How does Irish teachers’ understandings and lived experience of IBL impact their teaching practice?

Marelle Rice
Student Number: 18343663

Marino Institute of Education

Author Note
This dissertation is submitted for the attention of Dr Karin Bacon and Dr Alison Egan, as the end of course assignment- (Masters in Education Studies 1820-Inquiry Based Learning). The word count is 21,474.
Declaration:

a) The thesis must contain immediately after the title page the following declaration by the author:

I hereby declare that this dissertation is a presentation of my original research work. Wherever contributions of others are involved, every effort is made to indicate this clearly. This work has not been submitted previously at this or any other educational institution. The work was done under the guidance of Dr Karin Bacon and Dr Alison Egan at the Marino Institute of Education, Dublin. I agree that the Library may lend or copy this dissertation upon request.

Edna Marelle Rice
ABSTRACT

This dissertation explores Irish post-primary teachers’ lived experience of Inquiry-Based Learning (IBL) as they use it to teach areas of the Junior Cycle Framework (2015) (JCF). The research focused on how teachers’ lived experience of IBL, when viewed through the lens of inquiry as stance, informed the understandings of teachers about the nature of IBL, and how it impacted their teaching. Little is known about the lived experience of post-primary teachers in Ireland as they engage with the recent JCF. A qualitative methodology was employed to generate data through one-to-one interviews with four teachers and Interpretative Phenomenological Analysis was drawn upon to analyse the data and identify emergent themes. Findings reveal the efficacy of using inquiry as stance as a framework to understand the nature of IBL and teacher professional development. They also suggest childhood experience is a significant factor affecting experienced teachers’ beliefs about education and the role of the teacher. Further, this research found that participants understood IBL beyond procedural conceptualisations, and this bodes well for continued reflective practice among Irish teachers. Finally, this research found that the Irish context is conducive to teaching IBL owing to the conceptual nature of the learning outcomes of the JCF and the absence of draconian accountability measures and mandated Continuing Professional Development in IBL.

Keywords: Inquiry-Based Learning; inquiry as stance; Irish Teachers; Lived Experience; Teaching Practice; Junior Cycle Framework
ACKNOWLEDGEMENTS

Sincere thanks to Dr Alison Egan for starting me off on this study and to Dr Karin Bacon for seeing me over the line, their support has been invaluable. This has been a collaborative work, and many voices have helped shape, inform, and direct it from the past and the present, too many to mention by name. Special thanks to the participants in this study, whose voices were a pleasure to listen to. My heartfelt gratitude extends to the many communities of inquiry I have been part of over the years, I have learned a great deal and carry it all with me. Finally, I wish to acknowledge the support of my husband Jonnie whose consistency and care has kept me going over the last few months.
Contents

Chapter 1 Introduction .................................................................................................................. 9

Chapter 2 Literature Review ....................................................................................................... 12

The Emergence of IBL .................................................................................................................. 13

Traditional Education .................................................................................................................. 14

Progressive Education ................................................................................................................ 18

The Evolution of IBL and School Curricula ................................................................................. 19

Defining IBL ................................................................................................................................ 22

Inquiry as Stance .......................................................................................................................... 24

The Learner-Centred Nature of Inquiry Stance ......................................................................... 26

Conceptual Approach to Knowledge ........................................................................................... 28

Meaning Making and Communication ....................................................................................... 28

Democratising the Classroom .................................................................................................... 29

Teaching as Inquiry (TAI) an Effective Teaching Practice .......................................................... 30

What the research says about CPD in IBL .................................................................................. 33

Lived Experience and IBL .......................................................................................................... 36

IBL and The Irish Context .......................................................................................................... 36

Constructivism in an Irish context ............................................................................................... 37

Democracy in Ireland .................................................................................................................. 38

Irish CPD in IBL ............................................................................................................................ 39

The Potential for TAI in Ireland .................................................................................................. 40

Conclusion ..................................................................................................................................... 41

Chapter 3 Research Methodology ............................................................................................... 43

Purpose Statement ....................................................................................................................... 43

Rationale for Study ....................................................................................................................... 43

Associated Questions ................................................................................................................... 45

Methodology .................................................................................................................................. 45

Qualitative Research .................................................................................................................... 45

Phenomenology ............................................................................................................................. 47

Interpretative phenomenological analysis................................................................................... 48

Researcher Positionality ................................................................................................................. 51

Epistemological Stance ................................................................................................................ 51

Covid-19 ....................................................................................................................................... 52

Methods ....................................................................................................................................... 53
Selection of Participants ................................................................. 53
Sample Size .................................................................................. 54
Participant Background .................................................................. 55
Semi-Structured Interviews ............................................................. 55
Data Analysis .................................................................................. 57
Ethical Concerns ............................................................................ 58
Validity ............................................................................................ 59
Chapter 4 Findings, Analysis and Discussion .................................... 61
  Theme 1: Childhood Reflections ....................................................... 61
  Theme 2: Defining IBL ................................................................. 63
  Theme 3: Teaching as Inquiry (TAI) and Professional Learning Communities .. 66
  Theme 4: Learner-Centredness, the Ripple Effect ............................. 69
  Unanticipated Theme 5: IBL in Times of Crisis ............................ 72
  Discussion ..................................................................................... 76
  Limitations .................................................................................... 80
Chapter 5 Conclusion and Recommendations ................................... 82
  Recommendations ........................................................................ 83
  Concluding Paragraph ................................................................... 83
References ...................................................................................... 85
LEGEND

CPD – Continuing Professional Development
DBL – Design-Based Learning
DP – Diploma Programme (International Baccalaureate)
EDI – Equality, Diversity, Inclusion
GCSE – General Certificate of Secondary Education
IBL – Inquiry-Based Learning
IBT – Inquiry-Based Teaching
IPA – Interpretative Phenomenological Analysis
ITE – Initial Teacher Education
JC – Junior Certificate
JCT – Junior Cycle for Teachers
JCF – Junior Cycle Framework
MYP - Middle Years Programme (International Baccalaureate)
NCCA – National Council for Curriculum and Assessment
OECD - The Organisation for Economic Co-operation and Development
PDST – Professional Development Service for Teachers
PISA – Programme for International Student Assessment
PYP - Primary Years Programme (International Baccalaureate)
SEN – Special Educational Needs
SNA – Special Needs Assistant
TAI – Teaching as Inquiry
UCD – University College Dublin
UNESCO - The United Nations Educational, Scientific and Cultural Organization
### APPENDICES

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A</td>
<td>Interview Protocol</td>
<td>98</td>
</tr>
<tr>
<td>Appendix B</td>
<td>Sample Transcripts</td>
<td>101</td>
</tr>
<tr>
<td>Appendix C</td>
<td>Example Photographs of Manual Analysis Process</td>
<td>109</td>
</tr>
<tr>
<td>Appendix D</td>
<td>MERC</td>
<td>110</td>
</tr>
<tr>
<td>Appendix E</td>
<td>Consent Forms</td>
<td>115</td>
</tr>
<tr>
<td>Appendix F</td>
<td>Initial Invitations</td>
<td>118</td>
</tr>
</tbody>
</table>
Chapter 1 Introduction

This research formalises one iteration of my lifelong inquiry into the nature of teaching and learning. It was motivated by educational reform in Ireland which saw the recent adoption of the Junior Cycle Framework (JCF) (Framework for Junior Cycle 2015, 2015), which requires Irish teachers to engage with constructivist pedagogies, such as Inquiry-Based Learning (IBL), in their teaching practice. I spent many years as a Head of Religion, Philosophy and Ethics and teacher educator in post-primary settings in the UK, and after co-authoring the NCCA Philosophy Short Course I returned to Ireland in 2017 to initially help support Continuing Professional Development (CPD) in this curricular area. I have formed numerous judgements based on my experience of coming to know what I think I know. My journey of understanding was driven by lived experience, and later supported by theory, and opinions and biases have undoubtedly formed. This introduction serves to highlight my positionality with regard to this research, I am inextricably connected to it.

The constructivist nature of the JCF is well suited to IBL, but it is not a commonly used pedagogy in Irish post-primary schools (Department of Education and Skills, 2012) and requires a significant shift in pedagogy and practice from the teaching that led to these reforms. As noted by Maaß & Artigue, “a teacher who wants to use inquiry-based learning as a useful teaching ingredient needs to be able to change their role from an instructor to a facilitator” (Maaß & Artigue, 2013, p. 783). Moreover, there are clear and significant distinctions in the underpinning philosophies of education between instructivist and constructivist approaches to teaching and learning, (Porcaro, 2011), and it is not clear how this theoretical shift will impact Irish teachers.

Although immensely rewarding, my own journey with IBL through P4C was often challenging for multiple reasons. I discovered the Lipman/Sharp P4C (Philosophy
for/with Children) pedagogy by chance early in my teaching career in the South East of England and felt an immediate recognition and affinity with the approach. I recall the initial training vividly, as well as the excitement at feeling as though I had discovered a path to education in the sense of "educere," to lead out, and "educare," to train and mould. Developed in response to the lack of independent thinking skills observed among undergraduates by Matthew Lipman in the 1960s, Philosophy with/for Children is a highly effective, prosocial, teaching pedagogy that has been shown to improve students’ capacity to think critically, creatively, collaboratively and caringly (Gorard, Siddiqui, & See, 2015; Lewis & Sutcliffe, 2017; Siddiqui, Gorard, & See, 2019).

However, P4C was primarily marketed at primary school teachers in the UK and very few post-primary teachers had heard of or were using the pedagogy. I had a large cohort of GCSE and A-Level students whose examination results would either provide or deny future opportunities for them, as well as evidencing my competency as a teacher and Head of Department. There was considerable risk in failing to deliver the specification content at the expense of developing inquiry skills and I found myself adapting and flexing the pedagogy to suit my own context.

During this time there was a lengthy disconnect for me between P4C and the wider body of literature around IBL (Inquiry-Based Learning). It was through ongoing reflection that led me towards a practice of teaching whereby P4C had become embedded into what I now understand to be Discipline-Based Inquiry (Murdoch, 2015; "What is Discipline Based Inquiry?,” n.d.), which I used to deliver the Religious Studies curriculum across all year groups. It was not until 2008 when my school explored a move to the International Baccalaureate (IB) curriculum and I was given responsibility for the Theory of Knowledge (ToK) component, that I finally began to connect to a wider framework of theory and practise about IBL more generally. In
retrospect, the initial P4C CPD awoke an ‘inquiry stance’ (Short & Burke, 1996) within me that I found curious and inescapable, but it would be almost 20 years before I discovered this term and the wider community of practitioner-researchers who view IBL pedagogies in this way.

Irish teachers are being asked to radically change the nature of their work; every aspect of how they engage with the curriculum, from planning, teaching, assessment to reporting has to be reconsidered. In some respect, the new JCF, which aims to give autonomy to teachers and schools to enable them to best support their cohorts, has brought ambiguity and uncertainty to the profession (ASTI, 2019).

The purpose of this study is to explore Irish post-primary teachers’ lived experience of IBL as they use it to teach areas of the JCF. The research will attempt to discern how the lived experience of IBL, when viewed through the lens of inquiry as stance, informed the understandings of teachers about the nature of IBL, and how it impacted their teaching practice.

The research question requires an exploration of the lived experience of teachers to construct new knowledge and new meaning about IBL and its relationship to educational beliefs and teaching practice. The literature review will contextualise the varying understandings of IBL and their relationship to international developments in educational theory and practice, before reflecting on Ireland’s position in relation to the global picture. Using an inductive qualitative approach, data will be generated using one-to-one interviews to explore the emerging themes using IPA. The findings of this research are of professional and personal interest and value to me and will inform my future work.
Chapter 2 Literature Review

Firstly, the literature review aims to clarify the ambiguity surrounding the term ‘Inquiry-Based Learning’ through an exploration of the emergence of IBL as a response to Traditional Education and a feature of Progressive Education, and its subsequent relationship to wider educational philosophy, theory and policy. This will contextualise and reveal the challenges facing Irish teachers concerning the constructivist philosophy of education that underpins IBL as distinct from traditional approaches to education.

A critical review of the literature using the lens of ‘inquiry cycles’ contrasted with the perspective of ‘inquiry as stance’ will outline the different ways IBL is perceived in the literature. This will provide insight into the complexities and ambiguities associated with the defining IBL and establish an understanding of IBL for this research.

When considering the impact of IBL on teaching practice, the literature will show further congruence between ‘inquiry as stance’ and teacher professional development and bring the role of reflection in IBL to the fore. This will securely position ‘inquiry as stance’ as a broad and inclusive theoretical framework for this researcher when engaging with the participants in this study as they reflect on their lived experience.

From this position, a critical and comparative analysis of the differing perspectives and methodologies applied to IBL research into professional development can be undertaken. This will discern what has been discovered about the relationship between teachers’ CPD in IBL and their teaching practice and identify how teachers’ lived experience has been represented in the literature to date.

Finally, an exploration of Ireland’s educational landscape will provide local context to consider when reflecting on the themes raised by the wider international
literature to establish whether there is anything distinctively challenging or conducive to teaching using IBL in the Irish context.

**The Emergence of IBL**

The origins and development of IBL are complicated, woven as it is with historical, social, political and economic interests (Barron & Darling-hammond, 2008; Dewey, 1938a) and supported by wider interdisciplinary research, theory and reform (Barrow, 2006; Friesen & Scott, 2013). This is honestly acknowledged in the academic literature with Bakker’s use of the sub-heading, “a short history of nearly one thing” (Bakker, 2018, p. 170). Teachers attempting to draw understanding about IBL pedagogies from this landscape are immediately disadvantaged by its convoluted context.

Socrates is often cited as the origin of Inquiry-Based Learning and the Dialogues identified as the first recorded example of learning through inquiry in the Western academia (Bakker, 2018; Division of Elementary, Secondary, and Informal Education, Directorate for Education and Human Resources, 1998; Friesen & Scott, 2013; Kai Wah Chu, Reynolds, Tavares, Notari, & Lee, 2016). However, it is Dewey, (1910, 1916, 1938b), who is primarily credited with the emergence of IBL in the 20th Century when he formalised inquiry as an approach to teaching and learning. Recognised for his founding role in the Progressive Education movement, (Cremin, 1959; David A. Kolb, 1984; Noddings, 1998), Dewey’s philosophy of education identifies inquiry as the natural state of learning for the human condition (Dewey, 1916). His pioneering work contributes to the wider education theory of Constructivism (Ackermann, 2010; Noddings, 1998; Phillips, 1995; Vanderstraeten & Biesta, 2004), which is closely entwined with pedagogical developments in IBL (Barron & Darling-hammond, 2008; Kai Wah Chu et al., 2016; Strobel, 2008).
The literature shows that at the core of Dewey’s philosophy of education is a critique of three main components of traditional education that serviced the industrial economy, namely, knowledge transmission of information, conforming to conventional social rules and values, and operating within a system that has been organized unlike other social institutions (Dewey, 1938a). He argued that such a system of education does not kindle the innate curiosity of a child, nor promote the kind of social engagement, questioning, investigation, reflection and review that is natural to learning and human development, observing that:

No one has ever explained why children are so full of questions outside of the school (so that they pester grown-up persons if they get any encouragement), and the conspicuous absence of display of curiosity about the subject matter of school lessons (Dewey, 1952, p. 162)

He asserted the student should be actively engaged in inquiry, building on their prior knowledge, and reflecting on their experience, (Dewey, 1916). Essentially, Dewey was responding to the traditional model of education, designed to create a workforce for the industrial age, but which suppressed the innate creative and social dimension of learning which enables society to renew and positively progress “the aim is not the economic value of the products, but the development of social power and insight” (Dewey, 1966, p. 18)

**Traditional Education.** To understand the distinctive approach that IBL brings to the educational landscape and the challenges teachers may encounter as a result it is helpful to review the literature on the traditional educative approach that was established in western societies in the 19th and 20th Centuries. Traditional education is underpinned by a philosophy of education born from the intellectual enlightenment associated with the industrial revolution, with the focus on inductive reasoning (Bowen

Additionally, there was an appetite to maintain the hierarchical social structures in western societies that accompanied the perceived economic success of colonialism through public education systems (Pyenson, 1993; Robinson & Aronica, 2015). Essentially, traditional education pedagogies place the learner as a passive receptacle for the teacher to fill with prescribed knowledge deemed of value to such a system (Dewey, 1916; Freire, 1970; Porcaro, 2011). Freire’s critique of traditional education hits directly at the hierarchical and authoritarian power structures intrinsic to it, whether the teacher is consciously aware of this or not:

Education thus becomes an act of depositing, in which the students are the depositories and the teacher is the depositor. Instead of communicating, the teacher issues communiques and makes deposits which the students patiently receive, memorize, and repeat. This is the "banking" concept of education, in which the scope of action allowed to the students extends only as far as receiving, filing, and storing the deposits (Freire, 1970, p. 72)

Behaviourism and Cognitivism typify and justify the traditional instructivist position (Porcaro, 2011; Skinner, 1965, 1971). Working from a realist ontology, both share the view of the learner as passive, biologically determined receptacles and necessitate teachers to take responsibility for the students’ learning outcomes (Davies, 2019; Wittrock, 1978). It is beyond the scope of this literature review to detail the many nuanced distinctions theorists have contributed to these areas. However, a summary overview provided by Porcaro, (2011), and reprinted below serves to illustrate the shift in the foundational philosophical beliefs and values about education between these different perspectives and gives some starting point for reflecting on the impact of such
deep-rooted change for teachers and learners. It captures the shift from certainty and order towards open-ended creation, and also serves to show how the paradigm of constructivism is broad, with ongoing theorising bringing new perspectives and applications in concert with technological developments. While Porcaro’s (2011) table is by no means complete, it captures significant distinctions within, and some key contributors to, the wider theory of Constructivism, and by extension IBL.
<table>
<thead>
<tr>
<th>Philosophy</th>
<th>Instructivism</th>
<th>Cognitivism</th>
<th>Constructivism</th>
<th>Socio-cultural constructivism</th>
</tr>
</thead>
<tbody>
<tr>
<td>History</td>
<td>Skinner, Thorndike</td>
<td>Information processing theorists</td>
<td>Piaget, constructionism</td>
<td>Vygotsky, social practice theories</td>
</tr>
<tr>
<td>Ontology</td>
<td>Realism, objectivism</td>
<td>Realism, objectivism</td>
<td>Ranges from objectivism to radical constructivism</td>
<td>Reality can be objective and individually and socially created</td>
</tr>
<tr>
<td>Epistemology</td>
<td>Empiricism</td>
<td>Ranges from rationalism to empiricism</td>
<td>Rationalism</td>
<td>Empiricism, rationalism, and knowledge building</td>
</tr>
<tr>
<td>Learning theory</td>
<td>Stimuli, response, feedback; changes in behavior</td>
<td>Prior knowledge, sensory, short-term (working) and long-term memory; changes in knowledge states (long-term memory); use of schema in novel situations</td>
<td>Engagement with others, through conflict to construct personal meaning</td>
<td>Constructing intersubjective meaning in the Zone of Proximal Development with more knowledgeable peers</td>
</tr>
<tr>
<td>Pedagogy</td>
<td>Pedagogies</td>
<td>Pedagogies</td>
<td>Pedagogies</td>
<td>Flexible thinking skills and the domain practices for lifelong learning</td>
</tr>
<tr>
<td>Learning goals</td>
<td>Mapping the structure of the world onto the learner; effective and efficient knowledge transfer</td>
<td>Mapping the structure of the world onto the learner; effective and efficient knowledge transfer</td>
<td>Creating elaborations and interpreting knowledge</td>
<td>Authentic tasks; cognitive apprenticeships; multiple perspectives/argumentation; CSCL; anchored instruction; and problem-based inquiry-based learning</td>
</tr>
<tr>
<td>Pedagogies</td>
<td>Computer-assisted instruction, programmed instruction, instruction sequencing, behavioral objectives, and feedback</td>
<td>Intelligent tutors, advanced organizers, learning hierarchies, concept maps, and instructional design</td>
<td>Discovery learning; Logo-LOGO, negotiated objectives, multiple resources</td>
<td>Center of learning and participant in community of practice</td>
</tr>
<tr>
<td>Learner’s role</td>
<td>Recipient of teacher’s instruction</td>
<td>Recipient of teacher’s instruction</td>
<td>Active constructor of knowledge and center of learning environment</td>
<td>Facilitator; tutor; and mentor</td>
</tr>
<tr>
<td>Teacher’s role</td>
<td>Center of instruction; controls instruction process and content</td>
<td>Center of instruction; controls instruction process and content</td>
<td>Ranges from minimally guided to facilitator</td>
<td>Multiple goals; contextual; authentic assessment</td>
</tr>
<tr>
<td>Assessment</td>
<td>Individual; criterion-referenced</td>
<td>Individual; criterion-referenced</td>
<td>Multiple goals; contextual; authentic assessment</td>
<td>Multiple goals; contextual; authentic assessment</td>
</tr>
</tbody>
</table>

From ‘Elements of instructivism and constructivism’ (Porcaro, 2011, p. 42)
**Progressive Education.** As can be seen from Porcaro’s (2011) summary table reprinted above, Instructivism was not unique in finding support from psychological theorists, and the literature shows that Dewey’s philosophy of education has also found reinforcement from this discipline. Piaget (1959) took a biological, developmental perspective, and is associated with Cognitive Constructivism, which is largely concerned with the internal mental processes involved in learning (Piaget, 1959; Schcolnik, Kol, & Abarbanel, 2006). His work evidenced the view that children learn by making connections to what they already know to construct meaning about the world (Kolb, 1984).

It was Vygotsky (1978) who formalised the social dimension of learning with his Zone of Proximal Development, which asserted the need for a social context for comprehensive learning to occur (Vygotsky, 1978). Both Bruner and Vygotsky disagreed with Piaget’s age-related cognitive-developmental stage but did agree that learning comes from building on prior knowledge. They also viewed social interaction as a vital feature of the learning process (Lutz & Huitt, 2004).

These theorists supported Dewey’s constructivist vision of progressive education (1897, 1916, 1938a, 1966) which advocates for an inquiry approach asserting that learning should be experiential and collaborative for students, connected to their real-world experience and which recognises and values the construction of knowledge by the learner, rather than knowledge reproduction (Bruner, 1961, 1996; Vygotsky, 1978). However, the literature shows some resistance to IBL, with rebuttals of constructivism from those favouring instructivist approaches (Kozioff, LaNunziata, Cowardin, & Bessellieu, 2000; Porcaro, 2011; Skinner, 1965) as well as disagreements between constructivists indulging in what Phillips, (1995) identifies as the sectarian nature of constructivism.
The Evolution of IBL and School Curricula. Dewey (1910, 1916) considered the scientific method intrinsic to inquiry (Dewey, 1910) and his vision of IBL formed the basis for the American Science in Secondary Education curriculum (Commission on Secondary School Curriculum, 1937). This established a long history of IBL being associated with science as is evidenced by the wealth of research literature into the nature and efficacy of IBL in teaching and learning science, and the comprehensive analysis and evaluation of different aspects of IBL and its application in the science classroom (Anderson, 2002; Asay & Orgill, 2010; Barrow, 2006; Lonergan, Cumming, & O’Neill, 2017; Pedaste et al., 2015).

The literature also shows that in the years following the Commission on Secondary School Curriculum (1937), multiple permutations of IBL accentuating different aspects of Dewey’s initial conception of inquiry, and influenced by modern digital technologies, and research developments in the science of education have emerged (Barron & Darling-hammond, 2008; Friesen & Scott, 2013; Murdoch, 2015). These include; Challenge Based Learning (Johnson & Adams, 2011), Design-Based Learning (Fortus, Dershimer, Krajcik, Marx, & Mamlok-Naaman, 2004), Discipline-Based Learning (Kidman & Casinader, 2017), Discovery Learning (Hammer, 1997), Phenomenon Based Learning (Prakash Naik, 2019), Philosophical Inquiry-Based Learning as represented by Philosophy for Children (P4C) (Burgh & Nichols, 2011; Cam, 2020; Familia et al., 2017; Lewis & Sutcliffe, 2017; Lipman, 2003), Problem Based Learning (Savary, 2006), Process Oriented Guided Inquiry Learning (Moog & Spencer, 2008), and Project-Based Learning (Douladeli Efstratia, 2014).

Commonalities between these differing IBL pedagogies include a constructivist foundation and therefore have a learner-centred focus, reflective component and suggested steps or phases for progression (Schcolnik, Kol, & Abarbanel, 2006).
However, each has differing aims and prioritises these elements accordingly, which leads to diverse interpretation and classroom practice (Murdoch, 2015; Phillips, 1995). For example, Project-Based Learning is driven by a task, action or product, while P4C is dialogic, with a focus on critical thinking, metacognitive reflection, collaborative learning and democratic learning environments to explore fundamental questions about knowledge, beliefs and values (Echeverria & Hannam, 2013; Murdoch, 2015). The fluidity of IBL means teachers may incorporate different models to suit a larger inquiry, as Murdoch notes of P4C, “this kind of inquiry can work within and beside other inquiries or simply be the focus of an inquiry in its own right” (Murdoch, 2015, p. 41).

Evidently, IBL is no longer restricted to the science curriculum and is currently used by educators, curriculum developers and policymakers across all subject areas, and in primary, post-primary and third level settings (Chichkian & Shore, 2014; Department of Education and Skills, 2012; “Education programmes - International Baccalaureate®,” n.d.; Ministry of Education, 2015; Levy, Thomas, Drago, & Rex, 2013; Marie Crist & Ann, 2016; Martin, 2018; Pont, 2018). This can, in part, be credited to the substantial body of research confirming the efficacy of IBL on students outcomes in terms of knowledge as well as transferable skills that IBL can develop (Scott, Smith, Chu, & Friesen, 2018). It is also a response to the OECD’s advocacy of 21st Century Skills as the world shifts from the industrial to the knowledge economy (Fadel, 2008; OECD, 1999, 2018). These skills, also referred to as key competencies (DeSeCo, 2005), were identified following the OECD’s introduction of the global Programme for International Student Assessment (PISA) which is used to garner information about the competency of school leavers in respect to globalisation and the economical shift (“About - PISA,” n.d.; DeSeCo, 2005; OECD, 1999).
With a clear move from the attributes valued by traditional education, 21st Century Skills incorporate cognitive, interpersonal and intrapersonal capacities to prepare students for the ever-changing, multicultural and technological society and the associated challenges the post-industrial economy will bring (Friesen & Jardine, 2009; Martin, 2018; Reimers, 2013; Triling & Fadel, 2009). These challenges include the significant damage to the natural world that has in part resulted from education systems that encourage narrow anthropocentric objectives rather than understand our interdependence with each other and the rest of the natural world (Gadotti, 2010; Noddings, 2016).

However, the execution of international educational reform to include 21st Century Skills into curriculum policies has not addressed the underlying system of high stakes standardised testing and is positioned amongst increasing teacher accountability (Ball, 2010, 2016; Dyson, 2020). As a result, education reform has attempted to embed a holistic approach to teaching and learning rooted in constructivism into an instrumental system that continues to measure and reward the skills, attributes and dispositions associated with traditional educational and the industrial age and tensions invariably result (Cochran-Smith & Lytle, 2009; Cochran-Smith, Stringer Keefe, & Cummings Carney, 2018; Currin, 2019; Zhao, 2018).

There is an expectation for Irish teachers to adapt how they teach in line with new education policy, which is ambiguously defined by the diversity of models and applications of IBL (Asay & Orgill, 2010; Levy et al., 2013). Consequently, attempting to capture the nature of IBL is important for teachers’ professional development. There is a concern that the literature gives the impression of ‘inquiry as all things to all people” (Dyson, 2020, p. 2) because of the wide appropriation of the term for research with either opaque or conflicting epistemological and ontological foundations. This
reveals the perennial underlying tension of defining IBL for teachers who attempt to move towards constructivism, enacted through global education reform (Biesta, 2012; Biesta, Priestley, & Robinson, 2015) and it is worth exploring the literature to establish a clear understanding of the term for this research.

**Defining IBL**

The lack of consistency between terms, definitions and theoretical frameworks in the literature adds to the complexity of IBL and is identified as a challenge for teachers (Barron & Darling-hammond, 2008; Benade, 2015; Levy et al., 2013; Pedaste et al., 2015). Broadly speaking, the literature on IBL takes two different approaches to define IBL. The first, inquiry as a process focuses on the steps or phases within a cycle of inquiry, while the second defines IBL from a set of beliefs or principles the teacher holds about the nature of education and is commonly known as ‘inquiry as stance’ or ‘inquiry stance’. It is useful to review the literature around both to understand how each can contribute to a full understanding of IBL.

**Inquiry as Cycle.** Dewey offered the conceptual lens of a cycle to represent the elements he perceived at play in inquiry, making a direct link to the organic nature of a cyclical process, illustrating why he believed inquiry was the natural state of learning (Dewey, 1910, 1933, 1938b). This is distinct from the linear model seen in traditional education which is prescriptive and deductive (Lunenburg, 2011). The cycle of inquiry commonly attributed to Dewey contains five distinct phases or steps to the inquiry process, namely, ask, investigate, create, discuss, reflect, although the origin of this representation of his work is opaque in the literature.

Nonetheless, the identification of distinct phases or stages in inquiry is common in the literature and each representation gives some indication as to the subject discipline or the level of education it emerged from (Dialogue Works Ltd, 2019; “Fosil
Cycle | The Fosil Group,” n.d.; Justice et al., 2007; Marek, 2008; Murdoch, 2015; Pedaste et al., 2015; Short & Burke, 1996; Stripling & Hughes-Hassell, 2003). These cycles are often portrayed visually to capture something of the dynamic nature of IBL.

The diversity between these cycles of inquiry demonstrates the variety of distinct lenses used to conceptualise the process (Maaß & Artigue, 2013), and the literature suggests teachers’ will be influenced in this regard depending on which cycle/s they are introduced to, their context, and their underlying beliefs about the purpose of education (Short & Burke, 2001; Voet & De Wever, 2016, 2018). This plethora of approaches to IBL can confuse teachers if they do not have a clear understanding of the context in which they have been developed and the common features between them (Cochran-Smith & Lytle, 2001; Harste, 2001; Murdoch, 2015; Quigley, Marshall, Deaton, Cook, & Padilla, 2011; Short & Burke, 2001).

The academic literature concerning IBL frequently features cycles of inquiry and tends to take a quantitative or mixed-methods approach. This reflects the current global trend of educational reform aimed at supporting the transition from industrial to knowledge economies and the dominant view that evidence-based research provides the optimal direction to bring this to fruition (Cochran-Smith & Lytle, 2009; Kirschner & Hendrick, 2020). Consequently, the research relating to cycles of inquiry tends towards a positivist paradigm with a focus on either the efficacy of a particular inquiry cycle on student outcomes (Fortus et al., 2004; Gorard, Siddiqui, & See, 2015; Hmelo-Silver, Duncan, & Chinn, 2007; Kirschner, Sweller, & Clark, 2006a; Scott et al., 2018), or to assess the efficacy of either Initial Teacher Training (ITE) or Continuing Professional Development (CPD) (Chadwick, McLoughlin, & Finlayson, 2019; Silm, Tiitsaar, Pedaste, Zacharia, & Papaevripidou, 2017; Voet & De Wever, 2017).
The research concerning cycles of inquiry is unquestionably valuable, but it can reduce IBL to an instrumental list of stages or steps without addressing the underpinning philosophy of education it emerged from as distinct from traditional education (Marek, 2008; Murdoch, 2013; Pedaste et al., 2015). IBL’s origin in the sciences has justifiably resulted in the vast amount of research that relates to that particular discipline with limited reference to the variability or transferability of domain-specific skills (Asay & Orgill, 2010; Levy et al., 2013). The differing definitions, range of cycles and variety of domain application confuse IBL and its key features for both teachers (Levy et al., 2013; Lonergan et al., 2017) and theorists (Hattie, 2009; Kirschner, Sweller, & Clark, 2006b). Harste recalls Burke’s observation, “while we can simplify a complex process, to do so does not change the underlying complexity of the process” (Harste, 2001, p. 10) when offering his argument for viewing inquiry as a philosophical stance. A wider search of the literature around inquiry as stance will provide insight into the complexity of IBL.

**Inquiry as Stance.** This alternative approach to defining IBL is commonly known as ‘Inquiry Stance’ and Cochrane-Smith and Lyttle are credited with coining the term (Cochran-Smith & Lytle, 2001; Lytle & Cochran-Smith, 1993; Wolkenhauer & Hooser, 2017) describing it as:

The position teachers and others who work together in inquiry communities take toward knowledge and its relationships to practice…Across the life span, an inquiry stance provides a kind of grounding within the changing cultures of school reform and competing political agendas (Cochran-Smith & Lytle, 1999, pp. 288–289).

They were responding to the prevalence of empirical education studies used to inform American education policy and initiated the Teacher Research Movement as a
means to contribute to the academic field of knowledge in education and address the well-reported gap between theory and practice (Biesta et al., 2015; Currin, 2019; Lytle & Cochran-Smith, 1993; Mcdonough, 2012).

The term ‘inquiry stance’ has gained traction with other teacher practitioners in recognising the impact IBL has had on their beliefs about education, the curriculum and their students (Dana, 2015; Harste, 2001; Murdoch, 2015; Short, 2009). Understanding IBL as a ‘stance’ immediately moves the attention beyond procedure and necessitates engagement with teachers’ epistemological beliefs and underlying philosophy of education, as Murdoch notes, “Inquiry is not a single 'method' or a program. Inquiry is really a way of being as a teacher – it is about how you think about learning and the relationship between teaching and learning.” (Murdoch, 2015, p. 15).

The literature describes inquiry stance as the reaffirmation of the constructivist roots of IBL, which demands an epistemic shift in teachers’ beliefs (Harste, 2001; Murdoch, 2015; Short & Burke, 1996, 2001). Short and Burke describe their iterative experiences of their new and changing understandings about inquiry through experiencing inquiry in the classroom, indicating its pervasive and challenging nature, “sometimes we build on our current beliefs to further develop our teaching practices and the learning environments we are creating with students. Other times we rethink our beliefs and make difficult shifts in both our beliefs and our actions” (Short & Burke, 2001, p. 20).

Short & Burke (1996) position IBL as a holistic process that involves three knowledge sources. Personal and social knowing is the starting point “Inquiry can only begin with what learners already know, perceive, and feel” (Short & Burke, 2001, p. 32). The second knowledge source is ‘knowledge systems’ and is commonly understood as individual subject disciplines (Short & Burke, 2001). Sign systems are
the third knowledge source identified by Short and Harste (1996) and refer to the way discreet subjects create and communicate meaning. This epistemic shift in approaching the curriculum is further framed in the context of Education for Democracy.

This is a completely different perspective from the deficit view of knowledge that traditional education presents, and it is worth exploring the wider literature around these four areas to get a sense of the implications of this epistemic shift for teachers when engaging in IBL as defined by inquiry stance.

The Learner-Centred Nature of Inquiry Stance. Short and Burke’s (1996) label, Personal and Social Knowing, is often referred to in the literature as an inherent student centredness, and is implicit in the non-linear nature of inquiry cycles, indicating a necessary shift in the teacher and student roles of traditional education. Drawing on Freire (Freire, 1985), Short and Burke recognise the power of problem-poser for positively motivating the problem-solving dimension of the students (2001, p. 31). For students, this dual role of problem-poser and problem-solver enables them to make connections between the world they occupy outside of school and what they learn in the classroom. This expands their understanding of the relations between things from their own particular context and develops a sense of their place in an everchanging world (Freire, 1970, p. 82).

Common reports from IBL classrooms that embrace this stance show increased interest from parents who report increased enthusiasm for learning from their child that lead to parents’ collaboration with the IBL curriculum (Guccione, 2011). There is also a myriad of opportunities and affordances for teaching practice that emerge from the growing responsiveness to those parental engagements in the way teachers conceptually designed, delivered, assessed and reported the IBL curriculum (Short & Burke, 2001, p. 23). It should be noted that these reports are based on teacher research from primary
classes, and it is not clear if it would be a comparably affective experience for post-primary students and their parents.

Putting the student at the heart of learning requires significant effort and engagement from the teacher in addition to expert subject knowledge, and the breadth of this role is succinctly described by Blessinger, (2014) “while the learner moves from a passive to an active participant in the learning process, the instructor also moves from being an isolated subject matter expert to an instructional leader, learning architect, and learning guide and mentor” (Blessinger, Patrick; Carfona, 2014, p. 5). In practical terms, the literature shows that to enable the students to learn both knowledge and skills, a unit of inquiry will contain a balance of structured, guided and open inquiry and this may even occur within an individual lesson (Banchi & Bell, 2008; The National Academies Press, 2000; Wood, 2010). As inquiry experience builds so too does an understanding of learning how to learn and students will become more adept in managing open inquiries as represented by experts, thus IBL is a process rather than a distinct event.

From an inquiry stance perspective, IBL draws upon and fosters personal connection and interests, provides a process for knowledge creation, the development of critical thinking skills, as well as personal and social skills (Chichekian & Shore, 2014; Harste, 2001; Levy et al., 2013; Murdoch, 2015). However, as Cochrane-Lyle asserts “teaching and learning are matters of both head and heart, both reason and passion” (Cochran-Smith, 2003, p. 374) and some teachers’ underlying beliefs in the capacity and status of children, as well as their underlying view of education can be a barrier to taking an inquiry stance to IBL (Barron & Darling-Hammond, 2008; Bass & Good, 2004; N. Noddings, 2005).
Conceptual Approach to Knowledge. Inquiry stance recognises disciplines as discreet subjects, however, from this perspective, knowledge is approached conceptually which allows students to see the interconnected nature of the disciplines they are studying (Barnard, 2016; Erickson, Lanning, & French, 2017; Short & Burke, 1996). Stern, Mohnkern, & Ferraro, (2017) highlight the distinction further by pointing out the traditional approaches to knowledge in terms of ‘doing’ a subject or topic, in contrast to conceptual approaches of ‘using’ knowledge to create new knowledge.

Conceptual understanding and the associated cognitive demands have prompted the significant revision of Bloom’s taxonomy (Krathwolh, 2002), and evidence the view that IBL sees knowledge as greater than a list of facts to recall: “We know that the holy grail of education—the ability to transfer understanding from one experience or domain to another—is facilitated by discussions around concepts… they are the superhighways of learning” (Barnard, 2016). However, the literature shows this can be challenging to teachers who are attached to the idea that subject knowledge cannot or should not change, or who are working hard to prepare students for high stakes standardised testing (Chichekian & Shore, 2014; Dyson, 2020; Medwell et al., 2019).

Meaning Making and Communication. Sign systems are the third knowledge source identified by Short and Harste (1996) and refer to the way discreet subjects create and communicate meaning. As inquiry stance removes arbitrary distinctions between subjects it also allows free use of sign systems to access differing perspectives of a concept to enrich the students’ particular line of inquiry:

Traditionally in schools, language has been emphasized; art, music and movement have been treated as frills; and mathematics has been reduced to a set of computations…knowledge systems and sign systems are tools for exploring
and researching students’ own questions. The major focus is inquiry itself, not the traditional content area distinctions (Short & Burke, 1996, p. 101).

This has significant implications for Equality, Diversity and Inclusion (EDI) practices which seek to establish inclusive classrooms because it allows students to use multiple sign systems to explore, create and present new knowledge and conceptual understandings, rather than favouring one sign system over another as is common in traditional educative practices (Murdoch, 2015). In doing so it accepts and respects social, cultural, cognitive and physical differences among students and gives them access to the full range of ways humans make and express meaning (Short & Burke, 2001, p. 34). This foundational epistemic shift enables an inherently inclusive view of students and provides an underlying structure for teaching and learning within a democratic learning environment.

**Democratising the Classroom.** For Dewey (1916), the revolutionising of education was intrinsic to a functioning democracy. His view of education as inquiry directly identifies what happens in the classroom as a political act. This view is echoed by Short and Burke, (2001) “Inquiry is theoretically based on collaborative relationships, not the hierarchies of control common in most schools…Because education for democracy is essential to inquiry, the phrase "collaborative inquiry" becomes redundant because inquiry is at heart a collaborative process.” (Short & Burke, 2001, p. 35).

However, the literature shows that democratic classrooms are not necessarily the intended aim or outcome of IBL for many teachers and as previously mentioned, the literature shows that ceding power and responsibility to students is often a challenge for teachers (Carr, 2006; Echeverria & Hannam, 2013; Motherway, 2019). The majority of research focuses on the efficacy of IBL from a knowledge content or skills perspective
rather than considering the democratic nature of the learning environment (Jacques, 2017; Kuhn, 2007; Maaß & Artigue, 2013). As Hayes, (2005) asserts “if we are serious about making schools more democratic, it means re-examining the foundations of the everyday authority we claim as adults” (Haynes et al., 2005, p. 2). Those born into this system, who have adopted an empirical, material worldview, and who have worked hard to benefit from it in terms of status and existential certainty would naturally be concerned by any change that requires them to critically engage with their established beliefs and values (Kolb, 2015; Voet & De Wever, 2019).

Short notes the inherent tension between valuing diversity among students while herding them towards standardised testing, which promotes a monocultural model citizen (Short & Burke, 2001). As well as holding implicit ethnocentric notions of what it means to be educated, the traditional view does little to fully work towards the wider aims of EDI. Kolb (2015), asserts the necessity for the teacher to fully embrace the transition of the classroom and associated teacher and student roles to purposively nurture democracy, “It is based on a democratic relationship between student and teacher that begins with the here-and-now experience of students’ lives and encourages the praxis of critical reflection and action to improve their lives” (Kolb, 2015, p. 369). The impact of this for the education of the student can be significant on all aspects of their lives.

**Teaching as Inquiry (TAI) an Effective Teaching Practice.** The literature shows an additional benefit of adopting the perspective of inquiry as a stance for this research because it is associated with IBL and Inquiry-Based Teaching (IBT), also known as Teaching as Inquiry (TAI), (Capps, Crawford, & Crawford, 2013; Lotter & Miller, 2017; *Teaching as inquiry : responding to learners.*, 2012). The underpinning philosophical principles of inquiry stance similarly apply to both students and teachers
(Kidman & Casinader, 2017). Viewed in this way, inquiry stance is considered intrinsically valuable for teachers’ professional development;

the inquiry stance entails a dialectical relationship between the knowledge and action of teachers. Such an outlook on the knowledge and practice of teachers deserves attention, because it not only encourages teachers to perceive, interpret, and react to practical challenges but also presents a fresh perspective on their professional work (So, 2013, p. 189).

Unlike instrumental conceptions of IBL, inquiry stance draws heavily on reflection, which Short cites as the key to changing her perspective about teaching and learning, she notes “our experiences convinced us that inquiry was not a refinement of project approaches or theme units, but a stance on learning that challenged our perspectives as teachers” (Short, 2009).

Cochran-Smith and Lytle (2001) focus on the direct link between inquiry and effective teaching and offer inquiry stance as an alternative perspective;

We propose that a legitimate and essential purpose of professional development is the development of an inquiry stance on teaching that is critical and transformative, a stance linked not only to high standards for the learning of all students but also to social change and social justice and to the individual and collective professional growth of teachers (Cochran-Smith & Lytle, 2001, p. 46).

This is distinct from the literature that accords with two other perspectives they identify as common in teacher education, namely ‘knowledge for practice’ and ‘knowledge-in-practice’, both of which operate in hierarchical systems which run contrary to the democratic philosophy of education underpinning inquiry (Cochran-Smith & Lytle, 2001, 2009; Cochran-Smith et al., 2018).
Taking an ‘inquiry as stance’ enables teacher agency to be recognised as a lens to view the efficacy of teaching practice highlights the importance of teacher agency, beliefs, reflective practice and the potential for significant influence through professional collaboration. Currin (2019) draws on Snow Gerono to describe the influence of this theoretical shift on the wider school environment as “reculturing” (2003, p.4) toward a more fair and equitable democratic society. As previously noted, the Teacher Research Movement has grown in recent years and while studies that have emerged may not influence policymakers, they remain a rich resource for teachers and teacher educators (Currin, 2019).

New Zealand mandates TAI in their professional development framework and rather than prescriptively designing a curriculum that demands delivery through IBL, the focus is on inquiry as a means to strengthen professional development with reflection playing an intrinsic role to TAI (Sinnema & Aitken, 2011; Teaching as inquiry: responding to learners., 2012). However, forcing TAI upon teachers as an intrinsic part of accountability measures has had disadvantageous consequences as expounded upon by Dyson (2020). Her review of the literature in New Zealand led her to conclude “the biggest threat to authentic practitioner inquiry is external accountability…with a danger for inquiry to become corrupted, managerialized, appropriated and contrived” (Dyson, 2020, p. 4). This serves as a warning for policymakers and teacher educators and reminds researchers about the importance of agency in teachers’ professional development.

A reassuring feature of inquiry as stance is the repeated assertion that it is not a state of having arrived at the ‘right’ way to teach IBL, rather it acts as a framework to consider the complexity of emic and etic pressures that teachers experience across their teaching career. The literature recognises the difficulties that arise for teachers when
changing perspective and warns that it is not a linear process “This shift is a difficult one to make and we continuously find ourselves moving back into previous ways of thinking” (Short & Burke, 2001, p. 35). Murdoch echoes this “a mindset does not mean a ‘set mind’” (Murdoch, 2015, p. 19). In this sense, inquiry as stance is not a judgemental tool to evaluate how effective a teacher is in their role, and instead puts the focus on the reflective experience of a particular part of their learning journey.

The term inquiry as stance resonates with my own experience and understanding of P4C although it is interesting that I have only stumbled upon it now. Although common in primary education, as a framework to view IBL it gives a useful, holistic perspective for teachers of all levels. It will be used to define IBL for this research, although this does not exclude inquiry cycles from being referenced or acknowledged as components of inquiry; teachers with inquiry as stance use inquiry cycles (Murdoch, 2015; Short, 2009; Topping, Trickey, & Cleghorn, 2019).

**What the research says about CPD in IBL**

Indications about the impact of IBL CPD on teaching practice can be found in the literature, but present limited and often contradictory findings. Quigley et al. (2011) highlight four challenges teachers may encounter when using IBL in the science classroom. These are assessment, facilitation that fosters dialogue, conceptual understanding, and building a community of inquiry (Quigley et al., 2011, p. 55). It is difficult to identify from this list precisely which part of IBL is not challenging for teachers. In attempting to understand why IBL presents such difficulties, qualitative research capturing the underlying systemic and subjective context of the teacher proves valuable.

The mixed-methods study by Voet and De Wever, 2018, ‘Effects of immersion in inquiry-based learning on student teachers’ educational beliefs’, confirms that a shift
in understanding about IBL through experiencing IBL is not a foregone conclusion and cite reflection as the key to engage with the underlying educational beliefs of student teachers (Voet & De Wever, 2018). This concurs with the qualitative research conducted by Snow-Gerono (2005) who specifically used the definition of inquiry stance to explore teachers’ experiences of inquiry projects to discern whether this had cultivated an inquiry stance towards teaching. Snow-Gerono found that an inquiry project may be conducted procedurally without having any impact on a teachers’ existing philosophy of education and that it is “difficult to pinpoint whether an inquiry project naturally cultivates an inquiry stance or if an existing inquiry stance simply encourages undertaking inquiry projects” (2005, p. 89). The implication being that if a teacher does not already hold beliefs and values that resonate with inquiry stance, experiencing an inquiry project will not necessarily lead to reflections that influence their existing beliefs and values.

The complexity of the factors at play are explored by Maaß & Artigue (2013) in their review of the research into the effects of instructional guidance on teaching and learning. They also highlight the personal nature of teaching and learning and reveal the complexity of engaging with new pedagogies and curriculums for teachers, “teaching and learning is determined not only by instructional materials alone, but also by an interaction of other factors such as the curriculum, teachers’ beliefs and personal backgrounds, and their professional development experiences.” (Maaß & Artigue, 2013, p. 784). This perspective resonates with the framework inquiry stance provides.

Wider research into the role of reflective practices attempts to make a distinction between student teachers and experienced teachers. The latter has been identified as more capable of reflection because they have a wealth of previous experience to draw upon when reflecting on what Zeichner and Liston refer to as “teachers practical
theories” (Zeichner & Liston, 2014, p. 46) and they are also less likely to adopt new ideas without thinking about them through, which indicates reflective engagement with the new idea (Gheith & Aljaberi, 2018, p.162). However there is contradictory evidence in the literature and Sinnema and Aitken, draw on the work of Spillane (2004) to note “When presented with evidence about what works in teaching and learning, it is tempting for practitioners to over-assimilate and not recognize distinctions between what the evidence is suggesting and their own existing practice” (Sinnema & Aitken, 2011, p. 6).

Silm et al., (2017) recognise the ambiguity of the area of research into teacher experience and IBL, as well as the implications this has for teacher professional development. “The relationship between teaching experience and readiness to use IBL is not completely clear, and it is not clear whether teacher training should address teachers with different levels of experience differently” (Silm et al., 2017). Sim et al., (2017), draw on Fisherman et al. (2003) to reinforce the message that teacher beliefs should be considered when introducing new classroom methodology because professional development should, among other things, be trying to affect teacher beliefs. (Silm et al., 2017)

Challenges for teachers implementing IBL often relate to external factors, including time, curricular opportunity, accountability and agency (Dana, 2015; Guccione, 2011; Lotter & Miller, 2017; Murdoch, 2015). These findings are mirrored in research concerning the International Baccalaureate by Chichekian & Short, (2014) which shows that IBL is less established in MYP (Middle Years Programme) and DP (Diploma Programme) than in PYP (Primary Years Programme), where teachers have greater space, both in terms of curriculum and assessment, to develop their understanding and hone their skills. (Chichekian & Shore, 2014).
Lived Experience and IBL. Research concerning lived experience is qualitative and draws criticism for its lack of rigour when compared to empirical studies (Currin, 2019; Kincheloe, 2003). Lived experience can be addressed through several methodological approaches including ethnography, grounded theory, narrative research, case studies and phenomenology and the ultimate selection is dependent on the context and resources available to the researcher (Creswell, Hanson, Clark, & Morales, 2007).

Common in the teacher research movement, which has been strengthened in the USA in particular with the work of Cochran-Smith and Lytle (Cochran-Smith & Lytle, 2009), there has been an increasing call for more studies including teacher voice as a useful source of knowledge about the nature of inquiry stance both concerning IBL and TAI. The advantage of qualitative research to further investigate the nature of IBL relates to the emic and inductive nature of both (Merriam & Tisdell, 2016), and has the potential to uncover more about the affective role of feelings and beliefs in relation to practice than quantitative methods (Philipsen, Tondeur, Pynoo, Vanslanbrouck, & Zhu, 2019; Voet & De Wever, 2017). It also moves teachers from objects of reform in the literature and creates a space where their contributions and insights can make positive change “The plethora of small changes made by critical teacher researchers around the world in individual classrooms may bring about far more authentic educational reform than the grandiose policies formulated in state or national capitals” (Kincheloe, 2003, p. 37).

IBL and The Irish Context

Cochran-Smith and Lytle stress the value of “local knowledge influenced by global conditions” (2009, p. 154) and it is important to recognise the particularities of the Irish context in contrast to the wider international literature. This final part of the literature review seeks to establish knowledge about the local context, to ascertain how
Irish teachers are positioned in terms of the themes this literature review has explored. These are; the educational context in Ireland that shaped constructivist policy, the signs of democracy in the Irish classroom, the current provision of CPD in IBL in Ireland, and the potential for TAI to be a useful tool for teacher education in Ireland. This will help give greater understanding from a research position about the perceptions and realities of external pressures particular to teachers in Ireland.

**Constructivism in an Irish context.** The literature relating to the education policy of the original Junior Cycle Certificate gives an overview of the expectations of teachers before Junior Cycle Framework 2015 (JCF) and highlights what has changed. The original Junior Certificate, first introduced in 1989, had all the features of an instructivist approach to teaching and learning with the roles of teacher and pupil clearly defined and hierarchical, and specific knowledge transmission from the expert teacher to the novice student as the primary learning objective (Macphail, Halbert, & O’neill, 2018). Replaced by the JCF (2015) the use of constructivist pedagogies, including IBL is encouraged (*Key Skills of Junior Cycle Being Creative*, 2015). However, the JCF (2015) relinquished ambitions for formative assessment throughout and retained national examinations in some subject areas. The attempt to move from traditional education pedagogies has, as is common elsewhere, “been undermined by the dominance of high stakes summative discourse” (Macphail et al., 2018, p. 323).

This is compounded by the fact that post-primary education in Ireland is in an ongoing process of reform with Senior Cycle yet to be completed (Banks, Mccoy, & Smyth, 2018). Consequently, high stakes standardised terminal examinations in the form of the Leaving Certificate are still in place (Banks et al., 2018; NCCA, n.d.). The detrimental impact of this on teaching and learning is well explored by Baird et al (2014) who notes instructivist pedagogies continue to be used to teach to the test, and
Polesel, Dulfer, & Turnbull (2012) highlight the negative impact such testing has on the students and their families. In effect, the literature shows that teachers in Ireland are being asked to embrace constructivist pedagogies, including IBL to deliver a new curriculum while using instructivist approaches for another. However, the literature is unclear how the multiple incongruencies in the policy between IBL and standardised testing are experienced and navigated by teachers, and the impact it has on their teaching practice is not evident in the current literature.

**Democracy in Ireland.** IBL, when viewed through inquiry stance, is intrinsically democratic, however, democracy is a contestable concept with multiple and diverse interpretations (Kohan, 2018). In Ireland, the state itself has only emerged into a democratic political landscape in the last 100 years with questioning functionality (Harris, 2006). Motherway (2019) asserts, “Dewey’s belief in the development of a community consciousness with overarching elements of inclusion, diversity, transformation, and communication are conspicuous in their absence in the Irish context” (Motherway, 2019, p. 57).

The democratic nature of IBL may address the deficit revealed by further exploration of the literature which highlights that a significant proportion of the population is not well served by traditional educative approaches. It is not an inclusive system that accommodates the diversity of the human condition, and children with Special Educational Needs (SEN) have historically been segregated from mainstream education (Department of Education and Science, 2007; Department of Education and Skills, 1993; Wang, 2009). This is not isolated to Ireland as the UNESCO Salamanca Report highlights (UNESCO, 1994). Nonetheless, in the interim period reform has been slow and a shift from traditional teaching practices in the Irish classroom is not consistent (Shevlin, Kenny, & Loxley, 2008). Drawing on the work of Shevlin, Kenny
and Loxley (2008), Prunty, Dupont, & McDaid, (2012) reiterate the importance of teachers’ pedagogical understanding and application in the classroom noting that “some classroom teachers lack basic knowledge of the educational implications of particular disabilities and/or SEN with the result that they persist with traditional (inappropriate) teaching approaches” (Prunty et al., 2012, p. 34).

Where opportunities for democratic engagement have emerged through Irish education policy, such as Student Voice, the literature shows a performative, instrumental application in many schools constrained by a culture of tradition (Fleming, 2015; Forde, Horgan, Martin, & Parkes, 2018). “In this context, the student council, as a construct for student voice within a right-based, consultative and democratic citizenship perspective, is largely tokenistic and functionally redundant” (Fleming, 2015, p. 237). It should be noted that there is growth among the development of schools under the patronage of Educate Together in Ireland, who explicitly state their child-centred, democratic philosophy of education (“Mission & Values - Educate Together,” n.d.). Nonetheless, they account for around 3% of primary schools, with less representation at post-primary, and both the Catholic Church and State Education Training Boards hold control over the vast majority of schools (“Parents need to make informed choices over patronage,” n.d.). Despite education reform, the Irish context does not appear to be conducive to democratic classrooms, and as is common in hierarchical systems, it may be difficult for teachers to engage in authentic IBL as a result (Haynes, Murris, & Haynes, 2005).

**Irish CPD in IBL.** In practical terms, there is IBL professional development for in-service teachers offered by curricular support agencies, such as the Junior Cycle for Teachers (JCT) who offer CPD in IBL for Geography, Science and Philosophy teachers (“Geography | CPD Workshops 2019/2020 | Junior Cycle for Teachers (JCT),” n.d.;
“Science | Resources | Junior Cycle for Teachers (JCT),” n.d.; “Short Courses | Elective Workshops | Junior Cycle for Teachers (JCT),” n.d.). The Professional Development Service for Teachers (PDST), and a variety of University initiatives also support IBL through CPD (“Ireland | Amgen Teach,” n.d.; “P4C (Philosophy for Children) Training at Carlow College - Carlow College,” n.d.; “Transformative Role of Teachers to be recognised by Teaching Council - Teaching Council,” n.d.).

While welcome, these supports are concentrated around specific disciplines and their curriculum and consequently, there is no common articulation among these CPD initiatives about the broader nature of IBL as inquiry stance, instead, distinct permutations of IBL such as P4C or PBL tend to be used to frame the CPD. Experienced teachers in Ireland are attending IBL CPD, using IBL in their teaching, but there is no research investigating their experience of doing so at a post-primary level under the current auspices of the Junior Cycle Framework (2015).

The Potential for TAI in Ireland. The literature shows a more promising context for TAI is evident in Ireland. The Irish Teaching Council cite reflective practice as a pivotal feature of effective teaching and learning and reflection is seen as a key component of professional development for teachers, as can be seen by the Teaching Council’s Cosán initiative (Framework for Teachers’ Learning, 2016). Through Cosán, the Teaching Council is seeking to foster a culture of “powerful professional learning” based on teachers’ active engagement in their learning, for their benefit and that of their students. Similarly, the Irish Teaching Council’s Code of Professional Conduct for Teachers is clear in their expectation that teachers engage in reflective practices (Code of Professional Conduct for Teachers, 2016).

The way teachers engage with reflection is not mandated through appraisal in Ireland and informal reflection is included among more formal reflective structures in
recommendations to teachers. In this sense, Irish teachers should feel less pressure from performativity and accountability issues that are reported elsewhere in the literature as they can retain a sense of agency over their professional development. However, Irish education reforms in respect of terminal examination, have not been completed and it remains to be seen whether they will improve the current system.

**Conclusion**

A review of the international literature has highlighted the benefit of using inquiry as stance as a theoretical framework for understanding IBL because it captures the core epistemological features of IBL that teachers will have to navigate, namely a constructivist approach to knowledge. This leads to a theoretical shift for teachers in how they view their students, teaching, learning, and the curriculum (Short & Burke, 1996).

The literature has also shown that the intrinsically reflective nature of inquiry as stance on both practice and curriculum is congruent with a qualitative approach to researching the lived experience of teachers. The inductive and iterative qualities of lived experience provide a framework to explore what teachers reflected upon, when, why, what they learned, and how these reflective experiences impacted on their students, teaching, learning, and the curriculum.

Wider literature identified some of the general challenges facing teachers concerning IBL, including the lack of consensus about the definition of IBL; time constraints; assessment challenges; increasing accountability; and ongoing tensions between empirical and constructivist epistemologies. However, these do not necessarily represent the experience of Irish teachers as they engage with the JCF (2015). To date, there is no research about post-primary Irish teachers lived experience of IBL and the impact on their teaching practice and this research will address this deficit.
Chapter 3 Research Methodology

This chapter charts the methodology employed when undertaking this research beginning with a purpose statement which summarises the focus for study. This is followed by the rationale for the study outlining the purpose of the research and associated questions that were used to guide the study. The chapter will then describe the methodological approach taken, this researcher’s positionality and the effect of Covid-19 on the research. The methods used for selecting participants, generating data and conducting analysis are then described, before addressing the ethical concerns, issues relating validity and limitations of the research.

Purpose Statement

The purpose of this study is to explore Irish post-primary teachers’ lived experience of Inquiry-Based Learning (IBL) as they use it to teach areas of the Junior Cycle Framework (2015) (JCF). The research will attempt to discern how the lived experience of IBL, when viewed through the lens of inquiry as stance, informed the understandings of teachers about the nature of IBL, and how it impacted their teaching practice.

Rationale for Study

As shown in the previous chapter the literature highlights two interconnecting areas that the research question directly addresses. These are the gap in the research concerning post-primary teachers’ experiences of engaging with IBL as part of the JCF; the ambiguity of the term IBL and how it is understood by teachers. My life-long interest in the nature of learning and career in teaching and teacher education is the third justification for conducting this study into Irish teachers’ lived experience of IBL and how it impacts their teaching.
Firstly, the ongoing curricular reform in Ireland reflects wider global shifts in education policy and is underpinned by constructivism, which is distinct from instructivist pedagogies associated with traditional education (Framework for Junior Cycle 2015, 2015; Pont, 2018). In post-primary settings, The JCF (2015) requires Irish teachers to engage with constructivist pedagogies, such as IBL, in their teaching. As noted in the literature review experienced teachers in Ireland are attending IBL Continuing Professional Development (CPD) and using IBL in their teaching, but there is no research exploring their experience of doing so at a post-primary level under the current auspices of the JCF (2015). This research will address this deficit.

The Junior Cycle Framework (2015) encourages Irish teachers and students to use IBL as an approach to teaching and learning, and current research suggests the success of this is in part dependent on understanding IBL in its fullest sense to support classroom practice (Currin, 2019). Reflecting on experience is a core component of IBL as envisaged by Dewey (1938; 1933) and there is synergy with the contemporary literature on the role of reflection with regard to the relationship between teachers’ beliefs and practice (Biesta et al., 2015; Devine, Fahie, & McGillicuddy, 2013; Voet & De Wever, 2019; Zeichner & Liston, 2014). There is widespread support for reflective practice in teachers’ professional development, which seeks to change traditional education beliefs and teaching practice to accord with evidence-based 21st Century constructivist policies (Framework for Teachers’ Learning, 2016; Lotter & Miller, 2017). This research will frame Irish teachers’ understandings of IBL from an inquiry stance perspective to identify whether Irish teachers’ have a holistic understanding of the phenomenon of IBL that incorporate signs of a constructivist epistemological perspective and ongoing reflective practice as distinct from an instrumental, technical application of IBL. In taking this approach the role of beliefs on the impact of teaching
practice will emerge and give some indication as to the utility of inquiry stance in defining IBL.

As a teacher educator working with Irish teachers to develop IBL practice in several curricular areas at post-primary, the findings of this research are of professional and personal interest and value to me and will inform my future work.

**Associated Questions**

To answer the question, ‘how does Irish teachers’ lived experience of Inquiry-Based Learning impact their teaching practice?’ the research was guided by the following questions;

1. What are teachers’ understandings of the phenomenon of IBL when viewed through their lived experience?
2. What tensions and successes emerge for Irish teachers when they use IBL as part of the JC curriculum?
3. How do teachers’ understandings of IBL impact their professional practice?

**Methodology**

The formulation of the question ‘How does Irish teachers’ lived experience of Inquiry-Based Learning impact their teaching practice?’ is inherently open and exploratory, and as shown in the rationale, it is intentionally self-positioning in terms of its qualitative nature.

**Qualitative Research.** In contrast to quantitative research which has its origin in the enlightenment and empiricism and is concerned with applying numerical measurements to phenomena to derive objectively verifiable results, qualitative research seeks to explore those areas of human existence and experience, often referred to as qualia, that slip from view in quantitative studies. (Brinkman & Friesen, 2018; Creswell, 2007). Underpinned by constructivist epistemology, qualitative research is
congruent with the Deweyian roots of IBL. It is also as difficult to define succinctly. Qualitative research is not anchored in a particular academic discipline, and its wide range of application and diversity of research design, informed by the researchers’ worldview and often informed by an additional theoretical framework, challenges a uniform definition (Creswell, 2007; Merriam & Tisdell, 2016; Morrow, 1979; Yilmaz, 2013).

Nonetheless, shared characteristics of qualitative research are implicit in its ontological, epistemological, methodological axiological and rhetorical philosophical assumptions (Creswell, 2007; Denzin & Lincoln, 1998). Merriam & Tisdell, identify four aspects accepted by researchers as typical, namely “the focus is on process, understanding and meaning; the researcher is the primary instrument of data collection and analysis; the process is inductive; and the product is richly descriptive” (Merriam & Tisdell, 2016, p. 15). It is common to use the first person in recognition of the intersubjective role of the researcher and participants in qualitative research.

The research question requires an exploration of the lived experience of teachers to construct new knowledge and new meaning about IBL and its relationship to educational beliefs and teaching practice. Lived experience of participants as a source of data can be approached from a variety of perspectives through distinct qualitative methodologies, including Ethnographic, Narrative Theory, Grounded Theory and Phenomenology (Creswell, 2007). Each has a specific philosophical paradigm, reflecting the demands of the question and procedural practicalities relating to the context in which the research is being conducted. This directs the researcher in their choice of methodology and the methods used for data collection and analysis (Creswell et al., 2007; Yilmaz, 2013).
**Phenomenology.** Phenomenology offered a framework most conducive to the exploratory nature of the question at the centre of this research, enabling researchers to capture participants’ lived experiences about a particular phenomenon, in this case, IBL, and examine how they make sense of their experience to understand the phenomenon better (Creswell, 2007). However, phenomenology is a complex area and is both a philosophical discipline and a research method (Brinkman & Friesen, 2018).

The philosophical discipline of Phenomenology emerged in Europe in the 19th and 20th century as a response to Cartesian dualism dominating Western philosophy at that time. Descartes’ philosophy emerged in the early 17th century and asserted a mind/body dichotomy positioning reason as the tool for discovering objective knowledge. Over the centuries, the idea that knowledge can be known ‘a priori’ shaped scientific progress and informed western dualistic thinking. Consequently, the human dimension and experience of knowing were diminished in the pursuit of objectivity (Vagle, 2016, p. 29). As Van Manen, (2014) poetically noted, the resulting scientific perspective on the nature of reality leaves an incomplete picture, “what you hear is the cosmic sound of a flute without a player” (Van Manen, 2014, p. 16).

Edmund Husserl (1859 – 1938) is credited with founding phenomenology as a philosophical discipline, arguing that the mind was not separate from the world, and instead, consciousness was in constant relationality with the world, which he later termed ‘intentionality’. Devoid of choice or intent, Sartre’s description of intentionality, as ‘bursting forth towards’ (Vagle, 2009) gives a dynamic representation of the relationship between the mind and the world around us. Husserl’s phenomenology, referred to as Transcendental or descriptive, bridges the chasm between the subjective (self) and object (the world) created by Cartesian epistemology, locating lived
experience in the intentional relationship between the subject and the object, which he termed lifeworld (Vagle, 2016, p. 30).

Martin Heidegger was a student of Husserl and took phenomenology in a different direction with his focus on ontology rather than epistemology. He argued that lifeworld phenomenon or the phenomena of lived experience are brought into being through intentionality between the subject and the object. Heidegger used the term Dasein to describe this relationship, which is widely interpreted as ‘being-with’. This is a dramatic theoretical shift and placed further distance between Descartes’ dualistic epistemological philosophy and phenomenology (Vagle, 2016).

**Interpretative phenomenological analysis.** The alternative theoretical direction Heidegger’s conception of Dasein provided lead to associations with Heuristic or Interpretive Phenomenology for two reasons. “firstly, that human beings can be conceived of as ‘thrown into’ a world of objects, relationships, and language; secondly, that our being-in-the-world is always perspectival, always temporal, and always ‘in-relation-to’ something” (Smith, Flowers, & Larkin, 2009, p. 21). This started as an approach to psychology to capture the experiential within a qualitative paradigm (Smith et al., 2009). Merleau-Ponty and Sartre provide further direction for IPA researchers as they “contribute to a view of the person as embedded and immersed in a world of objects and relationships, language and culture, projects and concerns…with a focus on understanding the perspectival directedness of our involvement in the lived world” (Smith et al., 2009, p. 24). From an IPA research perspective, this is an inherently interpretative activity that seeks to make meaning from the relational experience of being in the world.

IPA also draws upon the theoretical tradition of Hermeneutics, which is distinct from phenomenology but provides important insights regarding textual interpretation
for the researcher. Schleiermacher’s work points to the intersubjective nature of the interpreter and the writer of a text and there are strong connections with the work of Heidegger concerning the fore-structure, or assumptions and preconceptions about a given phenomenon that we already hold (Smith et al., 2009). Heidegger highlighted the complexity of identifying these preconceptions so they do not obscure the meaning of the thing itself, which in IPA is referred to as bracketing. This is a reflexive practice and it is not expected that this can be achieved completely, or linearly, it may take several engagements with a text to understand our preconceptions (Smith et al., 2009). Building on Heidegger, Gadamer’s contribution is particularly helpful for the interview as he highlights the openness the researcher must have when engaging with the ideas of others “The important things is to be aware of one’s own bias so that the text can present itself in all its otherness and thus assert its own truth against one’s own fore-meanings” (Gadamer, 1998 p282).

The concept of the hermeneutic circle also informs IPA and looks at the relationship between the whole and the parts. This is a dynamic process and works on several levels reflecting the iterative nature of IPA, which is not a series of linear stages (Smith et al., 2009). In addition, the idiographic nature of IPA which highlights the importance of the particular in terms of detail, and in terms of a particular phenomenon as experienced by particular people in a particular context, “IPA study represents a perspective, or personal experiences and application thereof, rather than a population” (Smith et al. 2009, p49).

This gives a theoretical basis for small, purposive samples which offers a cautious approach to establishing generalisation that reflects the complex relationship between the individual and the phenomenon (Smith et al., 2009). The features of IPA
methods as intersubjective and iterative resonate strongly with those of IBL and offer
direction for data collection and analysis.

Numerous academic disciplines have adopted phenomenological research
methodologies including education, nursing, psychology, psychiatry and the social
sciences have benefitted as a result (Van Manen, 1990). The multiple permutations of
phenomenological research and methodology are a testament to its breadth and
flexibility across academic disciplines, and there is much debate about the merits and
limitations of phenomenological methodologies and methods, often in respect to their
relationship to the underlying phenomenological philosophy:

“It should be acknowledged that the various qualitative research methods that
are inspired by phenomenology may be undeniably important and relevant and
yet are not to be confused with genuine phenomenological methods and

Nonetheless, contemporary phenomenological researchers are encouraging
about originality when planning phenomenological research and selecting methods and
warn against attempting to find a recipe to follow (Dahlberg, Dahlberg, & Nyström,
2008). This is echoed by Vagle in his summary planning advice, which spans just two
points;

1. The phenomenon calls for how it should be studied—not a prescribed list of
sanctioned techniques, processes, and tools.

2. Any technique, process, or tool that you think helps you explore and
illuminate the phenomenon is fair game—as long as you can justify why.

(Vagle, 2016, p. 17)

As with IBL, qualitative research is an emergent design process, which provides
flexibility around any initial plan. Events in the field and during data generation may
require significant alteration to any aspect of the research (Creswell, 2007, p. 39) and are reflected in the section describing the impact of Covid-19. An inductive approach concerning data analysis adds another layer of complexity and uncertainty to planning but highlights the inherent reflectivity of the approach and the need to be responsive to both the participants and the question.

**Researcher Positionality**

This research formalises one iteration of my lifelong inquiry into the nature of teaching and learning and this has been described in the introduction of this research thesis. I recognise that I am inextricably involved in the research, which has been co-created with participants contributions.

The importance of the researcher’s awareness of their epistemological perspective, or theory of knowledge is emphasised repeatedly in the literature (Crotty, 1998; Broido & Manning, 2002; Creswell, 2007; Creswell, Hanson, Clark, & Morales, 2007;), as this directs the researcher in their choice of methodology and the methods used for data collection and analysis to address the research question. With Mary Midgley in mind, researchers need to examine their philosophical plumbing (Midgley, 1991, p. IX) to show congruence between the inquiry question, their philosophical foundations and choice of research methodology and design.

**Epistemological Stance.** I share Dewey’s constructivist view and believe that knowledge is produced through the meaning-making process of social interaction and reflection on experience (Crotty, 1998). This is evident in the research question which has identified a constructivist pedagogy as its focus and specifies a desire to learn of the lived experience of teachers to construct new knowledge and new meaning about IBL and its relationship to teaching practice. A constructivist epistemology also requires that I recognise my interdependent relationship with the participants which locates me in the
research. As such, the findings will reflect multiple realities, including my own, and will have multiple layers of meaning (Creswell, 2007).

**Covid-19**

As a result of the contextual and interpretative flexibility of qualitative research, there is no rigid set of instructions to follow, it is an emergent process and revision to any aspect of the design may be made (Merriam & Tisdell, 2016). This was particularly fortuitous with the onset of the global pandemic and lockdown of Ireland two days after inviting participants to the study. This led to a reiteration of the question as the sample and collection methods changed. The initial research question contained a reference to ‘cross-curricular IBL lived experience’ because permission had been granted to invite participants within an SFI project I co-managed at University College Dublin. The SFI project focused on increasing the level of engagement of girls in DEIS schools in STEM and used a cross-curricular, inquiry approach to STEM teaching. The initial focus on cross-curricular IBL was to frame IBL in its broadest sense as a pedagogy for teaching and learning in any curriculum area. However, the pool of potential participants was small and although four initially agreed, three of these were unable to contribute for Covid related reasons. Although alternative participants outside of this project were available, there was not the equivalent commonality of experience and the change of question reflects this.

It should also be noted that the question itself became difficult to pin down and I found reassurance from Short & Burke’s reflections on their engagement with IBL research:

> We knew from our own inquiry that finding the question often is the most difficult aspect of our research and occurs quite late in the process. We begin
with an area of interest that we explore, and the specific question grows out of that exploration rather than preceding it (Short & Burke, 2001, p. 32).

My initial conception of data generation for the research questions also altered. Initially, I had intended to use focus group interviews to build on the professional learning community that was already established in the SFI cohort. The change of cohort to include individuals who did not know one another weakened this justification, additionally, the infectious nature of the disease, travel restrictions and increased workload that has accompanied the pandemic meant it was impractical to continue with focus groups as a method and one to one interviews were used instead, allowing participants to engage at a time convenient to them.

Researching during a global pandemic required a significant degree of sensitivity to the uncertainty, increased workload and fusing of personal and professional lives among participants. These were and continue to be stressful times for everyone and it was challenging to keep the focus on the lived experience of IBL during interviews. At times it was inappropriate to do so and one interview was staggered over two sittings because the stress of the current school situation began to dominate the dialogue.

Methods

Selection of Participants. In keeping with the idiographic nature of IPA, purposive sampling was used to select participants, with the criteria identified as being an in-service teacher and using IBL to deliver some or all of the teacher’s curriculum area within the JCF (2015). One participant from the original SFI cohort remained. Three others were invited based on their attendance at independently organised P4C CPD three years previously. All three had remained in contact with me and I knew they were using P4C in different curricular areas.
Although I work for several institutions and organisations delivering CPD in P4C/IBL I did not want to be bound or restricted in respect to the data and potential internal politics. Instead, I contacted three individuals who had attended P4C/IBL CPD I had independently delivered. My relationship with these participants was professional and they had remained in intermittent contact over the previous three years to varying degrees.

**Sample Size.** The depth of data generation through one to one interviews necessitates at least three participants for triangulation purposes and maintain the credibility of the study (Smith et al., 2009). Owing to the amended criteria for sampling in light of Covid-19, four participants were included in this research sample.

The criteria for sampling post Covid-19 was not as homogenous as originally planned. When participants were viewed as a whole, rather than individually, a balanced representation of the range of educational provision at post-primary in Ireland emerged. The sample of participants includes academically selective and socially disadvantaged schools, co-ed and Girls schools and the broad spectrum of patronage indicating degrees of association with either traditional or progressive forms of education is represented. Participants also articulated differing motivations for engaging with an IBL curriculum. Rather than hinder the study, this has enabled a sharper focus on IBL as the phenomenon of shared experience among participants across diverse backgrounds, with local context giving a framework to reflect upon the local knowledge these teachers had gained in the process.
Participant Background

<table>
<thead>
<tr>
<th>Participant Pseudonym</th>
<th>Date of Interview</th>
<th>Type of School</th>
<th>Subjects Taught</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aoife</td>
<td>Interview A</td>
<td>Catholic DEIS Girls</td>
<td>Science/Maths</td>
</tr>
<tr>
<td></td>
<td>26/03/2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anna</td>
<td>Interview B</td>
<td>Catholic Grammar Girls</td>
<td>English/History Philosophy Short Course</td>
</tr>
<tr>
<td></td>
<td>7/04/2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sophie</td>
<td>Interview C</td>
<td>Educate Together (ET). Co-Ed</td>
<td>Ethical Education/CSPE</td>
</tr>
<tr>
<td></td>
<td>9/04/2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lana</td>
<td>Interview D</td>
<td>Education and Training Board (ETB). Co-Ed</td>
<td>English/History Philosophy Short Course</td>
</tr>
<tr>
<td></td>
<td>1/04/2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interview E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>30/04/2020</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Semi-Structured Interviews. To capture the subjective multiple realities of the participants, semi-structured, one to one interviews were conducted. As mentioned, this emerged as a response to the changing conditions created by the pandemic. Interviews were conducted over Zoom which enabled visual and audio recordings. The interviews lasted between 60 and 90 mins and one participant had the interview across two days owing to pressures relating to Covid-19.
The questions used to inform the semi-structured interviews incorporated the descriptors Short (2009) uses to describe an inquiry stance into broad and open questions to aid the collection of insights relating to the interplay between teachers’ beliefs and values and their experience of the IBL than using cycles of inquiry phases. The literature review shows inquiry cycles vary considerably and do not always represent the wider philosophy of education underpinning IBL. Furthermore, the features of inquiry stance as discussed by Short strongly correlate with the way P4C is articulated in the CPD I deliver, and I was confident these areas would be familiar, although I did not know to what degree. As Murdoch (2015) recognises, teachers will interpret subjectively any CPD and their expression of it may not reflect the intended communication (Murdoch, 2015, p. 75). However, this research is not interested in judging teachers concerning CPD outcomes, it is focused on their lived experience of IBL.

Guidance for the formulation of questions and interview conduct was taken from Smith et al., (2009) and Merriam & Tisdell, (2016). Given the dynamic and interconnected nature of the features of IBL, questions were not asked in a linear order, rather different aspects were addressed as they naturally emerged in the dialogue. This required careful note-taking during the interviews to ensure each area was covered. (See Appendix A for interview protocol). The challenge of bracketing was a constant throughout the interview process as teachers’ reflections resonated with my own experience, and on several occasions I found myself stopping halfway through a question to reform it so that I would not corrupt participants contributions with my own wonderings.

Once participant context was gathered all the interviews officially began with a question asking participants what their experience of IBL was like. This prompted an
entry point into their lived experience from which to work from. Questions were open, not asked in order, and some were not asked at all if the area had already been thoroughly covered. The interconnecting nature of the features of IBL coupled with the open style of questioning enabled participants to reflect authentically on their subjective experience, naturally making their own connections between one area, such as student-centredness, to others, such as assessment, or collaboration, depending on what was important for them. After lengthy contributions containing multiple areas of experience, I would summarise what I thought they had said to seek further clarity and aid my own charting of their experience. There was one participant who took the lead at the start of the interview, such was her interest in expressing her experience. However, after giving a few minutes to enable her to air the salient points on her mind, I was able to follow the protocol in line with the other interviews.

Transcripts were made using a mixture of free online software, and manual transcription (see Appendix B for sample pages from participant transcripts). Participants were sent copies of the transcripts so they could amend or expand on any contribution they had made. This was particularly important to ensure the veracity of responses given as the technology was not perfect and everyone had a strong accent. It also allowed me to acknowledge and honour the role the participants have in this research, as they are co-authors in a constructivist sense. No participant made any amendments, although one requested more time to look thoroughly. All data is stored on a password-protected computer.

Data Analysis

As mentioned there is no set recipe for IPA research, Thematic Analysis was used as described by Smith et al.,(2009) in concert with Braun and Clarke (2006; 2016). The resonance with IBL was apparent because it is an inductive, flexible, experiential
and interpretational approach that allows for sophisticated exploration of a phenomenon to enable thick descriptions. After familiarising myself with the data, reading actively, analytically and critically I began to manually generate semantic and latent codes, initially using word and excel, colour coding participants’ exerts which were them printed out and physically clustered into themes (See Appendix C).

There is much discussion of emergent themes in IPA which uses the terms superordinate and ordinate themes to indicate a hierarchy of ideas (Smith et al., 2009). I found this difficult to work with because IBL is such an interwoven construct. However, in their online lecture series, Braun and Clark discuss the tendency of referring to the emergence of themes in qualitative research which gives the impression of a passive researcher (Clarke, 2020). For this reason, I found their method of Thematic Analysis useful because it helped me recognise my active role as a researcher in this process of discerning patterns in the data. I retained the use of their terminology of codes and themes for the analysis, which were identified and reviewed repeatedly to identify how well they addressed the overarching phenomenon of IBL and its relationship to teachers’ understandings and practices. Once the final codes, themes and extracts had been identified they were reviewed by an external, independent source who had no background in education to ensure congruence.

**Ethical Concerns**

Given that participants are adults rather than children the level of consent required for participation assumes the capacity to consent rather than issues relating to assent. In seeking ethical approval for the research study, an Application for Ethical Approval of Research Proposal was submitted to Marino Institute of Education Ethics Research Council and was approved (See Appendix C). Permission was sought from
both UCD School of Education and SFI to invite the experienced teachers involved in the Girls in STEM project to participate in the study and this was granted.

Although I work with a variety of experienced teachers in relation to IBL CPD through several institutions, ethical concerns relating to the findings and implications identifying a cohort of experienced teachers who could be approached without incurring on ethical issues relating to a particular institution proved problematic. The time pressures and additional stress of the pandemic on peoples’ lives made seeking external ethical approval impractical. All participants signed consent forms before the interviews commenced and verbally affirmed consent at the start of interviews. (See Appendix D).

Validity

Qualitative research is concerned with internal and external validity to lead to credibility, rather than the generalisability of results expected with quantitative research. Smith et al. (2009) draw on Yardley’s (2000) four principles for researchers to consider when researching using IPA, namely, sensitivity to context, commitment and rigour, transparency and coherence, and lastly, impact and importance (Smith et al., 2009). These informed my conduct during the research process.

As a novice phenomenological researcher, I recognise that my inexperience is a limitation of this study, the success of which is dependent on the skills of the research to bracket out their personal biases. I have given careful attention to my positionality and have documented the process in detail to help mitigate this fact. A further factor is the time-consuming nature of data generation which was voluminous.

Summary

This chapter has outlined the research question and identified the qualitative approach used to answer it. The choice of methodology has been justified, the process used to generate and analyse the data has been described. Ethical, concerns, issues
regarding the validity and limitations of the study have also been included. In the following chapter, the findings, analysis and discussion that resulted from this process will show how the lived experience of IBL, when viewed through the lens of inquiry as stance, informed the understandings of teachers about the nature of IBL, and how it impacted their teaching practice.
Chapter 4 Findings, Analysis and Discussion

This chapter will outline the finding and analysis before moving on to the discussion. Participant background is provided at the outset in table form for ease of reference and expanded upon in participant summaries thereafter to show pre-existing ideas about the purpose of education and participants’ perceived role as a teacher, and provide a further layer for interpretation. This will be followed by an exploration of three themes identified from the data; Childhood Reflections, Defining IBL, Teaching as Inquiry (TAI) and Professional Learning Communities, and Learner-Centredness; the Ripple Effect, that relate to the preceding literature review. Owing to the timing of this research, a final, unexpected theme emerged, COVID-19 and IBL. With the findings and analysis presented, the chapter will proceed to the discussion section which will explore these findings with respect to the literature.

Transcript notation used in quoted extracts:

…significant pause

[] material omitted

[the inquiry] explanatory material added by the researcher

Theme 1: Childhood Reflections

When discussing their motivation for joining the profession all the participants reflected on their childhood experience. Aoife’s motivation to become a science teacher is closely wedded to her negative experience of science education as a child, “my biology teacher stood at the board, started at the top left corner and wrote the book on the board. We were never asked a question, there was nothing” (Interview A, line 34-36). Her “English teacher was way more engaging with us” (Interview A, line 61). and she saw the potential for the practical subject of science. This stimulated a desire to
effect change, “trying to change the approach I had experienced, especially within the subject area” (Interview A, lines 63-64).

Anna described her background as “a very different…a very disadvantaged background” (Interview B, line 290) and was the first of her family to attend university, Anna’s motivation for teaching comes from her personal experience of education being one that provided her with opportunities, “anyone can become what they want if they want to, an education can be a door” (Interview B, lines 293-294).

Anna had an interest in philosophy as an academic subject having studied it at undergraduate level, but was advised to drop it at the end of the first year because “you can’t teach it [] you’re not going to be very marketable” (Interview B, lines 106-107). Indicating the economic value of qualifications. She was glad to finally be able to teach philosophy through inquiry and has been teaching a reduced version of the Philosophy Short Course for three years.

Sophie explained that she was conflicted about her role as a teacher. She came from a disadvantaged background and did not have a positive experience of school. She explained this had caused a subconscious bias against the education system, which steered her towards the role of Guidance Counsellor and away from the role of classroom teacher. She took inspiration from an English teacher “who kind of left the books and just talked to us and did a lot of unorthodox things in the classroom, and it really resonated with me” (Interview C, lines 52-53). For her, teaching was intrinsically relational, “I was all about the relationships [] supporting them and guiding them” (Interview C, lines 40-41).

Lana cites her passion for English and History as a key motivating factor for going into teaching. When reflecting on the type of teacher she wanted to be, she recounted fondly her primary school experience with two unconventional teachers who
“loved poetry and getting us outside and appreciating everything that was around us and kind of putting fun into teaching. And, I suppose I didn’t really have the same experience in secondary school. It was very different. So, I always had the two of them in the back of my mind when I went into post-primary teaching” (Interview D, line 36-38).

It was unexpected to see that all four participants reflected immediately on their childhood as a source of knowledge when it came to the purpose of education and their role as a teacher. No participant made any reference to theory or adult experience when reflecting on this question.

Theme 2: Defining IBL

The pervasive nature of the theoretical shift involved in IBL as defined by inquiry stance presented challenges for teachers when articulating what it was they were actually engaged with and what was actually happening when teaching an IBL curriculum. Although they were not directly asked for a definition, the boundaries between teaching, learning, planning, and assessment that form the basis of normative professional dialogue among teachers became inadequate as they blurred when viewed through the IBL lens.

For Sophie, the resonance of IBL with her beliefs was overtly stated:

it became, like, a foundational kind of tool that I would use in my teaching [] because I’m not a traditional teacher at all (Interview C, line 36-37).

Her awareness of her natural and immediate engagement that comes with IBL was also explicit:

I always say when I do inquiry-based learning that I'm in flow as a teacher.

(Interview C, line 514).
There is an implicit reference to separate components involved in IBL that combine in a manner that brings a sense of mystery when Sophie goes on to say;

it is sort of like a sorcery. Like it is sort of an alchemy that happens in the classroom. (Interview C, line 534 – 537).

For Aoife, IBL was a way of empowering her students, and this was her underpinning principle when she was teaching IBL and she recognised the change this had on her planning for IBL:

a plan can only give you so much guidance when you go into a classroom then, that plan can go out the window within two seconds because of something that's asked of you (Interview A, line 298-300).

She went on to make the changing role of the girls explicit:

I didn’t think it was a good idea to sit down and say this is the rigid plan, it was supposed to come from the girls, that’s the way I operated it (Interview A, line 349 -350).

Aoife spoke of her aspiration for her own classroom teaching where she was consciously thinking in terms of IBL and;

trying to do something that has some level of inquiry in it (Interview A, lines 406-407).

This indicated that she understood the flexibility that comes with IBL, and that it takes time for the classroom teacher and students to transition to the approach.

Lana’s reflections on planning similarly showed she recognised the need to be responsive to her students and she explicitly stated that the term ‘planning’ was not the same as is ordinarily understood in education:

So, I didn’t really plan it, I just made sure I had a bank of resources (Interview D, lines 156-157).
She then explained in some depth how she was pursuing her students’ interests and mapping them with the specification, before reflecting on how the other teachers of the Philosophy Short Course had covered totally different areas:

They’re doing the same as me, they’re just following the flow of the class
(Interview D, line 170).

Like Sophie, Lana’s reference to ‘flow’ speaks to a natural engagement that inquiry can evoke as it harnesses a curiosity to embark on an iterative process of co-created knowledge.

When Anna spoke about assessing her students at the end of the previous year, she immediately realised that it was intrinsically connected to planning;

when I was talking to the students at the end of last year, about their assessment, their interview being their assessment, I call it assessment, you know, it was just kind of getting feedback really from them so we could move forward. That to me is a type of inquiry as well (Interview B, line 498 -500)

Implicit in her reflection is an awareness that her assessment was not the same kind of assessment she was used to; it was not a final outcome, or a judgement to rank and order her students. Rather it was a means to involve her students in future planning and teaching where collaborative learning was taking place between her and her students. In this sense, the assessment was an inquiry in itself.

Although this research was framed around the concept of inquiry as stance, no one used ‘stance’ as a descriptor. This was both surprising and understandable. I had been careful not to directly reference inquiry as a stance with participants throughout the interviews because I did not want to influence them, either consciously or subconsciously. However, all participants reflected qualities associated with attitudes,
beliefs and practices associated with an emerging inquiry stance when they spoke about IBL.

**Theme 3: Teaching as Inquiry (TAI) and Professional Learning Communities**

All participants spoke of collaborating professionally with colleagues as a consequence of working with IBL to varying degrees, which is a key feature of TAI, the correlate of IBL. For Aoife, this was an appealing feature of the SFI project, which was interdisciplinary by design and she was active in sharing what she was doing in department meetings, but there was a clear articulation that some teachers, particularly Maths teachers were not receptive to IBL.

Is there a touch of it in Maths? I'm afraid, no. That crowd, no. (Interview A, line 656).

Aoife is not one to give up easily and gave practical suggestions to her Maths colleague to begin moving the focus onto the students:

Like I did say to my Maths teacher, like something like you know, ask them rather than having 20 questions up there, do all 20, like it's a simple thing of saying, can you go off and do the hardest one? Then every child decides what the hardest one is for them. They kind of looked at me. So sometimes when I dropped the penny or the bomb, it takes a little while for it to filter down. Mmm. But I do know a math teacher that did go off and do that. So, you know, maybe he'll come back and say, 'Oh, actually it's a good idea. Aoife,' but he hasn't come back yet. (Interview A, lines 661-668).

The stereotype of the Maths teacher as particularly traditional in their approach seems to hold fast, but, interestingly, the humanities teachers have followed the lead of Aoife, a science teacher, in respect to the of IBL:
I know the English teachers, two of them, one is French, one is history. She can see how she can bring a little bit of it into the French as well, and the history teacher as well. So like, it's not subject-specific and that's what I was trying to say to them. But it's something that they can adapt and change. (Interview A, lines 658-661).

In contrast, Lana recognised that as a new school in cramped working conditions, they had a strong, if informal, professional learning community, and while she was not proselytising about IBL there was growing and sustained interest from her colleagues:

I actually have teachers looking to sit in on the philosophy class now to see what's happening (Interview E, lines 162 -163).

What was particularly interesting in her reflections was that she also touched upon the stereotype of Maths teachers because the appearance of one in her IBL lesson came as a surprise;

he has come to every second-year philosophy class since Christmas. For the first two he sat, he didn't want to engage. [ ] He did start engaging though and he absolutely loved it and he is so mathematically inclined, like it would not be his thing at all (Interview E, lines 163 -169)

Lana’s experience suggests that Aoife is right not to give up hope and that IBL is not subject-specific. She thought several factors were spurring on the widespread interest in IBL in her school;

the other students were talking about it, were so enthusiastic about it, they didn't really have a choice not to engage with it either (Interview E, lines 204-205).

She also notes the positive effect on the students was also noticed by support staff,
and one of the SEN coordinators asked, could she come in too because some of the SEN kids were finding it so easy to talk [in a P4C inquiry] compared to normal classes (Interview E, lines 169-171).

In a sense, Aoife’s reference to the ‘ripples’ of IBL in her established school is more pronounced in Lana’s context of a new school.

For Anna professional conversations around IBL increased in response to an increase in student interest and numbers which required additional teachers to teach the Philosophy curriculum using IBL;

we had another teacher who wanted to come on board. There are four of us really who teach it in the school, so we share resources (Interview B, lines 145-146).

However, Anna showed no appetite or interest to push IBL onto her colleagues, with her focus during the interview largely on her students and herself. This might be expected in a school as traditionally academic as hers:

well you know, they are not quite so in the same way and especially as they are coming from other subjects as well, they have a certain pattern and they have a certain mindset around certain things (Interview B, lines 7-9).

Professionally, Anna is in a different position from the other participants in terms of the type of school she works in and her level of responsibility. Engaging with IBL was about her professional development for the benefit of the students, rather than changing the status quo of the school environment;

it took me out of my comfort zone. I’d been that long in the school, I wanted to do something different (Interview B, lines 100-101).

She recognises that it is not about resistance from a particular subject, like the stereotype that that seems to be held about IBL and Maths, rather it is the ethos of the
school, coupled with the teacher’s immediate aim that shapes how IBL will unfold. For Anna, this means she is supported in working with IBL within the domain-specific context of philosophy:

I know that I have some members of staff who think, 'what a waste of time.' I know, I know. They'd gladly take it off the curriculum if they could. Thankfully myself and the principal are very much in favour of it, so I'm lucky in that respect (Interview B, lines 526 – 528).

Theme 4: Learner-Centredness, the Ripple Effect

In every school, children brought their learning from IBL into the home in a way that generated parents support and interest with what was going on, which challenged stereotypical understandings of what society considers important in a curriculum. Lana was particularly surprised by the response parents had:

I didn't think many parents would even come to me for philosophy because I have them also for English and History. Every single one of them came to me to tell me how much the kids are enjoying philosophy and that they know what day of the week the kids have philosophy because when they get into the car when they collect them in the evenings the kids just are nonstop chat and they're talking about everything that happened in the classroom, and I mean like it's kids who normally wouldn't even speak, are telling their parents everything that happens (Interview E, lines 10-17).

Indeed, even the parents recognised how their children’s experience had altered how they viewed the importance of subjects that had been promoted from the government through funding and policy:

They're all so positive about philosophy. Like parents have all said like when they first saw the timetable and were like “our kids are going to study
philosophy, what is that?” They say they're so happy that their kids are doing it because they would have pushed them towards the coding and the digital literacy option. Whereas it's bringing them completely out of themselves because they're becoming so much more articulate with their thoughts. They're engaging more with the world around them (Interview E, lines 46-52)

On hearing this I did wonder whether it was the subject or the way it was taught that was garnering the praise and for clarity I asked:

If you’d been teaching philosophy in that kind of transmission teaching way rather than in an inquiry way, do you think that would have been the case?

(Interview E, lines 230-232)

Her response was unequivocal and showed a tension between traditional curricula and that of IBL:

No, not a chance. Because that’s just a traditional classroom, that’s the same as going into my next history class (Interview E, lines 232-237)

Sophie had a similar experience concerning Ethical Education, with parents’ noting a change in their children:

they're very curious. They want to know, and especially if they've got a kid who’s maybe quite, you know, monosyllabic quite a lot of the time and they come in and they're sitting in the car chatting about, I don't know, like the dangers of social media is a very popular one, or you know…immigration or diversity, and they're just wanting to know what sort of sorcery is this? What are you doing? (Interview C, lines 498 – 502)

However, the conflation of the academic subject of philosophy with the IBL pedagogy of P4C did cause some confusion with one parent who was disappointed with the outcome:
I mean I had a parent come in to me with a stack of philosophy books and saying that ‘she's not coming back talking about Plato or Aristotle.' I said, well, I never ever said that I was a philosophy teacher. Never. Like, yes. You know you do have to explain. (Interview C, lines 424-427).

This was a good example of many adults’ assumption of education as a siloed study of an accepted canon of information and serves to remind that a high level of education in one area, such as philosophy, does not assure understanding in another, such as education.

Anna enjoyed positive feedback from parents from formal consultation about the new philosophy curriculum:

We surveyed the parents and the students and there was an overwhelming response to keep [the philosophy (Interview B, lines 136-137).

She was also pleased by the interest of parents more generally;

when I meet parents at parent-teacher meetings, some of them don't see it as relevant, but they're in the minority (Interview B, lines 137 – 139).

Anna goes on to recognise the value of these exchanges with regard to her evaluation and understanding of her students’ engagement:

Funnily enough, I hear a lot from parents at the parent-teacher meeting (Interview B, line 388).

In this sense when she says she hears a lot from parents, she is not talking about the quantity of talk, rather she is referencing how the parental feedback gives her a lot to think about as she uses it to re-evaluate previous understandings about progress and engagement of pupils, a quality intrinsic to inquiry. She goes on to explain;

because, you know, there's twins in the class and they're very different. One of them is really vocal, the other one is extremely quiet [.] But yet the mother told
me when they went home to discuss these things that went on, they'd have arguments about them, you know, the difference of opinion that went on in class, the philosophy, you know. I thought she was totally disinterested. She's just quiet (Interview B, lines 388-393).

The difficulty in knowing what is going on inside the minds of students is laid bare and of IBL she notes:

So there's a lot going on. You can't quantify it as easily on a piece of paper maybe (Interview B, line 509).

One could argue this is true of all teaching, the real difference between IBL and standard curricula is that the latter does not consider the qualia to be of any relevance at all.

**Unanticipated Theme 5: IBL in Times of Crisis**

Trying to manage the impact of Covid-19 on the research was a challenge and my initial coping mechanism was to imagine it as temporary so I could remain focussed on the task in hand. On reflection, I saw it as a backdrop to each interview, which is unsurprising given the enormous impact the pandemic was having in real-time on teachers’ practice and everyone’s personal lives. Consequently, issues relating to Covid-19 emerged naturally during interviews, and some comments were directly about IBL. The capacity for inquiry to become a source of strength for learners in a time of global crisis was unexpected.

Aoife was quietly confident about distanced learning, her obvious inquiry stance meant she naturally considered her students and their circumstances and developed inclusive lessons that connected science to the everyday lives of the students:
we're doing [work] at home now for science, [ ]. But they're all capable of going off and doing their own little investigation because I've made it about what they could do in their house (Interview A, lines 73-76).

Anna’s reflection on Covid-19 emerged completely by chance and in sharing it seemed to be the first time Anna had reflected on the significance of the student’s engagement at such a difficult time:

strangely enough, we have a new girl who's joined the school, I hadn't met her because she joined when this happened [Corvid-19]. I signed her up to [online platform] because she's in my [] philosophy class and she did the assignment immediately. [] and she did it really, really well. I don’t know if I’ve gone off on a tangent there (Interview B, lines 36-39).

She was encouraged by the student’s work and I suspected that she was wondering whether this was the natural disposition of the student, or if it was something to do with the inquiry nature of the work. Either way, inquiry had enabled the student to connect personally with her new school, and for her teacher to connect with her in these physically distanced times.

However, IBL in times of Covid-19 was not straightforward. Lana spent several minutes articulating her frustration at her history students’ lack of engagement and alleged inability to follow the four-step instruction to access their work. She wondered whether traditional teaching would have prepared them better;

we weren't doing any of this inquiry-based learning or giving them more ownership of their own work and yet they didn't need half the spoon-feeding that our current cohort need (Interview D, lines 462-464).

It was a frustration shared with her colleagues the previous evening:
The teaching from home at the moment, [] the four of us last night were like what have we been doing with these kids for the last three years that they can't follow a four-step instruction as to how to find a folder? (Interview D, line 472-474).

Lana was stressed by the lack of engagement of her students with regard to history and I immediately suspected the students were perfectly able to follow the instructions but lacked the motivation to do so. Curiosity prompted me to ask about her philosophy students and their engagement with online learning and I probed a little further:

Have you done any philosophy classes yet with online? With your students? How did that go in comparison to the other classes? (Interview D, line 476-477).

There was a pause before she answered:

I'll be totally honest. My first years are fantastic. At least 17 of the 24 are doing everything that I put up (Interview D, line 479).

Lana spent some time critically reflecting on the work she had set for her philosophy students and then what felt like a confession emerged:

And then the other thing is, I suppose we've been kind of told our exam subjects are where the priority needs to be at the moment (Interview D, lines 495-496).

I felt a great deal of empathy at that moment and understood the source of her stress being that constant external pressure on teachers, student achievement in terms of standardised examinations. This is difficult enough for teachers to manage, but during a global pandemic and just a few weeks into lockdown, the pressure was amplified to unreasonable levels.

In the second interview I had with Lana, which was four weeks later, her outlook was contagiously positive:
Well, do you know what's actually really interesting? We had an online meeting the other day because we were talking about student engagement[]. Our highest engagement across all of our classes online at the moment is philosophy. And like, I have the same students for English and history[]. We're getting more engagement out of our philosophy class than we are at the core subjects (Interview E, lines 77-83).

Lana’s school had adapted the online timetable in response to the students’ evident interests:

Like we've removed [other optional subjects] from the online timetable, but we've agreed to keep philosophy on because the kids are all doing it (Interview E, lines 112-113).

This enabled Lana to appreciate the learning that was happening, rather than worry about whether it was in the ‘right’ subject. Lana expressed joy and pride at the quality of work the students were producing and was actively involved in implementing ways to accommodate the collaborative aspect of IBL online, having created a space for them to connect and share.

like I have to say, the stuff they're sending me back is fabulous. They're doing great work from home, and like I set up a Padlet for them as well to put up their own philosophy thoughts and loads of them are adding to it (Interview E, lines 117-119).

The students were also taking more ownership over their learning, recognising opportunities for interdisciplinary connections and had found a way to extend their philosophy inquiries into their English work;

and even like it was Dear Day last week in Ireland, [] and we asked our kids to share what books they were reading and loads of them are reading books on
philosophy. I couldn’t believe it! Like when they shared a screenshot of the cover of their book, I was like ‘you’re reading Mythos?!’ and they were like, ‘yeah’, and I was like ‘okay’, and ‘you’re reading Heraclitus? Oh my God! Really!’ And someone else was reading the Grimm’s Fairytales, and I was like ‘why did you pick that?’ They said, ‘well you mentioned in philosophy that the Grimm’s original ones are much darker, so I thought I’d get it.’ (Interview E, lines 243-250).

In a time of such uncertainty, IBL brought several opportunities. It gave Aoife confidence when it came to setting work, it gave Anna insight into a new student and invigorated the wider curriculum for Lana’s students. It also provides insight into the challenges for teachers and students when simultaneously working with two different approaches to teaching and learning that lead them to pivot between externally driven outcomes and active ownership. The role of technology as a means to support IBL was also something of interest in this new physically distanced world.

Discussion

This research explored Irish post-primary teachers’ lived experience of IBL as they use it to teach areas of the JCF, to discern how the lived experience of IBL, when viewed through the lens of inquiry as stance, informed the understandings of teachers about the nature of IBL, and how it impacted their teaching practice. As is shown in the findings, the use of inquiry as stance as a lens was effective in identifying multiple understandings of IBL among participants and allowed connections to be made to their underlying beliefs and professional context through the tensions and rewards experienced by teachers. That I did not discover it sooner is a source of curiosity for me and I suspect it is because it has emerged from the primary sector in the USA. As a post-primary teacher, I am familiar with notions about P4C being for primary children,
which is largely driven by the constraints of funding, marketing and research by proponents of the approach. Nonetheless, the association can act as a barrier for other levels of education and acts as a reminder to educators that irrespective of age, the learner in front of them is a human whose qualities do not necessarily differ significantly with age.

Surprisingly, all the participants in the study drew upon their childhood experiences when conceptualising their role and purpose in the classroom. Given the combined adult experience of this cohort, I expected more reference to professional teaching experience informing their ideal. In some sense, participants’ understanding of IBL was akin to the Via Negativa perspective in theology, and when applied to the purpose of education, participants often understood this in terms of what it not, rather than what it is. The findings show a recognition of the IBL in terms of skills and attitudes that the transmission teaching they experienced in their youth seemed to omit. This suggests that the perceived difference between trainee teachers and experienced teachers concerning their CPD in IBL is not as relevant as other studies, such as Gheith & Aljaberi (2018) and Silm et al (2017), would suggest.

The findings across all four themes show participants engaged in ongoing reflective practice as they engaged with IBL. I suspect they were reflective practitioners to begin with. However, IBL provoked significant reflection as traditional boundaries around the role of teacher and learner were blurred, and as is frequently reported in the literature relating to inquiry as stance, this resulted in the enthusiasm and engagement of the learners acting as a catalyst for renewed relationships with colleagues and the wider school community (Guccione, 2011; Murdoch, 2015; Short & Burke, 2001; Short & Harste, 1996). As Murdoch reminds us, “When we move to the heart of inquiry, it is
about engagement, about lighting a fire within students so they want to investigate and find out more” (2015, p. 16).

The informal Professional Learning Communities that arose in participants’ schools as a result of IBL practice is a common feature of Teaching as Inquiry, the correlate of IBL. Interesting stereotypes among teachers about the association of IBL and particular subject disciplines were exposed through the research. The connection and dialogue that resulted from these professional exchanges of ideas reframed teachers’ notions of each other and opened space for interdisciplinary application and support opportunities. The adaptive and context-sensitive nature of IBL, noted by (Levy et al., 2013), was laid bare as participants saw their peers applying the pedagogy to alternative curricular areas. The professional collaboration with colleagues that resulted from teaching with IBL was beneficial for participants’ reflective practice and sustaining enthusiasm as they co-created new knowledge about their understanding of IBL. The tacit recognition from all participants that they were in an ongoing co-learning process was evident.

The interest from parents was another indication that the IBL taking place was more than a procedural exercise and that emergent inquiry stance was present. As noted in the literature review, parental engagement was commented on as an outcome of IBL in primary schools (Guccione, 2011; Short & Burke, 2001). It is a common assumption that parents of primary school children are more involved with their education, many activities that primary school children are engaged with relate to their parents and home experience. At post-primary, with the onset of puberty, children begin to distance themselves from their parents and they search for a sense of themselves as distinct from the home. The lazy stereotype of the surly teenager is a common motif. That so many post-primary school children and their parents had positive encounters
and extended dialogue because of their school experience has hopeful implications for
the well-being of all parties. It is also worth mentioning the value of parental feedback
with regard to assessment. As Anna noted, it is hard to quantify what is going on with
inquiry, and contributions from parents help teachers take into account the holistic
outcomes for the learner and lead to more understanding about the individual student.

I expected more commentary about working within the JCF than there was, not
least because it is still relatively new and participants are still adjusting to the change.
However, in relation to IBL, there was excitement expressed about the conceptual
approach to knowledge affording opportunities to bring some level of IBL into core
subjects and for interdisciplinary work as was the case for Aoife and Lana in particular.

Nonetheless, the spectre of high stakes terminal examinations didloom large
when Lana was reflecting about the tension she was experiencing at a result of her
students’ poor engagement with the core subjects, which were not taught using IBL.
This resonated with the findings from Dyson, (2020) who noted the impact of
standardised assessment a challenge for New Zealand teachers enacting IBL as they
struggled to meet the polarised objectives of both approaches. It also was reminiscent of
Short and Burke’s (2001, p. 35) observation of the challenge of maintaining an inquiry
stance and the tendency to revert to old habits associated with traditional teaching.
Teaching from two epistemologically distinct positions at the same time will be
difficult, but unfortunately unavoidable for Irish teachers, including Lana. However, the
supportive action of school leadership during this global pandemic enabled the learner
to settle at the forefront of Lana’s field of vision, rather than an externally identified
future outcome.

Subtle expressions of democracy were also evident through the themes, with
learners voices affecting a variety of factors relating to their curriculum. In Anna’s
school parents, teachers and pupils all voted to keep inquiry in the curriculum, even
though Anna recognised it was not an approach favoured by all her colleagues, who in
this instance were clearly in the minority. Lana’s students’ engagement with their IBL
subject was taken seriously and harnessed by her school, while Aoife acted as an
advocate for her learners and was committed to ensuring the positive inquiry
experiences they experienced with her in the science class were available for them
elsewhere in the curriculum. Sophie recognised she was working within a school that
had a democratic ethos and saw inquiry as the way to nurture this.

The perception of what teaching is when viewed from the position of IBL
fascinated me. At no point would it be reasonable for a teacher engaged in transmission
teaching to comment that they did not really plan their lessons, such is the nature of
working towards a pre-defined outcome. However, in the context of IBL it makes sense.
The learning outcome is unknown, but there is a conceptual area that gives some
boundary as to where the learning might lead, and Lana’s reference to having a bank of
resources demonstrates she recognises this. Similarly, Anna’s end of year reflections
informed her future planning to ‘move forward’ rather than reach a clear outcome. As
Aoife noted, when the learning is led by the learners, everything can change if they ask
a question that directs the inquiry in a different way. These reflections from participants
are congruent with Harste’s observation that teachers need to “engage in planning to
plan IBL” (Short & Harste, 1996, p. 9).

Limitations. Owing to the nature of qualitative research these findings are true
for participants of this study, it is not possible to generalise to the wider teaching
population. However, the findings do provide food for thought for teachers and teacher
educators about the nature of inquiry, its relationship to teachers’ understandings about
education and IBL and how it is enacted in the classroom. Further limitations of the
study relate to the voluminous amount of data that was generated and the amount of
time required for the researcher to process it. There were a number of themes that could
have been included but space did not allow. In particular, contradictory issues relating
to Special Educational Needs were found in the results, but it was not possible to
triangulate the findings.
Chapter 5 Conclusion and Recommendations

In exploring how Irish teachers’ understandings and lived experience of IBL impacts on their teaching practice, four key findings have emerged from this study. Firstly, the use of inquiry as stance as a framework to encourage exploration and prompt dialogue about the nature of IBL and teacher professional development was very effective at bridging the gap between belief and practice for this researcher, helping shed light on the interconnectedness of the variety of expressions of IBL. Inquiry as stance aids diagnosing particular tensions a teacher may have concerning their IBL teaching, their beliefs and the external pressures they are subject to.

Secondly, preconceived notions of teachers as learners and the relevance of teaching experience on the way teachers engage with CPD are called into question, as this study suggests childhood experience is a significant factor affecting teachers’ beliefs about education and the role of the teacher.

Thirdly, IBL acted as a contagion in participants’ schools with learners acting as catalysts for adult interest and enthusiasm both in and outside the school. There are implications for Student Voice, Well-being as well as democratising the classroom as the deficit model of the child is rejected and teachers gain a perspective of what their students can do when they are given the chance to be the problem-poser and not just the problem-solver. This is not a new finding, it is something seasoned inquiry teachers are aware of, but it does suggest the participants were able to understand IBL beyond procedural conceptualisations and this bodes well for continued, responsive, reflective practice among Irish teachers.

Finally, the Irish context is conducive to teaching IBL and the conceptual nature of the learning outcomes of the JCF has accommodated participants as they look for affordances for IBL within core subjects. That the Teaching Council have not
introduced accountability measures to mandate for inquiry as has happened in other countries is a positive step. There is incongruence with the spirit of inquiry to force this upon teachers, and it would be an unnecessary and potentially counter-productive step if the participants in this study were subjected to such measures because they organically engaged in TAI as a result of teaching using IBL.

**Recommendations.** The primary recommendation arising from this research relates to the use of inquiry as stance when designing or engaging with teachers about IBL. The dichotomy between different levels of education and years of experience within the system regarding professional development may be unnecessary, particularly concerning foundational educational pedagogies such as IBL as understood by inquiry as stance. I currently take the view that new knowledge and shared understandings to the benefit of everyone will emerge if a more collaborative approach among educators was adopted.

There is an interesting use of online technology concerning collaborative learning for IBL during this global pandemic, and the benefits and challenges of this would be worth exploring further, particularly as distanced learning may become an increasingly common phenomenon.

As mentioned, when detailing limitations with this study the experience of SEN students was inconsistent as they appeared to be both advantaged and disadvantaged by IBL in the Irish classroom. The range of ability in SEN is broad so it is not surprising this small study revealed such inconsistencies. However, the importance of EDI for a healthy, functioning society cannot be understated and this is an area that warrants further investigation.

**Concluding Paragraph**
The aims of this research have been met, I have been struck by the irony of trying to inquire about IBL using an inquiry stance, only to be tethered to traditional reporting constructs and high stakes testing established by third-level education. Australian Universities are reportedly increasing fees for arts degrees (BBC News, 2020) and I wonder how universities would cope if learners pursued their own interests rather than an economic imperative? Indeed, I wonder what would happen to society as a result? Nonetheless, this has been a valuable process for me personally and I hope the findings of the research are of interest and use to others. So, in conclusion, while this research may have concluded, it has become part of my bigger inquiry and so in some sense continues.
References


Teaching and Learning across Disciplines: Comparative Theory and Practice in Schools. https://doi.org/10.1057/978-1-137-53463-7


https://doi.org/10.1177/0011000006286990


Running Head: IRISH TEACHERS’ LIVED EXPERIENCE IBL

https://doi.org/10.1108/17504971111121919


Appendix A: Research Protocol

Research Protocol: What is the impact of an Inquiry-Based Learning lived experience on the practice of teaching? (Working Question)

Reminders:

- Structure
- Clear
- Gentle
- Sensitive
- Open
- Steering
- Critical/responsive to inconsistencies
- Remembers – can track, not repetitive
- Interprets/Summarises

What specific information do I want to know?
Briefing: Setting the Scene

Welcome and thanks for joining me on Zoom for this interview. As you know I had hoped to do this in person, but the global pandemic has made that impossible. I am recording using a Boss Micro BR and Zoom’s recording live capacity. I did not intend to record visual images of the interview when I envisaged it being a personal meeting but given the move to the virtual world, I would like to record visual as well as audio in the hope that if the sound quality drops I will be able to catch what you said with the help of the visual image. If you would prefer I did not record visual, as well as audio, do let me know and I will stop.

Contextualising: As you know, my research is a qualitative, phenomenological study, using one to one semi-structured interviews and lasting for approximately an hour. The focus for my research is the lived experience of post-primary schoolteachers when engaged in IBL within the Junior Cycle Framework.

There is a great deal of research investigating the structure of IBL and the efficacy of IBL regarding student outcomes, but there is very little from the perspective of experienced teachers. Research exploring the nature of IBL that gives voice to the lived experience of teachers working with IBL would be an important contribution to the academic literature relating to inquiry, and provide teachers space for further discussion and reflection on IBL pedagogies.

It is not within the scope of this research to assess the standard or quality of the IBL Project or teachers’ IBL practice, rather it is teachers’ lived experiences of an IBL that is the focus.

To be clear the purpose of this interview is for research only and you will be anonymised in the paper. I will send you a copy of the transcript and if you would like to add anything to aid clarity or depth once you have seen the transcript, that would be welcome. Similarly, if you are happy with it as it is that is grand too.

I just want to confirm that you are still okay to take part in the research?

I also want to reassure you that you do not have to answer any question you don’t want to.

While I do not want to take more of your time than necessary, I do want to do justice to your contribution and this area of research. Do you mind if I contact you again once the transcript has been analysed if a further interview would be useful? Even if you say yes now if circumstances change and it is not suitable that is perfectly fine. I want to ascertain whether you mind me asking in the future if necessary rather than assuming it is okay.
General Questioning:

- Can you tell me something about your teaching background, subject specialism time in teaching, what drew you to the profession/ CPD in P4C/IBL?

- What was your experience of teaching with IBL?

- Can you tell me something about how you engaged your students in IBL?

- What was your experience of the students’ role in the learning process?

- Can you tell me something about the experience of your role as a teacher when teaching using IBL?

- Tell me something about the feelings you experienced when you sat down to plan for IBL? Was it the same as usual or different?

- Can you tell me something about how you experienced the concept-driven nature of IBL

- Did it lead you to change anything about what you do in the classroom?

Debriefing:

Those are all the questions I have for now, do you have any for me?

I will send you the transcript over the weekend and if you have any additional thoughts or comments do feel able to send them on.
Appendix B: Sample Transcripts

Aoife

out there or predict, observe, explain scenarios that they wouldn't have ordinarily done. So we're trying to stretch the curriculum more across the three years and bring in more of what I had, the experience I had in the project.

Speaker 1 (21:38):

So are you, are you saying that the experience of the project somehow facilitated a re-imagining of how to play with the larger curriculum for science at junior cycle?

Speaker 2 (21:52):

Well, I think so because I'm actually, I'm doing the Magenta Principals as well, I don't know if you've heard of Mike Hughes. Yeah, he's around for years. But again, the principal asked for volunteers to do this workshop over there and I put my hand up this year to do that. So Mike's whole basis is there's core principles that you kind of reduce content for the students, you, order content, the students, like instead of giving them the information, you might give them key words and the definitions and ask them if they match them up. It's that sort of approach right, working from what they might know as opposed to just here, this is what you have to learn. Yeah. So even bringing that with it as well with all I'd done on the program. It's like my core thing that I was trying to get across to the science teachers, like, was like my experience of school, all been given to me, whereas in actual fact.

Speaker 2 (22:41):

The girls have an awful lot up there if you just push and focus. So that whole little idea of, you know, the girls round in the horseshoe, throwing the little soft toy to them, NAME does that now as well when she introduces different topics. So, Mmm. Yeah, no. As a department, we're trying to have just little ripples, we can't change the whole lot because you know, they still feel they have to get curriculum done but they are incorporating different ideas slowly but surely. But yeah, I would say that's Mmm, definitely. And NAMEour principal would say it like, the science department, we try to engage with things in a different way to other departments. We don't look and go, 'Oh here we go. Another thing we have to do.' We actually tried to look at what will actually help the students, if that makes sense.

Speaker 2 (23:27):

And he would say that within the school, one of the departments where he gets little or no complaints and I don't mean people are on the phone hopping left, right, and centre. But it won't be the science
department. The parents seem quite happy with the approach we're taking that we may not give homework on a daily basis. It might be a different type of style of homework and the parents can see what we're trying to do, if that makes sense. Without us actually formally saying this is what we're at. Yeah. But they can see a difference and even when they come into parent teaching meetings they'll say that as well. That like I know when I talked to NAME and NAME, we just feel that there's an awful lot of pressure anymore in society and education is likely important. We all know that, but we can't even, like when I see some of my colleagues now in the current situation and the stress they're putting on the students, I'm just like, 'no, can you take a step back?'

Speaker 2 (24:14):
Like, you know, we're all going on about their well-being and their mental health. You're not helping by trying to force it and put these demands on them. Sometimes we have to put them in the chair and let them make the decisions and choices and find their way and as a science department that's what we try and do. I think really, if that makes sense. I'm rambling now, but it's just, I do. I do think teachers who don't engage with ideas that are out there like their perspective is very limited that you know that if they only have their own view of it, if they don't experience other angles, you know, and I think that's one problem with teaching over the years that we were very much in our little, into little pockets. Don't collaborate, don't look for somebody else's opinion. I think there's a sphere of factors:

Speaker 2 (25:03):
I'm not good enough. And if somebody else has an idea, it's a poor reflection on me, if I don't do it right, or I can't do it. And I think it's a psyche that some teachers need to change. I don't know if that's the right way of putting it. I just see that myself, my own school. Because even my post is looking after teacher learning assessment and reporting and Oh my God, it's like anytime you ask them, try and do something. That's useless, NAME, useless, NAME and I'm going, 'Have you used it?' Nope. Well then how can you say it's useless? It's that sort of mentality. And it's the same thing sometimes when they deliver a message to the students, they don't even realize that's the way they deliver it. They don't put any, you know, level of, I don't know what the word is. It's not level of importance. They, they just keep forcing all this stuff at students and don't give them the reason as to why it's important for them to do it, if that makes sense.

Speaker 1 (25:54):
Anna

we audited the staff around the 24 statements to see what their needs might be for the junior cycle with the curriculum going forward and what emerged from that was the critical thinking aspect of things along the 24 statements of learning. There were gaps in that so we decided that at the end of that year from our consultation with the staff. We were looking at the curriculum around wellbeing. We decided then that we would bring in digital media, which was also a gap and we would bring in philosophy for the critical thinking and there was a lot in the media at the time about leaving cert being very rote learning and not preparing the students for third level.

Speaker 2 (10:18):

It was good timing on our part and we had also got somebody in from the outside that January before we brought it in the following September who did facilitate the auditing with staff. We've got an external to come in and tease things that around our curriculum and that and what our needs might be. So we brought in philosophy then and I presented to the staff in August before we came back. The thinking behind the philosophy and the digital media, why we brought them in. We wouldn't be bringing in the fall short course in either time-wise because we didn't have it, but we would be probably doing 60 or 70 hours over the two or three years. We wouldn't be doing it with the first years then. We might be doing it next year with our first years. But we do it with second and third years, as we will with the digital media aspect of things.

Speaker 2 (11:03):

So yeah. Then we surveyed at the end of our first year of doing both the new areas in curriculum. We surveyed the parents and the students and there was an overwhelming response to keep both and particularly the philosophy. So we had consulted them and when I meet parents at parent teacher meetings, some of them don't see it as relevant, but they're in the minority. You know, one parent said to me one day, ‘You really love this, don't you?’ and I said, ‘Yeah, I think I do.’

Speaker 2 (11:43):

We just found, and my principal would say this as well. The second year in particular can be a time where friendships go a bit skyway. We have seen an improvement in them. They have, you know, particularly the second year, you know, that are probably benefiting a bit more. You know, and then we had another teacher who wanted to come on board. There are four of
us really who teach it in the school, so we share resources. But I have to be honest, but don't stick rigidly to, at least I don't, to the short course. I was looking at the moral philosophy section.

Speaker 2 (12:23):

We did decide things. We do the philosophy of knowledge. We do moral philosophy. One teacher said she likes to do the philosophy of art. You know those sections. We did our own kind of mix and matches there. We dip in and dip out because we're not doing necessarily the full short course, but I do like the resource that has come online recently enough. They're really, really good resources. The one that's specifically designed with all the further philosophy short course, there's resources online that was just goldmine there. Sure you couldn't want any more. No teacher could ask for any more than what's in there really to use themselves in their own creative way. I haven't used this yet. [Adventures in Philosophy] but the principal bought me this last summer as well, I haven't used it though.

Speaker 1 (13:49):

So you kind of moved into planning, which is great because that's where my next kind of area. With regard to planning then, you've been teaching English and history up to leaving cert forever. Um, can you, can you talk to me a little bit about how it feels whenever you're planning that and how it feels when you're planning for this kind of bespoke philosophy course that you guys have developed, which actually I think is a great idea if you don't have to time for the full short course. I think that's great. So, the fact that it's bespoke to my mind is even more kind of pupil centred then.

Speaker 2 (14:26):

Yes, yes. If I come across something interesting, I think if I can use it in the philosophy class, I will. And they just enjoy it. Now having said that, I make them keep it in a portfolio and also what we did, and this is one part of our difference now with our planning and assessment wise. We did interviews last summer. We didn't give them a written exam. We interviewed them all. They had to bring along their portfolio and had to come in for interview. Now it took longer. I did give them a written one at Christmas time just to give them some thoughts on that. And I do do some philosophers, I've done Plato, obviously you knew that, I've done the parable of the cave, we've done Socrates, just to have a knowledge base around those things, which is part of the short course anyway.
Sophie

237 So like I'm thinking, I am familiar with the ethical education curriculum. I really like it. And I'm wondering, like, there is knowledge identified in it, but there's also a lot of skills identified in it. In a sense, it's quite conceptual. The learning outcomes as, as the junior cycle framework generally, it's much more conceptual than the previous junior cert. Yeah. And I'm wondering how you feel about working with concepts as opposed to direct nuggets of information.

243 Speaker 2 (20:12):

244 I prefer it because it's very subjective. You know, like and kids, are different, absolutely, every year I see like they come up with something different. The classes that I work with, I have a completely different response to the materials I provide and I do find myself changing materials as a result of that, because, you know, concepts also change over time. You know, like I used to teach a lot about social media for example, social media being really bad and you know you're giving all of this stimulus around, you know, being too much online and all that. All of that is kinda changing now and it's changed and like how helpful and useful it is to do this and you know how much it's helping people to survive through a pandemic and you know, like, so it's, it's all completely changing and they challenge me all the time. Like, on, on some of the things that I hold to be true or my beliefs and my values. And so I couldn't teach in that kind of formulaic way like in that kind of, you know, just you need to teach this and this and this and this and this.

256 Speaker 2 (21:26):

257 It just would not work for me or for the classes that I teach, even though I know it works very well for, I know other teachers do teach in that way. And so even in our school, English, Irish and maths, science, they'd have way more kind of, I suppose less concept led, more unit led, all, all going through the steps. And I think that's very valuable, but not for me and not for what I teach.

262 Speaker 1 (21:50):

263 You mentioned that, you know, you find your own beliefs challenged and your values. How does that feel when that happens?

265 Speaker 2 (21:58):
Really good. Really good. I have a rebellious streak in myself. I was a rebellious student. I
quite like it and I've never been challenged like in a very like negative way or anything like
that because I don't think we have that type of environment. It's never been anything personal
or, you know, nothing that would have kind of got me here. You know, it never has. It's more
a kind of a kind of a, an aha moments kind of way. 'Oh great. Tell me more about that. Say
a little bit more about that.' You know challenging, but we do a lot on subconscious bias. We
do lot of bias and work on that. I have to constantly look at my own. And they're really good
at that. They're really good at calling you on bullshit. Like they're so good at that. And I
really enjoy this. I never feel offended by it. I think it's, it's really healthy. And really healthy
for me as a professional.

Speaker 1 (22:57):
Thank you. So this conceptual nature from what I'm hearing, you've told me that you enjoy it,
that allows the subjectivity to emerge from the students. And that you actually prefer it. And,
well, you've given me such a lovely explanation of why the whole beliefs and values being
challenged thing is a good thing in your perspective. And you've described it there as though
actually your students are not criticizing you. They're criticizing the information, they're
critiquing the point. So it's digestible and it highlights the kind of subconscious bias that
we're all kind of sucked in under, which is a very incredibly valid point. And it is true, I think
you're right. Whenever kids do know when you're bull shifting. And then whenever you're not
walking the walk and it, and if you don't, in my experience, if you don't have a classroom
where they can call you out to your face they'll take it home and discuss over dinner that their
teacher was talking shit. Or you know, is a hypocrite is, contradicting themselves is
incongruent in whatever approach they have.

Speaker 2 (24:14):
Well that's the word I was going to use that like, authenticity and that congruence. Like, and
when I did my counseling training I was so sick of the word congruence. Like it was just
like, okay, yeah, you know, insides have to match your outsides and la-la-la-la-la, and it's so
true. Like, you know, the minute that I'm kind of drilling through a lesson, downloading
something from the curriculum, getting something from the Moodle, printing it out, handing
out sheets and whatever. Maybe I haven't read it beforehand. It's a busy day. It's like they got
me, they have me. They're like, what is this about? What? Like, you know, and they're, they
Lana

the entire year down to, you know, the most minute and ridiculous of details. So I kind of had
a broad plan for the year as to what I wanted to achieve in philosophy. But then because the
IYPA thing came out, I think it was in the February and I wasn’t expecting the due date to be
so soon for the entry to it.

Speaker 2 (10:56):

So that was really pressured because obviously I only had them once a week and I think there
was a midterm in the middle of all that and something else. Or they were gone on a trip or
something. So I literally had two classes to prepare for it and I just thought that was, it was
impossible for my group. Like we did get through it, but it was a nightmare. And then my
other concern then was how much time do you devote for them to do the project in class?
Like should they have been doing it at home themselves? Should I have been giving them the
whole entire hour whenever I had them. So I ended up giving them three weeks of it solely
for them to work. And then after that I said, right, you can have the last 15 minutes of every
other class to get into your groups and to do work. Because I was just concerned that some
groups were flying ahead and doing great work as always. And then others were just sitting
back and having the chats and not doing anything, do you know what I mean? And I just
didn’t think it was fair, so I had to condense it in the end.

Speaker 1 (11:55):

Okay. So it’s quite interesting really, because there are lots of different pressures coming
from different angles just because the philosophy specification is written using inquiry based
learning

Speaker 1 (12:09):

So did you find planning for the philosophy short course, Were you approaching it in the
same way as you were planning your English or your history or was it ...

Speaker 2 (12:31):

No, very different. Um, well it is and it isn’t I suppose. I looked at, you know, um, the 10
types of philosophy that you’ve to engage with and I said, right, if I kind of at least do, eight
of them throughout the year in some regard, and then I focused on those eight and just came
up with the stimulus for each of the eight. That’s what I felt. So I didn’t really plan it. I just
made sure I had a bank of resources that would fit into each different type of philosophy. That's the way I approached it.

Speaker 1 (13:02):

So, how are you deciding where to go next from? This, they would, it was literally based on whatever happened in the class. So what do you mean?

Speaker 2 (13:13):

Yeah, so whatever kind of [inaudible] and so whatever we started with in the day, so I'll even my current first year, so we started them obviously with Plato on the cave and stuff at the beginning of the year and they just became obsessed with the idea of language and how we use language and how we speak to each others. That kind of, um, for that reason I stayed on moral philosophy for ages and I kept going with that. And then, okay. My one of the classes that they were really interested in art and those and do art. Then I went into art, um, and then another student kept bringing up the idea of technology on customer and iPad schools. Then we went into the technology and science one, so it kind of just gradually float, if that makes sense. Whereas these two other classes, and they have different teachers, so they're doing completely different. So they're doing the same as me. They're just following the flow of the class. They're on completely different topics than what I'm on, which is very unusual because in history, in English, so for example, right now I'm an English in first year, we're all currently doing fairytales because that's on our scheme. We can do different fairytales, but we're all doing different fairytales. Do you know? So that's very different.

Speaker 1 (14:26):

And so did you find that, so was there anything coming from the philosophy short course classes that helped you with the IYPA project?

Speaker 2 (14:39):

Oh definitely. Because, they all came up with their own mini circles and even how they approached the stimulus is that they were creating. And then a lot of students went and interviewed em their parents, our principal and deputy actually, and they did a mini circle in other classes as well. And so they were able to use the framework that we had done in our own classes and apply that then when they were doing their own research. And it's very interesting because even when you listened back to some of the audio recordings, some of
Appendix C: Example Photos of Manual Analysis Process
Appendix D: MERC

Application for Ethical Approval of Research Proposals

Title of Research

__________________________________________________________

Research Reference Number

__________________________________________________________

Researcher’s Name

__________________________________________________________

Email Address

__________________________________________________________

Category of Proposer (please tick)

Student [ ] Principal Investigator (Staff) [ ]

If you are a student, please complete the following: Student Number:

__________________________________________________________

Course of Study: B.Ed. [ ] B.Sc. [ ] PME [ ] MES [ ]

OTHER: [ ]

Please indicate the level of approval required (see accompanying notes).

Level 0 [ ] Level 1 [ ] Level 2 [ ]

1 Please leave blank
1. Please give a structured abstract of the proposed research, including the methods you intend to use (approx. 300 words).

2. Please answer the following questions in relation to your proposed research. Questions (b), (c) or (d) will require detailed explanations if answered ‘yes’ and will be referred for additional scrutiny by the MERC. Answering ‘Yes’ to

<table>
<thead>
<tr>
<th>Question</th>
<th>Please tick</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Does the research involve work with children (under-18) or vulnerable adults?</td>
<td>Yes</td>
</tr>
<tr>
<td>If ‘Yes’, has appropriate Garda clearance (or equivalent) been obtained (include details)?</td>
<td></td>
</tr>
<tr>
<td>Please provide the date of issue on the Certificate of Garda Vetting.</td>
<td></td>
</tr>
<tr>
<td>b. Could any aspect of the research give rise to any form of harm to participants, including the researcher(s)?</td>
<td></td>
</tr>
<tr>
<td>c. Could any aspect of the research produce information that could lead to criminal prosecution of the participants or others?</td>
<td></td>
</tr>
<tr>
<td>d. Is deception of the participants planned in any aspect of the research? If yes, provide details.</td>
<td></td>
</tr>
<tr>
<td>e. Does any aspect of the research involve patients (or their relatives or carers) or other users of health and social care services, the premises or facilities of such services, access to personal records or the participation of health or social care staff?</td>
<td></td>
</tr>
</tbody>
</table>

3. (a) Who are the proposed participants, e.g. teachers; students?

(b) What is your relationship with them? (If you are in a position of authority, for example, indicate how you will deal with the potential influences of such a relationship.)
4. (a) How will you recruit participants?

(b) Please detail any ethical aspects that must be considered, including the proposed use of any incentives.

5. (a) What is the location(s) at which the data collection will be undertaken?

(b) Describe any circumstances that might give rise to security concerns for participants or researchers?

6. Please indicate how informed consent of all participants will be gained. For participants under the age of 18, indicate how the informed consent of both the participant and the participant's parent/guardian will be gained. (Draft consent forms MUST be attached – see question 8 for guidance.)

7. (a) Please indicate how the participants’ rights to privacy (inc. confidentiality and anonymity) and the privacy of their data will be protected. Highlight potential limitations of confidentiality in the ethics form and information sheets for participants (e.g. for small samples or insider research and how this will be addressed).

(b) Please also indicate how the data will be stored (and ultimately destroyed as appropriate).

8. Please complete the checklist below to confirm you have considered all ethical aspects of consent.

(Note that the consent forms that must accompany this application; any omission or inadequacy in detail will result in a request for amendments).

<table>
<thead>
<tr>
<th>Please</th>
<th>I have attached (an) appropriate consent form(s) which include the freedom to withdraw at any stage without having to offer a reason.</th>
<th>tick</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Each consent form has full contact details of the researcher to enable prospective participants to make follow-up inquiries</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Each consent form has full details, in plain non-technical language, of the purpose of the research and the proposed role of the person being invited to participate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Each consent form has full details of the purposes to which the data (in all their forms: text, oral, video, imagery etc) will be put, including for research dissemination purposes</td>
<td></td>
</tr>
</tbody>
</table>
Each consent form explains how the privacy of the participants and their data will be protected, including the storage and ultimate destruction of the data as appropriate.

Each consent form gives assurances that the data collection (questionnaires, interviews, tests etc) will be carried out in a sensitive and non-stressful manner, and that the participant has the right to cease participation at any time and without the need to provide a reason.

Please include here any other comments you wish to make about the consent form(s).

Has your proposal been submitted to any other Research Ethics Committee? Yes / No If yes, please provide details:

______________________________________________________________

Declaration by All Proposers:

I have read and understood Marino Institute of Education’s policy on ethics in educational research: and the Trinity College Dublin Good Research Practice Policies:

I declare that the details above reflect accurately my research proposal and I undertake to seek updated approval if substantive changes are proposed after this submission. I have consulted an authoritative set of educational research guidelines.

Signed: Date

(Students Only) My proposals are based on consultation with my supervisor(s).

Signed: Date

Supervisor’s Signature: (Student Proposal Only, first supervisor only if there are two)

Signed: Date

In instances where supervisors feel that their specialised expertise may be important information for the MERC to take into account (e.g. in relation in researching highly sensitive areas such as trauma/abuse), please submit an additional page with any relevant information.
Final Approval Signed-Off by Research Ethics Committee

Signed: Date

Appendix 3

LIST OF RESEARCH METHODS THAT DO NOT TYPICALLY REQUIRE ETHICS APPROVAL

- Historical research in education
- Research that uses pre-existing data in the public domain (e.g., data from the Growing up in Ireland study)
- Review of literature or research
- Document analysis

Appendix 4

BIBLIOGRAPHY AND USEFUL READING RE. ETHICS IN RESEARCH


Appendix E Consent Forms

Research into Teachers’ Lived Experience of Inquiry-Based Learning (IBL)

The focus for my research is the lived experience of post-primary schoolteachers when engaged in an IBL project within the Junior Cycle Framework.

There is a great deal of research investigating the structure of IBL and the efficacy of IBL regarding student outcomes, but there is very little from the perspective of experienced teachers. Research exploring the nature of IBL that gives voice to the lived experience of teachers participating in IBL would be an important contribution to the academic literature relating to inquiry, providing teachers space for further discussion and reflection on IBL pedagogies.

It is not within the scope of this research to assess the standard or quality of the IBL or teachers’ IBL practice, rather it is teachers’ lived experiences of IBL that is the focus.
Consent to take part in research

- I voluntarily agree to participate in this research study.
- I understand that even if I agree to participate now, I can withdraw at any time without any consequences of any kind.
- I understand that I can withdraw permission to use data from my interview within two weeks after the interview, in which case the material will be discarded from the study.
- I have had the purpose and nature of the study explained to me in writing and I have had the opportunity to ask questions about the study.
- I understand that participation involves attending one interview lasting approximately 60 mins in March/April at UCD or at a mutually agreeable alternative location, including online if preferred.
- I understand that I will not benefit directly from participating in this research.
- I agree to my interview being audio-recorded.
- I understand that all information I provide for this study will be treated confidentially.
- I understand that in any report on the results of this research my identity will remain anonymous. This will be done by changing my name and disguising any details of my interview which may reveal my identity or the identity of people I speak about.
- I understand that disguised extracts from my interview may be quoted in the dissertation, conference presentations and published papers.
- I understand that if I inform the researcher that myself or someone else is at risk of harm they may have to report this to the relevant authorities - they will discuss this with me first but may be required to report with or without my permission.
- I understand that signed consent forms and original audio recordings will be retained on a password-protected work computer with a backup secured on a password-protected external hard drive in the home office of the researcher, Marelle Rice, until the exam board confirms the results of the dissertation.
• I understand that a transcript of my interview in which all identifying information has been removed will be retained for two years from the date of the exam board.
• I understand that under freedom of information legalisation I am entitled to access the information I have provided at any time while it is in storage as specified above.
• I understand that I am free to contact any of the people involved in the research to seek further clarification and information.

Marelle Rice, MES IBL student, Marino Institute of Education,
mrice@mibl18@momail.mie.ie

---------------------------
Signature of research participant  Date

I believe the participant is giving informed consent to participate in this study

---------------------------
Signature of researcher  Date

This research is supervised by Dr Alison Egan, Marino Institute of Education

Alison.egan@mie.ie
Appendix F: Initial Invitation

Dear [Name],

Following on from the SRL Girls in STEM project, I would like to invite you to participate in my research for my M.Ed. Dissertation, which is supervised by Dr. Alison Leman at MIU. I have included a summary below and have attached a consent form to this email so if you are interested you can see further details.

It is a qualitative, phenomenological study, using one to one semi-structured interviews and lasting for approximately an hour. The focus of my research is the lived experience of post-primary school teachers when engaged in an IBL project within the Junior Cycle framework.

There is a great deal of research investigating the structure of IBL and the efficacy of IBL regarding student outcomes, but there is very little from the perspective of experienced teachers. Research exploring the nature of IBL that goes deep into the lived experience of teachers participating in an IBL project would be an important contribution to the academic literature relating to inquiry and provide teachers space for further discussion and reflection on IBL pedagogies.

It is not the scope of this research to assess the standard or quality of the IBL project or teachers’ IBL practices, rather it is teachers’ lived experiences on an IBL project that is the focus.

I really hope you have the time and inclination to take part, and I would be really grateful if you would let me know as soon as you can so we can find a mutually agreeable time and date for the interview.

Very best,

[Name]