



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

ECDE 7002: Introduction to Research Methods in Education

Doctorate in
Education (Ed D)
LEVEL 7



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Day 1 – Saturday 03/02/2024

Key dates 2024:

Date	Focus
Saturday 03/02/2024	Education research – why bother? • The place of education research in Wales and the place of Doctoral Research • Identifying your own area of interest • Introduction to ontology and epistemology • Ethics in research • Reviewing the literature, undertaking literature searches
Tuesday 06/02	Research Questions (RQs) in the context of your area of interest
Tuesday 20/02	Choosing a research approach
Tuesday 27/02	Ethics and Risk - Thinking about Risk - Mitigation of Risk Appropriate data collection and ethics
Monday 04/03	Using statistics in research (Dr Paul Hutchings)

Saturday sessions are from 10 am until approx. 4pm

Twilight sessions are from 6pm until 7pm

Key dates 2024:

Date	Focus
Saturday 02/03	Face to face: PRESENTATION
Please contact Alison or Susan to arrange date	TUTORIALS (by appointment)
Tuesday 07/05 By 5pm	Assignment submission Please ensure to submit in 3 parts, as per assignment guidance

Saturday sessions are from 10 am until approx. 4pm
Twilight sessions are from 6pm until 7pm

Assessment Component 1 – 45%

Written Assignment: (3500 words)

Exemplar: Critically reflect on research paradigms that would enable you to conduct a mixed methods enquiry that would meet identified research questions.

With reference to relevant literature, identify an area of research you may want to explore. Create between 1 and 3 research questions that would be answerable through a mixed methods approach to data collection. Critically appraise qualitative and quantitative research paradigms which link to your research questions, justifying why they are appropriate.

Assessment Component 2 – 45%

Written Assignment: (3500 words)

Exemplar: Outline your preferred approach (qualitative/quantitative/mixed methods) to this enquiry by focusing on ONE of your research questions. Plan an appropriate data collection process and associated analysis of the data, reflecting on its strengths and limitations. Critically reflect upon the ethical issues surrounding the research process.

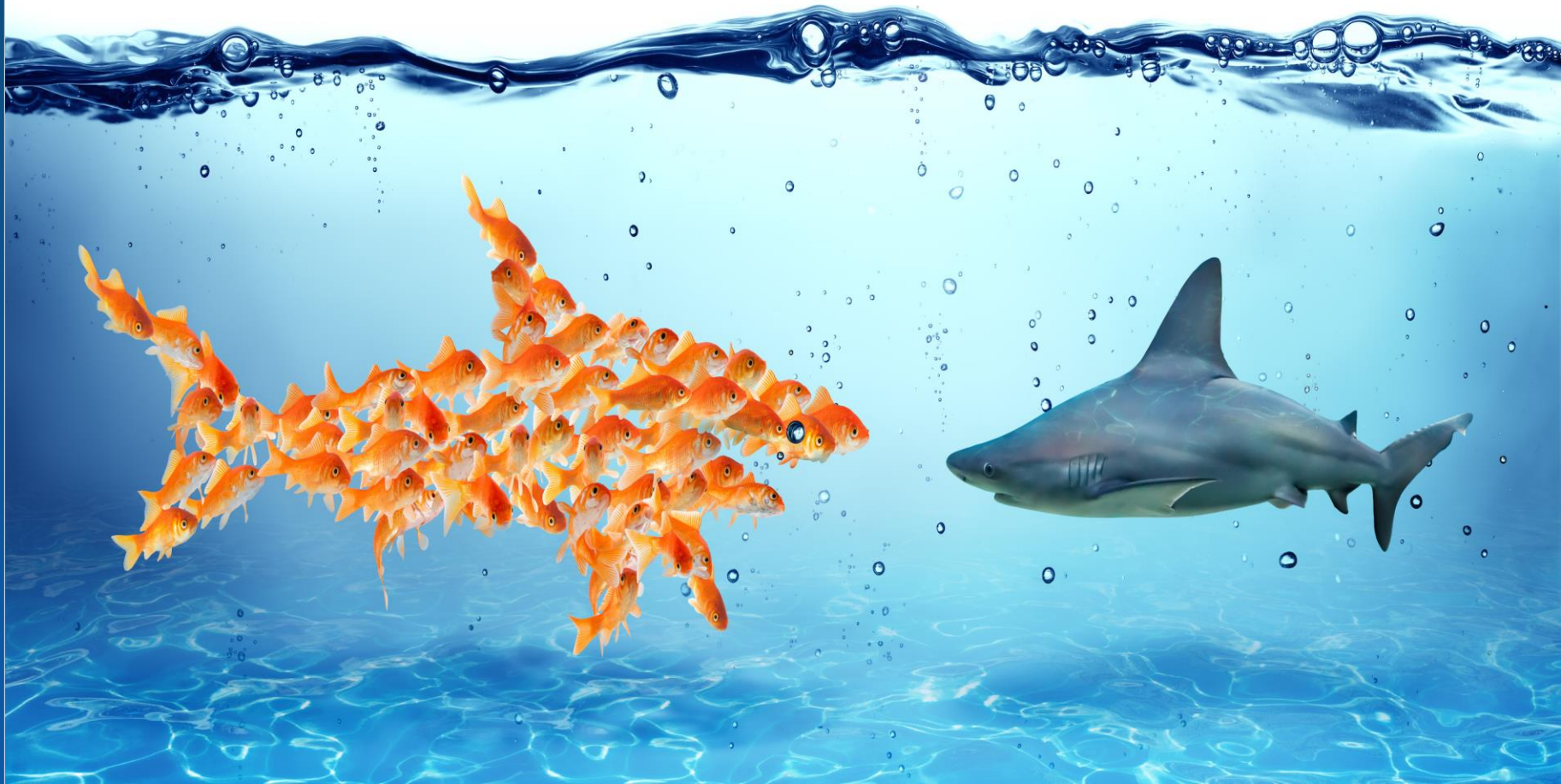
Assessment Component 3 – 10%

Consider the ethical implications of your identified research question (800 words or equivalent).

Exemplar: Using the UWTSD Ethics form, outline the responses you would provide to address the research question in component 2.

You will need to complete and upload the following sections:

- ✓ H – Anticipated risks
- ✓ I – Feedback, consent and confidentiality
- ✓ J – Data protection and storage





Session aims:

1. To critically consider the purpose of educational research – generally and within your context
2. Understand how researcher positionality impacts on research paradigms
3. To identify possible ethical issues in research
4. To be able to access relevant skills in sourcing literature

Session Aim 1:



Critically consider the purpose of educational research – generally and within your context

How do you make decisions about your practice?

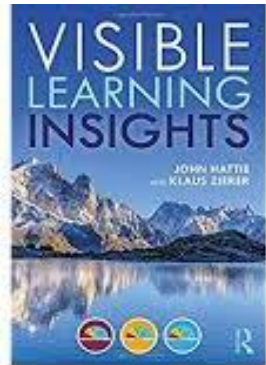


“I’ve always done it that way”

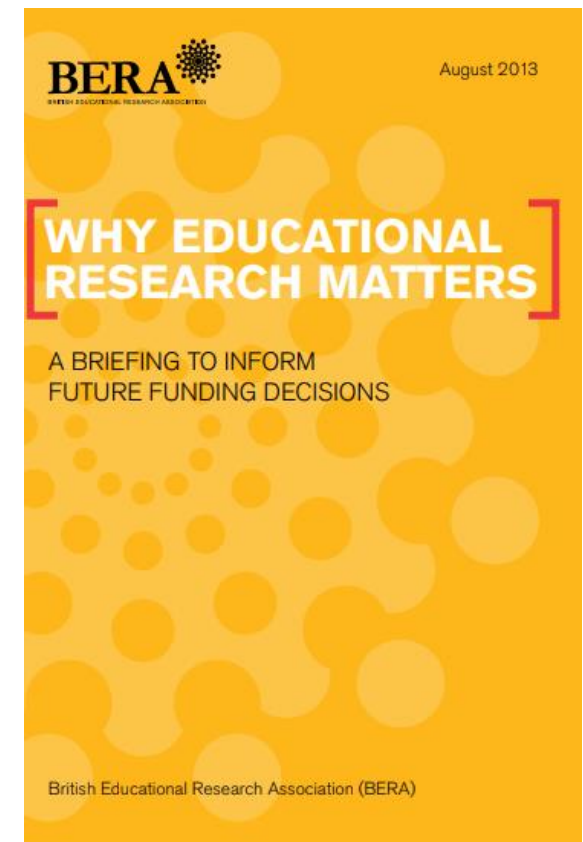
“It works, why change it?”

“It’s embedded within the culture of my workplace”

“I am informed by research evidence”



‘A good teacher ... constantly questions his or her own actions and impact, continuously evaluates his or her teaching and works together with other teachers to understand what they mean by impact and to evaluate this impact.’



HEADLINE MESSAGES

- Educational research makes a vital contribution to practice and policy in education and to wider society.
- Educational research is necessary for the advancement of knowledge for education and of education.
- Educational research supports the UK in developing the knowledge economy and facing other future challenges.
- Reduced investment in educational research would result in a void in the development and progression of education in the UK.

Educational research

Stenhouse (1926-1982):

- Curriculum development and role of teacher as researcher = foundation of teacher professionalism
- Notion of 'Restricted professional' and 'extended professional'

Contemporary view:

- Teachers as reflective practitioners
- Teachers as contributors of public knowledge about effective teaching

Adapted from: Fordham, M (2016). Realising and extending Stenhouse's vision of teacher research: the case of English History teachers. British Educational Research Journal. 42 (1), pp 135-150

In pairs/small groups, discuss possible areas of interest that you may want to research.

Use the **bank of questions** to scaffold your thoughts and be prepared to feed back to the wider group.



Session Aim 2:



Understand how researcher
positionality impacts on research
paradigms



Research is about asking big questions.

Researchers take **ontological** and **epistemological** positions to explain the nature of the problem, how we know what we know about it, and what is important to know to understand it.

Thinking about the 'ologies'...

Ontology...

Philosophical belief system about the nature of the social world (e.g.; whether it is patterned or predictable or constantly re-created by humans).

Levey (2017: 12)

Realist ontology = *objective reality*... 'is external and independent of the observer and... there is one single, universal reality that can be experienced and analysed which is external and independent of humans'

Relativist ontology = *subjective reality*... 'there is no single reality, instead reality is devised by human understanding and relative to the time, place and context'

Buckler and Moore (2021: 33)

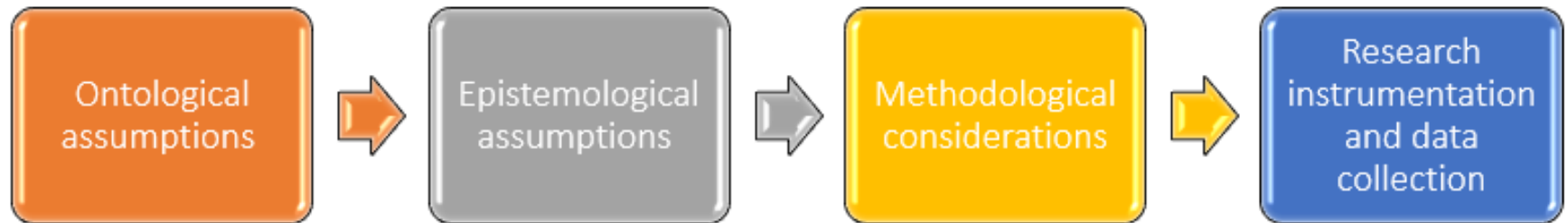
Thinking about the ‘ologies’...

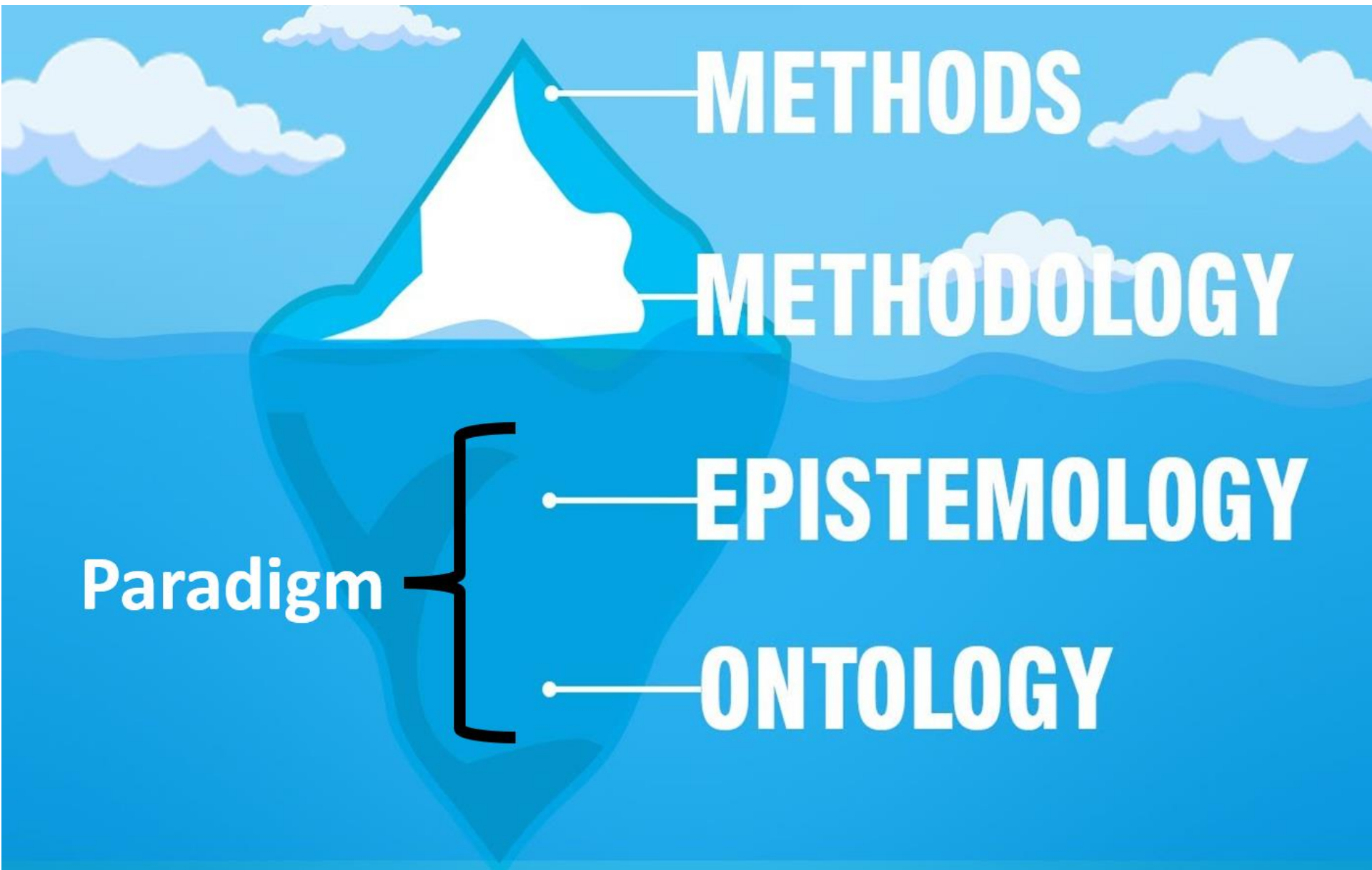
Epistemology...

‘How we come to have legitimate knowledge of the world;
rules for knowing’O’Leary (2021:6)

‘... concerns the very basis of knowledge – its nature and forms ,
how it can be acquired and how it can be communicated to other
human beings. How one aligns themselves... profoundly affects
how one will go about uncovering knowledge of social behaviour’
Cohen *et al.* (2018: 5)

Ontological and Epistemological relationship





METHODS

METHODOLOGY

EPISTEMOLOGY

ONTOLOGY

Paradigm

ONTOLOGY

+

EPISTEMOLOGY

=

PARADIGM



CREATED USING
POWTOON



Basic Beliefs associated with Major Paradigms

Basic Belief	Positivist	Interpretivism
Ontology Nature of Reality	The positivist ontology believes that the world is external (Carson et al., 1988) and that there is a single objective reality to any research regardless of the researcher's perspective or belief	Multiple Socially constructed realities; researchers' values are inherent in all phases of the research process. Truth is negotiated through dialogue
Epistemology Nature of Knowledge	Objectivity is paramount; the researcher interacts and observes in a dispassionate objective manner, Positivist thinkers adopt scientific method as a means of knowledge generation.	Interactive link between researcher and participants; we cannot separate ourselves from what we know, and how we understand the world is a central part of how we understand ourselves, others and the world. Values are made explicit; create findings
Methodology	Quantitative, Interventionist decontextualised	Qualitative, Hermeneutical; dialectual; contextual factors are described

Theoretical Perspectives



Worksheet: Positivism and Interpretivism

Read the following abstracts taken from journal articles:

Maxwell, N, Doughty, J, Slater, T, Forrester, D, Rhodes, K (2020). Home education for children with Additional Learning Needs – A better choice or the only option? *Educational Review*. 72 (4), pp 427-442

Siddiqui, S (2022). Categorized and Correlated Multiple-choice Questions: A tool for assessing comprehensive Physics knowledge of students. *Education Sciences*. 12 (1), pp 1-19

1. Using the two basic types of approaches – **positivism** and **interpretivism** – how would you categorise each piece of research?
2. What words, concepts or aspects of the research described in each abstract informed your judgement?
3. If you were to adopt a different approach to that taken by the researchers, what kinds of questions might you ask about how the research was designed and carried out?

Your own opinion:

4. Do you think educational research can or should be value-free (objective, unbiased, etc.)? If yes, what strategies should be used to ensure this outcome?

Session Aim 3:



Identify possible ethical issues in research



- What are the ethical factors at play in this research?
- Was this research harmful?
- Can any research be considered 'harm free'?

ETHICAL GUIDELINES FOR EDUCATIONAL RESEARCH

Fourth edition (2018)



Download

Responsibilities
to participants
(BERA, 2018)

- Individuals treated fairly, sensitively, with dignity – not subject to prejudice in terms of age, gender, sexuality
- Sensitivities in terms of ‘structural inequalities’ – race, gender, LGBTQ+, socio-economic status
- Informing participants of outcomes of research – debriefing or checking meanings?



Minimising harm
to participants
(BERA, 2018)

- Duty of care – minimise and manage any distress or discomfort
- The more vulnerable the participants, the greater the responsibility on researcher for their protection
- Recognise time and effort that participation can require (particularly on vulnerable or over-researched populations)

Informed consent
(BERA, 2018)

- Voluntary, informed consent at start and *throughout* the study
- Understand what is involved in study, what they will be asked to do, what will happen to information they provide and how it will be reported
- Consideration of 'gatekeeper' organisations – do they have their own ethical approval and safeguarding procedures?



Right to withdraw
(BERA, 2018)

- Participants have right to withdraw for any or no reason
- Participants need to be informed of this right

Privacy and data
storage
(BERA, 2018)

- Confidential and anonymous treatment of participants' data
- Researchers should take 'reasonable precautions' to avoid identification – fictionalising or changing identifying features?
- Comply with General Data Protection Regulations (GDPR)
- Data kept securely – secure computer networks – password protection, data encryption

Session Aim 4:



Develop relevant skills in sourcing literature

Finding good research

The hierarchy of research publications

Academic journals

Individual blogs

Conference proceedings

Professional blogs

Government reports

Book chapter(s)

The literature review

- Gives credibility and legitimacy to the research
- Clarifies the key concepts and terms
- Sets the context of the research
- Raises issues, showing where there may be gaps in the research
- Establishes and justifies theoretical and conceptual frameworks

Adapted from Cohen, L, Manion, L and Morrison, K (2018)

Finding good research

Your search for information

How confident are primary school teachers when teaching science at KS2?



Download

Journal, year, volume,
page numbers

Author(s) and institution

Abstract (purpose)
Read first

Skim – does it contain
relevant headings?

Scan – search for relevant
information and specific
terms

CHILD REVIEW OF EDUCATION, 2016
VOL. 42, NO. 3, 299–315
<http://dx.doi.org/10.1080/00084001.2016.1184807>

 Routledge
Taylor & Francis Group

Implementing curriculum reform in Wales: the case of the Foundation Phase

Chris Taylor , Mirain Rhys and Sam Waldron
Cardiff University, UK

ABSTRACT

The Foundation Phase is a Welsh Government flagship policy of early years education (for 3–7 year-old children) in Wales. Marking a radical departure from the more formal, competency-based approach associated with the previous Key Stage 1 National Curriculum, it advocates a developmental, experiential, play-based approach to teaching and learning. *The learning country: A paving document (NAFW, 2001)* notes that, following devolution, Wales intended to take its own policy direction in order to 'get the best for Wales'. Building on a three-year mixed methods independent evaluation of the Foundation Phase we discuss in detail the aims and objectives of the Foundation Phase, including the context to its introduction, the theory, assumptions and evidence underlying its rationale, and its content and key inputs. We then contrast this with how the Foundation Phase was received by practitioners and parents, how it has been implemented in classrooms and non-maintained settings, and what discernible impact it has had on young children's educational outcomes. The paper concludes with a critical analysis of the policy process and identifies a number of contextual issues during the inception of the Foundation Phase that has, it could be argued, constrained its development and subsequent impact. We argue that these constraints are associated with an educational policy landscape that was still in its infancy. In order for future education policy to 'get the best for Wales' a number of important lessons must be learnt.

KEYWORDS

Wales; foundation phase;
early years education;
policy implementation;
developmentally appropriate
practice

Introduction

The Foundation Phase is the statutory curriculum for all 3–7 year-olds in the maintained and funded non-maintained¹ education sectors in Wales. It represents one of the 'flagship' education policies of the first ten years of the Welsh Government following parliamentary devolution in 1999. The Foundation Phase is symbolic for three reasons. First, it demonstrated a commitment to the use of the 'best' international evidence for education policy-making. Second, it constitutes a radical departure from its predecessor, the National Curriculum Key Stage 1, both in terms of curriculum and pedagogy. And third, it provided one of the first examples of how the education system in Wales differed from that of England following devolution. The Foundation Phase is also a very important example of education policy in Wales because of its scale—it universally applies to all primary schools and funded

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Title

Key words

Main body



Effective use of the online library

[Library and Learning Resources | University of Wales Trinity Saint David \(uwtsd.ac.uk\)](#)

Spend some time using the search function to source relevant journal articles. Consider the following:

- Was there sufficient literature on your area of interest?
- What sort of articles were returned?
- Is this what you expected?
- How do the articles compare and contrast?



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References

Buckler, S and Moore, H (2023). *Essentials of Research Methods in Education*. London: Sage Publications Ltd

Cohen, L, Manion, L and Morrison, K (2018). *Research Methods in Education*. 8th Edition. Oxon: Routledge

Levy, P (2017). *Research Design: Quantitative, Qualitative, Mixed Methods, Arts-Based and Community-Based Participatory Research Approaches*. New York: The Guilford Press

O'Leary, Z (2021). *The Essential Guide to Doing Your Research Project*. London: Sage Publications Ltd

Levy, P (2017). *Research Design: Quantitative, Qualitative, Mixed Methods, Arts-Based and Community-Based Participatory Research Approaches*. New York: The Guilford Press

Follow up

- ✓ Read at least one more of the provided chapters
- ✓ As you review the literature around your area of interest, try to identify the coherence of each research paper that you read – consider ontology, epistemology and the claims made for the findings. Become a **critical reader**.

Twilight 1 – Tuesday 06/02, 6pm

Research Questions

