From a relativist ontological perspective, we perceive through our senses and from this, sensory input are perceived and processed by the brain, which in turn provides us with our concept of reality. However, the philosopher Immanuel Kant discussed that the true nature of anything can never be accurately perceived through our senses alone. Kant referred to the true nature of any 'thing' as the ding an sich, or 'thing-in-itself', the existence of this 'thing' being independent of the observer and which can never be fully known. Once this 'thing' is focused on, it becomes a noumena, leading to a mental representation or 'phenomena' (or vorstelling). Of course, from a quantum physics perspective, the Heisenberg principle states that reality does not exist until it is observed, based on the concept of superposition where an atom can be in a variety of states until the collapse into one state upon observation. While this works at the atomic level, Erwin Schrödinger's thought experiment demonstrates that when quantum theory is applied to larger physical objects, such superposition (where a cat could be concurrently alive and dead in a steel box) is somewhat problematic. To summarise this, in essence what do we really know? While ontology is a subfield of metaphysics, often you will either see that one or the other is discussed in research literature. However, we would argue that you cannot discuss one without the other.

If metaphysics and ontology are concerned with what we believe to be true and whether we take an objective or subjective stance, epistemology is based on establishing 'How do we know it is true?', or 'Where does the information come from to make the claim to the truth?' In Greek, the word episteme means 'to know'. Epistemology therefore seeks to understand how beliefs are justified – for example, by asking 'How do I know what I teach is the truth?', or 'How do I know this is the best approach to teach this lesson?' Such questions relate to the integrity and confidence of how we approach education (Nicholson, 2016).

Axiology derives from the Greek word axia, which means the 'value' or 'worth' of something. In relation to research, axiology asks questions about the right approach to investigate a phenomenon. It also relates to what is ethical and unethical, or what is the right and wrong way to do something. In relation to education, this is associated to the considered judgement on a course of action and whether the benefits of an approach outweigh the potential risks. An example of this would be to ensure that you have carefully considered the advantages and limitations of teaching a lesson one way and not the other way, based on your **metaphysical** and epistemological understanding.

Axiology leads to the development of methodology, which questions how knowledge can be acquired, or the strategy and justification for using different techniques to collect evidence, which is transformed into data once the evidence has been manipulated for the research purposes. There are two different types of methodology: quantitative, which relates to anything that can be quantified numerically, and qual**itative**, which relates to the use of words to describe thoughts, feelings, behaviours,







concepts, etc. Perhaps using both quantitative and qualitative approaches are warranted, which leads to a **mixed** approach.

Once data are generated, the subsequent stages of research consist of analysis, then applying logic to develop a coherent argument, or thesis, through careful reasoning. To summarise these core concepts, please refer to the box below.

SUMMARY

Metaphysics: Asking the core questions of education – for example, questions relating to the what, why, where, when, who and how of education. A quest for 'absolute reality'.

Ontology: Asking whether education can be studied from a detached position, or whether it can only be studied in collaboration with others. A quest for understanding whether to work alone or to work with others.

Epistemology: Asking how do I assess the degree of truth behind the what, why, where, when, who, how of education? A quest for understanding reality through our experience.

Axiology: Asking what is the right approach for investigating a phenomenon, also the ethical way for approaching education in relation to metaphysics and epistemology? A quest for doing the right thing at the right time.

Methodology: Asking, 'What is the most suitable approach for obtaining knowledge, either through quantitative, qualitative or mixed approaches?'. A quest for using the right strategy and the right methods.

Logic: Asking how do I argue my perspective within education based on my previous answers to the metaphysical, epistemological, and axiological questions? A quest for the truth through uniting our experience and reasoning.

REFLECTION

Consider how educational research can relate to each of the areas below:

1. Metaphysics: What do you consider to be the 'core questions' about education? Are there any absolute truths within education that you feel nobody could disagree with?

(Continued)







- 2. **Ontology:** Do you feel that your answer to 1) has one 'true' answer, or that the answer can only be discovered through discussion with others?
- 3. **Epistemology:** In relation to your answer to 1) and 2), how could you investigate this?
- 4. **Axiology:** What would be the right course of action to investigate this area, along with the ethical implications, both the benefits and the risks for conducting your investigation?
- 5. **Methodology:** Which approach to collecting evidence, and in turn transforming this into data appears more appropriate? Using numbers, using words, or a mixture of both?
- 6. **Logic:** Consider what you may find out from the research. What other proof would you seek to support your research? Can you identify areas from other sources of literature to help structure your argument? Are there any counter arguments?

The interplay of these terms helps to determine specific research **paradigms**, from which specific **research designs** develop (Crotty, 1998). This will be discussed in greater detail in Chapter 6. However, what is a paradigm? This is explored in the next section.

PERSPECTIVES AND PHILOSOPHY WITHIN RESEARCH (PARADIGMS)

While we have used the word 'perspective' so far as a way of looking at things differently, let us introduce a new word, which, although it may appear similar, is slightly different in nature. This is the word 'paradigm'. A paradigm is a set of ideas or concepts related to an area (Johannesson and Perjons, 2014; Rehman and Alharthi, 2016). Paradigms are commonly called a 'worldview', a collective agreement on what is reality. People can have different paradigms – for example, optimistic or pessimistic, although when applied to educational research, paradigms relate to theories, methods, approaches, etc.

The four philosophical concepts we have discussed so far of metaphysics, epistemology, axiology and logic influence educational research paradigms – specifically, positivism, interpretivism and eclecticism.







THE POSITIVIST PARADIGM

Positivism goes by many different terms within educational research as it is also known as empiricism/the empiricist approach or objectivism/the objectivist approach (Cohen et al., 2017).

The **positivist paradigm** adheres to the principle that if you want to know something, it should be observable and measurable. The observer adopts a detached, neutral perspective as they investigate the phenomenon. Take, for example, a scientist in a laboratory or a teacher insisting on exam conditions so that students can be measured and assessed as to their performance on a test.

Within the positivist paradigm, the core assumption is that the **independent variables** can be controlled and measurements taken from the **dependent variable**. An extreme positivist paradigm would argue that any observable phenomenon can be understood and logically explained only if enough is known about the multitude of complexities within a situation. For example, one day we will fully understand the quantum world or the development of life on earth, only when sufficient information is gathered through successful testing of theories through experiments.

The positivist paradigm is, however, dependent on a series of assumptions: **order**, **external reality**, **reliability**, **parsimony** and generalisability (Coe et al., 2021; Cohen et al., 2017).

Order: Positivists maintain that all phenomena are in some way ordered and that we can establish the link between cause and events. This in turn allows for predictions to be made – for example, a weather forecast, or a teacher predicting the outcome of an intervention to increase student performance.

External reality: Positivists advocate that everyone shares the same metaphysical perspective or, in other words, they maintain that everyone shares the same reality. To this extent, positivists assume that knowledge is both shareable and verifiable. By this, two observers of a student engaged in group work would reach the same conclusions through discussion with one another.

Reliability: Positivists emphasise that there is accuracy in both the human intellect and perception, and that through careful, repeated measures, the same result will be observed assuming the variables remain the same.

Parsimony: Positivists strive for the simplest possible explanation for a phenomenon. This relates to Ockham's razor, where the simplest explanation is probably the correct explanation (which we will discuss later in this book – see Chapter 14).

Generalisability: If the results of an **experiment** are only relevant to that one case, at that one time, in that one place, then the results are not generalisable. That means that they cannot be applied to similar situations. For example, if a







student has a learning intervention and improves their performance in an area like long division, the same intervention should have the same positive result with another student.

Ultimately, the positivist paradigm seeks to use logical methods and apply these scientifically to all aspects of education, so that the benefits can be shared equally and objectively. It seeks to find the what, the where, the when, the who and the how many, yet it lacks being able to answer the why.

THE INTERPRETIVIST PARADIGM

In opposition to the positivist paradigm, the **interpretivist paradigm** considers that it is impossible for a person to stand to one side and merely be an observer, specifically within educational research. Our experiences and perspectives are influenced through the sociocultural context (a combination of social and cultural factors) in which we live. While facts may be established, they are still merely human interpretations of what people agree to be the nature of reality and this could change with time or could have a different understanding within a different **culture** (Bryman, 2016).

An example of changing perspectives through an interpretivist paradigm relates to the understanding of the solar system. The geocentric model of the solar system places the planet Earth at the centre, with the Sun, Moon and other planets orbiting, while the heliocentric model places the Sun at the centre, with the other planets orbiting. The geocentric model dates back to Claudius Ptolemy (100–70) and remained for over a millennium until Abu Sa'id al-Sijzi (945–1020) suggested that the Earth rotated on its axis. Other Muslim scholars and astronomers, for example, Ibn al-Shatir (1304–75) proposed the heliocentric model of the solar system (where the Earth and other planets orbit the Sun) over a hundred years before Copernicus (1473–1543). However, in returning to Greek history, Aristarchus of Samos (310–230 BC) initially proposed that the Earth orbits the Sun. Yet, it was only in 1615 when Galileo Galilei (1504–1642) openly challenged the geocentric model did the paradigm start to change, and by the mid-eighteenth century the heliocentric model started to dominate (Ge, 2022; Shen and Confrey, 2010).

The interpretivist paradigm is influenced through individual perspectives and it is the role of the researcher to find a way in which the perspectives resonate. However, within the interpretivist paradigm, research is fundamentally driven by the researcher who is part of the research process and who in turn may affect the research. Consequently, the role of the observer needs consideration.

The 'observer effect' describes how the aspect being observed is disturbed by the act of observation (Dirac, 1967). An example of this is measuring tyre pressures (before the age of automated sensors in new cars). To measure the pressure, some air would need to be let out, which in turn lowers the pressure. Within quantum mechanics, the







Heisenberg effect, or the uncertainty principle, relates to measuring the position and momentum of a particle: when one is measured more precisely, the measurement of the other effect is less (Furuta, 2012). While these examples relate to the positivist paradigm through the errors that can arise through careful measurement, the observer effect similarly applies to the interpretivist paradigm. For example, consider how the presence of an outside observer can affect the dynamics of the classroom.

As with the positivist paradigm, the interpretivist paradigm is similarly dependent on a series of assumptions: order, external reality, reliability, parsimony and generalisability.

Order: Interpretivists purport that our understanding of the world is based on human perception and that the world changes as time passes due to our attitudes changing. In this way, interpretivists reconcile that they will never have a definitive understanding of the world. To this extent, the individual cannot be separated from society and prevalent views at the time. Arguably, relating educational research to the candle in a large dark room, as we did in the Preface, is a classic example of this interpretivist approach to order.

External reality: Interpretivists stress that our perception of the world is unique to the individual, that it is a series of sensory stimuli that we aim to interpret, process and understand. Through this, whatever we perceive is based upon our reality at that specific time, which is influenced by our thoughts and feelings. For example, when walking, we may seldom take account of a daisy as we pass by, yet another time when we pass a different daisy, we may take a moment to stop as it captures our full attention. In this way, interpretivists maintain that we look upon the world from within it, also from within ourselves.

Reliability: Interpretivists emphasise that due to our human nature, relying on our senses, our memory or our experiences cannot be taken as a definitive account of a phenomenon. By this, there is always a personal interpretation of our perception and what we observe on one day may differ on another day. For example, we may have listened to the same piece of music a hundred times, yet on the next listen, we hear how unique the bass guitar is.

Parsimony: According to the interpretivist paradigm, life and society cannot simply be explained in a tidy formula but requires a richness to fully capture a phenomenon.

Generalisability: Interpretivists tend not to generalise by sorting or categorising individuals, events or phenomena into specific classifications due to the uniqueness of each person, event or phenomenon.

The interpretivist paradigm seeks to understand education through appreciating the rich diversity of every individual, context, event or phenomenon, recognising that all





will change in time and that we are limited by our interpretation and understanding due to the evolving nature of the world. The focus of the interpretivist paradigm is to answer the why.

THE ECLECTIC PARADIGM (OR PRAGMATIC PARADIGM, OR RECONCILIATIONIST PARADIGM)

While positivism and interpretivism are polar opposites, the eclectic paradigm (also known as the reconciliationist paradigm) finds a middle way, drawing upon the principle of using whatever works. Using 'what works' also gives rise to the synonym of the **pragmatic paradigm**. This middle way could be weighted more to one side or the other, yet it appreciates that both of the other paradigms have something to offer (Coe et al., 2021).

The 'paradigm wars' was a phrase adopted by Gage (1989) to describe the prevalence of the two opposing paradigms. Specifically, this related to conflicts between educational researchers in the 1980s and early 1990s, using philosophical concepts as the weapons (Hammersley, 1992). Yet through reconciliation, both could learn from and support one another - hence another name for the eclectic paradigm is the reconciliationist paradigm. Indeed, synonyms are frequent within educational research - for example, how the eclectic, pragmatic and reconciliationist paradigm are all, in essence, the same.

The eclectic paradigm has in turn given rise to what is called 'mixed methodological research', although rather confusingly, researchers also call this 'mixed methods' research. Please do not worry about this for now, or at least until we reach Chapter 11.

YOUR EDUCATIONAL RESEARCH PHILOSOPHY

As you have progressed through this chapter, it is likely that you have considered how philosophy applies to you and your understanding of education. It may have also prompted your thoughts about how you would investigate a particular issue. We would encourage you not to settle on one specific paradigm, but instead to consider how the different paradigms could be used to investigate the area. For example, suppose that you have decided to conduct research into the use of play areas in your local community. Through a positivist paradigm, you could collect official statistics on play area use, the facilities, the demographic of the users, records of vandalism, the time spent on any specific apparatus, and so on. You could then compare this to data from the specific play areas in your community. From an interpretivist paradigm, research could include asking adults why they have brought their child to the area, what they think is good about the area, whether there could be any improvements, what the play area means to them, etc. Alternatively, you could adopt an eclectic paradigm and combine elements of the positivist and interpretivist paradigm.







A RETURN TO THE CANDLE ANALOGY

In the Preface, the analogy of the candle in the large, continually redecorated room was used to highlight how the world of education is ever changing. In some ways, the analogy relates to the Greek philosopher Heraclitus of Ephesus (535–475 BC) and his 'theory of flux', that everything changes. Specifically, this is illustrated through Heraclitus' words in that 'It is impossible to go into the same river twice' (Plutarch, 2022, XVIII), or more commonly written as 'You cannot step in the same river twice' (Heraclitus and Brooks, 2003). This is such a simple statement but one with a profound array of interpretations.

One interpretation is that the river is constantly flowing, therefore new water droplets are continually replacing those further downstream. Heraclitus could also be stating that as the river changes, so do you, that the nature of reality is about continual change and being able to flow with it is an aphorism for life. A further interpretation is that perhaps Heraclitus is implying that words cannot do justice to explore reality. In contrast to this last interpretation of Heraclitus, his contemporary, Parmenides (c. 515 BC–unknown) argued that change is an illusion, that while appearances change, the underlying 'truth' remains the same. In other words, everything is part of a universal, unchanging 'whole' (however you wish to define this 'whole', such as a single, unchanging reality, a universal force, and so forth). While philosophers have discussed this concept, from Plato's 'theory of forms' to Wittgenstein suggesting that you can step into the same river twice, a modern portrayal is the quote 'there is no spoon' from the film *The Matrix*, whereby you can alter your reality by changing your perception: the spoon or the concept of what a spoon is only exists in Neo's mind. If he alters his perception, the reality of the spoon similarly alters.

Ultimately, does education actually change or do you? Do both change or do neither?

CONTEMPORARY ISSUES AND TRENDS IN EDUCATIONAL RESEARCH

Wei and Enslin (2021) have discussed the comparative philosophy within education. 'Comparative' is the dialogue between and exploration of a range of contexts, such as the educational, cultural and philosophical traditions. New terms – for example, transcultural and intercultural approaches – have similarly been introduced.

The problem that Wei and Enslin highlight is that a researcher in the UK cannot just read about the educational philosophy in China and then discuss the similarities and differences, with their perspective influenced through their postcolonial world, which can lead to 'intercultural injustice' (Wei and Enslin, 2021: 2).

The authors provide four features which they argue will allow for a more accurate account of comparative philosophy: ethnography (the detailed, systematic study of







people and cultures); translation (the engagement across different cultural and linguistic backgrounds to promote a mutual transformation, through understanding ideas and concepts); hybridity (the negotiation of cultural differences between the dominant and subordinate cultural relationship); and critique (which is embedded in the other three). These four features are referenced against the educational philosophy of Zehou Li (李泽厚), a philosophy that recognises both the contributions of Western Enlightenment ideals alongside Chinese traditions, to develop an inclusive, post-comparative philosophy of education.

LESSONS LEARNT THE HARD WAY

One of the potential problems with research philosophy is running around in circles trying to understand all the different permutations and how it applies to the research you may want to conduct. This can leave you at the whim of your supervisor who may be passionate about one approach, yet you may feel differently.

LESSON 4: READ WIDELY

For a doctoral thesis, William was impassioned about the benefits that younger students may derive from training in a sport he had pursued since he was 10 years old. Having been accepted into a university, the next task was to try to find a suitable supervisor. It took William four years to establish his focus. One supervisor tried to lead William towards an ethnography, exploring the world of the sport through the eyes of a practitioner. Another supervisor advocated symbolic interactionism, the shared experiences and attributes across participants that make someone a participant in that sport. A further supervisor pushed for a detailed exploration of the ethics within the sport, while another drove towards a more psychological framework. It felt that none of the supervisors truly understood what William was striving for, only adding to the confusion.

During this time, William actively read all manner of journal articles and books, developing great insights into many other disciplines. Eventually, he read one journal article and came across a word that embodied everything he wanted to research. From this, it was as if a straight, wide, unobstructed road had been opened and, within four years, he had completed his thesis.

LESSON 5: FOLLOW YOUR OWN WAY

Katie was another doctoral student who wanted to understand the cultural development of informal education within a specific group. There was no specific framework that she could use for her intended research and, despite the advice from her supervisors, she developed her own approach, drawing on a variety of integrated academic







disciplines. Through her work, she developed a unique framework as a supplementary 'original contribution to knowledge' (the core defining feature of a doctorate).

CORE POINTS

- Educational research is not possible without being influenced through philosophy.
- Philosophy is 'the love of wisdom' and is a way of applied thinking through questioning and understanding.
- A central theme within philosophy is the quest for truth.
- There are a range of philosophical perspectives related to exploring the concept of the truth, such as correspondence (whether we have witnessed something working), coherence theory (where an argument is made to support a claim), consensus (where others agree with a perspective or argument).
- Within philosophy, there are five core areas: metaphysics, ontology, epistemology, axiology and logic.
- A paradigm is a set of ideas or concepts related to an area more commonly called a 'worldview', a collective agreement on what is reality.
- There are three core paradigms:
 - Positivist: using logical methods which are applied scientifically to all aspects of education.
 - Interpretivist: understanding education through appreciation of the rich diversity of every individual, context, event or phenomenon.
 - o Eclectic: unites elements of both positivist and interpretivist paradigms.

CHECKLIST FOR YOUR UNDERSTANDING

Table 2.1 Chapter 2 checklist

I understand	Tick if you agree	What I will do next
That philosophy is integral to educational research.		
That philosophy, and by this, educational research, is an attempt to discover ultimate 'truths'.		
That there are a range of philosophical perspectives.		
The role of correspondence, coherence, consensus and pragmatic perspectives to help explore the truth.		
What is meant by metaphysics, ontology, epistemology, axiology and logic.		
The difference between the positivist, interpretivist and eclectic research paradigms.		







FURTHER READING

The following books provide a greater level of discussion into the philosophy of research, all of which are highly commended.

Howell, K. (2012) An Introduction to the Philosophy of Methodology. London: Sage Publications.

Pring, R. (2015) Philosophy of Educational Research (3rd edn). London: Bloomsbury Academic.

Williams, M. (2016) Key Concepts in the Philosophy of Social Research (Sage Key Concepts Series). London: Sage Publications.



