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Munster Technological University
School of Business
Department of Management and Enterprise

**‘The Playful Entrepreneur’
Fostering Entrepreneurial Education in Early Childhood Education**

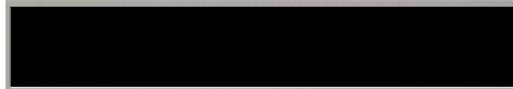
Trudie Murray

Submission for the Award of Degree of Doctor of Philosophy
Research Supervisors
Dr Breda Kenny, Dr Helen McGuirk and Professor Thomas M. Cooney

Submitted to Munster Technological University, August 2024

Declaration of Authenticity

I hereby declare that this PhD thesis, entitled “The Playful Entrepreneur – Fostering Entrepreneurial Education in Early Childhood Education”, is entirely the candidate’s own work except where otherwise accredited and that the thesis has not been submitted for an award at any other institution.



Trudie Murray

Supervisors Signature:

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Date: 20.08.2024

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List of Abbreviations

| | |
|--------|--|
| AIM | Access and Inclusion Model |
| CECDE | Centre for Early Childhood Development and Education |
| CGT | Constructivist Grounded Theory |
| CORE | European Competence Requirements in Early Childhood Education and Care |
| CPD | Continuous Professional Development |
| DAP | Developmentally Appropriate Practices |
| DCEDIY | Department of Children, Equality, Disability, Integration & Youth |
| ECCE | Early Childhood Care & Education |
| ECE | Early Childhood Education |
| ECEC | Early Childhood Education & Care |
| EDI | Equality/Equity Diversity and Inclusion |
| EE | Entrepreneurial Education |
| eEE | Early Entrepreneurial Education |
| EPPE | Effective Provision of Preschool Evaluation |
| EYFS | Early Years Foundation Stage |
| IBL | Inquiry Based Learning |
| NCCA | National Council for Curriculum & Assessment |
| OECD | Organisation for Economic Cooperation and Development |
| QAP | Quality Assurance Programme |
| TALIS | The Teaching And Learning International Survey |
| TRIO | Theory, Reality, and Practice Entrepreneurship Education Model |
| UNESCO | United Nations Educational, Scientific and Cultural Organisation |

Abstract

This study explores the integration of entrepreneurial education within early childhood settings in Ireland, focusing on embedding entrepreneurial capabilities at the foundational stages of education. Recognising the critical role that early experiences play in lifelong learning, this research advocates for equipping preschool children with essential 21st-century skills, such as independence, creativity and problem-solving. Despite significant investment in early childhood education, the integration of entrepreneurial education remains limited within existing pedagogical frameworks, which prioritise social, emotional, and cognitive skills without explicitly addressing entrepreneurial capabilities.

Utilising a Constructivist Grounded Theory approach, the study examines how early childhood educators can foster an entrepreneurial mindset, attitude, and capabilities among preschool children. It develops a comprehensive conceptual framework, providing a scaffold for the effective integration of entrepreneurial education into preschool settings. The research emphasises the crucial role of early childhood educators as facilitators of entrepreneurial learning, and considers the policies and training programmes that either facilitate or impede this integration.

A key finding is the importance of ‘play’ as a powerful tool for entrepreneurial learning, enabling children to develop creativity, problem-solving skills, and independence through exploration and experimentation. The proposed early Entrepreneurial Education (eEE) Framework offers an innovative, structured approach to embedding entrepreneurial education in early childhood education curricula, enhancing educator training, and informing policy development. This thesis contributes to the broader dialogue on advancing educational strategies, preparing young learners for a global society that values entrepreneurial capabilities.

Dedication

I dedicate this thesis to my daughters – Aria and Cali-Faye, who inspired this study by showing me that play is the highest form of research. You girls have made my life complete and shown me that being a mom is the best job of all. This is for you – to show you both you can achieve anything you want, be anyone you want – the world is yours for the taking. Be brave, be strong, be independent, be fierce. I love you both to the moon and back, my little best friends.

“Show me a child who doesn’t want to paint a picture. A child who doesn’t want to hear a story and tell it back to you. Kids sing and dance. They love music. They invent games and characters. They will build a kingdom out of pots and pans....if creativity is a luxury, then being human is a luxury.....” (Jeanette Winterson)

CHAPTER 1
INTRODUCTION

1.1. Introduction

This study enquires into the underexplored yet critical intersection of entrepreneurial education within early childhood settings in Ireland, presenting an innovative study aimed at integrating entrepreneurial concepts into the foundational stages of education. Amid Ireland's economic strategies to enhance national entrepreneurial activity, this research posits that fostering an entrepreneurial mindset should commence as early as preschool. Despite the lack of a national policy specifically targeting entrepreneurial education in early childhood, the Irish educational system, particularly through the Early Childhood Care and Education (ECCE) scheme¹ and the Aistear² curriculum, provides a unique backdrop for this investigation. This study is driven by the need to equip our youngest learners with the skills necessary for innovation and creativity - skills that are increasingly recognised as crucial in the 21st century. Through a Constructivist Grounded Theory approach, this research not only seeks to fill a significant gap in educational practice but also aims to craft a framework that can guide the integration of entrepreneurial skills in early childhood education across diverse settings.

1.2. Background and Context of the Study

This research study is situated within the evolving context of entrepreneurial education in early childhood settings in Ireland, a significant, yet under-researched connection between two educational paradigms. Entrepreneurial education is widely recognised and appreciated as a method of fostering interest, joy, engagement, creativity and societal value creation (Lackéus, 2015, 2013). However, its integration within early childhood education, particularly preschool-aged children (2.8 years to 5.6 years), remains minimal despite the potential positive impacts on economic health and societal well-being (OECD, 2022).

Ireland presents a unique backdrop for this study. The country's strong emphasis in boosting entrepreneurial activity as a core component of its broader economic and societal strategies is well documented in various national policy frameworks (e.g. Ireland's National Skills Strategy, 2025; National Social Enterprise Policy for Ireland 2024 - 2027; National Strategy for Higher Education to 2030; National Research and Innovation Strategy 2021 - 2027; National Smart Specialisation Strategy for Innovation 2022 – 2027 and Project Ireland 2040). Despite this,

¹ The Early Childhood Care and Education (ECCE) scheme provides free care and education for preschool children in Ireland. The ECCE scheme will be discussed in detail on p. 103.

² The Aistear Curriculum is the early childhood framework for all children from birth to 6 years in Ireland. Aistear will be explored and discussed throughout the thesis.

there is no dedicated national entrepreneurship education policy that explicitly incorporates these principles at the early childhood education level. The integration of entrepreneurial concepts at the foundational journey of education has not yet been fully realised, with education frameworks like Aistear focusing predominantly on child-led and child-centred pedagogies that emphasise social, emotional, and basic cognitive skills. These are crucial, yet they overlook the potential of an entrepreneurial approach to amplify these foundational skills (Christiani et al., 2015).

The National Skills Strategy 2025 illustrates Ireland's commitment to integrating entrepreneurship education into the educational curriculum across primary and secondary levels. It supports various programmes such as Young Social Innovators and Junior Achievement Ireland, which are designed to foster essential entrepreneurial aptitudes in older children. These programmes, reaching tens of thousands of students annually, focus on developing business understanding, creativity, innovation, and risk-taking through active and collaborative learning. However, the strategy's focus shifts significantly when it comes to preschool education, where the emphasis remains foundational, rather than innovative and entrepreneurial.

Recent developments in early childhood education in Ireland reflect substantial financial commitments by, and supports from, the government, with initiatives aimed at enhancing the quality and accessibility of education for young children. A notable increase in state investment exceeding €1 billion in early learning and childcare, reflects a 51% increase over the previous year's core allocation (DCEDIY³, 2022). In 2023, several key policies and initiatives were implemented to support families and early childhood education providers. The introduction of the Equal Participation Model aims to provide inclusive supports that address disadvantages among children and families, particularly focusing on marginalised communities such as Traveller and Roma children (Child Poverty Monitor, 2023). Additionally, a pilot scheme providing hot meals to Early Years services has been launched to combat food poverty, similar to school meal provisions, indicating a holistic approach to child welfare and development (Child Poverty Monitor, 2023). These efforts highlight a comprehensive national approach to early childhood education that values quality and inclusivity but still lacks a specific focus on entrepreneurial education. The need for integrating entrepreneurial education in early

³ Department of Children, Equality, Disability, Integration and Youth

childhood settings is illustrated by statistics showing that children represent 24.7% of the EU's population, with nearly 18 million children experiencing poverty and social exclusion (Eurostat, 2023; OECD, 2022). These figures highlight the significant role that quality early childhood education can play in combating social inequalities and fostering healthy development from a young age.

Moreover, research suggests that entrepreneurial activity is often influenced by cultural factors (Audretsch et al., 2017; Fritsch et al., 2019) and that fostering an entrepreneurial mindset across the general population is pivotal in generating entrepreneurial activities (Kuratko et al., 2020; Robinson & Gough, 2020; do Paço & Palinhas, 2011). Entrepreneurship education is acknowledged for its crucial role in building awareness of enterprise and entrepreneurship values, which are foundational for cultivating future entrepreneurs (Lundström et al., 2008).

This context sets the stage for this study, highlighting the gap in current educational practices and the potential benefits of introducing entrepreneurial education in early childhood. By exploring how these concepts can be integrated into Ireland's early childhood education framework, this study aims to contribute to the broader dialogue on enhancing educational strategies to better prepare young children, not only for school, but also for a rapidly changing global society.

1.3. Focus and Rationale of the Study

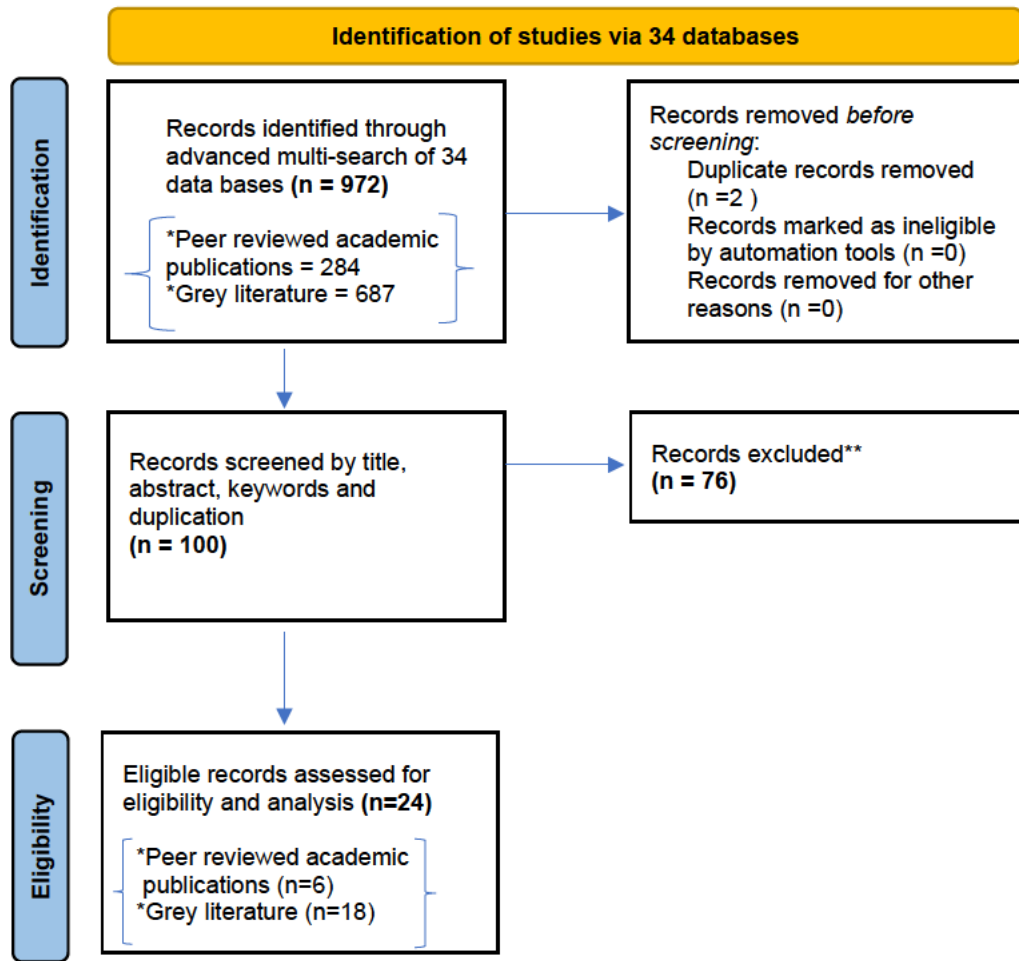
This study aims to address a critical gap in current educational practices by investigating how entrepreneurial education (EE) can be effectively introduced and fostered in preschool children, and seeks to consider the broader educational structure that supports or hinders such initiatives. The rationale for this study extends beyond enhancing educational outcomes – it seeks to fundamentally reshape how children perceive and interact with the world from an early age. This study emerges from a recognition of the pivotal role early childhood experiences play in shaping later life outcomes (Currie & Rossin-Slater, 2015). Research indicates that high-quality Early Childhood Education and Care (ECEC) significantly impacts holistic and academic development, setting the stage for lifelong learning and success (Whitebread et al., 2015; Van Huizen & Platenga, 2018).

Despite these findings, and strong public support for enhancing early childhood education as evidenced by substantial backing for policies that align childcare costs with parental income and provide substantial parental support (Early Childhood Ireland Barometer, 2023), the actual integration of EE remains limited. The discrepancy highlights a significant opportunity: to equip children with essential skills, like creativity, independence, and problem-solving, for navigating an increasingly complex world through EE.

Ireland's robust approach to early childhood education, characterised by a clear emphasis on quality, inclusivity, and continual investment, suggests a promising future for the sector. The choice of the ECCE scheme is strategic, given its extensive reach with 108,616 children enrolled in this preschool programme, supported by 3879 providers across the country (DCEDIY, 2023). Discussed in detail in Chapter 4, this substantial engagement offers an inclusive and rich field for implementing and studying the impact of entrepreneurial education.

An initial scoping review of the literature was used to address the research question and to provide a greater understanding of the factors that can influence access to entrepreneurial education within the early childhood education sector. This may lead to improved entrepreneurial education delivery, with the potential to develop enterprising behaviour and the fostering of an entrepreneurial spirit in young children. The scoping review was influenced by the five-stage framework developed by Arksey and O'Malley (2005) and further refined by The Joanna Briggs Institute (JBI) and Levec et al. (2010). Figure 1.1. illustrates the adapted PRISMA flow diagram (Page et al., 2021; Al-Lawati et al., 2022) employed to chart the search strategy and results in this study.

Figure 1.1. PRISMA Flow Diagram for Study's Scoping Literature Review



The PRISMA flow diagram in Figure 1.1. depicts the initial identification of 972 studies through database searches and other sources. After removing duplicates, and screening based on titles and abstracts, 100 studies were assessed for eligibility. From this, 25 studies were selected based on meeting the overall protocol requirements and addressing the research objectives. From these 25 studies, 4 peer-reviewed academic publications and 9 grey⁴ literature studies had a focus on entrepreneurship education in preschool. The remaining 12 publications, while in their theoretical framework included early years education, methodologically focused on primary school and general education of children. These 12 publications were included for their theoretical contribution to this study. This study notes, however, that from the 25 studies analysed, no study contributed to the field of entrepreneurship or entrepreneurship education,

⁴ Grey literature is “that which is produced on all levels of government, academics, business and industry in print and electronic formats, but which is not controlled by commercial publishers” (Paez, 2017, p.233)

nor were any publications found in entrepreneurship-focused journals or conference proceedings (see Appendix A).

From this initial scoping review, it is evident that while the journey towards integrating entrepreneurship into early childhood education is in its infancy, the potential for impact is vast. The lack of existing research in this area prompts a broader examination of how entrepreneurial concepts can be adapted for young learners. Through Chapters 2, 3, and 4, the literature review will explore the conceptual underpinnings of entrepreneurship, its educational applications, and strategies for fostering an entrepreneurial mindset, aiming to bridge the identified gap and contribute to the development of a framework that fosters entrepreneurial spirit among preschool children.

Despite the potential benefits of EE, such as fostering independence, creativity, and adaptability, there are significant critiques that must be acknowledged. Some scholars argue that entrepreneurship education is not necessarily always a good thing - that it has a dark side. The taken-for-granted view of entrepreneurship education has been challenged (Berglund et al., 2020; Brentnall & Higgins, 2022; Loi et al., 2021). Pressuring students to behave entrepreneurially can have negative implications including the constraint of students' identities, division among students, and the categorisation of levels of entrepreneurial capabilities (Berglund et al., 2020). Loi et al. (2021) argue that these positive stereotypes about entrepreneurs, such as confidence, risk-taking, and economic development can lead to biases in entrepreneurship education potentially hindering the development of a diverse and inclusive entrepreneurial ecosystem. Brentnall and Higgins (2022) also critically challenge the advantages of EE arguing that it can lead to the invisibility of power dynamics, inequality, insufficient exploration of sociological issues of autonomy, solidarity and cooperation, and a limited understanding of the impact of EE on society. They suggest that challenging the current philosophical assumptions of EE will foster more inclusive, transformative and socially impactful practices.

Fayolle et al. (2016) and Fayolle (2013) call for a more critical perspective and theoretical foundations to justify and explain the actions and interventions of entrepreneurship education. Entrepreneurship education is fragmented, lacks cumulative progress and lacks legitimacy (Fayolle, 2013). In addition, the pedagogical objectives and expected outcomes of EE are

complex and challenging to define without a broad consensus on the nature of entrepreneurship and its associated soft skills (Fayolle et al., 2016).

Leffler et al. (2010) question the values that entrepreneurship brings to education and the underlying relations between individuals and societies. Dodd et al. (2022) call for educators to move away from traditional, unsustainable practices and embrace progressive approaches that promote sustainability and social justice. This shift can help educators empower students to address real-world problems and envision positive change through entrepreneurship. Komulainen et al. (2011) contend that there are diverse interpretations of entrepreneurship education, making it challenging to establish a unified approach. Teachers also need to balance traditional educational values with new entrepreneurial ideals promoted in curricula. This also leads to the challenge of embedding EE as a holistic ideology as opposed to a specific subject or module (Komulainen et al., 2011; Penaluna et al., 2015).

While these scholarly works offer considerable critiques of entrepreneurship education that must be considered and appreciated, this study proposes that nurturing an entrepreneurial mindset from a preschool age may offer significant personal, educational, societal, and economic benefits. Entrepreneurship education promotes the development of essential soft skills such as communication, teamwork, and leadership (Bell, 2020; Jones & Iredale, 2010). It also improves critical thinking and problem-solving abilities, which are crucial not only in business but in everyday life and in addressing complex social issues (Bacigalupo et al., 2016; Lackéus, 2015).

Cultivating an entrepreneurial mindset encourages ongoing learning and curiosity, enhancing a culture of innovation within communities and contributing to economic growth (European Commission, 2016; Fayolle & Gailly, 2015). This transformative potential of integrating entrepreneurial learning in early education can prepare individuals for economic participation and can equip them with tools to contribute positively to society.

The OECD (2021) emphasises that high-quality ECEC is crucial for nurturing future generations. This research suggests that entrepreneurial education should therefore be integrated within the Irish ECCE programme, promoting entrepreneurial thinking age as a natural progression of learning from an early age. This approach supports the progression of

entrepreneurship education through all educational levels, advocating for comprehensive strategies that recognise the critical role of ECEC educators and engage various stakeholders in advancing entrepreneurship education in early childhood settings.

This study not only assesses the direct impact of entrepreneurial education on young learners but also considers the broader educational structure that supports or hinders such initiatives. By adopting a multidisciplinary approach involving policymakers, educational leaders, and frontline educators, the research seeks to bridge existing gaps in current practices and theory. The objective is to propose a conceptual framework that unites all necessary stakeholders, fostering a comprehensive and supportive environment for entrepreneurial education in early childhood settings.

1.4. Research Questions and Objectives

Central to this research is the question: How can early childhood educators foster entrepreneurial education in preschool children? The study endeavours to inquire into the integration of entrepreneurial education within preschool settings, aiming to uncover, analyse, and understand current practices. It seeks to explore the form of entrepreneurial education, questioning how it is defined, enacted, and experienced in early childhood education.

The objectives of the study are twofold: to describe what entrepreneurial education in early childhood settings encompasses, and to determine the means by which preschool educators can nurture and support the development of entrepreneurial competencies in children. These include a range of pedagogical strategies that underpin the fostering of an entrepreneurial mindset, attitudes, skills, and capabilities.

This research operates on the basis that entrepreneurial education is not just about business acumen but is a broader concept involving creativity, innovation, problem-solving, and resilience. The aim is to establish a clear picture of how these elements are presented and encouraged in the early years of education, and to determine the extent of entrepreneurial education's reach within the early childhood education and care sector in Ireland.

To achieve these objectives, the study will:

- Scope the existing literature to understand the intersection of entrepreneurial education (EE) and Early Childhood Education and Care (ECEC).
- Identify the educational policies and training programmes that support or hinder the introduction of entrepreneurial skills in early learning environments.
- Develop a framework that draws on theoretical findings to support stakeholders - including educators, academic leaders, and policymakers - in effectively integrating entrepreneurial education into the preschool curriculum.

By conducting this comprehensive investigation, the study aspires to bridge identified gaps in both the literature and practice, offering a theoretically grounded framework that facilitates early entrepreneurial education at preschool level through stakeholder collaboration. This proposed framework intends to provide a scaffold upon which the practical implementation of EE in early settings can be constructed. By pursuing this comprehensive inquiry, the study aims to enrich educational practices for young learners in Ireland and contribute to the global conversation on entrepreneurial education. It advocates for recognising early childhood educators as vital to educational policy development and the nurturing of entrepreneurial capabilities from the earliest stages of learning.

1.5. Research Design and Methodology

This study adopts a detailed research design guided by the ‘research onion’ model (Saunders et al., 2007, 2009, 2018, 2019) which provides a comprehensive, structured approach to the selection of the most appropriate methodologies and techniques for investigating the research question: how can early childhood educators effectively foster entrepreneurial education, in preschool children? This model aids in systematically peeling away the outer layers of decision-making processes related to the research, such as addressing philosophical stances, choosing research strategies, and determining data collection and analysis methods, thereby ensuring a coherent and logical progression through the research.

Within this structured framework, Constructivist Grounded Theory (CGT) (Charmaz, 2006, 2014, 2017) is selected as the central research methodology due to its strong alignment with the study's needs. CGT is particularly well-suited for exploring complex social phenomena from the subjective perspectives of the participants involved. It emphasises the co-construction

of knowledge between the researcher and participants, allowing for a deeper understanding of the pedagogical strategies employed by early childhood educators and the contextual factors influencing their practice. This approach is ideal for responding to the research question as it facilitates the generation of rich, grounded theories that emerge organically from the data collected through interactive and iterative cycles of data gathering and analysis.

CGT's focus on iterative data analysis and theory development mirrors the layers of the research onion, engaging with each layer from philosophical commitments to practical methodological choices. This ensures that the research design is not only comprehensive but also especially reflective of the complex dynamics within early childhood educational settings. By employing CGT within the framework provided by the research onion, the study ensures that every aspect of the research design is thoughtfully considered and justified, leading to rigorous, insightful findings that can significantly inform and enhance practices surrounding entrepreneurship education in early childhood.

1.6. Structure of the Thesis

This thesis is structured to provide a comprehensive exploration of how early childhood educators can foster entrepreneurial education, mindset, capabilities, attitudes, and skills in preschool children. Each chapter is designed to progressively build upon the insights gained from the preceding sections, culminating in a well-rounded understanding of the research topic. The thesis begins with a literature review that sets the academic backdrop for the study, followed by an in-depth explanation of the research methodology. Subsequent chapters present the findings, discuss these results in the context of existing literature, and conclude with a synthesis of the research contributions, implications, and suggestions for future research. This structure ensures a logical flow that facilitates a clear and thorough understanding of the study's aims, findings, and significance.

- **Chapters 2, 3, and 4 – Literature Review**

Chapters 2, 3, and 4 extensively examine the scope and implications of entrepreneurial education within early childhood settings, highlighting its potential to shape young learners' foundational skills such as creativity, innovation, and problem solving. The chapters trace the evolution of entrepreneurship from early economic theories to a mindset that can significantly influence personal development and societal contribution. The review emphasises the

transformation of entrepreneurial education over the years, from traditional business-focused approaches to holistic frameworks that integrate entrepreneurial thinking across all educational levels. It advocates for fostering entrepreneurial mindsets from an early age, supported by key theories such as Piaget's cognitive development theory and Vygotsky's social development theory.

The role of play is examined as a powerful tool for learning and development, providing children with opportunities to engage in creative problem-solving and innovation. Furthermore, the review highlights the critical role of educators in this process, emphasising the importance of pedagogical approaches that encourage active learning and engagement.

Overall these chapters provide a comprehensive theoretical foundation for the study, advocating for the early integration of entrepreneurial education to cultivate a proactive, creative, and adaptable generation.

- **Chapter 5 – Research Methodology**

Chapter 5 outlines the research methodology, detailing the structured approach to designing and conducting the study. The chapter begins by justifying the selection of the research methodology, emphasising the importance of aligning the design with the study's goals and the researcher's interpretivist philosophical orientation. The 'research onion' model (Saunders et al., 2007, 2009, 2018, 2019) is used to illustrate the layered approach to developing the research strategy.

Grounded in interpretivism, the study adopts a Constructivist Grounded Theory (CGT) methodology (Charmaz, 2006, 2014, 2017), suitable for exploring the complex phenomena of how early childhood educators foster entrepreneurial thinking in preschoolers. This approach supports a qualitative, in-depth-examination of perceptions and experiences, crucial for the study's interpretive nature.

The primary data collection method involves semi-structured intensive interviews, chosen for their ability to capture deep insights and allow flexibility in the emergence of new themes. The sampling strategy is purposeful, with theoretical sampling refining data collection based on emerging themes, ensuring alignment with the CGT approach. Ethical considerations are

thoroughly addressed, including respect, confidentiality and informed consent. The chapter concludes with a discussion on the limitations of the research methodology, such as the potential biases inherent in qualitative research and the challenges of generalising findings while ensuring the study is conducted with rigour and integrity.

- **Chapter 6 – Findings**

Chapter 6 presents the findings of the study using Constructivist Grounded Theory (CGT) to analyse how early childhood educators can foster entrepreneurial education in preschool children. The analysis begins with initial coding of interview data, progressing to focused coding, that refines these codes into key categories essential to the research question. Memo-writing and constant comparison are crucial in ensuring depth and theoretical saturation, capturing the complexities of embedding entrepreneurial concepts in early childhood education. The chapter concludes with a coherent theoretical framework, illustrated through reflective vignettes showcasing the practical application of entrepreneurial principles in preschool settings.

The findings highlight the pivotal role of early childhood educators as key facilitators who creatively integrate entrepreneurial concepts into daily routines and play, emphasising the development skills such as problem-solving, creativity, and initiative. The study demonstrates that entrepreneurial education can be effectively incorporated into early childhood curricula through both structured and unstructured play, which fosters essential non-cognitive skills like resilience, independence, and confidence in young learners

However, challenges such as traditional business-oriented perceptions of entrepreneurship, limited resources, and inadequate professional development hinder implementation. The success of these initiatives also depends on active community and parental involvement. The findings advocate for significant policy reforms to integrate entrepreneurial education into national and international educational frameworks, emphasising the importance of recognising and strengthening entrepreneurial skills from an early age.

- **Chapter 7 – Discussion of Findings**

Chapter 7 synthesises the data from previous chapters and discusses how entrepreneurial education can be integrated within early childhood settings, with educators playing a pivotal

role in fostering entrepreneurial mindsets and capabilities in preschool children. Central to the discussion is the development of *'The eEE Framework'*. The eEE (early Entrepreneurial Education) Framework is structured around five major components derived from theoretical findings and empirical evidence: Interconnected Development, Transformative Practice, Inclusivity and Empowerment, Evaluative Insights and Impact, and Collaborative Engagement. These components collectively address different aspects of educational and developmental needs, emphasising a holistic approach to embedding entrepreneurial concepts into early childhood education.

The chapter explores the practical applications of these findings, suggesting enhancements to curriculum, professional development for educators, and policy reforms to support entrepreneurial education in ECE. It advocates for a more integrated and systemic approach, involving community and parental engagement to broaden the impact and support for entrepreneurial activities.

The discussion not only clarifies the theoretical underpinnings and practical implications of introducing entrepreneurial concepts in early childhood but also sets the stage for future research and practice, aiming to establish a more inclusive framework for entrepreneurial education at the preschool level.

- **Chapter 8 – Conclusion**

Chapter 8 consolidates the findings, discussions, and theoretical advancements made, revisiting the core research question of how early childhood educators can foster entrepreneurial education in preschool children. The chapter summarises the study's theoretical exploration, empirical evidence, and practical implications, leading to the proposal of an innovative framework for early entrepreneurial education.

Key conclusions emphasise the importance of introducing entrepreneurial skills early, driven by global economic demands and the need for future success. The research advocates for integrating entrepreneurial education into early childhood curricula, and stresses the pivotal role of educators, calling for targeted training and resources.

The early Entrepreneurial Education (eEE) Framework, provides a structured approach for curriculum development, educator training, and policy formulation. Moreover, the chapter also considers the broader implications for educational policy and practice, suggesting that entrepreneurial education should be integrated at national and international levels to better prepare children for future challenges. It reflects on the study's limitations and proposes directions for future research.

Overall, the conclusion affirms the transformative potential of incorporating entrepreneurial education in early childhood, advocating for a progressive shift in educational paradigms to embrace entrepreneurship as a core component of early education.

1.7. Thesis Contributions

This thesis demonstrates the successful achievement of its aims by illustrating what entrepreneurial education in early childhood settings involves, and identifying effective methods through which preschool educators can nurture and support the development of entrepreneurial competencies in children. The research highlights the transformative potential of embedding entrepreneurial education within early childhood settings, emphasising the role of educators in nurturing an entrepreneurial mindset and capabilities among preschool children. The proposed *early Entrepreneurial Education (eEE) Framework* is central to these recommendations, advocating for a holistic, multi-dimensional approach that includes curriculum integration, educator training, and policy advocacy. Central to the framework is the recognition of play as a powerful tool for fostering entrepreneurial learning, as it naturally engages children in creative thinking, problem-solving, and risk-taking activities that are essential for developing entrepreneurial skills.

The study calls for practical steps, such as revising early childhood curricula to include entrepreneurial elements, expanding the use of play-based learning, and developing targeted professional development programmes for educators. Additionally, it suggests that these practices should be scalable and adaptable across various educational systems globally, proposing that the eEE Framework could serve as a model for integrating entrepreneurial education in diverse contexts. The thesis concludes that by strategically embedding entrepreneurial education from the earliest stages, children will be better equipped with the essential skills required for future success in an evolving global economy.

1.8. Conclusion

To conclude - this study outlines the importance of entrepreneurial learning in the formative years, as a foundation for lifelong entrepreneurial thinking, and investigates how entrepreneurial education can be integrated into early childhood education in Ireland. Focusing on the underexplored role of preschool educators, this research aims to bridge the gap between current educational practices and the potential benefits of fostering entrepreneurial mindsets from an early age. Through a carefully structured methodology and an awareness of the broader educational and economic context, the study offers a conceptual framework - '*The eEE Framework*' - to guide the practical application of entrepreneurial concepts in preschool settings. What follows is a thorough exploration from reviewing the literature to revealing new understandings, with the final objective of providing actionable insights for educators, policymakers, and the global educational community.

CHAPTER 2
ENTREPRENEURSHIP EDUCATION

2.1. Introduction

This chapter aims to provide a comprehensive understanding of how entrepreneurial principles can be integrated into early childhood education, addressing the research study's question of how early childhood educators can foster entrepreneurial thinking, mindset, capabilities, and competencies in preschool children. It delves into the importance of cultivating an entrepreneurial mindset from an early age, emphasising the significant impact that high-quality Early Childhood Education and Care (ECEC) can have on children's holistic and academic development. Through a detailed examination of existing literature, the chapter seeks to identify the key factors influencing access to entrepreneurial education within the early childhood education sector and explore strategies for improving its delivery.

At the heart of economic development and personal empowerment lies entrepreneurship, a concept that has evolved significantly through the ages, reflecting changes in societal needs and technological advancements. To situate this thesis within the field of entrepreneurship, the following chapter traces the journey of entrepreneurship from its historical origins to its current status, highlighting its role not just as a key driver of innovation and business creation, but as a mindset centred on opportunity recognition and exploitation. This exploration covers various dimensions of entrepreneurship, including its evolution, definitions, practical applications, and theoretical frameworks. As such it sets the stage for exploring how early childhood educators can foster entrepreneurial thinking, mindset and capabilities in preschool children.

2.2. What is Entrepreneurship?

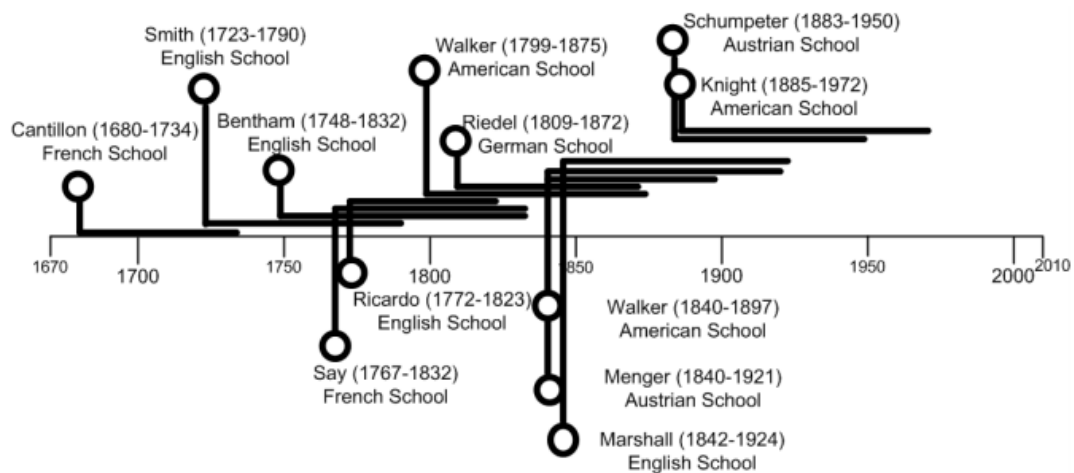
Entrepreneurship is the world's oldest profession, a stable employment feature during the pre-industrial revolution era, persevering throughout the 100 year industrial revolution and has been a profession that has grown and evolved ever since (Kariv, 2011). Developments in economy, society, technology, and regulations have seen entrepreneurship adapt, adjust, transform, and progress as a field. This evolution showcases entrepreneurship's central role in everyday life and its significance in fostering entrepreneurial mindsets from an early age (Penaluna & Penaluna, 2019).

2.2.1. Evolution of Entrepreneurship

Entrepreneurship's evolution reflects a complex interplay of economic theories and practices, grounded in the authoritative body of literature spanning several schools of thought. Bravo

(2016) introduces the concept of scholarly consensus which sets the stage for examining the evolution of entrepreneurship through the perspectives of French, English, American, and Austrian schools (Petrakis et al., 2020), as illustrated in Figure 2.1:

Figure 2.1. *History and Evolution of Entrepreneurship Thought*



Source: *Swanson (2017)*

The term ‘entrepreneur’ first appeared in Richard Cantillon's “Essai sur la Nature du Commerce en General” (1730), defining an entrepreneur as someone who undertakes self-employment and manages risks by exploiting market demand and supply imbalances (Kariv, 2011; Bridge, 2017; Thornton, 2020). Later contribution from classical and neo-classical economists like Adam Smith, Jean-Baptiste Say, and others, expanded on this, highlighting the role of innovation and resources allocation (DelliSanti, 2021; Westgren, 2020; Bosman & Fernhaber, 2018).

In contrast, Schumpeter (1911) and Knight (1920) positioned entrepreneurship as a disruptive force, emphasising innovation and the management of uncertainty (Mehmood et al., 2019; Wadhvani & Lubinski, 2017), a viewpoint further elaborated by later economists like Kirzner and Schultz, who argued for a dynamic, disequilibrium perspective of entrepreneurship (Dunkwu et al., 2016). Becker’s (2007) investment theory in human and physical capital further refined the entrepreneurial role as a decision-making agent facing dichotomous choices (Bridge, 2017), tying into Shane and Venkataraman's (2004, 2000) identification of entrepreneurship with the presence of enterprising individuals and lucrative opportunities.

Modern perspectives encompass cognitive styles, gender characterisation, team dynamics, social entrepreneurship, and the digital landscape (Adomako et al., 2016; Birley & Stockley, 2017; Urban & Kujinga, 2017; Kraus et al., 2019). Theories from psychology, sociology, and anthropology offer nuanced insights into personal traits, social networks, and cultural influences on entrepreneurial activities (Cuervo et al., 2007; Baum et al., 2006; Fayolle & Riot, 2016). As such entrepreneurship is framed as a multifaceted phenomenon, shaped by individual traits, societal norms, and technological advancements.

2.2.2. Defining Entrepreneurship

Entrepreneurship, rooted in the French word "entreprendre," has evolved to include varied interpretations. Cantillon (1755) viewed entrepreneurs as navigators of uncertainty (Herbert & Link, 2007), a concept expanded by Say (1823) to encompass resource allocator and productivity enhancement (Thornton, 2020; Drucker, 2014). The definition further developed through the insights of Sheahan (1951) and Cole (1946, 1968), who emphasised the decision-making and management roles in entrepreneurial activities (Miller, 2019).

Entrepreneurs play a critical role in reforming production procedures and introducing technology (Śledzik, 2013), encapsulating the process of starting and growing new ventures (Bridge, 2017; Zacca & Dayan, 2017). They create innovative networks amidst risk (David, 2015) and embrace financial gain and personal satisfaction (Slavec et al., 2023). Entrepreneurship is thus a dynamic activity that captures market opportunities through creative designs and strategic decisions (Bosman & Fernhaber, 2018; Sahoo, 2020), focusing on recognising and exploiting opportunities for sustainable development and reward (Bedi et al., 2019).

Schumpeter (1911, 1934) and Kirzner (1973) identified innovation and opportunity as central to entrepreneurship (Gedeon, 2010). Shane (2003), and Casson (2008) view entrepreneurship as an organised effort for profit, innovation, and growth (Wadhvani et al., 2020). Shapiro and Stiglitz (1984), and Drucker (1985) emphasise systemic change and innovation for wealth production, alongside Gartner's (1985) outline of entrepreneurial behaviours (McDaniel, 2014).

Entrepreneurship involves pursuing untapped opportunities (Kuratko, 2005), creatively combining resources (Dess et al., 1999), and breaking economic stasis through innovation (Podemska-Mikluch, 2020). Its definition has broadened to include social, international, and digital entrepreneurship, reflecting its adaptability to evolving societal and economic landscapes (Kimmitt & Munoz, 2018; Baier-Fuentes et al., 2019; Zaheer et al., 2019).

The evolution of definitions in entrepreneurship can be summarised through four key lenses, illustrated in Table 2.1 below, each highlighting distinct yet interconnected components of entrepreneurial activity.

Table 2.1. *Entrepreneurship Defined through four main lenses.*

| | |
|--|---|
| Entrepreneur as a Person: Innovator, resource allocator, and opportunity seeker | Cantillon, 1755; Say, 1803; Drucker, 1985; Schumpeter, 1928 |
| Entrepreneur as a Process: Decision-making, opportunity identification, and venture creation | Sheehan, 1951; Cole, 1968; Krizner, 1973; Casson, 2008 |
| Entrepreneur as an Outcome: Creative value creation, economic development, and societal impact | Baumol, 1990; Audretsch, 2017; Bosman and Fernhaber, 2018 |
| Enterprising Behaviour: Behaviours extending beyond economic profit, including creativity and innovation in various contexts | Davies, 2002; Gibb, 2005; Blenker et al., 2011; Jones and Iredale, 2014 |

Source: *Authors own*

In summarising the varied perspectives on entrepreneurship, it is a concept that is continually redefined yet steadfast in its core principle: the pursuit of opportunity through innovation and risk-taking. It is this core principle that illustrates the transformative power of entrepreneurship and its capacity to drive forward economic and societal change, embodying the spirit of progress and resilience.

2.2.3. Entrepreneurship in Practice

Entrepreneurship manifests in various forms, with different types of entrepreneurs - novice, serial, habitual, nascent, portfolio, and intrapreneurs - each facing distinct opportunities and challenges (Lahiri & Wadhwa, 2020; Westhead & Wright, 2016; Claire et al., 2021). These diverse entrepreneurial pathways illustrate the varied real-world applications of

entrepreneurship, moving beyond theoretical definitions to explore how different entrepreneurs navigate their unique environments.

Theoretical models, such as Ajzen's (1991) theory of planned behaviour, provide a lens to understand the intentions behind entrepreneurial actions (Kumar & Das, 2019), shaped by perceived behavioural control, subjective norms, and attitudes (Gieure et al., 2020; Brannback et al., 2018). Fayolle's (2008) five-phase journey of entrepreneurship further captures the evolution of entrepreneurial intent and action.

Entrepreneurship is also explored through macro and micro perspectives, offering insights into the factors influencing the trajectory of entrepreneurial ventures (Putsom et al., 2019). The macro-view focuses on the external factors, such as socio-cultural, and financial influences (Castano et al., 2015; Kuratko et al., 2015; Griffiths et al., 2013; Van Gelderen & Masurel, 2012; Kuratko & Hodgetts, 1998). In contrast the micro-view examines the entrepreneur-specific factors including personality traits, venture opportunities and strategic decision-making (Cunningham & Menter, 2020; Bajwa et al. 2017; Kerr et al., 2017; Vogel, 2017; Hansen et al., 2016; Kuratko et al, 2015; Cunningham & Lischeron, 1991)

Transitioning from theoretical definitions to practical applications, entrepreneurship reveals a rich diversity of participants and perspectives. This combination of insights and applications enhance our understanding of the entrepreneurial landscapes.

2.2.4. Entrepreneurship as a Process

The process view of entrepreneurship illustrates a dynamic journey from ideation to venture creation, focusing on actions and decisions, rather than personal traits. This perspective emphasises the steps necessary to transform from an innovative idea into a sustainable enterprise, with an emphasis on cultivating entrepreneurial skills (Davidsson, 2015; Bygrave, 2007; Fayolle et al., 2006; ; Shane & Venkataraman, 2000; Gartner, 1990, 1988).

Gartner et al. (2010) challenge the trait approach, arguing for a process-oriented view to better understand how new organisations form through interactions between individuals, environments, and the entrepreneurial process. Bygrave (2010) outlines entrepreneurial

activities as stages from business conception to growth, deliberately excluding cognitive and affective factors.

Shane and Venkataraman (2000) focus on opportunity recognition and the venture creation process, within the institutional framework, while Davidsson et al. (2006) emphasise the iterative nature of opportunity development. Morris et al. (2005) discuss the business model as a flexible framework essential for maintaining competitive advantage, particularly in the face of uncertainty.

In synthesising insights from key thinkers in the field, the process view emerges as a vital framework for understanding entrepreneurship beyond natural traits, focusing on actionable strategies. This exploration highlights the importance of a systematic approach, where each phase - from opportunity recognition to venture creation – shapes success. This perspective reinforces that entrepreneurship stems not just from personal attributes, but from learned skills and actions within a supportive ecosystem.

2.2.5. Entrepreneurial Effectuation

Effectuation, introduced by Sarasvathy (2001), is a decision-making framework that starts with an entrepreneur's available means - what they know, who they are, and whom they know - rather than specific goals. It emphasises evolving goals through interactions, guided by five principles: affordable loss, leveraging contingencies, partnerships, starting with available means, and focusing on controllable actions (Sarasvathy, 2001).

Dew et al. (2015) emphasise that personal traits, knowledge, and networks, form the foundation for creative and partnership-driven ventures. Chandler et al. (2011) and Fischer (2021) further develop effectuation, showing how ventures evolve through resource accumulation and opportunity recognition, highlighting effectuation as a means-driven, adaptable approach to entrepreneurship.

Effectuation shifts entrepreneurial thinking from goal-oriented to means-driven, leveraging existing resources and networks to navigate uncertainty, and foster innovation. This adaptable, collaborative framework not only provides practical strategies for entrepreneurs but also offers valuable insights for early childhood education. By emphasising creativity, resourcefulness,

and adaptability, effectuation principles can inspire educational strategies that nurture these qualities in preschool children.

This section provides a foundation for addressing the research question: how can early childhood educators foster entrepreneurial education in preschool children? It suggests that by integrating key entrepreneurial principles like effectuation, educators could design strategies and activities that nurture creativity, resourcefulness, and adaptability from an early age. The insights indicate that incorporating entrepreneurship into the curriculum - particularly through means-driven approaches like effectuation - could help foster curiosity, agency, and proactive thinking in young learners. As the research progresses it will explore the practicalities of integrating these concepts into educational frameworks.

2.3. The Entrepreneurial Mindset

Evolving from the foundational concepts of entrepreneurship to the specific notion of an entrepreneurial mindset represents a natural progression in addressing the research question: how do early childhood educators foster entrepreneurial education in preschool children? The exploration of entrepreneurship has laid the groundwork for understanding how entrepreneurial activities and thinking can be cultivated. Building on this foundation, the focus shifts to the entrepreneurial mindset, a critical component that captures the attitudes, skills, and behaviours necessary for entrepreneurial success. This concept moves beyond the mechanics of starting and running a venture to embody the cognitive and psychological traits that enable individuals, including young learners, to recognise opportunities, embrace challenges, and persevere through failure. By examining the entrepreneurial mindset, the objective is to determine how these essential qualities can be nurtured from the earliest stages of education. This inquiry not only advances the understanding of entrepreneurship in early childhood education but also directly contributes to developing educational strategies and curricula that foster a generation of resilient, creative, and forward-thinking individuals.

2.3.1. The Entrepreneurial Mindset Defined

The concept of a mindset, particularly in the entrepreneurial domain, represents a collection of attitudes, beliefs, and cognitive frameworks that not only evolve through individual experiences and environmental interactions but also significantly influence decision-making processes and reactions to information (Gollwitzer, 1990; Neck & Houghton, 2006; Neck &

Manz, 1996; Korte, 2018; Mathisen & Arnulf, 2013; Gupta & Govindarajan, 2002). This outlook characterises an entrepreneurial mindset as a distinctive way of navigating uncertainty, creating competitive advantages, and distinguishing entrepreneurs through their ability to sense, act and mobilise in complex, dynamic environments (Neck et al., 2019; Ireland et al., 2003; McGrath & MacMillan, 2000; Naumann, 2017; Krueger & Sussan, 2017; Hynes & Richardson, 2008; Burgelman & Hitt, 2007). An entrepreneurial mindset is characterised by adaptability, a growth-oriented perspective, and meta-cognitive awareness, enabling individuals to adapt their thinking to changing contexts and task demands (Haynie & Shepherd, 2007; Shepherd et al., 2010).

- **Entrepreneurial Mindset in the Individual**

Essentially an entrepreneurial mindset is a specific state of mind which facilitates an individual towards entrepreneurial activities, actions and outcomes (Kuratko et al., 2021). It is embedded in characteristics such as persistence, creativity, and autonomy (Bhansing et al., 2018) - and is significantly shaped by cognitive abilities, self-efficacy, socio-cultural background, educational experiences, and prior entrepreneurial exposure (Mozahem & Adlouni, 2020). These factors collectively shape the entrepreneur's capacity to identify, evaluate, and exploit opportunities, contributing to socio-economic growth and development (Ugwuanyi et al., 2020; Baron, 2014).

- **Entrepreneurial Mindset as a Process**

An entrepreneurial mindset encompasses a collection of skills, motives, and thought processes essential for entrepreneurial success. It plays a critical role at various stages of the entrepreneurial process, from venture conception to resource management and competitive advantage, underlining its impact on wealth creation (Davis et al., 2016; Ireland et al., 2003).

- **Entrepreneurial Mindset as an Outcome**

The development of an entrepreneurial mindset is a dynamic relationship between individual-level characteristics and the entrepreneurial process itself. Engagement in entrepreneurial activities fosters resilience, adaptability, and a unique entrepreneurial identity, directly influencing venture strategy, culture, leadership, and overall performance (Klapper et al., 2021; Shepherd & Patzelt, 2018; Aarstad et al., 2016; Outsios & Kittler, 2017; Kusio & Fiore, 2020).

Understanding the entrepreneurial mindset enhances appreciation of the entrepreneurial journey, emphasising the role of cognitive and psychological traits in navigating the uncertain terrains of venture creation. Larsen and Neergaard (2024) argue that if entrepreneurial behaviour is to be encouraged in students, a mindset that provides a positive view of entrepreneurial action is necessary and as such we should draw on a more holistic understanding of entrepreneurial mindset, from a socio-psychological perspective. By focusing on the developmental aspects of this mindset, particularly in the context of early childhood education, the foundation is laid for cultivating entrepreneurial capabilities in preschool children.

2.3.2. Mindsets Shaping Entrepreneurship

Exploring the entrepreneurial mindset offers invaluable insights into how individuals perceive the world and their place within it, significantly influencing their propensity towards entrepreneurial endeavours. This section examines the dichotomy between fixed and growth mindsets and their implications for entrepreneurial activities and the broader educational context.

Laspita et al. (2012) introduce the entrepreneurial mindset as an individual's worldview, shaping their intentions and tendencies toward entrepreneurial activities. This mindset is divided into fixed and growth mindsets, each with distinct characteristics and outcomes (Beugré, 2016). Individuals with a fixed mindset, perceive their abilities as innate and immutable, striving to validate their inherent talents rather than fostering growth and development (Glaveski, 2019; Kouakou et al., 2019). This perception often leads to avoidance of challenges and a tendency to interpret feedback and obstacles negatively, impacting their performance and growth potential (Ricci, 2020; Dweck & Yeager, 2019). Conversely, the growth mindset posits that personal qualities and abilities can be developed through dedication and hard work (Bosman & Fernhaber, 2018). This perspective encourages individuals to embrace challenges, learn from criticism, and persist in the face of setbacks, viewing effort as the pathway to innovation. Individuals with a growth mindset are more likely to engage in value creation, opportunity exploitation, and continuous learning, setting the foundation for successful entrepreneurial ventures (Mauer et al., 2017; Zappe et al., 2018).

The distinction between fixed and growth mindsets not only illustrates individual approaches to entrepreneurship but also highlights critical considerations for educators. The rapid advancement of entrepreneurship highlights the pressing need to review educational strategies to foster a growth mindset among learners. This involves rethinking what should be taught, how it is delivered, and the means of evaluating success to cultivate an environment conducive to learning, innovation, and growth (Lee et al., 2021; Morris et al., 2013).

The examination of entrepreneurial mindsets reveals a pivotal area of development for individuals and educators alike. In cultivating a growth mindset there is an opportunity to transform challenges into learning experiences, criticism into motivation, and effort into achievement. This mindset shift is not merely academic - it is fundamentally entrepreneurial. Integrating the principles of growth mindset into educational curricula encourages continuous improvement, resilience, and the courage to innovate, paving the way for a future where entrepreneurial thinking is not just encouraged but embedded in education, preparing learners not just to succeed but to redefine success.

2.3.3. Attributes of an Entrepreneurial Mindset

The entrepreneurial mindset is a complex field constructed from an individual's knowledge, experiences, competencies, and inherent traits. As such it serves as a key support in navigating the entrepreneurial landscape. This section examines the multifaceted aspects that constitute an entrepreneurial mindset, including alertness, heuristic decision-making, and the pivotal role of both explicit and tacit knowledge in opportunity recognition and venture creation.

According to Shaver and Commarmond (2019), an entrepreneurial mindset is influenced through multiple factors that include knowledge, experience, competency, and personal attributes such as attitude values and beliefs. Krueger and Sussan (2017), further refine an entrepreneurial mindset into six critical characteristics: alertness, heuristic decision-making, prior knowledge, cognitive and goal orientation, and social knowledge, each playing a pivotal role in the entrepreneurial process.

Obschonka et al. (2017) and Tang et al. (2012) define entrepreneurial 'alertness' as an acute awareness that, coupled with heuristic decision-making (Kabir, 2019) allows entrepreneurs to recognise new opportunities through intuitive judgment and past experiences, proving

especially crucial in navigating uncertainty and complexity. Kabir (2019) and Reuer et al. (2022) propose that prior knowledge - both explicit and tacit - has foundational elements that empower entrepreneurs to innovatively combine and utilise resources, highlighting the abstract nature of knowledge in entrepreneurial success.

The dynamism of the entrepreneurial mindset is emphasised by its evolving nature (Shepherd & Patzelt, 2018). This advancement is demonstrated through cognitive and goal orientation attitudes, where mindset adjustments align with individual activities to ensure task efficacy (Fayolle et al., 2013). Cascio and Racine (2019) differentiate between the elaborating mindset, characterised by open-minded evaluation, and the implementing mindset, marked by opportunity exploitation and risk-taking, further elevating the entrepreneurial mindset spectrum.

The entrepreneurial mindset is an intricate blend of cognitive frameworks, experiential knowledge, and social networks that collectively equip individuals to embark on and thrive in their entrepreneurial journeys. Understanding these components not only sheds light on the fundamentals of entrepreneurship but also signals the importance of fostering such mindsets within educational paradigms.

2.3.4. Developing an Entrepreneurial Mindset

Following the exploration of the attributes essential for cultivating an entrepreneurial mindset, the mechanisms and traits that facilitate its development are examined. This section highlights the influence of personality traits, cognitive strategies, and self-efficacy on entrepreneurial behaviour and success, illustrating the many components of developing entrepreneurial mindset.

Davis et al (2016) suggest that developing an entrepreneurial mindset involves cultivating a particular state of mind that encourages engagement in entrepreneurial activities. This mindset can be nurtured by focusing on key personality traits linked to entrepreneurial behaviour – such as achievement orientation, risk-taking, locus of control, creativity, tolerance of ambiguity, self-confidence, autonomy, innovativeness and openness to experience (Maitlo et al., 2020). Kerr et al (2018) suggest that these personality traits are an essential element of the multidimensional theory of processes, variables and environment, significantly predicting the

intention to create a successful business. The big five personality traits model (Calefato et al., 2022) further supports the positive linkage between these traits and entrepreneurial success (Obschonka et al., 2019; Lynch et al., 2017; Mathisen & Arnulf, 2014).

Developing an entrepreneurial mindset involves cultivating meta-cognitive strategies that shape how entrepreneurs think and act in uncertain environments. Central to entrepreneurial cognition, meta-cognitive psychology helps entrepreneurs develop cognitive strategies for venture creation and growth (Haynie et al., 2010; Cho, 2012; Shepherd & Patzelt, 2018; De Winnaar & Scholtz, 2019). Entrepreneurs leverage meta-cognitive abilities to interpret their environment and adapt strategically, with self-reflection playing a key role in enhancing cognitive flexibility and adaptability (Cho & Linderman, 2019; Haynie & Shepherd, 2009).

Meta-cognition enables entrepreneurs to surpass existing knowledge and heuristic learning, crafting higher-order cognitive strategies to achieve their goals (Bekki et al., 2018; Lackéus, 2015). Cognitive adaptability relies on meta-cognitive awareness and dynamic, self-regulating flexibility in cognition within uncertain environments (Lombardi et al., 2020; Ferreira et al., 2017). This adaptability is enhanced by self-efficacy, a belief in one's capabilities to perform entrepreneurial roles influenced by vicarious experiences, accomplishments, and psychological factors (Wardana et al., 2020; Gunzel-Jensen et al., 2017; Mauer et al., 2017).

Entrepreneurial self-efficacy, including the ability to exploit market opportunities, build investor relationship, and foster innovation (Newman et al., 2019; Coviello & Yli-Renko, 2016), forms a strong basis for an entrepreneurial mindset (Bachmann et al., 2021). This self-belief underpins the entrepreneur's ability to navigate market opportunities, manage uncertainties, and effectively communicate a venture's core purpose (Newman et al., 2019; Schmutzler et al., 2019).

Understanding the components that foster an entrepreneurial mindset - personality traits, cognitive and meta-cognitive strategies, and self-efficacy - offers a comprehensive framework for nurturing entrepreneurial capabilities. This exploration reveals the critical role of educational systems in cultivating these traits, emphasising the need for curricula that promote risk-taking, creativity, and adaptability.

2.3.5. Measuring the Impact of an Entrepreneurial Mindset

Transitioning from identifying the attributes necessary for an entrepreneurial mindset, the focus turns to the evaluation of its impact. Understanding how to measure the influence of an entrepreneurial mindset is crucial for both academic research and practical application in fostering entrepreneurship. This section discusses several established models and tests developed to assess the components of an entrepreneurial mindset, including personality traits, skills, attitudes, and behaviours indicative of entrepreneurial potential.

The Entrepreneurial Mindset Profile (EMP) developed by Davis et al (2016) combines individual skills and personality traits into a comprehensive model derived from extensive research on the motivations, traits, and skills of entrepreneurs (Gillin, 2020). It notably distinguishes 14 traits that encapsulate the entrepreneurial personality and skills, ranging from independence and risk acceptance to idea generation and execution, offering a framework for assessing the strengths, weaknesses, and entrepreneurial intentions of individuals (Laveren et al., 2019).

The General Enterprising Tendency Test (GET) developed by Caird and Johnson (1988) evaluates the 'enterprising tendency' crucial for enterprise initiation, highlighting attributes such as autonomy, risk-taking, and creative tendency (Mittal et al., 2016). This model emphasises the behavioural aspects associated with enterprising individuals (Caird, 2013; Mazzarol & Reboud, 2020). Robinson et al., (1991) introduced The Entrepreneurial Attitude Orientation (EAO). The EAO measures attitudes toward personal control, achievement, innovation, and self-esteem, predicting entrepreneurial behaviour through attitudinal qualities related to business activities (Barrett & Mayson, 2008; Soomro et al., 2020; Misra & Mishra, 2016). The larger the value when measuring these attitudes, the greater the prediction of higher entrepreneurial behaviour by an individual (Kautonen et al., 2013; Landstrom, 2007).

The Measurement of Entrepreneurial Tendencies and Abilities (META), a collaborative effort by the University of London, Harvard Entrepreneurial Lab, Goldsmiths, and University College London, employs rigorous psychometric standards to forecast entrepreneurial success (Almeida et al., 2014; Ahmetoglu & Chamorro-Premuzic, 2013). META evaluates potential contributions to entrepreneurial success through constructs like creativity, proactivity,

opportunism, and vision, emphasising behaviours and tendencies across individuals (Israr & Hashim, 2017).

The methodologies developed to measure the impact of an entrepreneurial mindset (EMP, GET, EAO, and META, summarised in Table 2.2.) provide invaluable tools for identifying and nurturing entrepreneurial potential. These assessments offer insights into the diverse components of an entrepreneurial mindset, from personality traits and skills to attitudes and behaviours, facilitating targeted development strategies. Refining these measurement tools enhances the ability to foster entrepreneurial talent, contributing significantly to the fostering of innovative, proactive, and opportunity-oriented individuals.

Table 2.2. *Comparison of the Measurements of an Entrepreneurial Mindset*

| Scheme | Development | Measurement | Variables |
|---|---|---|---|
| EMP The Entrepreneurial Mindset Profile | Davis et al (2015) | Measures the strengths and weaknesses of would-be entrepreneurs and assesses characteristics of entrepreneurial intention | Traits: non-conformity, independence, risk acceptance, passion, action-orientation, limited structure and passion Skills: idea generation, future focus, self-confidence, execution, persistence, optimism and interpersonal sensitivity |
| GET The General Enterprising Tendency Test | Caird & Johnson (1988) | Measures ‘enterprising tendency’ when starting an enterprise using personality traits | Autonomy, achievement, risk-taking, creative tendency, drive and determination, internal locus of control |
| EAO The Entrepreneurial Attitude Orientation | Robinson et al (1991) | Measures the specific attitudinal qualities towards specific objects related to doing business | Personal control, need for achievement, self-esteem, innovation |
| META The Measurement of Entrepreneurial Tendencies and Abilities | University of London, Harvard Entrepreneurial Lab, Goldsmiths, and University College London (Ahmetoglu, & Chamorro- Premuzic, 2010) | Designed to predict entrepreneurial success through behaviours | Vision, proactivity, creativity, opportunism |

Source: *Authors own*

2.3.6. Teaching and Learning Perspectives of an Entrepreneurial Mindset

This section explores how pedagogical strategies facilitate the development of an entrepreneurial mindset, with a focus on cognitive processes, metacognition and personality traits that underpin entrepreneurial behaviour and development. Educators play a vital role in creating environments that foster entrepreneurial thinking by integrating these elements into their teaching practices.

Cognitive science provides a framework for understanding how an entrepreneurial mindset is shaped. Mitchell et al. (2007) and Baron and Ward (2004) highlight the importance of cognitive adaptability – characterised by flexibility, dynamism, and self-regulation – in orienting students towards entrepreneurial behaviour. Fayolle (2018) suggests that this adaptability is crucial for responding effectively to changing environments, a skill that can be encouraged through targeted educational strategies (Busenitz, 2007). Teaching students to develop metacognitive awareness – where they reflect on and regulate their cognitive processes – can further enhance their ability to succeed in complex and unpredictable situations (Dew et al., 2015). Metacognition, involving the selection of cognitive strategies to understand personal assumptions, motivations, strengths, and weaknesses, facilitating control over one's thoughts in a changing environment (Guterman, 2003). Valerio et al. (2014), Haynie et al. (2010), and Kuhn and Dean (2004) emphasise that metacognition enhances awareness, rapid adaptability, and socio-emotional skills crucial for entrepreneurial motivation and success.

The exploration of entrepreneurial cognition, metacognition, and the influence of personality traits offers valuable insights into teaching and learning strategies conducive to developing an entrepreneurial mindset. By integrating these elements into educational practices, teachers can significantly contribute to cultivating an entrepreneurial generation. This requires a deliberate focus on creating learning environments that encourage cognitive flexibility, metacognitive awareness, and the nurturing of personality traits aligned with entrepreneurial success, designing teaching strategies that foster problem-solving, adaptability, creativity and resilience. Educators can also leverage the Big Five personality traits - conscientiousness, openness to experience, agreeableness, extraversion, and emotional stability (neuroticism) – to predict and shape students' entrepreneurial potential (Kell, 2019; Chetty et al., 2014). By fostering these traits teachers can influence not only academic success but also the development of key entrepreneurial skills (Harris et al., 2016).

Exploring the entrepreneurial mindset across various dimensions - from foundational theories to the practicalities of its teaching and learning - supports the pivotal role entrepreneurial education may play in early childhood. This approach extends beyond business mechanics, focusing on nurturing skills essential for personal development and meaningful societal contributions. The discussion highlights the entrepreneurial mindset as a catalyst for economic prosperity and innovation, as noted by Sagar (2024) and advocated by figures like former President Obama, who emphasised integrating entrepreneurial approaches and critical reasoning into education (Pope, 2009).

As the study transitions to discussing entrepreneurship education, the insights gathered from examining the entrepreneurial mindset provide a strong foundation for addressing the research question: how can early childhood educators foster entrepreneurial education in preschool children? The focus is not about instilling business acumen but about fostering a mindset that embraces creativity, risk-taking, adaptability, and perseverance - qualities that are indispensable for individuals to thrive in various life contexts, enabling them to navigate challenges effectively, innovate solutions, and engage proactively in community and societal development.

2.4. Entrepreneurship Education

Exploring the field of entrepreneurship education, it is essential to frame this educational paradigm within its historical evolution, definitions, frameworks, and pedagogical practices. Entrepreneurship education has emerged as a pivotal force in shaping the entrepreneurial capabilities of individuals, extending its influence from the domains of higher education to the foundational stages of early childhood learning.

The evolution of entrepreneurship education reflects a global recognition of entrepreneurship as a key driver of economic growth and innovation (Matlay, 2006, 2008). With roots tracing back to the mid-20th century, the field has witnessed significant expansion and diversification, responding to the changing demands of the economy and the labour market (Mazzarol & Reboud, 2020). Entrepreneurship education, as defined by Kuratko (2005), encompasses the structured formal delivery of entrepreneurial competencies, which includes the ability to identify opportunities and the knowledge and skills to act upon them. This definition highlights

the dual focus of entrepreneurship education on both the cognitive and action-oriented dimensions of entrepreneurship.

Frameworks for entrepreneurship education, such as those proposed by Fayolle and Gailly (2008), highlight the need for a comprehensive approach that integrates content knowledge with experiential learning, fostering an environment where entrepreneurial thinking and problem-solving skills can flourish. Pedagogies and practices within this educational domain, as explored by Lackéus (2015), emphasise the importance of learning through real-world engagement and reflection, moving beyond traditional classroom instruction to include venture creation projects, simulations, and mentorship experiences.

The distinction between entrepreneurship education and enterprise education, as discussed by Gibb (2002), delves into the nuances of preparing individuals for entrepreneurial roles versus broader enterprise activities within organisations. This distinction is crucial in tailoring educational objectives and outcomes to meet specific learning goals and societal needs. Jones and Iredale (2010) argue for the importance of embedding entrepreneurial learning in primary and secondary education, suggesting that cultivating an entrepreneurial attitude early on can significantly impact a child's ability to think innovatively and act proactively in various contexts.

The role of the entrepreneurial teacher becomes central in facilitating this form of education, as there is an interplay between the entrepreneurial teacher, entrepreneurial teaching methods and students' entrepreneurial competencies (Joensuu-Salo et al., 2021). As such this requires educators to embody entrepreneurial qualities themselves and to employ teaching methods that encourage exploration, experimentation, and learning from failure. Entrepreneurship education in early childhood, therefore, calls for a reimagining of educational practices to support the development of entrepreneurial qualities from the earliest stages of learning.

2.4.1. Evolution of Entrepreneurship Education

The evolution of entrepreneurship education represents a fascinating journey from its nascent stages in the mid-20th century to its current prominence as a key component of academic and practical learning. This journey, marked by significant shifts in pedagogical approaches and educational content, highlights the dynamic nature of entrepreneurship as a field of study and practice.

Entrepreneurship education's history traces its origins to the mid-twentieth century, evolving through the genesis, apprentice, and academic phases (Neck et al., 2014; Crittenden et al., 2015). It began with Myles Mace's course at Harvard University in 1947, marking the genesis phase and the initial step towards formalised entrepreneurship education, focusing on new venture creation and small business management with little emphasis on practical engagement or theoretical underpinning (Katz, 2003; Solomon, 2007).

The apprentice phase evolved towards a more strategic approach in the early eighties, integrating case study teaching to foster strategic decision-making skills among aspiring entrepreneurs (Kuratko, 2005; Hagg & Gabrielsson, 2019). This period saw an explosion of entrepreneurship courses, reflecting a growing recognition of entrepreneurship's role in economic development. Emerging themes included growing the business, family business, leadership and financing (Vesper & Gartner, 1997). The academic phase shifted focus towards developing business plans, emphasising market opportunity identification and comprehensive business strategy formulation (Arasti et al., 2012; Crittenden et al., 2015). This phase is characterised by a more structured approach to entrepreneurship education, albeit still portrayed as a linear process of venture creation.

Recent approaches to entrepreneurship education, such as the method approach advocated by Ozkazanc-Pan (2022) and Linton and Klinton (2019), argue for a departure from the linear process model towards more dynamic and skill-based learning. The method approach emphasises experiential learning, cognitive development, and the cultivation of an entrepreneurial mindset, allowing students to practice and internalise entrepreneurial behaviours (O'Brien & Hamburg, 2019).

The transformation of entrepreneurship education from its genesis phase to the contemporary method approach mirrors the broader shifts in economic and societal needs (Moberg, 2014b). By fostering an entrepreneurial mindset through experiential learning and practical engagement, educators are equipping the next generation of entrepreneurs with the tools to innovate, adapt, and thrive in an ever-changing world (Wardana et al, 2020). By delving deeper into the specifics of entrepreneurship education, it becomes clear that the ultimate goal is not merely to teach students how to start businesses, but to instil in them an entrepreneurial spirit that drives innovation, resilience, and societal progress (Larsen & Neergaard, 2024).

2.4.2. Entrepreneurship Education Defined

The evolution and definition of entrepreneurship education have significantly broadened, embracing a comprehensive approach that not only fosters innovative thinking and enterprise but also nurtures entrepreneurial attitudes and mindsets. This expansion reflects contributions from leading scholars and embraces a paradigm shift towards cultivating entrepreneurial capabilities across various contexts.

Entrepreneurship education has long been recognised as one of the most instrumental elements in fostering entrepreneurial attitudes and mindsets (Gorman et al., 1997; Kourilsky & Walstad, 1998, Lackéus, 2015). Definitions of entrepreneurship education have been argued and critiqued over many decades (Jones & Iredale, 2014; Matlay, 2008; Pittaway & Cope, 2007; Gibb, 1987). Over the years scholars have debated its definition, alternating between a narrow focus on venture creation (Kourilsky & Walstad, 1998; Matlay, 2006; Mahieu, 2006) to broader interpretations that include fostering innovation and enterprising behaviours, attributes and competences (Gibb, 1987; Jones et al., 2021).

Initially, the focus was on teaching students about establishing profitable businesses, marked by limited practical entrepreneurship experience (McMullan & Long, 1987). This approach evolved into a pedagogy influenced by strategic management and case studies, emphasising strategic decision-making and business growth (Kuratko, 2005; Hagg & Gabrielsson, 2020). Jones and English (2004) emphasise the process of imparting essential knowledge and skills for identifying and exploiting new business opportunities, encouraging students to apply enterprising attributes across various contexts (Matlay, 2006). This vision is supported by the European Commission's recognition of entrepreneurship as a key competency for lifelong learning, highlighting the importance of creativity, critical thinking, and problem-solving (European Commission, 2019).

Contrasting this view, Henry et al. (2005) and Hytti and O’Gorman (2004) argue for a broader understanding of entrepreneurship education, focusing on developing key competencies such as creativity and innovation skills. Introducing a framework to distinguish between learning 'about', 'for', and 'through' entrepreneurship (Gibb & Hannon, 2006; Hoppe, 2016) aims to build awareness, motivate future entrepreneurial actions, and develop competencies for value creation, respectively (Lackéus, 2020, 2015; Lackéus et al., 2015; Fayolle, 2018; Matlay, 2008).

Moreover, the Entrepreneurship Education at school in Europe report expands this definition to emphasise developing skills and mindsets for turning creative ideas into action, supporting personal development and employability (Eurydice Report, 2016).

Maas and Jones (2015) Daniel (2016) define entrepreneurship education to include fostering a wide range of life-enhancing skills and mindsets beyond mere business creation. This is echoed by the European Commission's inclusion of entrepreneurship among key competencies for lifelong learning, emphasising creativity, critical thinking, and problem-solving (European Commission, 2019; Eurydice Report, 2016). Fayolle (2018) supports this, describing entrepreneurship education through the lenses of culture, behaviour, and situational aspects, stressing the importance of a holistic educational approach.

Entrepreneurship Education has thus emerged with the specific aim of cultivating an entrepreneurial culture, creating new ventures, and fostering entrepreneurial mindsets within educational contexts (Kuratko, 2005). It is designed to equip young people to become entrepreneurial thinkers who can contribute to economic development and sustainable communities (Raposo & Do Paco, 2011). The emphasis on experiential learning (Bell & Bell, 2020; Penaluna & Penaluna, 2015; Pittaway & Cope, 2007) emphasises the importance of a pedagogical approach that encompasses exploration, experimentation, and situated learning to enhance entrepreneurial outcomes.

Entrepreneurship education's evolution from a narrow focus on business creation to a broader educational paradigm fostering a broad set of entrepreneurial skills and mindsets reflects a comprehensive approach to developing innovative, adaptable, and enterprising individuals. This holistic view, supported by scholarly work and European frameworks, underscores the role of entrepreneurship education in preparing individuals not just for economic activities but for contributing positively to all areas of life and society.

2.4.3. Entrepreneurial Education – A Playful Definition

Enterprise education broadens the scope beyond the confines of entrepreneurship, aiming to develop enterprising behaviours, skills, and attitudes (Jones & Iredale, 2010). Gibb (1987) defines enterprise education as an approach to develop personal skills and attributes such as initiative, problem-solving, creativity, and risk-taking. This broad range of skills emphasises

not just learning objectives but also socio-economic outcomes, advocating for a balance in learning aspects to maximise experiential learning opportunities (Fayolle, 2000; Burger-Helmchen, 2012). This paradigm seeks to instil a sense of confidence and resourcefulness, enabling individuals to navigate various personal and professional challenges (Dodd et al., 2022). Davies (2002) and Blenker et al. (2011) argue that enterprise education plays a vital role in fostering responsible citizenship and adaptability, equipping students to manage uncertainty and positively respond to change. It emphasises the development of creative and innovative qualities, laying the groundwork for a positive attitude towards change and opportunity identification in everyday life (Jones, 2019). The distinction between entrepreneurship education and enterprise education is crucial for adopting innovative pedagogical approaches suitable across education levels (Larios-Hernandez & Walmsley, 2022).

The term Entrepreneurial Education transcends the traditional focus on business creation and enterprise behaviour to encompass a broader set of skills and mindsets conducive to innovation, creativity, and adaptability, forming a unifying term (Erkkilä, 2000; QAA, 2019, Lackéus, 2015). It integrates experiential learning, critical thinking, and problem-solving across various academic disciplines, encouraging students to apply entrepreneurial thinking to diverse challenges and opportunities and become more '*entrepreneurial*' (Lackéus, 2015). Penaluna & Penaluna (2015) and Lackéus (2015) highlight the comprehensive approach of entrepreneurial education, which prepares individuals to identify, develop, and execute innovative solutions to problems. Penaluna and Penaluna (2019) further clarify this phenomenon, highlighting the creative approach needed to advance entrepreneurial learning beyond the traditional business education context. Entrepreneurial Education is praised for its ability to foster a mindset geared towards innovation and adaptability, preparing individuals not only for entrepreneurial careers but for innovative roles in various sectors.

The Enterprise and Entrepreneurship Education Guidance of the UK Quality Assurance Agency for Higher Education (QAA, 2018) uses '*entrepreneurial*' when discussing enterprise and entrepreneurship jointly. However, '*entrepreneurial learning often takes place within institutions without bearing the label of enterprise or entrepreneurship*' (QAA, 2018, p.7), because those '*labels*' put people off, particularly outside the business domain (Bridge, 2017).

Given the distinctions and critiques outlined above, the term and definition of ‘entrepreneurial education’ has been adopted as the focus of this study. The term ‘entrepreneurial’ evokes action and dynamism (Erkkila, 2000). Such a term emphasises the importance of ‘learning by doing’, capturing the essence of the child-led, experiential nature of early childhood education, where children learn and develop through play and active engagement with their environment. It is justified by its holistic approach to developing the skills and mindset needed for innovation and problem-solving across contexts (Jones et al., 2020). This approach is particularly relevant to early childhood education, as it aims to foster foundational competencies such as creativity, independence, and confidence from a young age.

Achieving these objectives will not only clarify what entrepreneurial education in early childhood settings involves but will also provide clear strategies for how preschool educators can effectively encourage and support the development of entrepreneurial competencies in children. Indeed, the World Economic Forum (Volkman et al., 2009) suggests the inclusion of entrepreneurial education for all individuals, could be significantly impactful.

2.4.4. Entrepreneurship Education Frameworks

This section explores entrepreneurship education frameworks, drawing from seminal works in the field. By examining frameworks from Jamieson (1983) to Bell and Bell (2020), insights are gained into how entrepreneurial education can be structured, evaluated, and applied within the preschool context.

Jamieson (1984) introduces a foundational differentiation in entrepreneurship education - education about, for, and through enterprise - highlighting a tiered approach to awareness, training for entrepreneurship, and ongoing business management education (Kakouris & Liargovas, 2021). This distinction highlights the varying depth and focus of entrepreneurial education at different educational levels and stages. Falkang and Alberti (2000) advocate for a framework that emphasises the social and personal learning aspects of entrepreneurship education, acknowledging the process as inherently contextual. This perspective is crucial for early childhood educators, suggesting that fostering an entrepreneurial mindset requires integrating learning within social interactions and real-world contexts. Jones and English (2004) focus on the curriculum elements of entrepreneurship education, such as creative thinking and risk management, offering a guide for incorporating these elements into early

learning environments. This approach can inform the development of curricula that nurture entrepreneurial traits from a young age. Politis (2005) champions an experiential learning framework that prioritises the career experiences of entrepreneurs, knowledge transformation, and the management of new ventures. For early childhood educators, this implies the importance of experiential and action-based learning activities that mirror real-life entrepreneurial challenges and opportunities.

Blenker et al. (2008) and Fayolle and Gailley (2008) highlight the significance of pedagogical methods and the integration of context into entrepreneurship education, calling for innovative teaching strategies that reflect the dynamic nature of entrepreneurship. These strategies are particularly relevant in preschool settings, where learning through play and exploration can mirror entrepreneurial discovery processes. O'Connor (2013) and Valliere et al. (2014) discuss the challenges of measuring the economic benefits of entrepreneurship education, pointing towards a multi-dimensional approach to understanding entrepreneurship.

Ghina et al. (2014, 2015) identifies a gap in understanding the relationship between learning opportunities and institutional support in entrepreneurial education, offering a framework to evaluate entrepreneurial learning within the university context. Adapted for early childhood, this framework can guide the creation of supportive educational environments that encourage entrepreneurial exploration. Ndou et al. (2019) propose a process-based framework that opens the "black box" of entrepreneurial competencies, emphasising the importance of a learning path that aligns with entrepreneurial stages. For preschool educators, this highlights the need to align educational activities with the developmental stages of young children, fostering awareness and appreciation for entrepreneurship. Bell and Bell (2020) emphasise the value of an experiential approach over traditional didactic methods, advocating for engagement between learners and teachers. This resonates with the interactive, learner-centred pedagogies essential in early childhood education, where experiential learning can significantly impact mindset and skills development.

The scholarly works discussed have provided comprehensive insights into the structure, evaluation, and application of entrepreneurial education across various educational levels. However, these frameworks predominantly focus on higher education settings, with less emphasis on the unique contexts and pedagogical needs of early childhood education. This

highlights a significant gap: the lack of a tailored framework that addresses the integration of entrepreneurial education, in its broadest sense, into early childhood education settings. Such a framework would need to consider the developmental stages of young learners, employing pedagogies that foster creativity, curiosity, and resilience, foundational elements of the entrepreneurial mindset. The existing literature, while rich in its examination of entrepreneurial competencies and pedagogical strategies for older students, provides limited guidance on embedding these principles within the playful, exploratory nature of early childhood education. This gap highlights the need for research and framework development specifically aimed at equipping early childhood educators with strategies to nurture an entrepreneurial spirit from the earliest years of education.

2.4.5. Entrepreneurship Education Pedagogies and Practices

Pedagogies and practices play a pivotal role in shaping the next generation of innovators and entrepreneurs. This section examines the entrepreneurial education pedagogies, as presented in the literature; to help address the research question: how can early childhood educators foster entrepreneurial education in preschool children? Drawing upon the distinctions of 'about entrepreneurship', 'for entrepreneurship', and 'through entrepreneurship', as outlined by scholars including Moberg (2014) and Jamieson (1984) this analysis illustrates the range of pedagogical approaches from passive to active methods, each with its unique implications for early childhood education.

Passive methods in entrepreneurship education involve traditional, instructor-centred approaches where students receive information through lectures, readings, and presentations without engaging in active learning experiences. These methods focus on theoretical knowledge and conceptual understanding rather than practical application. Gorman et al. (1997) highlight that while passive methods can introduce students to the principles of entrepreneurship, they often lack the experiential learning component critical for fostering creativity, problem-solving, and risk-taking abilities. Passive methods such as traditional lecture-based approaches can provide essential knowledge about entrepreneurial theories but may not adequately prepare students for the dynamic and uncertain nature of entrepreneurial activities (Fayolle & Gailly, 2008). The evolution of entrepreneurship education has increasingly emphasised the need for approaches that go beyond theoretical understanding, integrating active learning to prepare students for real-world challenges.

Active methods, highlighted by Fayolle (2018) and Heinonen and Poikkijoki (2006), advocate for experiential learning, where students self-discover through hands-on experience, thereby developing entrepreneurial practices (Neck & Greene, 2011). This approach aligns with the principles of early childhood education, which emphasise play-based learning and exploration as foundational methodologies for cognitive and social development. Such methods reflect the broader shift in entrepreneurship education towards more dynamic, skill-based learning models that prioritise experiential engagement.

The distinction between 'about', 'for', and 'through' entrepreneurship education offers a framework for understanding the depth of engagement with entrepreneurial content (Jamieson, 1984; Vincett & Farlow, 2008; Moberg, 2014; Makimurto-Koivumaa & Belt, 2016; Berglund & Verduijn, 2020). 'About entrepreneurship' focuses on theoretical knowledge, where learning is considered passive due to the teacher-centred process (Baker & Welter, 2018, Higgins & Elliot, 2011). Daniel (2016) and, Ismail and Sawang (2020) emphasise skills-based learning, suggesting that early education should include activities that promote teamwork, idea generation, and the ability to embrace and learn from failure. These practices align with the developmental needs of preschool children, offering structured yet flexible learning experiences that encourage exploration and innovation. Moreover, the concept of learning 'through entrepreneurship' as discussed by Jones (2019) and Moses et al. (2015), involving real-life projects and collaboration with entrepreneurs, can be adapted for young learners. Gabriellsson et al. (2020) and Arasti et al. (2012) advocate for a learning process that closely mirrors real-life entrepreneurship such as simplified business projects, role-playing, interactive games and collaborative projects which could serve as age-appropriate methods for engaging children in entrepreneurial thinking and problem-solving. These methods mirror the broader transformation in entrepreneurship education, which increasingly values experiential, context-specific learning.

Thomassen et al. (2020) and Barnard et al. (2019) suggest a hybrid approach, combining 'about' and 'for' entrepreneurship education. This could be effectively tailored to the needs and capacities of early learners, an approach that would balance theoretical knowledge with practical, experiential learning, ensuring a comprehensive introduction to entrepreneurship. This aligns with the ongoing shift in entrepreneurship education towards integrative and adaptable frameworks that cater to diverse educational needs.

Critiques of these pedagogical approaches, as discussed by Scott et al. (2016), point to a gap in integrating ideas with actionable skills in entrepreneurship education. This gap is particularly relevant in early childhood settings, where fostering an entrepreneurial mindset necessitates a balance between conceptual understanding and practical experience. The exploration of 'for entrepreneurship' and 'through entrepreneurship' pedagogies suggests a promising avenue for early childhood educators. By incorporating principles from these approaches, educators can create learning environments that encourage curiosity, problem-solving, and resilience. This emphasis on experiential learning and real-world application reflects the dynamic nature of contemporary entrepreneurship education, which increasingly focuses on preparing learners to navigate complex and unpredictable environments.

The focus on experiential learning, as supported by Volkmann and Audretsch (2017), and the integration of real-life entrepreneurial activities, as suggested by Isabelle (2020) and Neergaard et al. (2020), offer a template for developing programmes that engage preschool children in meaningful, entrepreneurial learning experiences. This approach is consistent with the broader trend within entrepreneurship education towards more dynamic and interactive learning models that prioritise skills development through practical engagement.

This discussion highlights a significant gap in current entrepreneurial education pedagogies when applied to early childhood education. Although the contributions from scholars provide a strong foundation for understanding effective pedagogical strategies, there is a clear need for developing and implementing approaches that are specifically designed for young learners. Early childhood educators have the unique opportunity to foster entrepreneurial skills and mindsets by adopting and adapting these pedagogical strategies, ensuring they are appropriate for the developmental stages of preschool children. This endeavour requires a thoughtful blend of creativity, adaptability, and a deep understanding of early childhood development, marking a key area for further research and innovation within the field of entrepreneurial education.

2.4.6. Children and Entrepreneurial Education

Neuroscience research highlights the critical importance of early childhood for cognitive and emotional development, making it an ideal time to introduce entrepreneurial education (do Paço and Palinhas, 2011). Evidence shows that babies are born with 100 billion brain cells (El Khuluqo, 2016) and 80% of brain development occurs by the age of eight (Jalongo, 2007).

Entrepreneurial spirit, according to Suzanti and Maesaroh (2017), can be nurtured from an early age. As such, early childhood presents an ideal opportunity to cultivate entrepreneurial mindsets, skills and capabilities, including self-confidence, creativity, teamwork, caring for the environment, hard work, discipline, independence and responsibility, (Christianti et al., 2015) through everyday active experiences (Axelsson et al., 2015). Children's natural enterprising nature during the first five years (Sharma & Cockerill, 2014; do Paço and Palinhas, 2011) can be harnessed through playful learning experiences that foster lifelong learning, citizenship, and an entrepreneurial mindset (Lindström, 2013; Jones, 2012; Hirsh-Pasek et al., 2009).

Introducing entrepreneurial education in early childhood can empower young minds, and may instigate value creation, enhance life quality (Jones et al., 2020; Blenker et al., 2012; Jones et al., 2018; Lackéus, 2020) and establish a foundation for future contributors to economies development and sustainable communities (Raposo & Do Paco, 2011). Scholars advocate for its inclusion primary school curricula (Jones, 2019; Floris & Pillitu, 2019) and even preschool settings (Nowiński et al., 2019; Agboola, 2021), emphasising that early exposure enhances self-efficacy, creativity, risk-taking, problem-solving and persistence, skills crucial for future societal contributions (Nabi et al., 2017; Nowiński et al., 2019; Robinson and Gough, 2020; Axelsson et al., 2015; Agboola, 2021; Rosendahl-Huber et al., 2014).

Entrepreneurial education at this stage is positioned not just as an academic addition but as a fundamental component of early childhood education, addressing social challenges, developing values like honesty, independence, and respect, and empowering individuals from the outset (Christianti et al., 2015; Blenker et al., 2012; do Paco & Palinhas, 2011).

2.4.7. The Entrepreneurial Teacher

The literature reveals a multifaceted view of the entrepreneurial teacher, shedding light on their potential impact on early childhood education, the challenges they face, and the systemic support required to strengthen their effectiveness. Entrepreneurial teachers, characterised by their innovative approaches and dedication to fostering creativity, critical thinking, and problem-solving skills in students, are at the forefront of this educational paradigm shift (Joensuu-Salo et al., 2021). Their influence extends beyond mere instruction, as they profoundly shape children's interactions, learning experiences, and overall development, making them critical agents in fostering entrepreneurial skills that evolve with students over

time (OECD, 2022; Martinez-Gregorio et al., 2021; Fayolle, 2018; Axelsson et al., 2015). Building on the value of neuroscience principles, Penaluna and Penaluna (2020) discuss that by leveraging neuroscience theory in teaching, educators can design learning experiences that encourage creative and innovative thinking.

This perspective is supported by Penaluna et al. (2012) and Jones et al. (2014), who discuss the multifaceted role of educators in transmitting, transforming, and extending knowledge in a manner that integrates enterprise education effectively across disciplines (Penaluna & Penaluna, 2019). The literature supports a learner-centred approach, advocating for teaching styles that promote experiential learning, creativity, and peer evaluation, aligning with the vision of entrepreneurial teachers as agents of change (Robinson et al., 2016; Gibb, 2002; Priestly & Drew; 2016)

Despite the recognised value of these practices, challenges such as resource constraints, assessment difficulties, and hesitancy towards entrepreneurship education due to its business-oriented connotations persist (Lackéus, 2015; Seikkula-Leino et al., 2010). The mismatch between the actual needs of teachers and the focus of continuous professional development (CPD) activities, as highlighted by The Eurydice and TALIS⁵ Reports (2018, 2016), further exacerbates the challenge.

Enhanced support for teachers through professional development that aligns with entrepreneurial education principles, is essential for overcoming barriers and maximising their impact on student outcomes (Sagar, 2013; Wraae et al., 2020). Ireland's National Skills' Strategy 2025, and the European Commission's key competencies for lifelong learning initiative also emphasise the importance of aligning educational strategies and teacher training with the evolving needs of the educational landscape (Sagar, 2013).

2.4.8. Entrepreneurial Education in Early Childhood Education

As education evolves, integrating entrepreneurial concepts into early childhood reflects a broader paradigm shift from higher institutions to preschool environments, emphasising the importance of preparing young learners with essential skills for future challenges (Ruskovaara,

⁵ TALIS is The OECD Teaching And Learning International Survey that asks teachers and school leaders about working conditions and learning environments at their schools.

2014; Toutain et al., 2017). Given that experiences in early childhood are crucial for later life outcomes (Currie & Rossin-Slater, 2015), entrepreneurial education at this stage represents a proactive approach to promoting these foundational skills.

Cultivating an entrepreneurial mindset and skills from an early age, recognising the significant impact that high-quality early childhood care and education has on children's holistic and academic development (Whitebread et al., 2015; Van Huizen & Platenga, 2018). The consensus is strong regarding the value of integrating new educational approaches that support the development of these qualities from a young age (Sarikaya & Coskun, 2015). As such, entrepreneurial learning, characterised by fostering leadership, innovation, and a proactive approach to opportunity exploitation, can be seen as increasingly essential within the preschool context (Karavida et al., 2020; EU, 2019).

While much of the existing literature on entrepreneurial competencies focuses on startups, there is a growing recognition of the need to define and implement these competencies in early childhood settings (Mitchelmore & Rowley, 2010). However, research continues to explore the specific types of entrepreneurial competencies necessary, highlighting a gap in understanding how best to integrate these into the preschool curriculum (Leffler & Falk-Lundqvist, 2014; Axelsson et al., 2015). Mulder (2017) notes that organisations like the OECD (2011) and the European Commission (2014) advocate for entrepreneurship education with dual objectives: fostering business startups and cultivating an entrepreneurial mindset within society. Studies also suggest that early exposure to enhancing both cognitive and non-cognitive entrepreneurial skills, lays a foundation for future educational investments (Huber et al., 2014; Heckman, 2012). Early childhood education should therefore extend beyond traditional classroom activities to include outdoor and experiential learning opportunities, which foster creative thinking, exploration, and active learning (Habidin et al., 2016; Khan et al., 2019; Sabzeh, 2019).

The EntreComp Framework (Bacigalupo et al., 2016), while originally designed for adults and organisations, offers a valuable guide for adapting entrepreneurial competencies in early childhood education. By incorporating principles from EntreComp, educators can foster creativity, innovation, problem-solving, teamwork, and resilience in young learners, preparing them to navigate changes and challenges effectively (Bacigalupo et al., 2016). Such

competencies are crucial for future success across various aspects of life, including education, work, and social interactions.

The TRIO model of entrepreneurship education, introduced by Lindner (2019), further supports this approach by emphasising a comprehensive and holistic strategy that integrates core entrepreneurial education, culture, and civic responsibility. Through playful and engaging activities that promote creativity, independence, and social responsibility, the TRIO model provides a strong foundation for implementing entrepreneurial education in preschool settings (Lindner, 2018, 2019; Dodd et al., 2022).

In early childhood settings, the presence of competent role models and the structured development of personal, social, and professional initiatives are key to fostering an entrepreneurial mindset (Bandura, 1985; European Commission, 2006). The professional development of teachers is critical in this regard, as their readiness to adopt new pedagogical approaches directly impacts the effectiveness of introducing entrepreneurial concepts in early childhood education (Foliard et al., 2018; Torres & Weiner, 2018).

2.4.9. Benefits and Challenges of Entrepreneurship Education

Entrepreneurial education has been the subject of debate, with research highlighting both positive and negative outcomes. On the positive side, studies have shown that it can increase students' entrepreneurial intentions and actions (Galloway & Brown 2002; Fayolle et al., 2006), thereby boosting employability and economic contributions (Bae et al., 2014). Moreover, entrepreneurial education is not only about preparing individuals for entrepreneurial roles but also equipping them to make innovative contributions within established organisations. Volery et al. (2013) emphasise its pivotal role in fostering societal change, encouraging students to develop innovative solutions to societal challenges through critical and creative thinking.

However, the impact of entrepreneurial education is not universally positive. Some research points to negative outcomes, such as lower intentions and curriculum outcomes, suggesting that not all students benefit equally from these programmes (Von Graevenitz et al., 2010; Penaluna et al., 2012). This variance in outcomes highlights the need for further research to address differences in motivations, learning rates, skills, knowledge bases, and resource networks among students and educators (Martinez-Gregorio et al., 2021; McNally et al., 2018; Linton & Xu, 2020; Weaver et al., 2010).

The challenges facing entrepreneurial education are multifaceted. These include an overemphasis on the theoretical aspects of business management, which may hinder the stimulation of an entrepreneurial mindset (Henry et al., 2017; McGuigan, 2016). There is also a pressing need for a more integrative approach that encompasses creativity, teamwork, and real-world decision-making (Kassean et al., 2015). Furthermore, calls have been made to expand the curriculum to include topics such as uncertainty management, risk tolerance, and self-efficacy (Samuel & Rahman, 2018). Pedagogical challenges arise from the diverse models and methods used in delivering entrepreneurial education, highlighting the lack of a universal framework for evaluating its impact (Ratten & Usmanij, 2021). Equitable access to entrepreneurial education faces significant challenges due to socioeconomic, cultural, and gender barriers, emphasizing the need for targeted efforts to improve inclusivity (Maritz & Brown, 2015). Additionally, bridging the gap between educational content and real-world business needs requires ongoing collaboration between educational institutions and the business community (Guerrero et al., 2016).

Addressing these challenges demands innovative approaches to curriculum design, teaching, and assessment, as well as efforts to ensure inclusivity and alignment with industry needs (Ismail & Sawang, 2020; Morris & Liguori, 2017). By overcoming these obstacles, entrepreneurial education can continue to play a vital role in preparing individuals for both entrepreneurial careers and innovative roles across various sectors, ultimately contributing to societal and economic growth.

2.5. Conclusion

Chapter 2 establishes that nurturing an entrepreneurial mindset from a preschool age can offer significant personal, educational, societal, and economic benefits. Insights gathered emphasise the importance of developing educational strategies and curricula that foster creativity, risk-taking, adaptability, and perseverance from the earliest stages of education. This preparation is not about instilling business acumen but about fostering a mindset that embraces opportunities, innovates solutions, and transforms challenges into learning experiences. By integrating these principles, early childhood educators can contribute to more equitable and inclusive educational systems and broader socio-economic development. Table 2.3. summarises the key findings from literature discussed in this chapter and identified gaps, facilitating progression in addressing the research question.

Table 2.3. Chapter 2: Key Learnings, Gaps and Directions

| Source | Key Learnings | Gaps Identified | Key Directions Going Forward |
|--|---|---|---|
| Ajzen (1991) | Theory of planned behaviour helps to understand the cognitive precursors of entrepreneurship, like intentions and attitudes. | Does not address the very early childhood educational context. | Can inform the development of curricular activities that shape intentions toward entrepreneurial behaviour from a young age. |
| Shane & Venkataraman (2000) | Discussed the role of opportunity recognition and exploitation in entrepreneurship. | Application of these concepts in preschool settings is not thoroughly explored. | Develop activities that help children recognise and develop opportunities through play and projects. |
| Sarasvathy (2001) | Introduced effectuation, a decision-making framework based on starting with what one knows and who one knows. | Limited exploration of effectuation in the context of early childhood education. | Educators can use principles of effectuation to encourage resourcefulness and creative problem-solving in children. |
| Fayolle (2008) | Outlines a five-phase journey of entrepreneurship education, enhancing understanding from unawareness to operational results. | Phases are not clearly adapted to the learning stages of preschool children. | Curriculum design for early education should incorporate age-appropriate entrepreneurial phases. |
| Fayolle & Gailly (2008) | Highlight the need for a comprehensive approach that integrates knowledge with experiential learning. | Specific frameworks for integrating this approach in early childhood education are missing. | Develop educational strategies that combine theoretical knowledge with practical, experiential learning from an early age. |
| Laspita et al. (2012) | Discuss the impact of fixed vs. growth mindsets on entrepreneurial activities. | Research is needed on how these mindsets can be cultivated in early childhood education. | Educators should foster a growth mindset in young children, emphasising that skills can be developed through effort and persistence. |
| Jones and Iredale (2014) | Emphasise the role of personality traits, particularly within the teaching profession, in fostering an entrepreneurial mindset. | Lack of focus on how these traits can be developed or encouraged in preschool educators. | Training for educators should include development of traits that support entrepreneurial teaching methods. |
| Penaluna & Penaluna (2015) | Advocate for experiential learning in entrepreneurship education. | Limited research into how experiential learning can be effectively implemented in preschool settings. | Design, test and encourage hands-on activities that mirror real-life entrepreneurial challenges and opportunities for young learners. |
| Lackéus (2015) | Discusses the impact of entrepreneurial education on personal qualities like curiosity and innovation. | Need for studies on how these qualities can be fostered from an early age. | Investigate the effects of entrepreneurial education on the development of curiosity and innovation in preschoolers. |
| Currie & Rossin-Slater (2015) | Early childhood experiences significantly impact later life outcomes. | Scarce research connecting early childhood entrepreneurial education to long-term entrepreneurial outcomes. | Longitudinal studies to trace the impact of early entrepreneurial education on future entrepreneurial activities. |
| Nabi et al. (2017) | Found that entrepreneurial education enhances resilience, self-confidence, and failure management capacity. | Studies rarely focus on the impact of these educational outcomes on preschool children. | Aim to measure and foster resilience and confidence as outcomes of early entrepreneurial education |
| European Commission (2016, 2019) | Recognises entrepreneurship as a key competency for lifelong learning, emphasising creativity, and problem-solving. | Few guidelines on how to implement this in early childhood education settings. | Adapt the principles of lifelong learning competencies to suit early childhood education curricula. |
| Berglund et al. (2020), Brentnall & Higgins (2022) | Critical perspectives on the potential constraints of entrepreneurial education. | Research lacking on the implications of these constraints in early childhood. | Examine the potential negative implications of entrepreneurial education and develop strategies to mitigate them. |

Source: Authors Own

CHAPTER 3
EARLY CHILDHOOD EDUCATION AND CARE

3.1. Introduction

Entrepreneurial education in early childhood is an emerging field with profound implications for the holistic development of young learners. This chapter explores how integrating entrepreneurial principles into early childhood education can foster creativity, resilience, problem-solving skills, and a proactive mindset from an early age. The focus is on providing a comprehensive understanding of how early childhood educators can nurture entrepreneurial thinking and competencies in preschool children through various pedagogical theories, curriculum models, and educational practices, with a particular emphasis on the role of play as a fundamental component of learning.

The chapter begins by defining Early Childhood Education and Care (ECEC), tracing its historical evolution, and examining the current dynamic landscape influenced by societal changes, policy developments, and educational research. It also delves into the critical competencies of early childhood educators and how they can create learning environments that effectively cultivate entrepreneurial skills in young children. Additionally, it explores modern educational strategies - such as pedagogy, andragogy, and heutagogy - and their relevance to entrepreneurial education. The analysis highlights the importance of reflective practice in continuously improving teaching methodologies, ensuring they meet the evolving needs of young learners.

3.2. What is Early Childhood Education and Care?

This section begins by defining ECEC, outlining its fundamental components and the educational philosophies that underpin it. From there the evolution of ECEC is traced, noting historical milestones and shifts in educational paradigms that have shaped current practices. The discussion progresses to examine the dynamic landscape of ECEC today, highlighting how societal changes, policy developments, and educational research influence its implementation. Finally, the scope broadens to a global perspective, exploring how different countries, including those beyond Ireland, approach ECEC, thus providing a comparative understanding of international educational strategies and their outcomes. This exploration helps to frame ECEC not only as a critical educational foundation but also as a reflection of broader societal values and goals.

3.2.1. Defining Early Childhood Education and Care (ECEC)

Early Childhood Education and Care (ECEC) encompasses a comprehensive range of practices aimed at supporting the holistic development of children from birth to eight years (Wood, 2020). The term integrates various aspects such as early years education, childcare, and preschool, all of which share the goal of fostering a child's social, physical, emotional, and cognitive growth. ECEC not only builds on children's prior learning from their immediate environments but also provides enriching experiences that stimulate their development (Tayler, 2016; UNESCO, 2022).

Early definitions focus on the academic aspects of early childhood education. Burchinal et al. (2015) define early childhood education and care as programmes and services designed to influence young children's development and learning, considering both direct and indirect impact on their academic skills. Balladeres & Kankaraš, (2020) further this, proposing that ECEC includes programmes designed to foster children's development and prepare them for school. Recent developments in childcare emphasise its dual role in both care and educational development, supporting improvements in school performance and the overall well-being and development of children (Harju-Luukkainen et al. 2022; Fisch & Gunzenhauser, 2010; Cascio, 2021).

The European Commission's Early Childhood Education and Care Eurydice Report (2023) highlights that effective ECEC systems are characterised by inclusive and equitable access, quality pedagogical practices, and the integration of educational and caregiving activities. This study adopts the definition proposed by the OECD Starting Strong VI Report (2022), whereby ECEC is defined as a critical foundation for children's future educational trajectories and social integration, emphasising the importance of early interventions and support systems in early childhood settings.

The structure of ECEC is defined by its quality requirements, which include the physical environment, staff training, and caregiver-to-child ratios, ensuring a comprehensive, multisectoral approach (Rostgaard, 2018; OECD, 2021). Childcare, a crucial component of ECEC, extends beyond mere supervision, encompassing educational activities that promote intellectual and social enrichment (Clarke-Stewart & Allhusen, 2005).

Significant curriculum frameworks, such as the Irish Aistear curriculum, illustrate the importance of sociocultural learning perspectives, highlighting themes like identity, belonging, well-being, exploration, thinking, and communication for children up to six years (NCCA⁶, 2009; Moloney, 2018). The structured environment of preschool serves as the initial formal educational setting, crucial for stimulating a child's curiosity and fostering personal growth (Larimore, 2020). In summary, ECEC is pivotal in shaping children's early experiences, preparing them to engage meaningfully with others beyond their family, ensuring they have the support needed to thrive in diverse settings (Bruce et al., 2019).

3.2.2. Evolution of Early Childhood Education and Care

The historical evolution of Early Childhood Education and Care (ECEC) reveals a broad spectrum of philosophical and pedagogical shifts that have shaped modern educational practices. This exploration traces the lineage of key educational thinkers and their impact on the development of early childhood education across various cultural and historical contexts. In Europe, the transformation of ECEC began with figures like Martin Luther (1483-1546), who championed universal education rights, a notion furthered by John Amos Comenius and Jean-Jacques Rousseau. Rousseau's seminal work, 'Emile', proposed developmental stages emphasising that children should learn as they are developmentally prepared, not merely as small adults (Saracho, 2019). This philosophy was expanded by Johann Heinrich Pestalozzi and Friedrich Wilhelm Froebel, the latter founding the first Kindergarten, thus advocating play as a pivotal educational tool (Manning, 2005; Saracho & Evans, 2021). Figures like Margaret McMillan and Maria Montessori emphasised holistic education and child-led learning, respectively, impacting ECEC significantly with approaches that prioritise child autonomy and holistic development (MacBlain, 2018; Morrison, 2017).

In the US, John Dewey introduced child-centred education, supported by Jerome Bruner's stages of learning, which acknowledged children as active participants in their learning process (Ritchie, 2020). This perspective aligns with the constructivist theories of Jean Piaget (1936, 1950) and Lev Vygotsky (1978), who emphasised active and social aspects of learning, particularly through Vygotsky's concept of the zone of proximal development (Fragkiadaki et al., 2021; Shaban et al., 2010). In Ireland, adaptations of these pedagogies led to the establishment of early education systems influenced by pioneers like Lady Powerscourt and

⁶National Council for Curriculum and Assessment

John Synge, with later policies such as the Revised Programme for Infants, Curaclam na Bunscoile and the Primary School Curriculum reinforcing child-centred approaches (O'Connor, 2010; Murphy, 2006).

Throughout its evolution, ECEC has been profoundly influenced by a blend of democratic, romantic, and developmental perspectives that place the child as a leader of their own learning experience (Bogatic et al., 2018; Westbrook & Croft, 2015). The ongoing refinement of child-centred practices highlights a global commitment to educational environments that respect and nurture the unique needs and potentials of each child, ensuring that the principles of individuality, play, and active participation remain central to early childhood education (Murphy, 2006).

3.2.3. The Changing Landscape in Early Years Education

The landscape of Early Childhood Education and Care (ECEC) has undergone significant shifts due to emerging trends, policy changes, and technological advances. Haslip and Gullo (2017) outline both positive and negative trends, from personalised workforce development to challenges like the overemphasis on skilled literacy and changing curricula. Meanwhile, Ellis (2012) addresses the changing pedagogical practices and demographics within the field. Hussain and Gupta (2017) and Smyth (2022) criticise the commodification of ECEC, noting a shift towards privatisation and reduced state funding, which prioritises profit over child development. Recent OECD reports (OECD, 2021, 2022b) highlight that technological advances have introduced digitalisation into ECEC, impacting how children interact with technology. These reports advocate for universal ECEC provision to ensure every child accesses quality education before primary schooling. This universal access is designed to foster equality and inclusion, offering children from all backgrounds the opportunity to engage in learning through a high-quality curriculum (White et al., 2022; Taguma et al., 2012).

Key research studies such as the Perry Preschool Project - an experiment analysing short and long-term effects of preschool education programmes for young children living in poverty (Schweinhart, 2010), and the Effective Provision of Preschool Evaluation (EPPE) study - the first major European longitudinal study to investigate the effects of preschool education on young children's development between the ages of 3 and 7 years (Sylva et al., 2006, Sylva, 2010), validate the substantial benefits of preschool education on social and intellectual

development. These studies underpin policy recommendations and have shaped modern educational practices by demonstrating the long-term benefits of early education on children's lives. Furthermore, the CoRE study (Urban et al., 2012 & 2012b) and the work by UNESCO (2022) emphasise the importance of developing competencies and inclusive practices in ECEC from early years, when fundamental attitudes, values and lifelong learning are developed (UNESCO, 2022). These contributions have been instrumental in redefining ECEC quality (Campbell-Barr, 2017; Taguma et al, 2012) where this quality varies by context, reflecting local and cultural values (Slot, 2018; Boyd & Garvis, 2021).

Ultimately, the evolution of ECEC reflects a growing recognition of the sector's impact on societal wellbeing and child development. The European Union's Quality Framework for ECEC (Watkins and Meijer, 2016) and the emphasis on professionalism (Vandenbroeck et al., 2016; Watts, 2009) highlight the need for a commitment to excellence and ethics in early education (Dalli & Urban, 2013). These frameworks and discussions emphasise the importance of ECEC in nurturing knowledgeable, ethical, and reflective practitioners who can contribute profoundly to the developmental trajectories of children and, by extension, the broader community.

3.2.4. Global Perspectives on Early Childhood Education

Early Childhood Education and Care (ECEC) policies and practices vary significantly around the world, influenced by cultural, societal, and governmental factors. Exploring these variations provide valuable insights into diverse educational frameworks and their foundational principles. This section examines the global landscape of ECEC, focusing on the integration of entrepreneurial education, even when not explicitly labelled as such.

Scotland's "Pre-birth to Three: Positive Outcomes for Young Children" policy provides a comprehensive approach to early education, catering for children from birth to age three, with a focus on philosophical underpinnings and practical outcomes (Learning and Teaching Scotland, 2010). It also emphasises the smooth transition of children into the Curriculum for Excellence for ages 3-18. This framework guides the delivery of preschool education and actively improves the transition from preschool to primary school by emphasising active learning. "Building the Curriculum 2: Active Learning in the Early Years" (2007) specifically addresses how to engage children effectively in both preschool and primary settings, ensuring

they develop as successful learners, confident individuals, responsible citizens, and effective contributors.

The Early Years Foundation Stage (EYFS) in England is a statutory framework that sets specific developmental goals across various categories such as self-care, self-esteem, and community awareness (Pascal et al., 2019) for children from birth to five years old. It outlines detailed developmental goals across seven key areas, ranging from communication and language to expressive arts and design. The framework emphasises the importance of play, critical thinking, and independence, with a strong focus on safeguarding and welfare standards. Assessments, including the Early Years Foundation Stage Profile, measure progress and ensure children are prepared for school. The EYFS also encourages active parental involvement and tailors' activities to the needs and interests of each child, ensuring a holistic approach to their early education and well-being.

Wales's "Foundation Phase" framework (2015) provides a statutory early year's curriculum for children aged 3 to 7, emphasising a play-based and child-centred approach to learning. It encompasses seven areas of learning, including personal and social development, literacy, and mathematical development, promoting active engagement through hands-on experiences. The curriculum prioritises outdoor learning and natural discovery, catering to individual needs and interests for personalised educational pathways. Assessment is observational and continuous, guiding the developmental and educational trajectories of children to ensure a holistic integration of educational goals with personal growth and well-being. The Welsh government have very successfully adopted an entrepreneurial culture within their education system through their Youth Entrepreneurship Programme (YES) implemented in 2005 (Penaluna et al., 2020). Aligned with the Welsh Curriculum's purpose of developing Enterprising Creative Contributors two national guides were launched in 2024 to support teachers and students (from ages 3 – 16) in their enterprising teaching and learning journeys.

France mandates preschool education up to age 7, emphasising intellectual, physical, and moral development. Similarly, in Belgium, the Ecoles Maternelles cater to children from 2.5 to 5 years old, embodying a national commitment to early childhood education as a fundamental right (Rentzou & Slutsky, 2020). The Czech Republic's Framework Education Programme for ECEC tailors its educational offerings to local contexts, while Norway's Kindergartens focus on balancing care and structured pedagogical planning. Denmark and Poland support early

education with public funding and comprehensive curricular guidelines, emphasising play and safety in fostering each child's unique development (Willekens & Scheiwe, 2020). Italy's national guidelines, "Indicazioni per il Curricolo" define the infant school curriculum through detailed educational goals and pedagogical approaches.

Outside of Europe, countries like Turkey, Australia, New Zealand, and Japan offer distinctive frameworks that reflect their unique educational philosophies. Australia's "Being, Belonging and Becoming" framework and New Zealand's "Te Whāriki" curriculum highlight the importance of cultural and social contexts in learning processes. Japan's guidelines focus on emotional, motivational, and attitudinal aspects of child development (Bertram & Pascal, 2016).

Exploring Early Childhood Education from a global perspective reveals a complex interplay of cultural, educational, and policy-driven factors that shape early learning environments and influence educators' engagement with young learners. Diverse worldviews on early childhood education, comprising individual ontological, ethical, and epistemological orientations, contribute to varying interpretations of educational practices across societies (Kaushik & Walsh, 2019; Kavonius et al., 2015). Papatheodorou (2010, 2012) identifies two prevalent perspectives in early childhood education: one focusing on developing skills for economic and social prosperity, driven by policy agendas for future employability; and another that views early childhood education as a holistic foundation for nurturing well-rounded, resilient individuals.

This dichotomy is reflected in international policies, which often promote a universalistic approach to childhood education, prioritising quantifiable outcomes (Papatheodorou, 2012). Critics argue that this focus on economic values can undermine the ethics of care, neglecting broader areas of child development such as emotional and spiritual growth (OECD, 2018; Dahlberg et al., 2007; Kirova & Hennig, 2013). Noddings (2013) advocates for a relational approach that prioritises nurturing and empathetic relationships in educational settings.

A global perspective emphasises the importance of integrating social justice, inclusivity, and sustainability into early childhood education. Derman-Sparks and Edwards (2020) offer practical strategies for anti-bias education, promoting social justice from an early age, while

Siraj-Blatchford and Manni (2008) highlight the critical role of leadership in shaping educational outcomes and curriculum implementation. Furthermore, fostering sustainable development from an early age is essential as it cultivates essential life skills, attitudes, and values crucial for lifelong learning in diverse, cultural contexts (Biberhofer et al., 2019; Zidny et al., 2020; Raivio et al., 2022).

Early childhood educators play a crucial role in mediating cultural and social narratives within pedagogical practices. Navigating their values and power dynamics, educators must effectively address stereotypes and inequalities to create environments where democratic values are both taught and practiced from the earliest stages (Keranen-Pantsu & Heikkinen, 2019; Miedema & Bertram-Troost, 2015). Urban (2008) calls for resilience and adaptability among educators to respond to evolving societal and policy landscapes, a view supported by Wong and Rao (2015), who emphasise understanding cultural diversity to tailor effective educational strategies.

As countries around the world recognise the importance of fostering entrepreneurial skills from an early age, the integration of these competencies within early childhood curricula varies significantly. While nations like Germany, the United Kingdom, and New Zealand are known for innovative educational practices, they often embed entrepreneurial skills implicitly within broader developmental goals rather than through explicit strategies targeting early childhood. This trend reflects a global approach where the emphasis on entrepreneurial education intensifies at higher educational levels.

Nevertheless, foundational elements of an entrepreneurial mindset are subtly encouraged through play-based learning, child-led activities, and holistic curricula from the earliest stages of education. Table 3.1. examines how various countries integrate entrepreneurial education in preschool, even when concepts are embedded implicitly, and provides an overview of entrepreneurial elements fostered in highly regarded early childhood education systems (OECD, 2023b).

Table 3.1. Entrepreneurial Education – A Global Preschool Overview

| | |
|---------------------------|--|
| Finland | Finland's approach to early childhood education emphasises creativity and innovation as core elements. By making these skills a fundamental part of their curriculum, Finnish children are encouraged to explore and innovate within a supportive learning environment, establishing a strong foundation for entrepreneurial thinking. |
| New Zealand | New Zealand's Te Whāriki curriculum is highly regarded for its emphasis on empowering children through child-led learning. This framework supports children in making choices and taking control of their learning processes, which are critical components of an entrepreneurial mindset. |
| Sweden and Denmark | Both countries have strong welfare systems that provide substantial support for early childhood education. They integrate entrepreneurial skills such as teamwork, creativity, and self-directed learning, aimed at fostering well-rounded individuals from a young age. |
| United Kingdom | In the UK, particularly in England, the Early Years Foundation Stage (EYFS) encourages settings to foster environments that develop critical thinking and problem-solving skills among preschool-aged children, laying the groundwork for entrepreneurial education. |
| United States | Programmes supported by organisations like the NAEYC (National Association for the Education of Young Children) advocate for the integration of developmentally appropriate practices that encourage resilience and adaptability, aligning with entrepreneurial skills. |
| Singapore and South Korea | Countries like Singapore and South Korea focus on developing these life skills early in their educational programmes, preparing children for a rapidly changing global landscape. |
| Netherlands | Dutch early childhood programmes often incorporate entrepreneurial elements, promoting a proactive and innovative mindset from an early age. |
| Canada | Canadian provinces integrate skills such as critical thinking and problem-solving into early childhood curricula, focusing on fostering an entrepreneurial spirit. |
| Australia | Australian early education focuses on inquiry-based learning and developing skills essential for the digital age. |
| Estonia | Estonia's emphasis on digital literacy and proactive problem-solving starts in early education, reflecting its national focus on technological innovation. |
| Germany | Germany's early education incorporates elements from its vocational training system to teach entrepreneurial skills effectively. |

Source: *Authors own*

These countries demonstrate the integration of entrepreneurial concepts into early childhood settings, even if not explicitly labelled as 'entrepreneurial' and employing varied approaches. Each example offers valuable lessons on embedding entrepreneurial skills in early education, fostering not only economic competencies but also personal and social growth. This global perspective illustrates the significance of tailoring educational practices to a rapidly evolving, interconnected world, equipping children with the creative and adaptive skills needed to face future challenges.

3.3. Defining the Early Childhood Educator

The effectiveness of introducing entrepreneurial education in preschool largely centres on the capabilities and insights of early childhood educators. This section of the literature review examines the critical roles that these educators play, the influences that shape their professional identities, and the key competencies they must possess to successfully nurture entrepreneurial traits in young children. Highlighting these aspects will provide a deeper understanding of how

educators can create environments that encourage curiosity, problem-solving, and innovative thinking - essential skills for entrepreneurial success - within the framework of early childhood education.

3.3.1 The Role of the Early Childhood Educator

The role of the early childhood educator is pivotal in shaping the learning experiences and developmental trajectory of preschool children. This section explores extensive responsibilities of educators as they create environments that foster independent learning, support development across multiple domains, and model positive behaviours and skills.

A key responsibility of early childhood educators is to prepare and maintain a learning environment that is safe, engaging, and enriching (Sumitra et al., 2021). As noted by Barbarin and Wasik (2009), these environments should stimulate children's curiosity and foster meaningful interactions. Once the environment is set, educators transition to facilitators, supporting children in becoming autonomous learners (Sullivan & Glanz, 2009) through strategies such as scaffolding, which helps children progress in understanding their world (Allen & Cowdery, 2015). Observation plays a critical role in this process, allowing educators to tailor learning experiences to the individual needs, strengths, and interests of each child (Grotewell & Burton, 2008).

Through modelling, as described by Bandura's Social Learning Theory (Bandura, 1977; Rumjaun & Narod, 2020), educators influence children's learning behaviours by providing examples for them to imitate (Macnaughton, 2003; Saracho & Spodek, 2004). Vygotsky's sociocultural theory (Vygotsky, 1987) further defines the educator's role as both a guide and a co-learner who facilitates knowledge construction through interaction within the child's zone of proximal development (ZPD) (Bodrova & Leong, 2018; Jones & Reynolds, 2015). Similarly, Piaget's theory of cognitive development (Piaget, 1971; Huitt & Hummel, 2003) underlines the educator's duty to provide scaffolded learning opportunities that enhance critical thinking (Bean & Melzer, 2021).

Different educational philosophies, such as Montessori, Reggio Emilia, Waldorf, and High Scope, interpret the educator's role uniquely, ranging from setting up child-led activities to creating enriching, thematic environments that promote community and natural inquiry

(Westerberg & Vandermaas-Peeler, 2021; Froden & Von Wright, 2018; Wiltshire, 2019). Capel et al (2012) synthesise these elements by highlighting that effective teaching in early childhood is informed by observing and understanding children's interactions and learning patterns, which guide pedagogical decisions and curriculum development (Woods, 2014; MacDonald, 2015). In essence, educators not only deliver content but also build community relationships, understand diverse cultural backgrounds, and foster a respectful, inclusive learning environment (Hall et al., 2013; Ingleby, 2013).

The role of early childhood educators is crucial in mediating cultural and social narratives that shape pedagogical practices. As Keranen-Pantsu and Heikkinen (2019) note, educators must navigate their values and the power dynamics within educational settings to address stereotypes and inequalities effectively. This is vital for fostering environments where democratic values are not only taught, but practiced, starting from the earliest stages of education (Miedema & Bertram-Troost, 2015). Urban (2008) discusses the profession's uncertainties, advocating for resilience and adaptability among educators in response to evolving societal and policy landscapes. This is further supported by the work of Wong and Rao (2015), who explore global perspectives on early childhood education and emphasise understanding cultural diversities to tailor effective educational strategies.

The role of the early childhood educator is dynamic and complex, integrating direct instruction with an understanding of developmental psychology, cultural awareness, and community engagement. Educators are tasked with not just teaching but also inspiring and guiding young learners in a way that respects their individuality and promotes their overall growth and readiness for future educational challenges (Cor et al., 2017; Paniagua & Istance, 2018; Taylor & Boyer, 2019).

3.3.2. Key Influences on the Early Childhood Educator

Understanding the key influences on early childhood educators is essential for comprehending how they shape their teaching strategies and educational outcomes. Clarke and Hollingsworth (2002) identify three critical domains that influence early childhood educators: the personal domain, which encompasses their beliefs, knowledge, and attitudes; contextual factors tied to their working environment; and external domains, which include various sources of information and broader educational policies.

Personal factors such as educators' qualifications, values, beliefs, and experiences directly impact teaching approach. Self-efficacy, or the perception of their abilities, alongside professional identity, significantly influences their instructional methods and interactions with children (Baum, 2000; Gudmundsdottir & Hatlevik, 2017). For instance, a teacher's attitude, shaped by personal and professional experiences, effects how they engage with students and implement learning activities (Tan et al., 2022). Professional development opportunities is crucial for equipping educators with new skills and enabling them to adapt to innovative teaching methods aligned with current educational demands and policies (Oder & Eisenschmidt, 2016; Gul et al., 2021). Educators with higher self-efficacy are more motivated and committed, leading to more effective educational outcomes (Couse & Recchia, 2016; Dikilitass & Erten, 2017).

The school environment, including policies, resources, and infrastructure, plays a pivotal role in shaping teaching strategies. Support system such as professional development and collegial relationships can either enhance or impede the adoption of innovative practices (Hoy & Dipaola, 2008; Forlin, 2012). A supportive environment that encourages reflection and adaptation positively impacts teaching.

External factors, such as local and national educational policies, curriculum frameworks, and the socio-cultural environment, provide the structural and regulatory backdrop that shapes teaching practices. These factors dictate the resources available to teachers and set expectations for educational outcomes (Gordon, 2015; Nath, 2009). Socio-cultural norms and values also impact the delivery of culturally responsive and relevant education (Palaiologou, 2016).

The interplay between personal convictions, institutional context, and wider educational policies shapes early childhood educators' teaching practices. Recognising these influences is vital for supporting educators in adopting effective and responsive strategies, thereby enhancing educational practices and outcomes in early childhood education.

3.3.3. Competencies of the Early Childhood Educator

In the context of early childhood education and care (ECEC), educator competence is essential for fostering entrepreneurial education in preschool children. Competence encompasses not only foundational knowledge and skills but also the disposition necessary to effectively nurture

and guide young learners. This section explores the key competencies that early childhood educators must possess across various domains to support child development holistically.

Feeney (2012) defines educator competence as the amalgamation of knowledge, skills, and dispositions essential for effective functioning within the ECEC environment, highlighting its significance in professional development. Educators must mobilise a broad array of cognitive and practical skills alongside psychological and creative capacities such as motivation, attitude, and values. The five competencies essential for educators of infants, toddlers and preschoolers across early years settings are as follows (Urban et al., 2012; OECD, 2018):

- Child Growth and Development

Educators apply contemporary research and theoretical perspectives to support the development of children, including cognitive, physical, social, and emotional domains (Deiner, 2012; Boyd & Garvis, 2021). They develop strategies tailored to the unique cultural, familial, and socioeconomic contexts of each child, thereby facilitating personalised learning experiences that are developmentally appropriate.

- Observation and Assessment

Systematic observation is pivotal for assessing all developmental domains in children. Educators use a variety of tools and methods to gather relevant data, which informs the customisation of curriculum and interventions tailored to individual needs (Heikka et al., 2023). This competency is crucial for adapting teaching strategies to the diverse backgrounds and learning trajectories of students.

- Curriculum and Learning Environment

Competent educators create and maintain healthy, safe, and culturally responsive learning environments. They integrate research, theory, and continuous assessment to plan and evaluate comprehensive curricula that encompass all key learning areas, from language to arts to physical education (Allen & Kelly, 2015; Meloy & Schachner, 2019). This also involves selecting appropriate materials and creating inclusive spaces that support the learning needs of all children (OECD, 2021).

- **Family Support and Community Engagement**

Understanding the family as the primary context of a child's development is essential. Educators build strong, culturally sensitive relationships with families to foster children's social and emotional development (Koralek et al., 2019). They collaborate with families and community members to enhance educational outcomes and ensure a supportive learning environment (Epstein, 2018; Couchenour & Chrisman, 2013).

- **Child Health, Nutrition, and Safety**

Ensuring the well-being of children involves providing a learning environment that addresses health, nutrition, and safety. Educators adhere to best practices that promote holistic health, including physical and emotional wellness, which are foundational for effective learning (Dunst et al., 2015; Marotz, 2021).

The competencies required of early childhood educators are comprehensive and multifaceted, reflecting the complex nature of their role in fostering not only academic but also social, emotional, and physical development. These competencies enable educators to implement innovative and effective teaching strategies that prepare preschool children for future educational challenges, including potential entrepreneurial endeavours. By mastering these competencies, educators can provide an educational experience that is both enriching and conducive to the development of young learners.

3.3.4. Early Childhood Educators: Shaping Entrepreneurial Mindsets in Children

The foundation for developing an entrepreneurial mindset starts as early as age three, making early childhood a pivotal stage for fostering entrepreneurial, creative, capable, and resilient learners (Dweck et al., 2014; Cain & Dweck, 1995; O'Connell et al., 2016). An entrepreneurial mindset encompasses a dynamic set of values, attitudes, and competencies, vital for long-term achievement and learning. This mindset is crucial for the acquisition of non-cognitive skills such as self-control, self-regulation, and social skills, which are foundational for entrepreneurial education (Lindner, 2019).

In early childhood education, fostering personality traits, like honesty, self-confidence, responsibility, independence, and teamwork is crucial (Alasuutari et al., 2014). Lindner (2019) emphasises that these traits, along with an entrepreneurial mindset, begin to develop in the

early years through socialisation, and are central to fostering self-responsibility and independence.

Peterman and Kennedy (2003) and Hytti and O’Gorman, 2004 argue that entrepreneurial education to younger students is more about enterprise education, which involves teaching children to take responsibility for their learning, be creative, achieve goals, discover opportunities, and navigate a complex society. This type of education supports behaviours and skills, not only exhibited within family settings, but also across broader societal contexts, facilitates by specific pedagogy known as cognitive learning (Gibb, 2006; Neck et al., 2014).

Teachers play a crucial role in this process by utilising competences related to creativity and entrepreneurship, encouraging risk-taking and viewing mistakes as learning opportunities (Barth, 2001; Mulford, 2003). Effective entrepreneurial education involves active experiential learning where teachers inspire and facilitate skills development through real-life applications (Bell & Bell, 2020; Lackéus, 2020). This approach aligns with the constructivist educational theory, which supports experiential learning approaches and emphasises action as a key component in mastering complex and ill-structured knowledge (Carsrud & Brannback, 2011). By shifting from teacher-centred to learner-centred methods, educators help students develop critical thinking skills, enabling them to creatively and holistically identify and act upon opportunities (Duyen, 2021; Shaver & Commarmond 2019).

Understanding teachers’ beliefs about teaching and learning is essential, as these beliefs significantly influence their instructional practices and openness to educational reforms, including those aimed at fostering entrepreneurial skills (Pajares, 1992). Positive teacher-student interactions in the early years have a long-term impact on academic and social development. Building strong, supportive relationships is foundational for teaching skills like risk-taking and problem-solving, which are essential for entrepreneurship (Hamre & Pianta, 2001).

Leadership within early childhood education settings is also crucial for setting direction and creating a supportive environment for innovative practices. Effective leaders’ model entrepreneurial behaviours, set high expectations, and foster a culture of curiosity and innovation (Siraj-Blatchford & Sylva, 2004). The role of the teacher extends beyond instruction

to include promoting child development, building community and family relationships, and employing Developmentally Appropriate Practices (DAP) to effectively engage with children and their families (European Commission, 2011). Bell and Cui (2023) describe the challenge teachers face in bridging gaps between their role as critical practitioners and the curriculum and learning environments necessary to cultivate an entrepreneurial mindset in young children.

Finally The 2019 report from the OECD highlights successful international practices in integrating creativity and critical thinking into curricula, serving as a model for how educational systems can foster an entrepreneurial mindset from an early age.

3.4. How Children Learn - Theories and Philosophies of Learning

This section examines the diverse theories and philosophies proposed by leading educational theorists like Dewey, Piaget, Vygotsky, Kolb and others. These perspectives provide a rich understanding of how children learn and develop, crucial for creating pedagogical practices that foster innovative thinking, creativity, and problem-solving abilities in young learners.

- Behaviourism and Classical Conditioning

Ivan Pavlov laid the groundwork for classical conditioning, focusing on learning through associations. This theory emphasises that behaviours can be conditioned and unconditioned through repeated stimuli, laying a foundational understanding of behavioural learning (Akpan, 2020; Valsiner, 2022). This concept was expanded by John Watson (1913), who developed behaviourism, emphasising that behaviours are learned through interactions with the environment, thereby shaping children's responses through repeated exposure to stimuli (Strapasson, 2020; Keenan & Evans, 2016).

- Cognitive Development Theories

Jean Piaget and Lev Vygotsky offer contrasting yet complementary views on cognitive development. Piaget's theory suggests that children move through four developmental stages, each characterised by increasing sophistication in thought processing (Mecacci, 2021). Piaget emphasises the active role children play in learning through the assimilation and accommodation of new information. In contrast, Vygotsky introduced the socio-cultural theory of cognitive development, emphasising the crucial role of social interactions and cultural tools in the development of cognition. Through his concept of the zone of proximal development

(ZPD), a child can perform tasks with guidance (Vygotsky, 1997), highlighting the potential growth achievable with adequate scaffolding (Goldstein, 2011).

- Constructivist Approaches

Jerome Bruner expanded on these ideas advocating for discovery learning, a method where students build on their existing knowledge to discover new concepts through guided exploration, thus fostering independence and critical thinking (Bruner, 1961; Takaya, 2013). This approach aligns with constructivist theories that suggest knowledge is actively constructed by the learner, not passively absorbed.

Educators adapt their roles according to different learning theories. These roles involve guiding students through structured activities and supporting them in actively engaging with the environment to construct their understanding (Bell, 2019). Table 3.2. outlines how children learn through the main theories of learning and the role of the educator and child in this process.

Table 3.2. How Children Learn – Theories of Learning

| Description | Behaviourism | Cognitivism | Constructivism |
|---|--|--|--|
| Concept | Learning occurs through observable, objective behaviour (response to stimulus) and discounted mental activities. | Learning involves processing information through schemes, assimilation and accommodation (mental activity). | Learners construct their meaning, ask questions and interact with the environment. |
| Role of Learner | Passive learners respond to stimuli. | Learners use information processing to assimilate and transfer new information. | Active learning involves new concepts and ideas based on social interaction, knowledge and motivation. |
| Role of Teacher | The teacher provides information, and the student demonstrates material understanding. | Instructor manages structured search activities and problem-solving for group learning strategies. | Instructors focus on connecting facts and generating new understandings in learners. |
| Learning Process | Pavlov: classical condition, spontaneous reaction to stimulus and altered natural relationships. | Piaget: Knowledge is the interaction between an individual and the environment. Cognitive development is the result of logical thinking. | Piaget: Learner starts with a blank state; knowledge is a human construction, not logical thinking. |
| | Watson: Humans are born with the emotional reaction of love. Behaviour is developed through stimulus conditioning. | Vygotsky: Cognitive development involves developing and mastering cultural forms of reasoning. | Bruner: Learner develops new concepts or ideas based on past or current knowledge. Discovery is learning through the development stages. Vygotsky's Zone of Proximal Development. |
| Type of Learning | Association, generalisation and chaining. | Problem-solving, reasoning and information processing | The three stages of knowledge acquisition are introductory, advanced, and expert. |
| Principles of Instruction Design | Observable behaviour and measurable outcomes (pre-assessment and reinforcement). | Learner active participation in the learning process. Structuring, organising, and sequencing information | Information presentation in various ways. Learner's ability to manipulate and control information. |
| Structure of Instruction Design | Stimulus and cue presentation (stimulus-response pairing). | Instruction design around existing schema and knowledge (metaphors, analogies and meaningful feedback). | Focus on the individual learner and later move to collaborative work. |

Source: Adapted from Ertmer and Newby (2013)

- Experiential and Progressive Learning Theories

David Kolb's Experiential Learning Theory (ELT) emphasises learning as a process where knowledge is created through the transformation of experience (Kolb, 1984). Kolb proposes that effective learning occurs by progressing through a cycle of four stages: Concrete Experience, Reflective Observation, Abstract Conceptualisation, and Active Experimentation. This cycle supports learners in absorbing information through direct experience, reflecting on these experiences, forming logical conclusions, and testing them in new situations, which is crucial for developing entrepreneurial skills such as risk assessment and strategic thinking. Kolb's framework highlights the importance of a hands-on approach to learning, advocating that educators should create learning opportunities that engage learners actively and allow them to experience real-world applications of their knowledge.

John Dewey, often regarded as the father of progressive education, argues that learning should be grounded in practical, real-world activities and that learners should be actively involved in their learning process (Dewey, 1981). Dewey believed education should mirror the complexity of life to prepare children as proactive citizens, emphasising the integration of curriculum with students' experiences and interests to foster a meaningful and engaged learning process (Dewey, 1981). Dewey's ideas support the development of entrepreneurial skills by promoting critical thinking, problem-solving, and the ability to interact effectively within a community, as he viewed education as a tool for social change and personal growth.

- Modern Educational Theorists

Recent educational theorists have continued to build on these foundations. Bandura's Social Learning Theory emphasises the role of modelling and observation in learning (Rumjaun & Narod, 2020), while Bronfenbrenner's Ecological Systems Theory illustrates the significant influence of multiple environmental layers on child development (Christensen, 2016).

- Early Childhood Education Pioneers

Friedrich Froebel, Maria Montessori, and Rudolf Steiner have also made significant contributions to early childhood education through their innovative approaches. Froebel's introduction of the concept of kindergarten emphasised the importance of play and hands-on activities (Tovey, 2017). Montessori developed a pedagogy that stressed the importance of self-

directed activity and tactile learning, fostering independence (MacBlain, 2018). Steiner's Waldorf education promotes holistic development through rhythm and repetition in a supportive environment, nurturing the child's imagination and emotional growth (Collister, 2021).

The theories and philosophies of these educational thinkers offer a valuable framework for understanding how children learn and develop, particularly for educators focused on fostering entrepreneurial skills in preschool children. By integrating these pedagogical principles, educators can design educational experiences that promote exploration, innovation, and adaptability. This approach supports the objective of empowering young learners, ensuring that education goes beyond knowledge acquisition to enable children to creatively and effectively shape their future.

3.5. Modern Educational Strategies

This section explores a range of educational paradigms, from the structured guidance of pedagogy to the learner-centred principles of andragogy, the autonomy-promoting practices of heutagogy, and the integrative approach of academagogy. It also integrates adult learning theories, appreciative inquiry, and practitioner inquiry, which enrich the approach to educational strategies. These discussions aim to blend theory with practice, providing a solid foundation for developing teaching strategies that not only align with developmental stages but also foster the entrepreneurial skills essential for young learners to thrive in a dynamic world. This holistic examination will highlight methods that educators can embrace and impart, to empower children to be innovative, creative, solve problems, and take initiative.

3.5.1. Pedagogy v's. Andragogy v's. Heutagogy v's. Academagogy

Pedagogy traditionally focuses on the teacher-directed method of communicating knowledge (Jones et al., 2019), where the educator actively directs the learning process and content delivery. This method is characterised by a structured environment where the teacher controls the learning pace and content, which is particularly effective for young learners (Shah & Campus, 2021), where basic concepts and learning habits are established. Andragogy, popularised by Knowles (1980), shifts the focus to the learner, advocating for a self-directed approach where adults manage their learning, drawing on their life experiences as valuable resources. This approach encourages young learners to bring their experiences into the learning

process, enhancing engagement and relevance, advocating for autonomy and responsibility for learning outcomes (Jones et al, 2019).

Heutagogy, or self-determined learning, extends this concept further by advocating for learner agency in deciding what, how, and when to learn. This approach is particularly beneficial in entrepreneurship education, as it encourages learners to pursue their interests, challenges and motivations, (Hase & Kenyon, 2000; Jones et al., 2014) fostering essential entrepreneurial traits such as innovation and resilience. Academagogy is a synthesis of the three aforementioned approaches, proposing a balanced and flexible educational framework that adapts to the needs of the learner. This approach is particularly relevant in a diverse educational landscape, where the ability to tailor educational strategies to individual learner needs is crucial (Jones et al., 2019).

Each framework offers distinct advantages for different stages of learning: pedagogy provides structure and direction for young learners, andragogy emphasises self-directed learning for adults (early childhood educators), heutagogy advocates for self-determined learning, and academagogy combines elements of all three to create a flexible and adaptive educational strategy. Integrating elements of each of these educational frameworks into entrepreneurial education involves creating learning environments that can encourage both educators and students to explore, engage, and reflect on their learning journeys. This integration can be particularly impactful in early childhood education by fostering an entrepreneurial mindset from a young age. Activities designed to encourage creativity, problem-solving, and decision-making can be guided by these varied educational approaches, each contributing uniquely to the development of entrepreneurial skills. For example, allowing children to choose their learning activities or explore topics of interest can foster an entrepreneurial spirit by encouraging innovation and adaptability (Ismail & Sawang, 2020).

3.5.2. Adult Learning Theories

Adult learning theories are central to understanding how to adapt teaching strategies to accommodate not only children but also the educators who instruct them. Appreciating these theories can contribute to understanding how educators can be supported in promoting an entrepreneurial culture in their preschool classroom. These theories, which include behaviourism, cognitivism, and constructivism, describe different processes by which adults

(and by extension, older children) integrate new information and experiences into their knowledge base (Muhajirah, 2020; Merriam 2018). Table 3.3. depicts a comparison of learning theories.

Table 3.3. *Comparison of Adult Learning Theories*

| | Behaviourism | Cognitivism | Constructivism |
|-------------------------|---|--|--|
| Study | Observable behaviour study | Study of the mind | The social construction of knowledge |
| Knowledge | Knowledge gained through behaviour modification | Knowledge gained through information processing | Knowledge is constructed through personal interaction with experiences of the world and social environment |
| Learner | Passive | Active | Social and Active |
| Learning | Behaviour changes through a condition (positive and negative reinforcement) | Change in memory structure through planning and evaluating | Learners construct meaning by integrating prior beliefs, knowledge and experience |
| Type of Learning | Defining concepts, procedures and explanations (recalling facts) | Breaking down complex problems (problem-solving) | Emphasis on the whole system |
| Teaching Focus | Teacher centred and modified behaviour. (Outcome base) | Organising content and teacher-centred (Scaffolding) | Teacher as facilitator (Social construction of knowledge) |

Sources: *Jordan et al. (2008) and Reuter (2022)*

Bierema (2019) ascertains that adult learning theories explain how adults learn differently from children. Adult learning involves adults pursuing education to learn new skills. The adult learning theories also include instrumental learning theories, humanistic theories, transformative learning theories, social learning theories, motivation models, and reflective models (Mukhalalati & Taylor, 2019).

3.5.3. Appreciative Inquiry

Appreciative Inquiry is a strength-based approach that focuses on identifying what works well in an organisation and building on those strengths (Cooperrider & Srivastva, 2013; Lewis et al., 2016). It provides the foundation for appreciative learning, a pedagogical approach

consistent with constructivist learning theory and is deemed authentic, active, and experiential learning (Cooperrider et al., 2003). It is based on the premise that knowledge can empower and enlighten individuals and organisations who want to change the environment in which they work and live (Lewis et al., 2017). In educational settings, this approach can be adapted to highlight and build upon what children are already good at, thus promoting a positive learning environment and enhancing their confidence and willingness to engage in entrepreneurial activities (Cockell & McArthur-Blair, 2020).

3.5.4. Practitioner Inquiry

Practitioner Inquiry involves educators systematically reflecting on and researching their practices to improve their effectiveness (Gilchrist, 2018). This method promotes a deep, reflective practice, where educators continuously adapt their teaching to better meet the needs of their students. Engaging in practitioner inquiry can help teachers develop personalised educational practices that foster creativity, leadership, critical thinking, and independence - qualities considered essential for entrepreneurial success (Woodrow & Newman, 2015).

The examination of modern educational strategies highlights a range of approaches that may play a role in nurturing entrepreneurial competencies among preschool children. Each educational framework, be it the structured environment of pedagogy, the self-directed learning of andragogy, the learner autonomy emphasised in heutagogy, or the integrated flexibility of academagogy, offers unique benefits that contribute to the development of skills crucial for entrepreneurial success. By incorporating elements from each framework, educators can create a dynamic learning environment that encourages young learners to explore, experiment, and engage actively with their learning processes.

Moreover, integrating adult learning theories, appreciative inquiry, and practitioner inquiry into early childhood education enriches the teaching strategies employed. These approaches not only accommodate the learning needs of educators themselves but also foster a reflective and strengths-based educational culture. Such an environment promotes creativity, problem-solving, and initiative - traits essential for overcoming future challenges and succeeding in a competitive world. By embracing these varied educational paradigms, early childhood education can effectively establish a foundation for developing future holistic entrepreneurial thinkers.

3.6. Strategies Used in Teaching Preschool Children

This section explores various curriculum and pedagogical practices that can be instrumental in cultivating entrepreneurial skills and mindsets. It covers broad strategies in early childhood education curricula, specific pedagogical practices and innovative curriculum models, all which play a crucial role in nurturing the creativity, problem-solving abilities, and proactive thinking needed for nurturing an entrepreneurial mindset. The concept of value creation pedagogy, which embeds entrepreneurship principles into everyday learning is also discussed. Analysing these strategies aims to highlight how educators can integrate entrepreneurial principles into the foundational stages of a child's education.

3.6.1. Curriculum and Pedagogical Practices in Early Childhood Education & Care

This section examines the intricate relationships between curriculum design, the pedagogical approaches employed by educators, and their collective impact on the learning and development of young learners. It enquires into various pedagogical approaches, ranging from teacher-directed methods to child-centred strategies, and examines their effectiveness in nurturing entrepreneurial skills. The analysis also considers the benefits and limitations of each approach, offering a balanced perspective, integrating these approaches to create an environment conducive to holistic development.

Curriculum in early childhood education encompasses the knowledge and skills that educators aim to impart, and which children are expected to learn. According to Epstein and Hohmann (2012), the curriculum includes not only the content but also the expected learning outcomes. Wood (2013) further describe the curriculum as a structured set of intended and organised experiences occurring within preschool settings. Wood and Hedges (2016) expand this definition by including the resources and interactions provided to children, highlighting the dynamic nature of educational content delivery.

Pedagogy involves the methods and modes of teaching that support these learning experiences, serving as the practical application of the curriculum. It provides the framework within which content is delivered (Siraj-Blatchford, 2009; Johansson et al., 2011). Ligozat and Almqvist (2018) articulate that pedagogy serves as a didactic framework, defining how educational content is taught, with an emphasis on educational meaning and purpose. Key components of

pedagogy include the content taught, methodologies employed, and social approaches facilitating children's integration into society (Stephen, 2010; Bowman et al., 2001).

Pedagogy is a multidimensional concept influenced by cultural, historical, social, political, and societal factors (Garvis et al., 2019). This complexity is particularly evident in early childhood education, where pedagogical strategies lay the foundation for effective learning experiences in ECEC settings (Gupta, 2015). Karaoglu (2020) emphasises that pedagogy includes strategies and instructional techniques that facilitate effective learning, offering children opportunities to acquire knowledge and skills within specific material and social contexts. This approach integrates values, curricula, and educational philosophies, influencing the broader social, political, and operational context of education (Garvis et al., 2021).

The relationship between curriculum and pedagogy in early childhood education is crucial for shaping effective and engaging learning environments. By understanding and applying these concepts thoughtfully, educators can create enriched educational experiences that not only meet developmental goals but also foster the entrepreneurial skills necessary for young learners to succeed in their lives. This holistic approach to curriculum and pedagogical practices ensures that educational strategies are both comprehensive and conducive to fostering the innovative capacities of young minds.

Early childhood education includes a broad spectrum of pedagogical practices, ranging from didactic instruction to child-centred instruction. According to Jarvis (2005), this continuum allows for varied teaching styles that cater to different learning needs and developmental stages.

- **Teacher-Directed Learning**

Characterised by teacher-led learning, this approach involves structured and sequential tasks focusing on core academic skills like language, reading, and math (Hornby & Greaves, 2022). While this method enhances focus on detail and outcomes, developing children's analytical abilities, it may lead to frustration or boredom if not dynamically engaged (Pianta, 2015; Fleer & Oers, 2018). The National Institute of Child Health and Human Development (NICHD, 2002) found that structured teacher-directed activities are effective in promoting specific academic skills like numeracy and literacy.

- Child-Centred Instruction

In contrast, child-centred instruction promotes active participation and self-learning. This pedagogy emphasises the role of the educator as a facilitator, providing diverse experiences, engaging children in playful learning, and encouraging autonomy (Veraksa et al., 2021). It is particularly beneficial for fostering entrepreneurial values such as perseverance, motivation, cooperation, and individuality; although it may lack structured learning for essential academic skills like reading and writing, which require more adult input (Fisher et al., 2021; Tassoni, 2007).

Further exploration of pedagogical strategies reveal the following approaches:

- Sustained Shared Thinking

An interactive process whereby an adult and child work together to solve a problem, develop a concept, or evaluate an activity. This approach is pivotal in developing critical thinking and reasoning skills in young children. Siraj-Blatchford and Manni (2008) emphasise its effectiveness, supporting deeper cognitive processing through collaborative intellectual exploration.

- Scaffolding

Involves structured, yet flexible, interactions between an adult and a child to help the child achieve a specific learning goal. This approach, underpinned by Vygotsky's concept of the zone of proximal development, supports learning by providing temporary support structures that are gradually removed as the child gains independence (Vygotsky & Cole, 1978; Wood & Attfield, 2005).

- Playful Learning

Integrates play into the learning process, where children learn through both free play and guided play. Playful learning effectively promotes cognitive, social, and emotional development, providing a joyful means for exploring the world, solving problems, and interacting with peers (Hirsh-Pasek & Golinkoff, 2003). The role of play will be discussed in further detail in section 3.7.

These curriculum and pedagogical approaches highlight the diverse strategies available to meet the developmental and educational needs of young learners. By thoughtfully combining these methods, educators can create a dynamic and supportive learning environments that foster both initial academic skills and the soft skills that are foundational for an entrepreneurial mindset.

3.6.2. Value Creation Pedagogy

Karlsson and Moberg (2013) provide foundational insights into the pedagogical approaches that encourage entrepreneurial learning, emphasising the importance of experiential learning where students engage in activities that have real economic and societal impact. Their work suggests that value creation as part of education helps in developing the students' entrepreneurial skills and mindset. The concept of value creation pedagogy integrates historical philosophical insights with modern educational research. The foundational philosophy of value creation by Tsunesaburo Makiguchi highlights the significance of creating value as the core purpose of education, emphasising the significance of individuals actively engaging with the world to create value, harmonising personal gain with social good through cooperative and contributive existence within society (Gerbert & Joffe, 2007).

Incorporating this philosophical underpinning, Lackéus (2018) further refines the application of value creation in educational settings. He defines it as the process of transforming opportunities and ideas into value for others, emphasising that educational experiences should extend beyond personal gain to contribute to societal well-being. This perspective enriches the approach to early childhood education by encouraging activities that foster not only economic but also social, cultural, and environmental values. In subsequent work Lackéus (2020) elaborates on Value Creation Pedagogy (VaCP), advocating for educational practices that allow students to apply knowledge in real-life contexts to benefit external stakeholders. This approach has been found to significantly enhance entrepreneurial motivation, and both knowledge and skills acquisition.

Jones et al. (2020) build on these concepts by exploring the multifaceted nature of value creation in education, providing a critical examination of how value creation can manifest within educational settings, and emphasising the potential for both personal satisfaction and societal benefit derived from entrepreneurial activities. The authors suggest that such pedagogical approaches should foster a sense of agency, purpose and capability development

in students, empowering them to see value in their actions and to understand the impact of their contributions on others. Their work aligns with Makiguchi's and Lackeus's principles by advocating for a pedagogy that not only supports economic understanding but also cultivates enjoyment, social interaction, harmony, and influence, which resonate with the holistic goals of early childhood education.

In practice, integrating value creation pedagogy into preschool settings involves designing age-appropriate activities that allow young learners to engage creatively and constructively with their environments. These activities might include community-based projects, artwork for family members, and simple problem-solving tasks, which are not only personally enjoyable but also instil a sense of contribution and community involvement. Thus, the synthesis of historical philosophies with contemporary research provides a compelling framework for early childhood educators to consider. By adopting elements of value creation pedagogy, educators can nurture an entrepreneurial mindset among preschoolers, ensuring that education is a dynamic, interactive process that prepares children to meet future challenges with creativity and resilience.

3.6.3. Curriculum Models in Early Childhood Education

Curriculum models guide the implementation of effective teaching strategies, content delivery, and assessment methods tailored to nurture the diverse needs of young learners. Both in Ireland and globally, various curriculum models offer unique insights and frameworks that educators can use to enhance children's learning experiences. This section will explore these models, detailing their theoretical foundations, applications, and relevance to fostering entrepreneurial skills in preschool settings.

- **Emergent Curriculum**

The emergent curriculum is highly responsive to children's interests, facilitating learning through active engagement and tailored experiences. This approach is constructive and collaborative, involving dynamic interaction between students, teachers, materials, and the environment (Stacey, 2009; Pinkham, 2021). It prioritises adaptability, flexibility, and play-based learning, making it well-suited for fostering an entrepreneurial spirit, encouraging creativity and problem-solving.

- Inquiry-Based Learning (IBL)

Rooted in constructivism, IBL places children at the centre of their learning journey, encouraging them to explore, pose questions, and seek answers (Watt & Colyer, 2014). This model disrupts traditional didactic teaching, promoting a creative, contextual, and meaningful learning environment influenced by the Reggio Emilia approach (Nxumalo et al., 2020). It supports the development of a proactive, inquisitive mindset (Michalopoulou, 2014) essential for embracing entrepreneurial education.

- Transdisciplinary Approach

This approach integrates multiple subject areas, facilitating holistic learning experiences that encourage young children to build concepts and skills across different domains (Daries et al., 2009). Burger (2016) highlights that transdisciplinary learning is not confined to student interactions but extends to the dynamic quality of teacher collaboration, promoting comprehensive knowledge co-construction.

The exploration of curriculum models in early childhood education reveals a rich diversity of approaches, each contributing uniquely to the holistic development of children. These models not only adhere to educational standards but also embrace the complexities of individual learner needs, making them invaluable for fostering the critical, creative, and adaptive skills necessary for an entrepreneurial mindset. By effectively integrating these curriculum models, educators in Ireland and beyond can provide robust and dynamic learning environments that encourage children to explore, innovate, and excel.

3.7. The Role of Play

This section explores how early childhood educators can foster entrepreneurial education in preschool children, focusing on the pivotal role of play in shaping learning and development. By examining the multifaceted dimensions of play - its definition, categories, and implementation through play-based curricula - this discussion aims to describe what entrepreneurial education in early childhood settings may encompass and determine how play can be used to nurture and support the development of entrepreneurial competencies in children. Through an analysis of various educational frameworks, including child-centred approaches and specific applications within the Irish context, the literature highlights how play not only supports fundamental developmental processes but also enhances creativity, problem-

solving abilities, and social competence. Delving into these aspects will uncover the potential impact of play on facilitating entrepreneurial education, providing children with the tools and experiences to innovate, collaborate, and think critically from an early age.

3.7.1. Defining and Categorising Play

Play in early childhood education is a complex, multifaceted phenomenon that has garnered significant attention from educational theorists and philosophers. It is recognised not only as a form of learning but as a fundamental right of every child. Educational theorists such as Bruner, Piaget, Frobel, Montessori, and Vygotsky have described play as a vital means for children to explore their environment, express their development, and engage in cognitive growth.

Frobel observes play as a critical expression of human development during childhood, emphasising its innate nature for discovery (Liebschner, 2006). Piaget (1962) views play as a display of assimilated behaviours, where children joyfully recreate known actions. Bruner (1983) suggests that play allows children to take risks within a safe environment, thereby acquiring vital information about the world around them. Montessori (2013) considers play to be ‘the child’s work’, highlighting its essential role in learning and development. Vygotsky argues that play serves a crucial adaptive mechanism for cognitive development, particularly through the creation of zones of proximal development (ZPD) (Gray & MacBlain, 2015).

Play in early childhood ranges from free play, characterised by flexibility, voluntariness, and make-believe (Pellegrini, 2009; Fler & Oers, 2018), to guided play, which combines discovery with structured learning objectives (Jensen et al., 2019). Free play allows children to direct their activities, promoting open-ended interactions that foster creativity, imagination, problem-solving, self-regulation, and cognitive and social development (Honey & Kanter, 2013; Whitebread et al., 2017; Delcarmen-Wiggins & Carter, 2019). Vygotsky emphasises the importance of free play stating ‘*a child’s greatest achievement is possible through free play*’ (Holzman, 2016, p.50). In this type of play children retain autonomy of choices without guidance from teachers (Santer et al., 2007; Fler & Oers, 2018). Conversely, guided play offers a balanced approach between autonomous play and formal instruction, enhancing literacy, science, and math outcomes through adult scaffolding (Pianta, 2015; Selmi et al., 2015; Weisberg et al., 2016). It is goal-directed and child-centred, allowing for freedom of exploration and active engagement while aligning with clear learning goals (Jensen et al., 2019).

Table 3.4. categorises different types of play, each uniquely contributing to various aspects of learning and development. Ranging from symbolic and creative play to socio-dramatic and constructive play, these categories highlight the diverse ways in which children interact with their environment and peers, building foundational skills for future academic and personal success.

Table 3.4. Types of Play

| Types of Play | Description |
|-----------------------|--|
| Symbolic | Using toys or objects to represent other objects. |
| Creative | Self-expression through creating artefacts or pictures using various materials. |
| Socio-Dramatic | Enactment of potential and actual experiences of an intense social and personal nature. Children act out scripts, stories and imaginary situations which relate to the real world. |
| Social | Interactive situations or collaborative interactions of adults and peers during play based on protocols. |
| Exploratory | Exploring objects and the function of the world using all the senses. |
| Object | Involving objects for intended and unintended purposes such as exploring. |
| Locomotor | Involves repetitious, exaggerated and physical moves. |
| Role-play | Exploring the way of being, acting out roles in a given situation or scenario. |
| Imaginative | Make-believe in something, where the rules of the physical world do not apply. |
| Constructive | Involved in building something using various materials. |
| Language | Children play with words, jokes, stories and sounds. |
| Fantasy | Non-realist or pretending to be someone else e.g. a fictional character |

Source: *White (2012); Bulgarelli & Bianquin (2016); Charles & Bellinson (2019)*

Play is indispensable in early childhood education, offering a rich, engaging platform for young learners to potentially develop entrepreneurial capabilities. Through various types of play, children learn to navigate their social worlds, solve problems creatively, and build resilience and flexibility. Moving forward to discuss the specifics of play-based learning in different contexts, including its pivotal role in the Irish educational framework, it is clear that play is not

just a method of learning but a fundamental aspect of holistic educational practices in preschool.

3.7.2. The Role of Play in Learning and Development

This section examines the dual roles of play in early childhood education: enhancing specific academic skills and fostering comprehensive developmental growth. By reviewing the literature and relevant studies, it demonstrates how play supports traditional learning outcomes, such as literacy and numeracy, while also promoting critical cognitive, socio-emotional, and physical development.

Scholarly discourse on play often distinguishes between its impact on academic learning and broader developmental outcomes. Researchers like Ihmeideh (2014) focus on how play influences specific academic skills including math, language, and literacy. These studies frequently explore the direct benefits of play-based activities on traditional educational benchmarks (Haile & Ghirmai, 2024; Pyle, 2021). In contrast, a broader perspective emphasises play's role in supporting holistic child development, including cognitive growth, socio-economic development, and self-regulation. This view suggests that academic learning alone may not adequately address the multifaceted needs of child development (Mowder et al., 2009; Reichow et al., 2017).

Wood and Attfield (2005) conceptualise the relationship between play, learning, and development through three developmental domains: cognitive, affective, and psychomotor. They explain how play aids cognitive skills like learning, thinking, and understanding, supports emotional intelligence, and enhances physical development, including fine and gross motor skills and overall well-being. Allen and Kelly (2015) argue that play universally fosters diverse areas of development, allowing children to experiment with social skills, tackle cognitive challenges, and engage in physical activities for holistic growth. The US National Research Council (2000) defines four primary areas of learning and development through play: cognitive, socio-emotional, physical, and general competence.

Socially, play is integral to a child's interaction with their community (Aeri & Verma, 2005). Through play, children develop essential life skills such as interacting with adults and peers, choosing friends, playing team games and building bonds. The elements of play that support

social development includes collaboration, turn-taking, empathy, self-regulation and impulse control (Brown, 2014). Additionally, play helps children assimilate cultural norms, values, and language, contributing to their self-identity within the community (Smith & Hart, 2014). From an intellectual standpoint, play introduces children to complex cognitive concepts in an engaging, enjoyable manner (Goswami, 2004). Pellegrini (2011) suggests that embedding learning themes into play activities can facilitate formal learning outcomes like recognising colours, shapes, and letters. Gauvain (2022) emphasises that play stimulates creativity, enabling children to express themselves and develop innovative problem-solving skills.

The role of play has been recognised for generations by great philosophers and educational theorists of education, as illustrated in table 3.5.

Table 3.5. Learning Theorists & Play

| | Piaget | Vygotsky | Dewey | Isaacs | Montessori | Frobel |
|-----------------------------|---|--|---|---|--|---|
| Theme | An individual creates knowledge through ideas, experiences, and interaction. | Individuals acquire knowledge through interacting with others. | Integrates Vygotsky's social learning concept with Piaget's constructivism approach. | Nursery education is not a substitute for the home function but is an extension. | Montessori classrooms address whole child development. | Father of Kindergarten. |
| Child Development | Children develop through four discrete stages. Child development is a fluid process through new information adapted from previous knowledge. | Subjective interpretations and culture play an essential role in cognitive development. Individual abilities are enhanced through interactions which translate into mental processes. | Dewey and Vygotsky emphasise cultural meaning and forms to enhance human thoughts. Piaget and Dewey champion independent reasoning. | The nursery setting provides companionship and experience for child development. Provides opportunities for cooperative play. Children explore relationships with family and peers to develop positive social interactions. | The four development principles are: mixed age grouping, big picture focus, classroom environment and focus on critical periods. | Children have unique needs and capabilities. The four components for whole child development include: social participation, motor expression, creativity and self-expression |
| Play and Development | Children, through play, negotiate, argue and test new ideas. As teachers support children through new materials, they support children's ability to accommodate new information into existing knowledge. Through play, children develop and refine concepts and have a continuous drive to develop and adapt schemas or understandings about the world | Make-believe or sociodramatic play is typical for preschoolers. The educator forms groups that allow less experienced children to learn from those who mastered specific skill sets. | The learner develops knowledge through engaging with the natural world and demonstrates high levels of skills through collaboration and creativity, play-based learning, project-based activities, and hands-on activities (co-constructors). | Isaacs used psychoanalytical knowledge to underpin the role of play in child development. Play is a vehicle for child development. | Montessori classrooms have specifically designed materials to appeal to children, and educators teach one skill at a time. Children develop and learn through active, hands-on activities rather than memorisation. | Play is the highest expression of learning, and child-initiated play is purposeful and creates meaning for children. |

Source: *Authors own*

Play, in its various forms, is foundational to early childhood education, bridging the gap between academic learning and comprehensive developmental growth. By integrating play into educational settings, educators can provide children with a balanced approach that not only targets academic skills but also enriches their social, emotional, and physical development.

3.7.3. Play-Based Curriculum in Early Childhood Education

Integrating play into the early childhood education curriculum has emerged as a transformative strategy that significantly enhances learning and development. This section examines the historical evolution, theoretical foundations, and practical applications of play-based learning, showcasing its vital role in fostering holistic growth in young learners. By understanding how play has been interlinked with educational practices through foundational theories and modern pedagogical approaches, an appreciation can be recognised for its profound impact on cognitive, emotional, and social development.

The inclusion of play in Western curricula is a relatively recent innovation (Colliver, 2012), reflecting the influence of early childhood philosophers like Frobel, Montessori, and Dewey. These theorists emphasised the integral role of play in a child's learning and development, advocating for educational environments that combine learning with freedom and nurturing (Platz & Arellano, 2011).

Scott (2007) outline four key dimensions that frame the curriculum: aims and objectives, subject content, methodologies, and assessment strategies. This framework supports the integration of play into structured educational settings while allowing the flexibility needed to adapt to children's evolving needs. Branscombe et al. (2013) highlight the constructivist perspective, which posits that learning stems from children's interactions with their environment, thereby emphasising the value of a play-based approach.

Various pedagogical models, including Montessori, HighScope, Reggio Emilia, Forrester, Steiner Waldorf, and Te Whāriki offer distinct yet complementary perspectives on integrating play into the curriculum. Montessori education emphasises a prepared, sequential environment, that respects each child's natural development. Children learn through natural interaction with educational materials, fostering independence and sensory-based learning (Edwards, 2006; Lillard, 2012).

The HighScope framework incorporates a unique play-based curriculum that emphasises “active participatory learning”, where children engage in meaningful independent and group activities. The “Plan-Do-Review” cycle encourages active learning and cognitive development grounded in Piaget’s theories (Schweinhart & Weikart, 1990; Weikart, 1996). This approach supports children’s natural curiosity and desire to interact with the world, providing opportunities for them to make choices and initiate play activities that foster both cognitive and social development (Epstein, 2018).

The Reggio Emilia approach views young children as capable, resilient, and rich with wonder and knowledge. It emphasises an emergent curriculum that evolves through child-teacher interactions, with a strong focus on arts and documentation to foster a collaborative learning community (McNally & Slutsky, 2016; Hall et al., 2015; Edwards et al., 2012). Rinaldi (2020) describes play in Reggio Emilia as predominantly project-based, where children engage in long-term explorations of concepts, ideas, and interests, that arise naturally from their experiences.

Forest Schools adopt a nature-based approach, emphasising learner-led outdoor play that encourages curiosity, exploration, and risk-taking. This model, as discussed by Knight (2009) offers hands-on experiences crucial for building independence, confidence, and self-esteem. Play in these settings enhances children’s cognitive development, social skills, and emotional resilience through negotiation, cooperation, and problem-solving (Maynard & Waters, 2007).

Steiner Waldorf education places a strong emphasis on imagination, advocating for play as a means to cultivate creative and analytical thinking. This model integrates play as a central element of its curriculum, blending arts, music, movement, and storytelling to develop intellectual, emotional and social competences (Edwards, 2002; Oberski, 2006).

Te Whāriki, New Zealand’s early childhood education framework, embodies a socio-cultural approach where play is seen as vital to learning and development. This curriculum emphasises flexibility, and family and community involvement, viewing children as competent and confident learners (New Zealand Ministry of Education, 2017). Rockel (2009) notes that in Te Whāriki, play is a pedagogical tool where children develop various skills through spontaneous and guided play, enhancing their communication skills, emotional well-being, and cultural understanding.

Gronlund (2010, 2013) advocate for a curriculum that respects preschoolers as active, curious learners. This approach integrates play into daily activities, ensuring that learning extends beyond traditional academic subjects to include rich, engaging experiences that promote physical, cognitive, and social skills (Beaty, 2019). Saracho (2013, 2019) supports this view, arguing that play allows children to engage in active learning by reconstructing ideas, experiences, and knowledge. An effective preschool curriculum should use play as a medium for learning, providing a supportive environment with appropriate materials, spaces, and opportunities for social interaction.

Table 3.6. illustrates how play-based curricula contribute to the development of entrepreneurial competencies in young children by detailing the strengths and limitations of each approach in fostering entrepreneurial education.

Table 3.6. Relationship Between Play-Based Curriculum and Entrepreneurial Education

| Philosophy | Description | Advantages in fostering EE | Disadvantages in fostering EE |
|-----------------------------|--|--|--|
| <i>Reggio Emilia</i> | Reggio Emilia features cultural and social values of democracy, solidarity and participation (Thornton & Brunton, 2015). Children are viewed as capable, active and valuable community members. The children develop their thinking capacity and knowledge in an environment rich in provocation and possibilities. The self-guided curriculum enables the children to express themselves in different ways. Activities include drawing, painting, drama, sculpting and language, aiming to develop of love for learning (Linder & Emerson, 2019). | Emphasises creativity, problem-solving, and self-expression. Encourages collaboration and project-based learning. | Less structured curriculum may lead to uneven academic readiness. |
| <i>Montessori</i> | Montessori involves providing an environment that supports children's learning (Isaacs, 2018). Montessori programmes are based on child interest in learning, and teacher involvement is limited. The classroom provides a structured and aesthetic environment in which toys, books and materials are carefully selected and incorporated to support children's independent learning. Children engage in free activity and can choose activities within a prepared environment independently or within small mixed multiage groups. | Promotes independence, self-directed learning, and practical life skills. Encourages initiative and personal responsibility. | May underemphasise collaborative learning and structured guidance. |
| <i>Forest School</i> | Forest School learning involves a child-centred learning process to inspire and motivate the learner to learn through the outdoor play-based curriculum in a natural environment (Karavida et al., 2020). Forest learning focuses on learning in the outdoor environment and encourages children to navigate through learning by interacting with the natural environment, inspiring exploration and curiosity. Forest schools show increased confidence and self-esteem, increased awareness of the mind, and improved ability to collaborate and language development. | Focuses on outdoor learning, risk-taking, and resilience. Enhances connection with nature and practical skills. | Limited exposure to traditional academic subjects and indoor activities. |
| <i>Te Whāriki</i> | Te Whāriki, New Zealand's early childhood education curriculum integrates cultural values and holistic development. It emphasises child-centred learning, respecting cultural identifies and supports development through exploration and play (New Zealand Ministry of Education, 2017; Chan, 2019). | Supports social competence, exploration, and independence. Encourages culturally relevant learning and holistic development, | Flexible nature may result in less emphasis on structured academic learning and inconsistencies in EE integration. |
| <i>Outdoor Play</i> | Frost et al. (2012) emphasise the role of outdoor play in promoting creativity and problem-solving through unstructured interactions with the natural environment. Outdoor activities also foster independence and self-esteem as children learn to navigate and manage risks (Bilton, 2010). | Enhances creativity, risk assessment, and physical skills. Promotes exploration and autonomy. | Weather dependency and potential for less structured educational content. |
| <i>HighScope</i> | The High Scope programme is developed on Piaget's intellectual development theory to provide a realistic educational experience for children and to promote constructive learning processes to broaden social and intellectual skills. The teacher-learning cycle is based on plan-do-review, and the curriculum is emergent (Epstein & Hohmann, 2012). | Emphasises active participatory learning and goal setting. Develops problem-solving skills and self-regulation. | Requires specific training for educators; may not suit all learning styles. |
| <i>Steiner Kindergarten</i> | Steiner's approach aims to improve children's concentration and prepare them emotionally and physically for learning. The learning environment is non-competitive and occurs through 'doing and making'. All curriculum areas have integrated arts, myths and tales to promote multiculturalism and imagination. Learning occurs through materials and practical activities to strengthen creativity and imagination. Teachers lead and design group activities and behaviour for children to imitate (Nordlund, 2013). | Focuses on imaginative play and artistic development. Encourages holistic growth and social cooperation. | Possible delay in introducing academic concepts and technology. |

The play-based curriculum in early childhood education illustrates the dynamic and multifaceted nature of learning. By embracing the principles set forth by early educators and adapting them to contemporary educational needs, play has been effectively harnessed to foster an environment where children thrive. The theoretical and practical applications of play highlight its indispensable role in supporting the comprehensive development of young learners.

3.7.4. Child-Centred Play

Child-centred play, also known as child-led or child-initiated learning, prioritises activities chosen by the child, fostering a sense of autonomy, motivation and engagement. Katz and Chard (1992) advocate for this method, emphasising that it supports intrinsic motivation and enhances learning outcomes by allowing children to pursue topics that interest them, thereby aligning with their developmental needs.

This approach leverages the natural curiosity of children to explore and interact with their environment, creating a conducive atmosphere for autonomous learning. According to Woods (2017), child-centred play provides opportunities for children to practice, experiment, and apply what they have learned in a safe, supportive setting. In these environments, adults take on a non-directive role, strategically choosing when to observe and when to interact, thereby supporting the child's learning process without dominating it (Fisher, 2019).

Briggs and Hansen (2012) highlight that child-led learning contrasts with more structured educational approaches by prioritising children's interests over a rigid curriculum, with adults serving as facilitators rather than instructors. This constructivist approach gives children the agency to engage with learning materials at their own pace, driven by their intrinsic interests (Arnott, 2018). Mielonen and Paterson (2009) further explain that through play, children process experiences and manage complex emotions and scenarios in a symbolic and manageable form.

Chadwick and Webster (2010) argue that child-centred play enables practitioners to gain insights into children's developmental progress by observing and reflecting on their activities, which also empowers children to articulate and develop their ideas. These activities reflect the child's true passions and interests, providing a window into their cognitive processes and

learning goals (Fisher, 2019). Educators can adapt environmental factors or instructional strategies to better support the child's explorations, helping them refine their skills and apply their ideas effectively.

The advantages of child-centred play extend beyond academic outcomes to include improvements in self-esteem, confidence, motivation, and problem-solving, as well as social skills (Fisher, 2016; Wood, 2017). By allowing children to lead their learning journeys, educators create an educational experience that aligns with the developmental needs and interests of young learners, while also cultivating essential life skills such as problem-solving, communication, and collaboration. This approach is foundational in modern early childhood education, recognising the significant impact of respecting and nurturing individual learning paths in the formation of well-rounded, capable, autonomous individuals (Featherstone & Featherstone, 2013).

3.7.5. The Power and Importance of Play

Play is characterised by high levels of involvement, engagement, creativity, imagination and intrinsic motivation, without the pursuit of extrinsic goals. Brown (2018) highlights the severe consequences of play deprivation during the first decade of life, which can include poor self-control, adaptability issues, depression, unstable relationships, and a tendency towards addiction. Given its powerful and critical role in a child's development, play is essential across multiple domains

According to Pound (2011), play is instrumental in advancing language skills, emotional intelligence, creativity, and social capabilities. Cooper (2016) echoes this sentiment, noting that play enhances mathematical learning and contributes to identity formation. Mabagala and Mabagala (2012) further emphasise play's role in developing vocabulary, self-confidence, and problem-solving skills. For young children, physical activities like running and jumping allow them to explore their physical limits, while sensorimotor play encourages infants to actively engage with their environment, fostering early cognitive connections (Saracho & Spodek, 2008; Garvis et al., 2019).

UNICEF (2018) and Bodrova (2015) discuss the multifaceted impact of play, including its role in enhancing analytical thinking, problem-solving, scientific reasoning, and creativity. Play

also facilitates the development of essential social skills such as negotiation, conflict resolution, and empathy, all which contribute significantly to holistic development (Guldberg, 2009; Vasc & Lillard, 2020). Charles and Bellinson (2019) advocate for holistic play that addresses all aspects of child development - social, physical, and emotional, by creating a playful learning environment in preschool. Brown (2013) argues that play is “children's business”, serving as their primary way of discovering the world, enabling them to learn new ideas and gain experiences.

Some researchers caution against increased focus on direct instruction, arguing that it can be developmentally inappropriate, as children may be pushed to learn academic content beyond their developmental level, leading to disengagement. Instead, literature supports the effectiveness of play in establishing curricula that include writing, reading, science and mathematics (Kostelnik, 2008; Saracho, 2013).

The role of play in early childhood education is invaluable, offering a foundation for comprehensive development that academic instruction alone cannot provide. Play equips children with the skills necessary for academic success and adult life, fostering resilience, creativity, and a robust personality (Whitebread et al, 2017). By integrating play-based learning into early education curricula, educators ensure that children develop the cognitive, social, and emotional skills needed to navigate complex future challenges effectively. This holistic approach not only supports immediate developmental needs but aligns with the research objective to fostering entrepreneurial education in preschool children to support lifelong learning and adaptation (Pellegrini, 2011).

3.8. Reflective Practice

Reflective practice is a key element in early childhood education, enabling educators to continually evaluate and refine their teaching strategies to better support entrepreneurial skills in preschool children. This section inquires into reflective practice, focusing on its theoretical basis, application in educational settings, and specific adaptations for early childhood environments. By integrating reflective practice into daily activities, educators can significantly enhance their approaches to supporting the development of entrepreneurial mindsets in young learners (Kassean et al., 2015). This exploration highlights how reflective

practice empowers educators to innovate and adapt their teaching strategies to meet the dynamic needs of children.

3.8.1. Theory of Reflective Practice

Reflective practice is a foundational component of educational methodologies, enabling educators to critically analyse and enhance their professional practices, thereby improving educational outcomes and fostering a deeper understanding of the learning process (Mohamed et al., 2022). This section explores the theory of reflective practice, drawing upon the insights of influential theorists like Vygotsky, Piaget, Bruner, Argyris, Schön, and others.

Vygotsky's socio-cultural approach highlights how our interactions with the environment and cultural context shape learning processes, advocating for the integration of these influences in educational settings. Dewey (1981) further emphasises experiential learning, where reflection arises from engaging with real-world experiences, promoting intellectual curiosity and a responsive educational approach based on contextual understanding (Guile, 2010). These perspectives collectively establish reflective practice as a bridge between theory and practice, enhancing teaching methods and contributing to a more adaptable and insightful educational system.

Argyris and Schön (1989) describe reflective practice as a critical strategy for professional development, where behaviour change is a goal within professional practice dimensions. They emphasise that the learning objectives extend beyond mere acquisition of knowledge to include the development of ideas that enhance performance (Ghaye, 2010). Schön's framework integrates both reflection-in-action and reflection-on-action (Visser, 2010) allowing professionals to analyse and adapt their actions in real time and reflect post-experience for deeper professional growth (Visser, 2010). This dual approach emphasises situational awareness and the dynamic adaptation of strategies with professional knowledge, facilitating continuous learning through practical application (Visser, 2010; Brockbank & McGill, 2017).

Reflective practice also extends into transformative learning and critical awareness, serving as a powerful tool for both personal and educational development. Brookfield (1995) advocates using reflective practice to challenge dominant ideologies, incorporating multiple theoretical lenses to promote personal critical reflection, break dysfunctional beliefs, and foster self-

formation and emancipatory learning. Mezirow and Talyor (2009) further highlight transformation as a consciousness-raising process, enabling learners to become aware of their tacit assumptions and make more informed decisions. Similarly, Freire et al., (2016) emphasise the transformative power of reflection in developing critical consciousness. By examining and questioning existing values and beliefs, individuals become empowered, gaining a new self-awareness, leading to a dialogic and emancipatory approach to education. This critical disposition encourages educators to reflect on their assumptions, engaging in dialogues that enhance their educational practices.

By engaging in reflective practice, educators not only improve their teaching method but also contribute to a broader, more responsive educational system. This dynamic approach is key for nurturing environments that aim to foster entrepreneurial education among preschoolers.

3.8.2. Reflective Practice in Teaching

Reflective practice in teaching helps bridge the gap between theory and practical application in the classroom, ensuring that teaching strategies are not only effective but also adaptable to changing educational demands. By engaging in reflective practice, teachers develop a deeper understanding of their professional actions and decision-making processes.

Reflective practice involves critical self-assessment of one's teaching methods and decision-making. Unlike researchers, teachers often need to make quick, on-the-spot decisions based on their experiences and reflections on past practices (Mikk et al., 2010). This integration of theory with practice enables teachers to articulate why they teach in certain ways and how they can improve their methods.

Reflective practice empowers educators to actively analyse and question their teaching methods and underlying assumptions, leading to informed adjustments that enhance their practice. It helps teachers develop a coherent theory of practice that guides their daily interactions and instructional strategies (Ghaye, 2010). Without reflective practice, teachers risk falling into routine, potentially stagnating educational outcomes (O'Connor & Diggins, 2010).

When teachers encounter unique and challenging situations, reflective practice prompts them to think critically and devise effective solutions (Brookfield et al., 2019). Zeichner and Liston (2013) identify five key attributes of a reflective teacher: proactive problem-solving, questioning of personal values and assumptions, contextual awareness of the cultural and institutional settings, involvement in school change, and commitment to personal professional development.

Tajeddin and Watanabe (2022) discuss strategies to foster reflective practice among both novice and experienced teachers. They note that novice teachers rely more on academic texts and their belief systems, while experienced teachers draw extensively from their interactions within the school community. Effective reflective practice programmes incorporate a variety of strategies, including the analysis and critique of teaching methods, use of case studies, action research, ethnographic methodologies, and reflective writing, to enhance the reflective capacities of teachers (Marzano & Marzano, 2003).

Reflective practice is an indispensable tool for modern educators, crucial for adapting teaching strategies to meet the evolving needs of students and the educational landscape. By continually engaging in reflective practice, teachers not only improve their instructional techniques but also contribute to the overall quality of education, ensuring that it remains relevant, effective, and responsive to the diverse needs of learners.

3.8.3. Reflective Practices in Early Childhood Education

This section explores the application of reflective practices in early childhood settings, emphasising their role in transforming educational experiences and outcomes through continuous, thoughtful engagement. Reflective practice in early childhood education is fundamentally linked to action research, which aims to implement positive changes through critical reflection. O'Connor and Diggins (2002) argue that this process involves educators questioning their own beliefs and values, integrating personal experiences with new insights to inform their professional decisions.

Reflective practice extends beyond personal reflection to include a critical examination of broader social contexts, particularly in analysing power relationships and grounding practices in democratic values (Saric & Steh, 2017). The broader perspective encourages educators to

consider not just their immediate goals but the tangible context that drives significant improvements in teaching efficiency and learning outcomes. Macnaughton (2003) introduces six critical questions to help educators critically assess their assumptions and practices:

- Why do I do things this way?
- How do I understand things this way?
- How do I perceive those who benefit from my practices?
- Who is overlooked or marginalised in my practices?
- What are alternative approaches?
- Which alternatives promote fairness and equity?

This reflective process is dynamic and intellectually engaged, not only critiquing but also transforming knowledge, fostering an ongoing cycle of practice examination and adjustment. Educators, as Fayolle (2019) notes, play a transformative role by mentoring learners to develop competencies that reshape their worldviews and behaviours.

Effective reflective practice in early childhood education is characterised by seven key features (Parker-Rees & Rees., 2011 & Pollard, 2008):

1. Active focus on goals and their outcomes.
2. Continuous evaluation and adaptation of practices.
3. Informed judgments based on solid evidence.
4. Open-mindedness and responsiveness.
5. Ability to reframe practices through evidence-based reflection.
6. Engaging in dialogue with peers and external networks.
7. Flexibility to mediate external influences and challenge conventional practices.

Siraj-Blatchford et al. (2003) emphasise that educators who are conscious of cultural biases can better support children from diverse backgrounds, fostering an environment of responsiveness and respect. Such a culture avoids blame, focusing instead on continuous, constructive critique of everyday practices. This approach is supported by pre-service and in-service training programmes, which advocate for reflective practice as a critical learning tool (Macnaughton & Williams, 2008).

Furthermore, documenting children's activities serves as a reflective tool, that not only aids in understanding children's interactions with the world but also promotes teachers' professional development (Gueudet, 2019). Documentation helps educators develop, confront, and refine their educational strategies, transitioning learners from passive recipients to active constructors of knowledge (Pollard, 2014).

Reflective practice, thoroughly explored through its theoretical foundations, practical applications in teaching, and specific implementations in early childhood education, forms the basis for educators aiming to cultivate entrepreneurial skills in preschool children. This comprehensive approach enables educators to critically assess and refine their pedagogical strategies, ensuring that teaching methods remain aligned with the dynamic needs of young learners. The principles of reflective practice also highlight the importance of adaptive and engaging learning environments, which are vital for fostering creativity and problem-solving skills - key components of an entrepreneurial mindset. By integrating reflective practice with playful learning experiences, educators can create a rich variety of educational opportunities that encourage children to explore, innovate, and contribute meaningfully to their communities and the broader economy.

3.9. Conclusion

This exploration of Early Childhood Education and Care (ECEC) illustrates the important potential of early childhood educators in fostering entrepreneurial education in preschool children. By identifying strategies to nurture and support entrepreneurial competencies, the discussion provides valuable insights into cultivating these foundational skills from a young age.

As ECEC evolves in response to global, societal and economic changes, there is a growing need to prepare children for an ever-changing world. Educators are central to creating environments that promote curiosity, independence, resilience, and problem-solving - core elements of entrepreneurial thinking.

Integrating play and reflective practices within the curriculum can be considered essential for developing an entrepreneurial mindset. These methods, encourage exploration, experimentation, and reflection, which enhance creativity and problem-solving abilities, supporting the growth of entrepreneurial competencies.

The literature underlines the significant impact of high-quality ECEC on children's cognitive, social, emotional, and physical development. Entrepreneurial education in these settings can foster essential soft skills crucial for personal and professional success, contributing to societal and economic growth by cultivating innovative, forward-thinking individuals. However, challenges remain, including the need for stronger theoretical foundations, more critical perspectives, and longitudinal studies to track skills development over time. There is also limited research on practical frameworks and strategies for integrating entrepreneurial competencies into early childhood curricula.

In conclusion, the ECEC framework aligns with the goal of fostering entrepreneurial education in preschool children. By nurturing these skills early, educators can prepare children to contribute positively to society and the economy, equipping them for a successful and fulfilling future. This approach not only enhances the educational experience, but aligns with the needs of the modern economy, laying a strong foundation for the next generation of innovators and leaders. By fostering creativity, adaptability, and perseverance, educators can play a crucial role in building more inclusive educational systems and contributing to broader socio-economic development.

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Table 3.7. Chapter 3: Key Learnings, Gaps and Directions

| Source | Key Learnings | Gaps Identified | Key Directions Going Forward |
|---|--|--|---|
| Harju-Luukkainen et al. (2022) | Emphasises holistic development in ECEC, integrating educational and caregiving aspects. | Limited research on specific strategies that effectively integrate these aspects to foster entrepreneurial skills. | Develop and explore the effectiveness of holistic ECEC approaches in fostering entrepreneurial skills. |
| European Commission (2022) | Describes ECEC as critical for children's future educational trajectories and social integration. | Limited practical guidelines for implementing entrepreneurial education in ECEC settings. | Develop guidelines for integrating entrepreneurial education into ECEC frameworks. |
| OECD (2022) | Highlights the importance of inclusive and equitable access to quality ECEC systems. | Lack of studies linking ECEC quality indicators with entrepreneurial skills development. | Investigate the relationship between ECEC quality and the development of entrepreneurial competencies. |
| Wood (2020); UNESCO (2017) | Integrates childcare and preschool to support social, physical, emotional, and cognitive growth. | Needs assessment of how integrated approaches can be optimised for entrepreneurial education. | Assess and optimise integrated ECEC approaches for enhancing entrepreneurial education. |
| Rostgaard (2018), OECD (2017) | Quality ECEC defined by staff training and caregiver-to-child ratios. | Research gap on how staff qualifications affect the promotion of entrepreneurial skills. | Examine the influence of caregiver qualifications on entrepreneurial skill promotion in children. |
| Van Huizen & Platenga (2018) | ECEC sets the stage for lifelong learning and success. | Insufficient focus on how entrepreneurial education specifically contributes to lifelong learning. | Examine the specific contributions of entrepreneurial education to lifelong learning and success. |
| Taylor (2016); Clare-Steward & Allhusen (2005) | Focus on enriching experiences that stimulate development beyond the immediate environment. | Exploration needed on how enriched environments specifically contribute to entrepreneurial thinking. | Study the impact of enriched learning environments on fostering entrepreneurial thinking and capabilities. |
| Habidin et al. (2016); Khan et al. (2019) | Importance of creative thinking, active learning environments, and experiential learning in preschool. | More research required on effective pedagogical strategies and practical guidelines for fostering entrepreneurial thinking | Investigate and develop pedagogical strategies and guidelines that enhance creative and entrepreneurial thinking in preschool |
| Whitebread et al. (2015) | High-quality ECEC significantly impacts children's holistic development. | Research gap on how entrepreneurial education can enhance these impacts further. | Study how incorporating entrepreneurial education into high-quality ECEC programmes affects holistic development. |
| Clarke-Stewart & Allhusen (2005); Fisch & Gunzenhauser (2010) | Discusses the dual role of childcare in care and educational development. | Insights needed into how dual roles can be effectively used to encourage entrepreneurial traits. | Explore effective strategies for utilising the dual roles of childcare to foster entrepreneurial traits. |
| NCCA (2009); Moloney (2018) | Aistear curriculum emphasises sociocultural learning, essential for entrepreneurial education. | Limited empirical evidence on the effectiveness of sociocultural approaches in fostering entrepreneurial mindset. | Evaluate the effectiveness of sociocultural curricula in developing entrepreneurial mindsets. |
| Ellis (2012) | Addresses changing pedagogical practices and demographics in ECEC. | Gap in understanding how these changes affect entrepreneurial education. | Study how changes in pedagogical practices influence entrepreneurial education outcomes. |
| Axelsson et al. (2015); Leffler (2014) | Research on specific entrepreneurial competencies and ongoing studies in early education settings. | Comprehensive strategies for integrating these competencies into preschool curricula are lacking. | Develop and test integration methods for entrepreneurial competencies in preschool curricula. |

Source: Authors Own

CHAPTER 4
EARLY CHILDHOOD EDUCATION AND CARE
IN IRELAND

4.1. Introduction

With its robust early childhood education and care (ECEC) frameworks, presents a unique context for integrating entrepreneurial education into this sector. This chapter delves into how Irish policies, curricula, and educational frameworks such as Aistear and Síolta not only support but actively foster the development of entrepreneurial skills among preschool children. Through a detailed examination of national schemes, educator roles, and specific educational settings, this analysis aims to explore the nuanced ways in which early childhood educators in Ireland could enhance their practices to prepare children for a dynamic world. This exploration is crucial for constructing a comprehensive understanding of the strategies in place and for proposing innovative approaches to integrate entrepreneurial education effectively within the Irish ECEC landscape.

4.2. Early Childhood Education and Care (ECEC) – The Irish Context

The early childhood education and care sector in Ireland is a crucial component of the country's educational infrastructure, supporting children from infancy through to school age. Governed by various initiatives and programmes, this sector aims to enhance the quality, accessibility, and affordability of early learning and childcare services. Ireland's commitment to innovative educational practice is reflected in its national policies, curriculum standards, and educational programmes, including the Irish National ECEC Curriculum – Aistear, the Síolta standards framework, and the Early Childhood Care and Education (ECCE) Scheme.

In January 2024, the Department of Children, Equality, Disability, Integration, and Youth (DCEDIY) introduced a new online hub featuring a series of interactive dashboards that present data on the early learning and childcare sector (DCEDIY, 2024). This initiative replaces the traditional 'Annual Early Years Sector Profile Report' with a more accessible and innovative tool designed to improve user experience. Although the design of these dashboards is still ongoing and the latest statistics are not yet fully available, this shift reflects Ireland's broader effort to enhance educational outcomes through technological advancements in data reporting.

Table 4.1. provides a valuable snapshot of the early childhood education sector in Ireland, illustrating the capacity, reach, and scope of government-supported programmes. Based on the

most recent publicly available data as of June, 2023, this information is crucial for understanding the landscape within which entrepreneurial education could be integrated.

Table 4.1. Key Statistics for the Early Years Sector (2020/2021 vs 2022/2023)

| Category | 2022/2023 | 2020/2021 |
|------------------------------|--|-----------|
| Service Providers | 4,483 service providers delivered at least one DCEDIY funded programme or scheme, 48 more than the same day in 2022. | 4,022 |
| Core Funding Participation | 95% of service providers participated in Core Funding ⁷ in 2022/23, 87% delivered the Early Childhood Care and Education (ECCE) pre-school programme, and 77% provided the National Childcare Scheme ⁸ (NCS). | - |
| ECCE Programme Participation | 87% | 89% |
| NCS Participation | 77% | - |
| Total Enrolment | Over 213,000 children were enrolled in early learning and childcare services across the country in 2022/23, an 8% increase from the previous year. | 104,612 |
| Sector Capacity | The total estimated capacity of the sector in 2022/23 was over 243,000, a 6% increase from the previous year. The highest growth in capacity was for school-age childcare, with a 25% increase for children aged 4 to 6 years and a 20% increase for those aged 6 years and older. | 220,500 |
| ECCE Enrolment | 108,616 children were enrolled in the ECCE scheme, supported by 3,879 providers across Ireland. | 104,612 |

Sources: *Department of Children, Equality, Disability, Integration, and Youth (DCEDIY), (2023) and Pobal Annual Early Years Sector Profile Report (2020-2021)*

The data presented in Table 4.1 showcases significant growth and engagement within Ireland's early childhood education sector. The increase in service providers, child enrolment, and sector capacity between the 2020/2021 and 2022/2023 programme years demonstrates the sector's robust development. This upward trend suggests Ireland's ECEC sector is not only healthy but also well-positioned to incorporate new educational paradigms, such as entrepreneurial education. As the sector continues to grow, the opportunity to influence educational outcomes through early interventions that cultivate an entrepreneurial mindset become increasingly viable.

⁷ Paid directly to Early Years providers, Core Funding is intended to improve affordability, quality, inclusion and sustainability.

⁸ The National Childcare Scheme (NCS) is a scheme launched by the Irish government in 2019, that provides financial support to help parents to meet the costs of childcare.

4.3. The Early Childhood Care and Education (ECCE) Preschool Scheme

From 3 years onwards the evidence is consistent that preschool provision is beneficial to educational and social development for the whole population (Van Huizen & Platenga, 2018). Established in 2010, the Early Childhood Care and Education (ECCE) Scheme is a universal, free preschool programme in Ireland that provides early learning opportunities to all eligible children. Initially offering one year of funded preschool, the ECCE scheme was extended in 2016 to provide up to two years, allowing children to begin their ECCE placement at age three and continue until they transition to primary school. This extension aligns with children's developmental stages and educational needs, reflecting the Irish government's commitment to supporting early childhood education.

The ECCE programme is available for all children between the ages of 2 years 8 months and 5 years 6 months, running for 3 hours per day, 5 days a week, over 38 weeks each programme year (DCEDIY, 2023). The programme is particularly focused on foundational learning and socialisation skills, preparing children for the academic challenges of primary school as well as for broader social and personal development.

Ensuring high-quality educational experiences is a central focus of the ECCE scheme. All participating childcare services are required to adhere to the national frameworks for early years care and education, specifically *Síolta*, the National Quality Framework, and *Aistear*, the National Curriculum framework. These frameworks emphasise child-centred participation and learning, guiding educators to create environments that foster inquisitiveness, exploration, and creativity (NCCA, 2009).

Table 4.2. Key Statistics for the ECCE Programme (2020/2021 Programme Year)

| | |
|---|--|
| Children Enrolled | 104,612 children |
| Number of children benefiting for the first year of ECCE programme | 58,874 |
| Number of children benefiting for the second year of ECCE programme | 45,738 |
| Service Providers | 4,022 services delivered the ECCE programme, with a distribution of 983 community and 3,039 private services, reflecting a 9% decrease from the previous year. |
| Community Services | 983 |
| Private Services | 3039 |
| Value of Programme | €297,291,187 |
| Staff Demographics | 98% of staff were female |
| Staff Qualifications | 14% of staff held a Level 7 qualification |
| Average Hourly Rate | €12.60 |
| Annual Staff Turnover | 19% |

Source: *Pobal Annual Early Years Sector Profile Report (2020-2021)*

Table 4.2 provides a detailed breakdown of the ECCE programme for the 2020/2021 programme year, highlighting key metrics such as child enrolment, the number of service providers, and staff qualifications. The data illustrates the scheme's broad reach, with over 104,000 children enrolled and substantial financial backing of nearly €300 million. The ECCE scheme's engagement with both community and private service providers, as well as its focus on qualified staff, underline its role in delivering high-quality early education across Ireland.

The ECCE scheme's structured curriculum, qualified staff, and increased funding ensure that young learners receive a strong educational foundation. This initiative not only prepares children for the academic demands of primary school but also plays a crucial role in their social and personal development. By laying the groundwork for lifelong learning and adaptability, the ECCE scheme exemplifies Ireland's commitment to early childhood education.

4.4. Early Childhood Education and Care Policy

Since Ireland signed the UN Convention on the Rights of the Child in 1992, the country has progressively refined its approach to Early Childhood Education and Care (ECEC), with a strong focus on safeguarding children's rights and meeting their developmental needs. The commitment has led to the establishment of key policies and frameworks designed to create a high quality early education system. This review examines the evolution of these policies, tracing significant milestones and the development of key components such as Aistear, Síolta, and the ECCE scheme.

Ireland's formal commitment to the rights of children in 1992 marked the beginning of a concerted effort to enhance early education and care in the years that followed, foundational policies were developed to structure and improve the ECEC landscape, laying the groundwork for a system that supports both educational excellence and child well-being.

- *1998 - 2002 initiatives*: the establishment of the National Forum on Early Childhood Education in 1998, and the Centre for Early Childhood Development and Education (CECDE) in 2002 catalysed the coordination of ECEC policies and practices, encouraging a focus on quality and comprehensive care.
- *National Childcare Strategy (1999) and National Children's Strategy (2000)*: these documents are pivotal in defining the Irish government's role in child care, emphasising the needs and rights of children (Hayes, 2010), quality and accessibility (Moloney, 2014).
- *The National Voluntary Childcare Collaborative (1999)*: comprising of seven non-governmental agencies, the National Voluntary Childcare Collaborative (NVCC) was established to promote ECEC in Ireland.
- *The Ready to Learn (White Paper) (1999)*: this ECE White Paper sets out government policy relating to ECE. The key theme of the report was quality of provision, and its findings led to the development of the Child Care Preschool Regulations, and the Aistear and Síolta frameworks.
- *The Child Care Preschool Regulations (2006)*: this framework provides clear guidelines for service providers, outlining a standard of care and education for children aged 0-6.

- *Siolta (2006)*: launched by the Centre for Early Childhood Development and Education (CECDE), *Siolta* is the National Quality Framework and Quality Assurance Programme (QAP) for ECEC in Ireland. It focuses on enhancing the quality of early childhood settings through a structured and standardised approach.
- *Aistear (2009)*: the NCCA introduced *Aistear*, the Early Childhood Curriculum Framework in 2009, which guides educators in supporting children's early learning and development through play-based and thematic experiences.
- *ECCE Scheme (2010)*: the Early Childhood Care and Education (ECCE) scheme provides two years of free early education for children before they begin primary school, aiming to provide an equitable start for all children.
- *Better Outcomes Brighter Futures (2014)*: this policy framework set forth initiatives up to 2020, aiming to enhance outcomes across health, education, and social sectors for young children.
- *Tusla (2014)*: the Child and Family Agency was established to improve the safety and well-being of children in Ireland.
- *AIM (2016)*: AIM (Access and Inclusion Model) creates a more inclusive environment in preschools, so that all children, regardless of ability, can benefit from quality early learning and care.
- *Better Start (2016)*: this initiative was launched to promote and enhance inclusive high-quality Early Learning and Care for children from birth to six years of age in Ireland.
- *First 5 Strategy (2018)*: building on previous frameworks, this government strategy focuses on supporting children from birth to age five in various components - including health, development, and learning. Recent updates aim to integrate more comprehensive supports for childminding and parental involvement.
- *Young Ireland (2023) and Together for Better (2023)*: these recent initiatives continue to build on the foundational aims of previous policies, focusing on rights, well-being, and holistic development from birth to 24 years, with an emphasis on accessibility, affordability, and quality in ECEC services.
- *First 5 Strategy Updates (2023)*: recent updates to the First 5 strategy include a focus on parenting support, child health, and early learning reforms aimed at improving the quality of childcare services and education.

The evolution of early childhood education and care policy in Ireland reflects a growing recognition of the developmental needs of young children and the importance of structured, quality early education. From foundational policy frameworks to contemporary strategies, Ireland's ECEC environment has been shaped by a dedicated effort to improving the educational outcomes and overall well-being of its youngest citizens. A notable demonstration of this dedication is the 8% increase in funding, amounting to an additional €83 million, allocated to early learning and childcare in the 2024 budget (DCEDIY, 2023). This increase reflects Ireland's commitment to keeping its policies adaptive and responsive to the evolving needs of children and their families.

4.5. The Irish National Curriculum and Quality Frameworks in ECEC

Aistear and Síolta are foundational frameworks within Ireland's early childhood education system, each playing a crucial role in shaping the quality of education for young learners from birth to six years. Aistear focuses on the curriculum, providing a child-centred approach to learning through play and interaction, while Síolta establishes the quality standards necessary for educational settings to ensure an environment conducive to effective early learning.

- Aistear: The Early Childhood Curriculum Framework

Introduced by the National Council for Curriculum and Assessment (NCCA) in 2009, *Aistear* centres on creating quality learning experiences for children from birth to six years. Aistear, the Irish word for 'journey', is implemented in early childhood education and care (ECEC) settings throughout Ireland (Woods et al., 2022). Recognising and respecting the rights and needs of every child, the curriculum outlines the dispositions, values, attitudes, skills, knowledge and understanding vital for young children, offering a framework on how learning might be nurtured (Egan, 2020).

The curriculum encourages ECEC educators to plan and provide enjoyable, challenging learning experiences, allowing all children to grow and develop as competent and confident learners (NCCA, 2009). Aistear guides learning and development through 12 principles and four interconnected themes: Well-Being; Identity and Belonging; Communicating; and Exploring and Thinking. These themes emphasise a holistic approach to early childhood

education, addressing children's social, emotional, physical, and cognitive needs (NCCA, 2009).

Aistear is recognised for its flexibility and adaptability, allowing educators to tailor educational experiences to diverse learning environments and individual needs, laying important foundations for later learning (Egan, 2020; NCCA, 2009; McMonagle, 2012; French, 2013). While the curriculum does not directly include entrepreneurship or enterprise education, its structure supports the integration of these concepts through its emphasis on exploration, creativity, and problem-solving.

- **Síolta: The National Quality Framework**

Established in 2006 by the Centre for Early Childhood Development and Education (CECDE), Síolta defines, assesses, and supports the enhancement of quality across all aspects of early childhood care and education. The framework is built on 12 principles, including pedagogy, the rights of the child, equality and diversity, health and welfare, play, and community involvement, with 16 quality standards translating this vision into practice (CECDE, 2006; Duignan et al., 2007). These standards are actionable and measurable, providing a clear pathway for continuous improvement in early childhood education services (CECDE, 2006).

Both Aistear and Síolta are designed to be complementary, with Aistear focusing on curriculum development and Síolta on quality standards. Together, they provide a robust structure for delivering high-quality early education, ensuring that practices remain relevant and impactful in a changing educational environment. The implementation of these frameworks involves continuous assessment and adaptation to meet the evolving needs of children, supporting their holistic development.

Aistear and Síolta collectively offer a comprehensive approach to early childhood education in Ireland, emphasising a child-centred, play-based learning environment underpinned by rigorous quality standards. This dual framework not only prepares children for the transition to formal schooling but also lays down the foundational skills necessary for lifelong learning. For educators and policymakers, understanding and implementing these frameworks is crucial for

fostering an environment that nurtures the development of competent, confident, and caring children.

4.6. Entrepreneurial Education and the Aistear Curriculum

The connection between the Aistear curriculum and entrepreneurial education can be explored through the lens of fostering entrepreneurial mindsets and skills in preschool children. This aligns with global educational trends emphasising the importance of nurturing key competencies such as innovation, problem-solving, and self-efficacy from an early age.

Aistear (NCCA, 2009) promotes holistic development through its four interconnected themes - Well-being (focusing on children's health and emotional well-being), Identity and Belonging (encouraging children to develop a sense of who they are and feeling that they are valued and respected), Communicating (covering all forms of communication including language, gestures, signs, and symbols), and Exploring and Thinking (emphasising curiosity, inquiry, and creativity - encouraging children to make sense of the world around them). These themes are subconsciously, intrinsically linked to the foundational aspects of entrepreneurial education. For example, the theme of 'Exploring and Thinking' encourages active learning, critical thinking, and problem-solving, which are essential components of an entrepreneurial mindset. Entrepreneurial education in early childhood settings also involves encouraging initiative, resource management, and the development of autonomy and accountability. Aistear's focus on 'Identity and Belonging' supports this by helping children build confidence and a sense of competence, both crucial for entrepreneurial endeavours.

Research supports the integration of entrepreneurial education within established curricula. Moberg (2014) argue that early exposure to entrepreneurial concepts enhances adaptability and innovation in later life. Empirical studies further suggest that entrepreneurial education at a young age fosters a proactive attitude and creative problem-solving skills (European Commission, 2016).

On a policy level, NCCA guidelines for Aistear provide frameworks and examples of how early childhood settings can incorporate economic literacy and entrepreneurial skills within the existing curriculum themes. Activities like role-playing a mini-business or market can

introduce children to economic concepts and the value of goods and services - foundational aspects of entrepreneurial education.

Incorporating these elements into the Aistear curriculum enriches the learning experience and aligns with broader educational goals aimed at preparing children for a dynamic and complex global economy. Systematic inclusion of entrepreneurial education within early childhood frameworks like Aistear supports the development of traditional academic skills while fostering soft skills and attitudes crucial in today's fast-paced, innovation-driven world.

4.7. Early Childhood Educator CPD in the Irish Context

Continuing Professional Development (CPD) plays a crucial role in enhancing the competencies and professionalism of educators in Ireland, particularly within the context of entrepreneurial education. CPD not only updates educators on the latest pedagogical strategies and industry standards but also supports the implementation of innovative teaching practices, fostering a proactive and adaptive educational workforce.

Research highlights the significant impact of professional development on educators' ability to adopt new behaviours and integrate entrepreneurial concepts into early childhood education (Torres & Weiner, 2018; Foliard et al., 2018). Ruskovaara and Pihkala (2014) emphasise the importance of diverse educational levels in shaping entrepreneurial training. In Ireland, CPD for early childhood educators is supported by several frameworks and initiatives aimed at continually enhancing professional skills and knowledge. The National Childhood Network (2021) and regulations under the Childcare Act (1991) advocate for continuous professional development, ensuring educators engage in ongoing learning to maintain and enhance their professional qualifications and stay updated on modern teaching methods.

Quality in early childhood education and care heavily depends on competent staff, where the concepts of 'care' and 'education' are interdependent (UNESCO 2022, 2010; European Commission, 2011; European Commission/EACEA/Eurydice/Eurostat, 2014). The importance of CPD is further supported by The Effective Preschool Provision Education Study (Sylva et al., 2004) and The European Quality Framework for ECEC (European Council, 2019), both of which indicate that professional development significantly impacts staff pedagogy and children's outcomes. Participation in high-quality ECEC supports children's cognitive, social,

emotional, and self-regulatory development, with benefits extending beyond early childhood (OECD, 2021). This highlights the necessity for educators to engage in ongoing professional development and work within supportive environments.

The Irish Department of Education and Skills Statement of Strategy 2023-2025 underlines the importance of CPD by committing to enhancing teaching through continuous professional learning. The strategy is dedicated to ensuring that all children and young people have access to a positive learning experience, which facilitates them in realising their full potential and contributing to Ireland's social, economic and cultural development. Strategic goal 1 of this document emphasises supporting high-quality education and improving the learning experience for all students.

Professional learning and development for early childhood educators is increasingly recognised as pivotal in supporting curricula that are socially and culturally relevant to children. (Johnston et al., 2020). The Starting Strong VI Report (OECD, 2021) explains that ECEC educators require comprehensive initial education, ongoing professional development, and supportive working conditions to engage effectively in high-quality interactions and innovate within their sector. Woods et al. (2022) argue that to meet the lofty expectations set out in Aistear, ECEC educators require extensive education. Research indicates that participating in enterprise education during initial teacher education increases awareness and receptiveness to entrepreneurial education (Tiernan & Deveci, 2021).

Despite structured CPD initiatives, challenges remain, such as the historical undervaluing of early childhood education as a professional sector in Ireland. However, this is gradually changing, with the introduction of new qualification requirements and criteria for ECEC educators, which aim to enhance the quality and consistency of education. Manning et al. (2019) identify ECEC educators' initial professional education as a strong predictor of the quality of interactions within ECEC settings. The OECD (2021) also emphasises the importance of professional development strategies, including CPD and onsite learning opportunities, to ensure high-quality interactions and to build a foundation for quality education.

The CoRe report (Competence Requirements in Early Childhood Education & Care) (Urban et al., 2012) highlights the importance of good-quality early childhood institutions for children's educational attainment and life-long learning. At the core of professional competence lies the ability to connect knowledge, practice and values through critical reflection. As ECEC educators increasingly work in complex and changing contexts, it is crucial for them to continually reflect on and adapt their practices. Competent systems, which include collaboration between individuals, teams and institutions, as well as competent governance at the policy level, are essential. Such systems build on staff's initial education and CPD, providing regular opportunities for collaborative reflection on ideas and practices.

The role of CPD in entrepreneurial education is particularly significant, integrating both formal and informal learning experiences tailored to the contextual needs of schools and external collaborations. These dynamic training environments are essential for fostering entrepreneurial schools that promote innovation, creativity, and problem-solving skills among young learners (OECD, 2014; Srinivasacharlu, 2019; EU, 2019).

Sumison et al. (2015) identify the need for professional learning models that encourage critical thinking and the evaluation of beliefs and practices. Johnston et al. (2020) argue that the skills and experiences of early childhood educators should be continuously built upon with professional learning approaches that respond to specific early learning contexts. Penaluna et al. (2015) propose that for educators to engage effectively in creativity, innovation, and opportunity recognition, neurological functionality should be understood, which aligns with neuroscience literature emphasising learning abilities in babies and children.

Researchers, experts and policy makers agree that the quality of ECEC and its outcomes depend on competent staff (Peters et al., 2018). The European Quality Framework for ECEC states that recognising the ECEC workforce as professionals is key. Practitioner inquiry as a professional learning strategy acknowledges educator autonomy and capabilities in contextually relevant ways (Groundwater-Smith & Campbell, 2013) and is most effective when it is collaborative and responsive to the skills and experiences that educators bring with them (Carter & Fewster, 2013). Structured CPD initiatives enable educators not only to refine their skills and broaden their knowledge but also to enhance their capability to foster entrepreneurial mindsets among

young learners. This preparation is crucial for empowering the next generation to thrive in a complex global environment, emphasising the importance of continuous learning and adaptation among educational professionals.

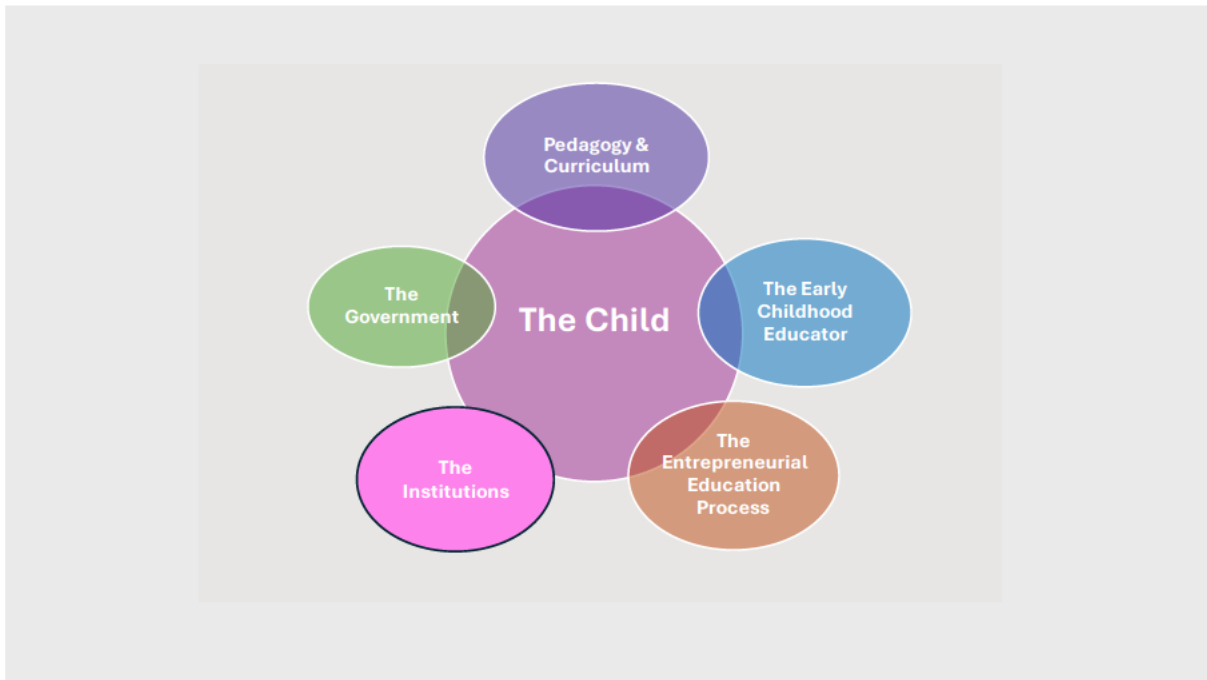
4.8. Conceptual Model

Building on a review of the literature, which highlighted a significant lack of research, engagement, and practice in the area of entrepreneurial education within the early childhood education and care (ECEC) sector, this study has developed a working conceptual framework (Figure 4.1) for Entrepreneurial Education in ECEC. This framework aims to address the gaps between these two areas of education, by proposing a structured approach to integrate entrepreneurial concepts into early childhood settings.

The framework is adapted from the entrepreneurship education conceptual framework developed by Jones and Matlay (2011) which identifies five major elements that collectively contribute to a greater understanding and appreciation of entrepreneurship education. In line with the research objectives of describing what entrepreneurial education in early childhood settings encompasses and determining how preschool educators can nurture and support the development of entrepreneurial competencies in children, this study adapts these elements to include pedagogy, curriculum, and a key educational partner – government.

The resulting model presents a initial framework specifically tailored for entrepreneurial education in the context of preschool, intended for implementation across all children partaking in Ireland's ECCE preschool scheme. This framework directly aligns with the research question: *'how do early childhood educators foster entrepreneurial education in preschool children?'* and provides a practical structure for integrating entrepreneurial principles within early childhood education.

Figure 4.1. *The early Entrepreneurial Education (eEE) Framework*



Source: *Adapted from Jones and Matlay (2011)*

- **The Child**

Entrepreneurial education is fundamentally rooted in a philosophy of student-centeredness, which aligns closely with the child-led, child-centred pedagogical approaches foundational to early childhood education (Matlay, 2006; Jones & English, 2004; Bell & Bell, 2016; Robinson et al., 2016; Bell, 2020; Fiet, 2001). This alignment is particularly evident in the Aistear curriculum, which emphasises the importance of placing the child at the centre of the educational experience (NCCA, 2009, 2023; Woods et al., 2021). Building on this alignment, the proposed conceptual framework positions the child as the central element, linking all other components of the framework to the child’s development of an entrepreneurial mindset.

The existing literature on both entrepreneurial education and early childhood education highlights the importance of a child-led approach to learning. As previously discussed, this approach not only supports autonomy and engagement but also aligns with the holistic development goals outlined in early childhood education frameworks (Jarvis, 2005; Woods, 2017; Fisher et al., 2021). By drawing from the established principles of Aistear and

sociocultural theory, this framework integrates entrepreneurial education into early childhood settings, offering a novel approach to fostering entrepreneurship from a young age.

The framework also draws on socio-cultural theory and social constructivism, both of which emphasise the importance of social interactions and cultural contexts in learning (John-Steiner & Mahn, 1996; Brandsford et al., 2000; Aminah & Asl, 2015). As noted in the literature review, these theories suggest that learning is an ongoing process that builds upon prior knowledge and experiences - an idea that resonates with the Piagetian-inspired holistic approach to education. This holistic approach is particularly relevant as it connects entrepreneurship and enterprise education with early childhood education and care, *'encompassing the development of a rich understanding of the world through active, hands-on, experiential, child-centred processes'* (Egan, 2020, p.23).

Researchers have pointed out the similarities between entrepreneurial education and constructivist education, further supporting the integration of these concepts within early childhood frameworks (Löbler, 2006). By viewing children not merely as learners but as active participants in their own development (Jones & Matlay, 2011), this framework for entrepreneurial education in early childhood settings emphasises the potential role of educators in fostering an environment where entrepreneurial thinking can thrive.

Each element of the framework is intrinsically linked, and for entrepreneurial education to be effectively introduced at the pre-school level, every element plays a pivotal role in the process.

- Pedagogy & Curriculum

Pedagogy in early childhood education is fundamentally concerned with creating environments that support holistic child development, where learning strategies are designed to allow children to acquire knowledge and skills within specific material and social contexts (Siraj-Blatchford et al., 2002; Gupta, 2015). This approach aligns closely with the principles of entrepreneurial education, which also emphasises learner-centred, inquiry-based instruction (Matlay, 2006; Jones & English, 2004). Integrating entrepreneurial learning into early childhood settings, particularly through the Aistear curriculum, offers a unique opportunity to cultivate entrepreneurial skills from a young age (NCCA, 2009, 2023).

Child-centred instruction, as extensively discussed in the literature, underlines the importance of allowing children to explore their interests at their own pace, with educators serving as facilitators rather than direct instructors (Jarvis, 2005; Woods, 2017). This method is particularly effective in fostering critical thinking, creativity, and problem-solving - key competencies in entrepreneurial education (Arnott, 2018). Such an approach supports both academic learning and the preparation of children to adapt to future challenges, reflecting broader goals of entrepreneurial education.

Research has consistently shown that child-led play and learning are instrumental in developing essential competencies such as self-efficacy, resilience, and social skills - traits closely aligned with entrepreneurial mindsets (Lackéus, 2015).

This alignment between early childhood pedagogy and entrepreneurial education is not just theoretical but practical, as demonstrated by the effective incorporation of child-led learning within the Aistear framework. The focus on play-based, experiential learning within Aistear naturally supports the development of entrepreneurial traits such as creativity, initiative, and problem-solving abilities, ensuring that the educational experience is both developmentally appropriate and forward-looking.

- The Early Childhood Educator

While the child is central to entrepreneurial education in early childhood settings, educators play a critical role as the bridge between concept and practice (Sumitra et al., 2021). They are responsible for creating learning environments that encourage children to explore, experiment, and develop essential entrepreneurial competencies (Sullivan & Glanz, 2009).

Observation enables educators to assess progress and tailor learning experiences, aligning with Bandura's social learning theory, which emphasises modelling as a key educational tool. Children learn by observing and imitating others, and effective scaffolding supports them in achieving tasks they cannot complete alone, enhancing their understanding and problem-solving skills (Bandura & Walters, 1977; Allen & Cowdery, 2015; Bodrova & Leong, 2018).

Vygotsky's concept of the zone of proximal development (ZPD), already highlighted in the literature, is essential not only for children's learning but also for educators' professional growth. Just as children benefit from guidance to reach their full potential, educators can advance their pedagogical skills through continuous professional development within their own ZPD - supported by peers and ongoing learning opportunities (Blanton et al., 2005). This development is essential for integrating entrepreneurial education into early childhood settings, ensuring educators remain innovative (Johnston et al., 2019; Sumison et al., 2015).

To address the existing gap in entrepreneurial education among early childhood educators, targeted and collaborative CPD strategies are necessary. These strategies should be responsive to educators' current skills, thereby enhancing the quality and impact of entrepreneurial education in preschool environments (Groundwater-Smith & Campbell, 2013; Carter & Fewster, 2013).

- The Entrepreneurial Educational Process

Entrepreneurship and its pedagogical approaches are defined in various ways (Fayolle & Gailly, 2008; Lackéus, 2015), making it challenging to determine the most effective methods for integrating entrepreneurial teaching in preschool. However, adopting a 'teaching through entrepreneurship' approach has broad applicability, extending from preschool children within the ECCE scheme to the educators themselves (Lackéus, 2015; Smith et al., 2006; Handscombe et al., 2008). This approach can foster essential attributes such as creativity, engagement, and societal value creation from an early age (Lackéus, 2015).

While progression models exist to support learning outcomes and pedagogical strategies across different educational levels (Lackéus, 2015; Gibb, 2008; Blenker et al., 2011; Mahieu, 2006), there is an opportunity to extend these models to pre-primary education. This stage, as supported by research, is crucial for embedding entrepreneurial learning in a child-centred manner (Gibb, 2008; Blenker et al., 2011). An entrepreneurial approach, adaptable to different educational contexts, is vital for fostering an entrepreneurial mindset that supports various outcomes, including economic growth and social change (Blenker et al., 2011; Lackéus, 2015).

- Educational Institutions

Entrepreneurship education within Early Childhood Education (ECE) undergraduate courses in Irish Higher Education Institutions (HEIs) remains limited. Ndou et al. (2019) note that most courses focus on the ‘for entrepreneurship’ approach, emphasising new venture creation, self-employment, and enterprise development (Fayolle & Gailly, 2008; Mahieu, 2006). A review of entrepreneurship modules in Ireland identified approximately 400 modules across 26 institutions, supported by 22 Centres for Enterprise and Innovation (Cooney & Murray, 2008). However, within ECE undergraduate programmes, only four modules across three institutions specifically address entrepreneurship, primarily targeting students interested in opening and running their own early years settings.

As communities evolve, so too can the role of entrepreneurship education, with expanded engagement from local communities enhancing a holistic approach (Jones & Matlay, 2011). Collaboration with businesses, universities, families, and youth organisations is key to positioning schools as learning organisations (EPPN, 2020). Early education services also play a crucial role in fostering social cohesion and inclusion, contributing to learning to live together in diverse societies (European Council, 2019).

- The Government

The European Commission contend that high-quality early childhood education and care lays the foundations for future success in education, well-being, employability and social integration. By 2030, the European Union aims for at least 96% of children between 3 years old and the starting age for compulsory primary education to participate in ECEC.

The European Commission’s 2015 report, ‘Entrepreneurship Education: A road to success’, examined 91 studies from 23 countries evidencing that entrepreneurship education works. It emphasises that being entrepreneurial is not just about starting and running new ventures, but involves creativity, innovation, risk-taking, and the ability to turn ideas into action – skills applicable in all areas of life, including organisations, society, and personal contexts.

Supporting this, the Entrepreneurship Forum Report (Department of Business, Enterprise and Innovation, 2014), advocates for creating an innovative ‘can do’ culture. The 2006 European

Commission and Norwegian Government Conference on ‘Entrepreneurship Education in Europe: fostering mind-sets through Education and Learning’ highlighted international evidence that students exposed to entrepreneurship education excel in life skills, work skills, academic performance, and employability. *‘The primary goal of entrepreneurship education is not to get everyone to start their own business but to give our young people the ability to think positively, to look for opportunities to make things happen, to have self-confidence to achieve their goals and to use their talents to better society (economically and socially)’* (p.16).

However, The Eurydice Report: Entrepreneurship Education at school in Europe Report (2016) reveals that 75% of EU countries lack strategic recommendations on entrepreneurship education in relation to initial teacher education (ITE). The report suggests that focused and specific entrepreneurship education strategies offer *‘a more coherent and comprehensive approach to supporting entrepreneurship education’*, (Eurydice Report, 2016, p.10).

In Ireland, discussions on embedding entrepreneurship in education are on-going (Entrepreneurship 360, 2015). While entrepreneurship education is recognised as a cross-curricular objective at primary and secondary school level, it is not an objective of preschool education. The European Council Recommendations on High-Quality Early Childhood Education and Care Systems (2019) evidence that children create the foundation and capacity to learn throughout life. Importantly learning is an incremental process; building a strong foundation in the early years is a precondition for higher level competence development and educational success. Participating in early childhood education and care benefits individuals and society, leading to improved educational attainment, labour market outcomes, and more cohesive societies.

- Conclusion

This framework builds on Jones & Matlay’s vision, suggesting that entrepreneurship education now needs to be viewed from the preschool child’s perspective. The nature of entrepreneurial learning demands a broadening of the curricula. Learning outcomes are designed around choice (Jones & Matlay, 2011, p. 700). Entrepreneurship education can be made part of all areas of curricula if teachers’ entrepreneurial competencies are developed (EEPN, 2020). Building

relationships and creating professional networks could play an integral role in early childhood entrepreneurial education becoming a reality.

The Entrepreneurship Competence Framework (EntreComp) (Bacigalupo et al., 2016) offers a valuable foundation for framing entrepreneurial skills in early childhood education, providing comprehensive competence areas, developmentally appropriate competencies, a progression model, learning outcomes, integration with existing curricula, and opportunities for professional development. Educators have an opportunity to adapt the EntreComp to focus on fostering creativity, problem-solving, teamwork, and communication in young children through engaging activities and assessments. By aligning the framework with curriculum goals and utilising its structured approach, educators could create a supportive learning environment that nurtures entrepreneurial competencies in preschoolers.

Understanding the intertwined relationships of the educators, the process, education institutions, government, pedagogy and curriculum, and the child, may encourage the emergence of purposeful relationships and a bridge between all stages of entrepreneurial education progression. What will make entrepreneurial education in early childhood education successful and effective is an understanding and appreciation of the value and importance of the early childhood education and care sector, and its prominence as the first step in formal education. Stakeholders, including entrepreneurship and early childhood educators and policymakers, must be cognisant of the learning abilities of this cohort of learners and open to the wide interpretation of entrepreneurial learning and its values. Jones & Matlay (2011) challenged future researchers to become active in the development of a shared teaching philosophy for entrepreneurship education. *'Defending our teaching space, becoming fascinated by the way we approach entrepreneurship education, will allow us to become masters of our own destiny'* (Jones & Matlay, 2011, p.702). This proposed framework accepts the challenge, to extend this philosophy to early childhood education.

4.9. Conclusion

This chapter explores the pivotal roles of Irish national curricula, particularly Aistear and the quality framework Siolta, when considering the integration of entrepreneurial education within early childhood settings in Ireland. These frameworks not only support but can actively enhance the entrepreneurial capacities of young learners, laying a foundation for skills such as innovation, problem-solving, and resilience.

Despite Ireland's solid infrastructural and educational frameworks, there are opportunities to further tailor these environments to explicitly foster entrepreneurial skills. The conceptual framework proposed in this chapter, synthesising Aistear's flexibility with targeted support from governmental and educational institutions, aims to bridge current gaps between policy intentions and educational practice. This framework serves as a blueprint for educators and policymakers alike, emphasising the early introduction of entrepreneurial concepts through play-based learning and structured interaction.

Central to this discussion is the transformative potential of this framework for future research and practice. It advocates for a shift from traditional pedagogical strategies to more dynamic, child-centred approaches that not only prepare children for the academic demands of school but also equips them with the competencies needed to navigate and contribute to a complex, rapidly changing world. As this framework is implemented and evaluated, it can offer valuable insights into the effectiveness of early entrepreneurial education and its long-term benefits on children's development.

CHAPTER 5
RESEARCH METHDODOLOGY

5.1. Introduction

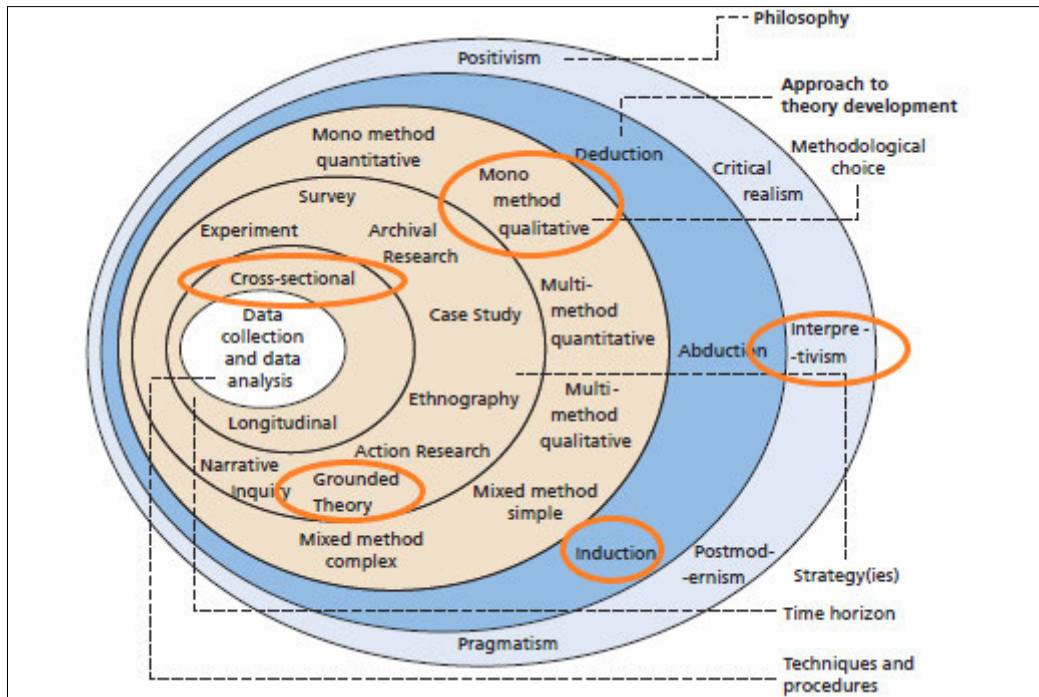
The previous chapters have created a rationale for this research study, developed meaning through a detailed review of the literature relevant to addressing the research question under exploration, and influenced a conceptual framework that has evolved from a synthesis of the literature in entrepreneurship education and early childhood education. This chapter aims to provide a justification and explanation of the rationale behind the key decisions made in selecting an appropriate research methodology to address the research question – how can early childhood educators foster entrepreneurial education in preschool children?

After identifying the research topic and formulating questions, selecting the appropriate research design is perhaps the most important decision a researcher needs to make (Abutabenjeh & Jaradat, 2018). A research design is a strategic plan, a blueprint to answer research questions, influenced by various factors (Creswell, 2009; Kothari, 2004), including study purpose, available resources, philosophical worldview, researcher skills and abilities, and chosen strategy for inquiry. Research design is important in deciding the research processes and elements such as research methods, research strategy, and sampling (Robson, 2002). Expanding on this, the research design includes defining the project purpose, conceptualising ideas, selecting an appropriate research method - decisions on when and how the data will be collected - operationalising variables, determining the sampling process, data analysis and application of findings (Abutabenjeh & Jaradat 2018; O’Sullivan, 2016).

In making this decision, pertinent questions include: (1) which approach to research design is most appropriate for this research study, and (2) what are the common themes among the current entrepreneurship education and early childhood education approaches to research design?. Research designs are types of inquiry within qualitative, quantitative, and mixed methods approaches that provide specific direction for procedures in a research design - others have called them strategies of inquiry (Denzin & Lincoln, 2018). For the purpose of this research study, the ‘research onion’ developed by Saunders et al. (2007, 2018, 2019) as illustrated in Figure 5.1. provides a structured and comprehensive approach for informed decision-making and for developing a coherent research process. This study is concerned with examining what entrepreneurial education in early childhood settings encompasses, and exploring how early childhood educators can foster and support entrepreneurial learning and

encourage the development of an entrepreneurial mindset, entrepreneurial skills and values in preschool children in Ireland.

Figure 5.1. Key research study methodological decisions



Source: Adapted from Saunders et al. (2019., 2018., 2007)

Saunders et al. (2007) suggest that the ‘research onion’ involves a conceptual framework that offers a hierarchical structure to understand, plan and conduct research. This multi-layered model meticulously peels away the complexities of research strategies, allowing scholars to systematically address the philosophical, methodological, and operational layers employed to achieve research objectives (Saunders et al., 2019).

Within the context of this research study, the research onion framework serves as an invaluable tool in guiding the methodical examination of the educational practices and pedagogical strategies employed by early childhood educators. By adopting this framework, the researcher is positioned not just as an observer but as a reflective practitioner, deeply engaged in the intricacies of methodological rigour. The research onion's holistic perspective aligns with the investigative approach of this study, enabling a comprehensive exploration of the educational conditions that shape entrepreneurial learning. It aids in articulating the philosophical

underpinnings of this study - such as the epistemological and ontological assumptions - while also providing a structured pathway to method selection, data collection, and analysis to address an educational research question (Saliya et al., 2023). This alignment ensures that this research is not only methodologically sound but also deeply connected to the empirical realities of early childhood education, thereby contributing meaningful insights to the field. Given the fusion of entrepreneurship education and early childhood education, this design is very appropriate and the key decisions taken in this research study are highlighted in Figure 5.1.

5.2. Research Philosophy

'Sometimes a normal problem, one that ought to be solvable by known rules and procedures, resists the reiterated onslaught of the ablest members of the group within whose competence it falls' (Kuhn, 2012, pp 5-6).

The beliefs and assumptions we possess affect our everyday lives, in every single decision that we make. Our beliefs and assumptions also impact, in a very important way, the research we decide to pursue and the methodology and methods that we use to answer our research questions. Guba and Lincoln (1994) describe a paradigm as a set of assumptions about ethics, reality, epistemology, and methodology that guide systematic inquiry. They argue that different paradigms have different philosophical assumptions and methodological choices (Morgan, 2007). Kuhn (2012) defines a paradigm as a worldview that embodies the beliefs of scientists, while Alghamdi and Li (2013) suggest that research paradigms define how knowledge works and how one thinks, communicates, and writes this knowledge. Denzin and Lincoln (2018) further discuss that paradigms define the type of questions to be asked and methodologies to answer the research problem. The significance of understanding research paradigms is crucial for researchers as it guides their approach to inquiry and influences the interpretation of research findings (Gunbayi, 2020; Schriever, 2021).

In the context of exploring how early childhood educators foster entrepreneurial learning in preschool, these philosophical underpinnings take on a nuanced importance. The ontological, epistemological, methodological, and method-based dimensions of research paradigms, as outlined by Crotty (1998) and further elaborated by Zukauskas et al. (2018), Tashakkori & Teddlie (2009), Scotland (2012), provide an interpretative lens through which this study is

viewed. This research, aligning with the perspectives of Gliner et al. (2016), adopts a paradigmatic approach that not only reflects on the research and its implementation processes but also resonates with the nature of entrepreneurial learning in early childhood settings, ensuring a comprehensive understanding of the educational dynamics at play.

Crotty (1998) and Easterby-Smith et al. (2008) explain the elements of a research paradigm as follows:

- Ontology - philosophical assumptions about the nature of reality
- Epistemology - a set of assumptions about ways in which we inquire about the nature of the world and the relationship between knowledge and the researcher.
- Methodology - a combination of techniques used to inquire into a specific situation to gain knowledge.
- Methods and techniques - individual techniques for data collection and analysis.

Ontology refers to the nature of reality and existence (Saunders et al., 2018, 2019), and depicts the researcher's objectives of the study. Ontologically, this study grapples with the reality of entrepreneurial learning as either an independent, objective entity or a construct shaped by the interactions and perceptions of early childhood educators - a debate that reflects the realism vs. constructivism dichotomy (Bryman, 2004). Epistemology is concerned with the theory of knowledge, what constitutes acceptable, valid, and legitimate knowledge, and helps researchers understand the best ways of enquiring into the nature of the world and how to communicate that knowledge to others (Holstein et al., 2013; Burrell & Morgan, 2019; Saunders et al., 2018., 2019; Zukauskas et al., 2018). Epistemologically, this study connects with understanding how knowledge about fostering entrepreneurial skills in preschoolers can be validly and legitimately acquired, whether through objective measures or through interpretative, socially constructed insights. This is critical in devising methodologies and methods that resonate with the spirit of entrepreneurial learning - often a blend of observable behaviours and deeply subjective experiences.

Epistemology encompasses a range of perspectives from empirical observation and objectivity (positivism) to the influence of social context and subjective interpretation in knowledge creation (interpretivism) (Rescher, 2012). Positivism regards knowledge as objective, based on empirical observation, and independent of the researcher. It utilises the scientific method to

discover causal relationships and universal laws, emphasising replicability and generalisability in findings. In contrast, constructivism considers knowledge as subjective and socially constructed, dependent on individual interpretation, experiences, and interaction with the world (Howell, 2012).

Research philosophy forms the foundation of any research project, reflecting ontological and epistemological assumptions that underpin the research strategy or methodology. These assumptions shape the understanding of research questions, the methods employed, and the interpretations of findings (Crotty 1998). According to Saunders et al. (2018, p.130) a research philosophy is as *'a system of beliefs and assumptions about the development of knowledge'*. Zukauskas et al. (2018, p.121) in simpler terms define a research philosophy as *'a system of the researcher's thought, following which new, reliable knowledge about the research object is obtained'*. Research philosophies encompass integrated sets of beliefs, assumptions, research models, and techniques for gathering and analysing data. In the social sciences, the main research philosophies include positivism, critical realism, post-positivism, pragmatism, and constructivism.

The research philosophy guiding this study is crucial in addressing the central research question by shaping methodological choices. It determines the selection of methods that are sensitive to the dynamic, interactive nature of preschool environments where entrepreneurial learning is fostered. Whether adopting positivist approaches to quantify aspects of entrepreneurial learning or through constructivist approaches that explore the qualitative richness of early educational settings, the philosophical stance underpinning this study directs the investigation towards meaningful, actionable insights.

This exploration into fostering entrepreneurial learning in early childhood settings, is not just about identifying strategies employed by early childhood educators but is also about understanding the philosophical dimensions that inform these strategies. It seeks to bridge the gap between theoretical paradigms and practical application, ensuring that the methodologies and methods chosen are deeply aligned with the complex, multifaceted nature of entrepreneurial learning in preschool. In essence, the research philosophy acts as the backbone of this study, shaping the inquiry from its conceptual stages through to the interpretation of

findings, thereby offering a comprehensive view of how early childhood educators can effectively nurture entrepreneurial spirits among the youngest learners. Through this philosophical and methodological synergy, the study aims to contribute meaningful insights and practical recommendations to the field of early childhood education, supporting the development of future generations of innovative, creative, and entrepreneurial individuals.

5.2.1. Overview of Research Philosophies

Selecting the appropriate research philosophy is foundational to guiding the methodology and overall direction of a research study. Each philosophy offers a unique lens through which to view the research question, underlining the importance of careful consideration to align the research approach with the study's objectives and the researcher's worldview. Each has been considered in terms of their appropriateness to this study. The four philosophies that have been discounted are briefly outlined, supported by a rationale for their unsuitability in this study.

Positivism - Positivism is a philosophical system of knowledge that only accepts observable or measurable (i.e., empirical) experiences of the world as data for analysis, the findings from which are considered positive or absolute truths about reality and are based on granular and ordered events (Pascale, 2010). Researchers thereby treat persons whom they study no differently than objects, believing that the truth of individuals' experiences, including interpersonal and social experiences, can be studied objectively (Hiller, 2016). In this research philosophy, the scientist is an objective analyst and dissociates themselves from personal values and works independently. A long-held belief is that particular laws of nature exist (i.e., cause-effect statements); regarding the workings of the human psychological and social worlds, and that through careful observation these laws could be discovered and truths about humans and how they function thereby explained (Crotty, 1998). Critiques of positivism occurred due to the realisation that human beings are by nature vastly different subjects of study than the objects and workings of the natural world in which they live. Humans are beings who possess minds and bodies, and who use minds and bodies to exercise will and individual capacities of judgment and action (Pascale, 2010).

While certain aspects of educational practices can be objectively measured and analysed to yield insights into effective teaching practices, such a positivist approach would not fully capture the depths of educators' pedagogical philosophies, the subtleties of their interactions

with preschool children, or the contextual factors influencing their practices. In addition, the importance that educators attach to their practices and the values they aim to instil in children further solidify against a positivist philosophy.

Critical Realism - Critical realism is a philosophical approach to understanding science initially developed by Roy Bhaskar (1944 - 2014). Critical realism '*focuses on explaining what we see and experience, in terms of the underlying structures of reality that shape the observable events*' (Saunders et al., 2018, p.147). It argues that humans experience the sensations and images of the real world and that these sensations and images of the real world can be deceptive, and they usually do not portray the real world (Novikov & Novikov, 2013). Thus, according to critical realists, unobservable structures cause observable events, and the social world can be understood only if people understand the structures that generate events. In critical realism, reality is the principal philosophical consideration with an ontology that is structured and layered. Critical realist research observes organisational events to identify the fundamental causes and mechanisms through which deep social structures shape everyday organisational life (Saunders et al., 2019). Critical realist research methods are primarily focused on understanding, rather than merely describing, social reality. To this end, critical realist research is ecumenical in its approach to research, fitting designs and methods to the problem at hand (Vincent & O'Mahoney, 2018).

While critical realism offers a powerful framework for exploring the underlying mechanisms and structures influencing social phenomena, its emphasis on the independence of reality from human perception and the focus on structural causality does not align with the need to capture the dynamic, interpretative processes of teaching and learning, where the immediate, lived experiences and pedagogical interactions are central. This research seeks to delve into how educators interpret and implement entrepreneurial learning, necessitating a philosophy that values subjective understandings and the richness of individual experiences over the discovery of unobservable causal structures.

Post Modernism - Postmodernism is a philosophical and cultural movement that critiques the foundations of certainty, objectivity, and universal truth that underpin modernist ideologies. It is characterised by a scepticism towards meta-narratives (Lyotard, 1984) that claim to offer

absolute and universal explanations of the world. It emphasises the role of language and of power relations, seeking to question accepted ways of thinking and give voice to alternative marginalised views (Saunders et al., 2019).

This research involves an empirical investigation into educational strategies and outcomes. Postmodern scepticism towards empirical evidence and objective reality could conflict with the study's methodology, which relies on gathering and analysing data to draw meaningful conclusions (Guba & Lincoln, 1994). The research intends to contribute to and expand upon existing theories of entrepreneurial education, which requires a framework that supports the development and testing of new theories. Postmodernism's critique of established knowledge systems could detract from this objective, prioritising questioning over building (Kuhn, 2012). In addition, postmodernism is concerned with the researcher taking a position of power dominance and does not appear to be open to new knowledge. This is in stark contrast to what this research aims to achieve. While postmodernism excels in critique and questioning established narratives (Habermas, 1987), this study aims to build upon existing knowledge and practices in a positive direction, which may be better supported by a philosophy that allows for the identification and validation of effective educational strategies.

Pragmatism - Pragmatism asserts that concepts are only relevant where they support action. Pragmatics *'recognise that there are many different ways of interpreting the world and undertaking research, that no single point of view can ever give the entire picture, and that there may be multiple realities'* (Saunders et al., 2019, p.151). Pragmatist research philosophy deals with the facts. It claims that the choice of research philosophy is mostly determined by the research problem. In this research philosophy, practical results are considered important (Lancaster, 2005). In addition, according to Alghamdi and Li (2013), pragmatism does not belong to any philosophical system and reality. Researchers have freedom of choice. They are "free" to choose the methods, techniques, and procedures that best meet their needs and scientific research aims. Pragmatists do not see the world as an absolute unity. The truth is what is currently in action. Researcher values drive the reflexive process of inquiry, which is initiated by doubt and a sense that something is wrong or out of place, and which recreates belief when the problem has been resolved (Saunders et al., 2019).

This research study seeks to inform and possibly enhance early childhood entrepreneurial education and is primarily exploratory and interpretive in nature. This distinction matters because pragmatism emphasises action-oriented outcomes and practical applications directly stemming from research findings. In contrast, this study aims at understanding phenomena in-depth, without immediate action or application. In addition, this research is built on the belief that understanding the subjective experiences and interpretations of educators requires a deep, contextually grounded exploration (Rajasinghe & Aluthgama-Baduge, 2021; Pidgeon & Henwood, 2004). This philosophical stance differs significantly from the pragmatist view, which is more flexible and oriented towards practical solutions and outcomes.

The above discussion outlines how four of the major philosophies have different ways of defining what is reality and how it can be known and understood. Table 5.1. provides a visual summary of this discussion whereby the five major research paradigms are compared in terms of ontology, epistemology, axiology, and research methodology. While all philosophies carry equal importance, the choice of researchers' philosophy is very much dependent on the purpose of the study, the research question being explored and the worldview held by the researcher. From an understanding of one's ontological and epistemological position, researchers can decide which methodology best reflects their stances and from this can ascertain the methods and techniques that will gather good quality data (as illustrated in table 5.1.).

Bristow & Saunders 'HARP' (Highlighting Awareness of Research Philosophy) reflexive tool (Bristow & Saunders, 2014; Saunders et al., 2019) has helped consider the potential fit between this researcher's own beliefs and values and those of the 5 major philosophies used in business and education. The interpretivist paradigm is particularly suited for this research study because it aligns with the aim of understanding the subjective experiences and interpretations of early childhood educators. Interpretivism values the richness of individual experiences and the contextually grounded exploration necessary to capture the dynamic and nuanced processes of teaching and learning in preschool settings. This paradigm enables a comprehensive examination of how educators interpret and implement entrepreneurial learning, considering the social, cultural, and personal contexts that shape these educational practices. The interpretivist paradigm emphasises understanding the meaning and experiences of participants within their specific contexts. This approach is essential for this study as it seeks to explore

how entrepreneurial thinking, mindsets, capabilities, and competencies are fostered in preschool children. By focusing on the subjective experiences of educators and the unique contexts in which they operate, the study can uncover deep insights into the processes and practices that support entrepreneurial learning. This makes it the best approach for addressing the research question and achieving the objectives of this study.

Table 5.1. Main Research Philosophies

| Fundamental Beliefs | Positivism | Critical Realism | Interpretivism | Postmodernism | Pragmatism |
|--|--|--|---|---|---|
| Ontology: assumptions about the nature of being and our reality and truth. | One objective reality. Granular, ordered, external, and independent. | Stratified/layered (the empirical, the actual, and the real). Objective structures. External, independent, intransient. | Holds all knowledge is a matter of interpretation. Complex, rich. Socially constructed through language. Multiple meanings and interpretations. | Challenge and reject simplicity. Complex rich. Socially constructed through power relations. Some meanings and interpretations are dominated by others. | Complex, rich, external. Multiple. Reality is the practical; consequence of ideas. |
| Epistemology: what constitutes knowledge and the processes of how knowledge is created. | Scientific methods. Observable and measurable facts. | Relativism. Knowledge transient. Facts are social constructions. Causal explanation as contribution . | Theories and concepts too simplistic. Focus on narratives, stories, perceptions & interpretations. New understandings as contribution. | Truth and knowledge are decided by dominant ideologies. Focuses on absences, silences, and repressed meanings. Exposure of power relations and challenge of dominant views as contribution. | Practical meaning of knowledge. Focus on problem-solving, informed future practice, and relevance. |
| Axiology: the role of values and ethics in research. | Neutral and independent. Objective stances. Value-free research. | Research is value-laden; researcher acknowledges bias by world views, cultural experiences, and upbringing. Researcher minimises bias. | Value-bound research. Researchers are part of what is being researched (subjective). Researcher interpretation is key to contribution. Researcher is reflexive in approach. | Value-constituted research. Researcher and research embedded in power relations. Researcher radically reflexive. | Value-driven research. Reflexive researcher. Researcher's doubts and beliefs initiate and sustain research. |
| Research Methodology: the strategy of design used to carry out the study. | Quantitative | Quantitative or Qualitative | Qualitative | Qualitative | Quantitative or Qualitative (mixed or multimethod design) |

Sources: Saunders et al. (2019); Easterby-Smith et al. (2021); Lincoln et al. (2011); Quinlan et al. (2015); Zukauskas et al. (2018)

5.2.2. Research Study Interpretivist Paradigm

This study embraces an interpretivist paradigm, in which the researcher views reality as constructed, subjective and context-dependent (relativist ontology) (Guba & Lincoln, 1994); where knowledge is socially constructed and influenced by the personal interaction of the researcher (constructivist epistemology). This choice is driven by the research's aim to understand how early childhood educators foster entrepreneurial learning in children as young as 3. Through the interpretivist lens, this research recognises the complexity inherent in educational settings and acknowledges that there is no singular truth in the ways entrepreneurial learning is imparted and received.

At the heart of interpretivism is the belief that human experiences, particularly in the realms of education and learning, are inherently subjective and constructed through complex interactions between individuals and their environments (Saunders et al., 2009). This perspective naturally aligns with the study's focus on the complex practices of educators in early childhood settings. By adopting a relativist ontology, this research posits that the reality of educational practices is not fixed but shaped by the diverse experiences, beliefs, and values of educators themselves. Each educator's experiences, values, and interpretations of the educational processes are unique and cannot be generalised across different contexts. This stance is crucial for exploring the multifaceted nature of entrepreneurial learning, where educators' interpretations and implementations of teaching strategies vary widely and are deeply influenced by their cultural and contextual understandings (Mukherji & Albon, 2022). The relativist view suggests that reality is not a fixed entity but is constructed through individual and collective interpretations, a perspective that is essential for examining the complexities of entrepreneurial education in early childhood education (McCaig & Dahlberg, 2010; Bergman, 2008).

Complementing the relativist ontology, the adoption of a constructivist epistemology facilitates a deeper engagement with how knowledge about entrepreneurial learning is constructed by educators and young learners. Furthermore, the constructivist epistemology underpinning this study emphasises the belief that knowledge is not merely discovered but actively built through the interaction between individuals and their environments (Collis & Hussey, 2014). This viewpoint is vital for examining the dynamic process through which educators and young learners interact and co-create the learning experience, thereby contributing to the development

of entrepreneurial mindsets, values, and skills in preschool children. It acknowledges that educators play an active role in shaping the learning environment, a process that is reflective, interpretive, and influenced by their personal and professional experiences. This approach aligns with the study's aim to uncover the varied strategies employed by educators and how these strategies shape the entrepreneurial learning experiences of preschool children (Creswell, 2014; Elliott et al., 2000).

The choice of interpretivism is further justified by the study's methodological approach, aiming to capture the lived experiences of educators through qualitative methods. This approach facilitates an in-depth exploration of the complex, rich, and varied interpretations of entrepreneurial education within early childhood settings, allowing for a nuanced understanding of how entrepreneurial learning is fostered. It mirrors the broader discussions in entrepreneurship research, where the importance of understanding the ontological and epistemological foundations is emphasised for a holistic grasp of entrepreneurial phenomena (Busenitz et al., 2003; Shane & Venkataraman, 2000).

This research's interpretivist stance also responds to the call for methodological pluralism in entrepreneurship education, advocating for a comprehensive approach that integrates diverse perspectives and methodologies to capture the essence of entrepreneurial learning processes (Hamilton, 2014; Leitch et al., 2010). By focusing on the subjective experiences of early childhood educators, this study contributes to the broader discourse on entrepreneurship education, highlighting the importance of contextual, cultural, and individual factors in shaping educational practices (Blenker et al., 2011; Hagg & Kurczewaka, 2021).

The interpretivist paradigm, with its relativist ontology and constructivist epistemology, provides a robust framework for this research study. It allows for an in-depth examination of the ways early childhood educators interpret and implement entrepreneurial learning, acknowledging the complexity and diversity of educational practices and experiences. This philosophical stance not only aligns with the research question but also enriches the understanding of entrepreneurial education in early childhood settings.

5.3. Approaches to Theory Development

Transitioning from the exploration of research philosophies, the next layer of the 'research onion' framework as proposed by Saunders et al. (2019) is a pivotal stage - bridging the study's foundational philosophical underpinnings with the practical strategies for constructing and refining theoretical frameworks. This point of research examines how the chosen interpretivist perspective informs the development, testing, and integration of theories within the context of early childhood educators fostering entrepreneurial learning in preschool children. This step is crucial for shaping a coherent research strategy that not only aligns with the study's philosophical stance but also guides the systematic investigation of the research question.

Inductive and deductive are two principal approaches to theory development identified by Glaser (2012). The inductive approach offers a pathway from specific observations to broader theories and generalisation (Bergdahl & Berterö, 2015; Pathirage et al., 2008) naturally aligning with qualitative methods (Sahay, 2016). Through this approach, data gathered from various sources is interpreted to identify prevalent trends or patterns, leading to theories that explain the observed phenomena with a high degree of probability rather than absolute certainty (Trochim & Donnelly, 2001). This approach to data collection enables the development of theory from data analysis (Saunders et al. 2019). This data-driven or empirically grounded theory development, as explained by Bryant and Charmaz (2007), is particularly valuable for exploring areas where existing frameworks may be inadequate. Given its compatibility with the interpretivist philosophy (Saunders et al., 2019), the inductive approach is distinctly suited to this study.

In applying the inductive approach, this research will utilise qualitative techniques to analyse data, employing coding and categorisation to unearth patterns, and relationships within the data (Vanover et al., 2021). This contrasts with the deductive approach, which moves from general principles to specific conclusions, embodying a top-down logic (Saunders et al., 2019; Locke, 2008).

The inductive approach is suitable when researchers aim to develop a deeper understanding of a phenomenon or relatively unexplored areas and is mainly associated with 'intuitive' techniques (Azungah, 2018). The choice of an inductive approach is strategic, aimed at

developing a deeper understanding of the unique phenomenon of entrepreneurial learning in early childhood education - a field yet to be thoroughly explored. This research seeks to generate rich, contextual insights from a focused sample, laying the groundwork for new theories or conceptual frameworks that resonate with the lived experiences and pedagogical strategies of educators (Saunders et al., 2007; Saunders et al., 2019). By emphasising theory generation and a data-driven exploration, this approach seeks to enrich the educational discourse with fresh perspectives on fostering an entrepreneurial mindset in preschool settings. Thereby, it resonates deeply with the interpretivist philosophy, ensuring a direct and meaningful connection to the objectives of this research study.

5.4. Methodological Choices

The next juncture of the research onion involves selecting the research methods and strategies most aligned with this study's interpretivist stance and inductive approach.. These choices are critical to ensure that the research study is rigorous, informative, and enlightening in addressing the research question.

'Research methodology is a way to systematically solve the research problem' (Kothari, 2004, p.8) and is intrinsically linked to the philosophical assumptions that guide the design, execution, analysis, and interpretation of its findings (Moon & Blackburn, 2014; Creswell, 2014). It details the specific procedures, techniques, and instruments that are used to conduct research within a particular discipline or field and encompasses the theoretical frameworks, data collection methods, data analysis techniques, and ethical considerations that guide the research process (Powell et al., 2015). This approach ensures a comprehensive approach that is methodologically sound and ensures a consistent progression from conceptualisation of the study to presentation and analysis of findings.

Creswell (2009) proposes three types of research design - qualitative, quantitative, and mixed methods. Exploring this concept further these three techniques for collecting data can be categorised as (1) mono method - which refers to the use of a single data collection technique (quantitative or qualitative); (2) multi-method - which refers to combinations of two or more data collection techniques (Tashakkori & Teddlie, 2009); and (3) mixed-method - which refers to the use of both quantitative and qualitative data collection techniques (Saunders et al., 2019).

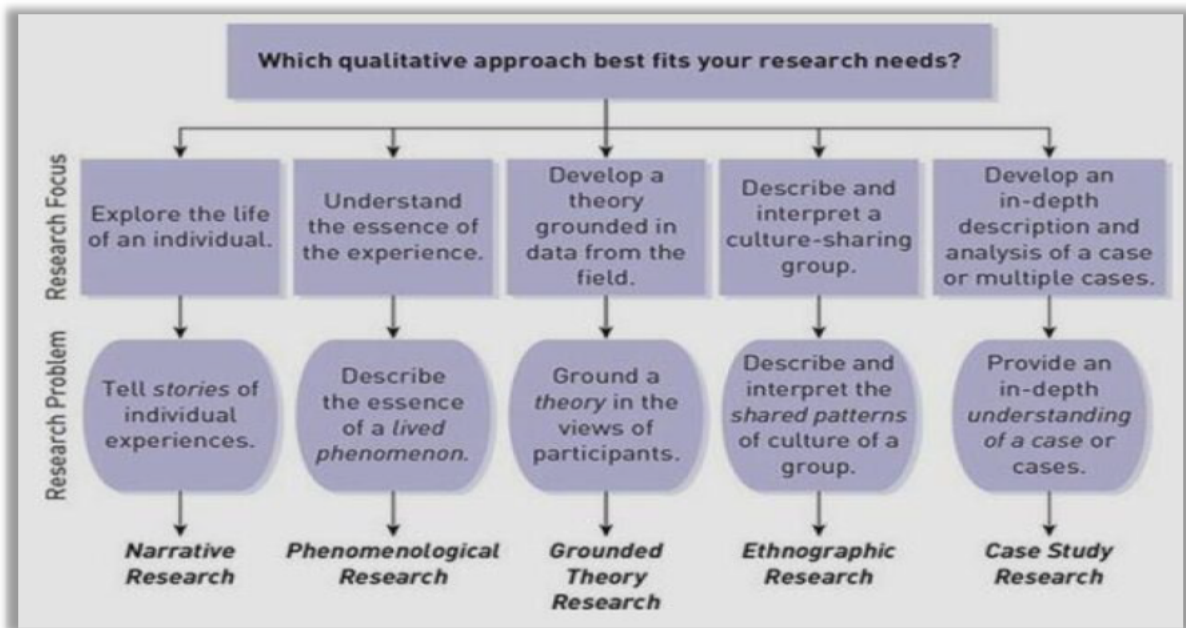
While quantitative research seeks to test hypotheses and validate theories through objective analysis and statistical methods (Bridgmon & Martin, 2012), it is less suited to addressing the complexities of this study's focus on early childhood educators' opinions and experiences with teaching and learning entrepreneurial education. In contrast, qualitative research naturally aligns with the study's objectives, offering the opportunity to explore and understand the meanings that people, either as individuals or in groups, attribute to social or human problems (Creswell, 2014, 2009). This method facilitates a holistic approach that occurs in a natural setting and enables the researcher a high level of involvement in the actual experiences of early childhood educators.

This approach is uniquely positioned to offer the opportunity to provide rich contextual insights, flexibility, and emergent research questions, making it the optimal choice for examining perspectives and practices of early childhood educators fostering entrepreneurial learning.

5.5. Research Strategy

The research strategy bridges the theoretical underpinnings of the study with its empirical investigation. The strategy operationalises the methodological choices into a coherent plan of action. Figure 5.2. outlines five key qualitative research strategies deemed appropriate methodologies for addressing research questions. In selecting one of these qualitative strategies, the research focus and research problem must be at the forefront of consideration. This is because the problem statement serves as a foundation for selecting specific approaches within qualitative research (Islam & Aldaihani, 2022). The strategies examined have each been considered for their appropriateness in addressing how early childhood educators can foster and nurture entrepreneurial thinking, skills, and capabilities in preschool children.

Figure 5.2. 5 Qualitative Research Strategies



Source: Creswell & Poth (2016)

Qualitative research strategies such as narrative research, phenomenological research, ethnographic research, grounded theory research, and case study research offer valuable insights into subjective experiences and meanings. **Narrative Research** involves focusing on understanding the stories and personal experiences of individuals or groups to comprehend culture, identity, and historical experiences (Butina, 2015). It seeks to uncover meaning and significance of these stories and how they shape people’s identities and perspectives (Riessman, 2008). While narrative research could provide valuable insights into individual educators' approaches, it may not fully capture the collective practices and the broader educational context influencing entrepreneurial education in early childhood settings. The methodology's focus on individual stories might overlook systemic and interactive factors (Chase, 2013). **Phenomenological Research** aims to explore the meaning of individuals experiences and feelings, as they are lived and perceived, to gain in-depth explanations on particular phenomenon (Creswell & Poth, 2016; Karaca & Karakoc, 2022). It involves in-depth interviews or other methods to capture participants’ rich descriptions of their experiences (Creswell & Poth, 2016). While phenomenology could capture early educators' experiences of teaching preschool children, it may not adequately address the processes and interactions leading to entrepreneurial education in preschool children. This methodology is more suited

for exploring the depth of personal experiences rather than the dynamic, interactive processes involved in educational settings (Creswell & Poth, 2016). **Ethnographic Research** involves immersing the researcher in the natural setting of the study to observe and understand the culture, behaviours and social interactions of a group or community (Hammersley & Atkinson, 2019; Chase, 2013). Ethnography could provide deep contextual insights into the culture of preschool education and its contribution to fostering entrepreneurial skills. However, its focus on cultural immersion and observation might not be entirely effective in systematically identifying and analysing the underlying processes and theories specific to entrepreneurial education (Hammersley & Atkinson, 2019). **Case Study Research** focuses on in-depth analysis of a single or a small number of cases to gain insights into particular phenomena, organisations or individuals (Stake, 1995). It allows the researcher to explore complex real-life contexts and interactions. While a case study could explore the implementation of entrepreneurial education in specific settings, it may not generalise findings across different contexts. The methodology's strength in detail and depth can also limit its ability to uncover broader, emergent patterns and theories relevant to diverse educational environments (Stake, 1995; Handcock et al, 2021).

Each of the above strategies offers unique insights with a distinct focus - be it on individual narratives, lived experiences, cultural contexts, or specific cases. However, while these perspectives are valuable they are not appropriate for capturing the interactive and complex processes essential to understanding and enhancing entrepreneurial education in preschool settings. Having completed an extensive scoping review of the literature and identifying a gap in research regarding entrepreneurship education within early childhood education, constructivist grounded theory emerges as the most appropriate strategy to undertake this research study. This approach not only facilitates the exploration of interactions, practices, and processes, but facilitates the development of theory rooted in educators' experiences and perspectives, offering a rich, contextual, and comprehensive understanding of early entrepreneurial education.

5.6. Research Strategy Design - Constructivist Grounded Theory

Following the selection of constructivist grounded theory (CGT) as the research strategy of this study, it is pertinent to explore the foundational principles and context of grounded theory, with an emphasis on the Charmazian Constructivist variant. CGT aligns with this study's interpretivist stance, and its iterative, inductive approach to building theory from data offers a solid framework for this study's central inquiry. The strategy is uniquely positioned to investigate the dynamics of entrepreneurial education within the preschool environment, offering a rich understanding of the experiences and opinions of early childhood educators.

- **Background of Grounded Theory**

Grounded theory has become one of the most commonly used qualitative research methodologies (Stough & Lee, 2021; Birks & Mills, 2015; Bryant & Charmaz, 2019; Morse, 2004; Timmermans & Tavory, 2007), and serves as a robust framework for analysing the complexities of social interactions, particularly educational settings (Flick, 2018). It is a flexible but structured methodology and it is valuable when little is known about phenomena (Birks & Mills, 2011).

Glaser and Strauss (1967) developed the concept of grounded theory for qualitative research as a means of generating theory rather than testing pre-existing hypotheses, moving qualitative inquiry beyond descriptive studies into the realm of explanatory theoretical frameworks, providing abstract conceptual understandings of studied phenomena (Charmaz, 2006). Charmaz (2006, 2014) advocates for a flexible approach, guided by a set of principles and practices rather than prescriptive procedures.

Grounded theory is a strategy very well suited to researching teaching and learning and is compatible with different epistemological positionalities used by educational researchers including constructivism (Stough & Lee, 2021), which correlates with the epistemological position of this study. It is a comparative, iterative, and interactive method that begins with inductive data and is useful in examining classroom behaviours, reasoning, and pedagogical strategies (Charmaz & Belgrave, 2019). Throughout the research process, data is concurrently collected and analysed to develop a theoretical explanation of common themes of experience or topics (Starks & Brown-Trinidad, 2007; Stough & Lee, 2021, Howell, 2012) from action,

process, and interaction through participants' perspectives (Urquhart, 2012; Aurini et al., 2016). As an interpretative theory, grounded theory can synthesise, integrate and conceptualise empirical data (Glaser & Strauss, 2017).

- Charmazian Constructivist Grounded Theory (CGT) approach

The Charmazian Constructivist Grounded Theory (CGT) approach (Charmaz, 2006, 2014, 2017) is a qualitative research methodology that seeks to understand and explore a complex social process where no *adequate* prior theory exists (Charmaz, 2006, 2014; Bryant & Charmaz, 2019; Coskun, 2020). Constructivist grounded theory is an extension of the original grounded theory developed by Glaser and Strauss. This approach to grounded theory encourages innovation and the development of new understandings and novel theoretical interpretations of studied life (Charmaz, 2008). Unlike the traditional scientific research method in which the researcher develops hypotheses, the CGT approach involves constructing theories and hypotheses from emerging data. In CGT, Charmaz (2006, 2014, 2016) argues that the researcher is not a neutral observer but is rather a co-participant in the research study, where data, research processes, and theories are not discovered but co-constructed by the researcher and research participants (Denzin & Lincoln 2018), highlighting the subjective nature of knowledge creation.

Unlike traditional grounded theory which involves structured cycles of data and analysis, continued until theoretical saturation (O'Connor, 2015), the CGT process is a non-linear, iterative approach (Chun-Tie et al., 2019) to theory development. In-depth interviews and focus groups are used to gather data, generating new theory, or adding to existing theory using this inductive process (Charmaz 2006, 2014, 2016), an approach proven very compatible in studies concerning teaching and learning (Stough & Lee, 2021). Data collection involves qualitative coding, analytical memo-writing, theoretical sampling and sorting, and reconstructing theory or theory building through the emergence of categories in the data. Categories are then analysed in light of existing knowledge to form core categories or concepts, which inform the substantive grounded theory (O'Connor, 2017).

While early grounded theorists sought to discover patterns of behaviour in the data and conceptualise their properties through abstraction (Glaser and Strauss 1967; Glaser 1978; 1992)

constructivist grounded theorists seek to understand difference and variation among research participants and to co-construct meaning with them (Charmaz 2006). CGT '*addresses how people's actions affect their local and larger social worlds*' (Charmaz 2006, p.132). Each study has a specific index of time, space, culture, and situation, and theories generated are evaluated as "*plausible accounts*" (Charmaz 2006, p.132) rather than as objectively verifiable. As such in the context of this research, the adaptability of the constructivist grounded theory approach will provide a high-quality and rigorous research output that has the potential to deliver insightful, practice-relevant findings.

Central to CGT is the integration of the researcher's and participants' meanings, languages, and actions (Charmaz, 2017). This enables the development of a comprehensive theoretical framework through constant comparison and interaction with existing literature and field data (Barrett, 2023). In CGT, researchers are part of the data they collect and part of the world they study. Theory is constructed through present and past involvement and interactions with practices and people (Khanal, 2020). CGT recognises a researcher's experiences and background and emphasises reflexivity in influencing research outcomes. As such social reality is fluid and knowledge is constructed and therefore subject to change based on participants' perspectives. However it is important to note that CGT allows using prior conceptual and theoretical frameworks during coding, including initial and theoretical coding (Belgrave & Seide, 2019).

The core principles of CGT are as follows:

- CGT embraces a constructivist perspective and recognises that reality is subjective and socially constructed. It emphasises meaning, perspectives, and interpretations that individuals relate to their own experiences (Bryant & Charmaz, 2019; Belgrave & Seide, 2019; Charmaz, 2014, 2006).
- CGT follows an iterative and inductive approach, and data collection analysis occurs simultaneously, allowing emerging categories and concepts to shape the research process. The researcher makes constant data comparisons and refines concepts and codes (Bryant & Charmaz, 2019; Charmaz, 2014, 2006).
- CGT uses theoretical sampling where data is guided by emerging theoretical insight, needed to refine theory. Moreover, CGT deploys constant comparative analysis to

compare cases and data and identify connections, generating properties and categories (Bryant & Charmaz, 2019; O'Connor, 2017; Charmaz, 2014, 2006).

- CGT acknowledges the researcher's active role and reflexivity. The researcher critically reflects on their assumptions, biases, and interpretation and manages ongoing dialogue with participants and co-constructing knowledge (Charmaz, 2017, 2014, 2006).

In contrast to grounded theory, CGT begins with a literature review to determine what is known and explores substantive areas. Furthermore, the theoretical sensitivity depicts the ability of the researcher to extract relevant elements to emerging categories, concepts, and theories from the data (Bryant & Charmaz, 2019; Levitt, 2021).

While the proponents of the earlier theory discourage exploring literature related to the areas of inquiry before data collection, Charmaz (2006, 2014, 2017) encourages investigating the research topic before data collection without forcing the knowledge obtained on the research process. The literature review has an important role in informing this study and generating new theories as the researcher acknowledges new insights and allows the theory to emerge organically from reflecting participants' experiences and perspectives in social and cultural contexts. In early childhood education, constructivism acknowledges the important role of play and social interaction experiences and enables researchers to develop an understanding of the world through active engagement with peers, materials, and adults. In the entrepreneurship education context, CGT can provide valuable insight into processes and experiences related to learning and teaching entrepreneurship. In such contexts, CGT can help identify themes, patterns, and categories that emerge from the data and contribute to the development of the theory grounded in the perspectives and experiences of individuals and groups.

Specifically, CGT is a research strategy that is very appropriate when researching teachers, focusing on participants' perspectives or main concerns, and could help spark theoretical insights of value to educational research and educational practices (Lindqvist & Forsberg, 2023), offering real insights into how early childhood educators can embrace entrepreneurial pedagogies. One of the benefits of using constructivist grounded theory as a research strategy when researching teachers is that it allows for an open, exploratory approach (Lindqvist & Forsberg, 2023), which will provide for a deeper understanding of the experiences and perspectives of preschool teachers.

In this research study, the Charmazian Constructivist Grounded Theory (CGT) approach is strategically applied to explore the dynamics of entrepreneurial education among early childhood educators, in particular those who teach preschool children. Entrepreneurial education at preschool age is a relatively unexplored area, and constructivist grounded theory allows for in-depth exploration of this phenomenon. Supported by a relativist ontology that acknowledges the multiplicity of realities suggests that understanding entrepreneurial education varies across different early childhood contexts. Aligning with a constructivist epistemology, this infers that knowledge about entrepreneurial education in early childhood settings is constructed through the interaction and experiences shared between the researcher and the participants.

With its emphasis on the co-construction of knowledge, CGT enables a comprehensive inquiry into these shared experiences, facilitating an in-depth understanding of how educators perceive, navigate, and if applicable, implement, the complexities of fostering entrepreneurial mindsets among preschoolers. This methodology not only allows for a detailed exploration of the phenomena but also ensures that the knowledge generated is grounded in the actual experiences and opinions of those within the early childhood education sector. CGT is instrumental in actively engaging early childhood educators in dialogue, acknowledging their unique perspectives, and collaboratively constructing meaning from their interactions with preschool children.

Furthermore, CGT's flexible and iterative methodology supports the continuous integration of new insights, thereby expanding understanding concerning the integration of entrepreneurial education into early childhood learning. This research strategy, grounded in the interpretivist paradigm, not only has the ability to provide novel insights into the application of entrepreneurial education in early childhood settings but also emphasises the significance of collaborative knowledge creation between researchers and educators. As such CGT widens the possibilities for entrepreneurial education in early childhood settings, and advocates for the development of theories that resonate with the complexity and realities of educational practice, thereby directly addressing the research question in this study, and advancing the field of entrepreneurship education.

5.7. Time Horizon

The time horizon element of the ‘research onion’ model (Saunders et al., 2007, 2019) refers to the duration over which the study is conducted, data is collected, and captures the temporal aspects and changes that occur within a research context. Importantly time horizon establishes whether the study is cross-sectional or longitudinal. According to Neuman (2014), a cross-sectional study involves data that is collected only once within a specific time period. This indicates that researchers do not follow up on the same data subjects or collect data over an extended period of time. As the most common approach evidenced in the literature (Al-Ababneh, 2020), the cross-sectional time horizon provides a snapshot of information at a particular point in time.

Conversely, the cross-sectional approach involves data collected from multiple subjects, without acknowledging the changes that occur over time (Machado & Davim, 2020). This approach is useful when researchers want to explore behaviours, characteristics, and relationships among different variables within a population, at a given point in time. The cross-sectional time horizon provides a valuable perspective for understanding educational phenomena and informing educational practices (Martyniuk & Tucker, 2014). It has been widely used in both entrepreneurship and education research to gather data at a specific point in time, to examine various phenomena. In the field of entrepreneurship, cross-sectional studies have been conducted to explore the impact of cognitive entrepreneurial training and education on business opportunity recognition (Suteerchai et al., 2019), examine the entrepreneurial intentions of university students (Hossain, 2023), and investigate the relationship between entrepreneurial orientation, learning orientation, and performance of small and medium-sized enterprises (Suteerchai et al., 2019). Cross-sectional studies are also evident in early childhood education. A study by BMC Health in 2014 examined the knowledge of early childhood educators in facilitating physical activity for pre-schoolers (Martyniuk & Tucker, 2014).

Applying a cross-sectional time horizon in this research study, particularly when employing a CGT approach, will allow the researcher to gather data from a diverse and representative sample of pre-school educators across various different early years settings. This design will offer insights into the current position of entrepreneurial education within the early childhood context, facilitating the identification of patterns and differences in understanding among the

participants, leading to a comprehensive and nuanced analysis of their perspectives. In addition, utilising a constructivist grounded theory approach complements the cross-sectional time horizon as it focuses on understanding individual's experiences and perspectives within their social and cultural contexts. The interpretivist paradigm and constructivist philosophical stance emphasises that participants actively construct meaning and their understanding of entrepreneurial education may evolve over time. By capturing their views at a specific moment, the cross-sectional design helps researchers uncover the range and diversity of opinions within the target population while also considering the dynamic and subjective nature of these educators' beliefs. Utilising a cross-sectional time horizon in conjunction with a CGT approach will offer a robust and insightful methodology for investigating early childhood educators' understanding of entrepreneurial education.

5.8. Data Collection - Techniques and Procedures

Moving to the pivotal phase of data collection within the research strategy, the choice of techniques and procedures are fundamentally influenced by the study's relativist ontological and constructivist epistemological positions. The chosen qualitative method aligns with the aims of this research study and will facilitate a comprehensive exploration of educators' beliefs, experiences, and practices. This section details how the chosen technique and procedure is well suited to thoroughly address the research question.

Billups (2019) states that qualitative data collection is used to collect non-quantifiable information about individual beliefs, experiences, perceptions, and behaviours. It is used when the researcher aims to explore the depth and richness of human experiences and interprets people's social interactions and lives. A strength of a CGT approach to data collection is its flexibility and adaptability to the unique context of the research participants. Charmaz (2006) states that CGT allows researchers to employ a variety of data collection techniques, including interviews, observations, and document analysis. The methodological flexibility, tailored to suit the specific needs and preferences of the individuals being studied, permits the researcher to gather in-depth data. While observations are a favoured technique in CGT, this approach is not possible in this research study, given that observation would have involved the simultaneous observation of children in their learning and play environment, an ethical research

challenge that was not possible to overcome in this study. As such a mono-method of semi-structured interviews was deemed the most appropriate data-gathering technique.

The mono method of qualitative research in CGT offers several benefits including allowing for critical qualitative inquiry by fostering the asking of emergent critical questions throughout the research process (Charmaz, 2016). Additionally, it integrates methodological innovations in qualitative inquiry such as coding, memo-writing, and theoretical sampling, while shifting the epistemological foundations of the original grounded theory (Charmaz, 2016, 2014; Mills et al., 2006a, 2006b). Importantly, this method also encourages the integration of individualism in qualitative research and adopts a deeply reflexive stance of methodological self-consciousness (Charmaz, 2016).

5.8.1. Semi-Structured Intensive Interviews

Interviews as a qualitative data collection approach focus on understanding perspectives, context, and the social interactions of individuals or groups (Hennink et al., 2010). They are an effective method for getting people to talk about their personal feelings, opinions, and experiences, and to reflect upon experiences in a way that seldom occurs in everyday life (Charmaz, 2006). It is also an opportunity to gain insight into how people interpret and order the world (Milena et al., 2008) and as such are the chosen technique used to address the research question of this study.

An interview is a directed conversation (Lofland & Lofland, 1995); and intensive interviewing facilitates a comprehensive exploration of a particular topic, experience, or opinion, and as such is an effective method of interpretative inquiry (Charmaz, 2006). *'Intensive qualitative interviewing fits grounded theory methods particularly well'* (Charmaz, 2006, p.28). Employing semi-structured intensive interviews in CGT, a researcher explores participants' motivations, thoughts, and perceptions to gain valuable information on education systems, processes, and experiences (Conlon et al., 2013).

Interviews are designed to encourage participants to discuss their experiences, perspectives, and interpretations freely while ensuring the conversation remains focused on the research question. Leavy (2020) explains that semi-structured interviews involve a systematic, yet

flexible approach to data collection from participants. The key features of semi-structured intensive interviews are flexibility (the interviewer has the flexibility to change and adjust to responses), open-mindedness (encouraging participants to express feelings, thoughts, and experiences in their own words), participant centred (acknowledges beliefs, experiences, and interpretations) and rich data generation (contextualised and detailed data) (Crow & Edwards, 2013, Charmaz, 2006).

While there are pre-determined questions, semi-structured interviews unfold in a conversational manner offering participants the chance to explore issues they feel are important (Crow & Edwards, 2013). The open-ended nature of these interviews complements the study's epistemological position by allowing educators' narratives to emerge organically facilitating the co-construction of meanings, questions and answers between the researcher and educator participants (Charmaz, 2006), and giving space for participants to introduce new, relevant themes to the conversation.

The iterative nature of CGT allows for the modification of interview guides based on preliminary findings, ensuring that the emerging themes are explored in subsequent interviews. This responsive approach enhances the depth of data collection and ensures that the research remains closely aligned with the lived experiences of early childhood educators. Semi-structured interviews in the CGT framework also emphasise the importance of reflexivity. Through reflective memo-writing after each interview, the researcher continuously evaluates their assumptions and biases, ensuring that the data collection process remains grounded in the participants' perspectives. This reflexivity is vital for maintaining the integrity and authenticity of the co-constructed knowledge.

The choice of semi-structured intensive interviews, as the data collection technique within this research study's CGT approach, offers a robust method to gain insight into the concept of entrepreneurial education within early childhood education. Insights may offer new knowledge and actionable recommendations to both entrepreneurship and educational research and practice.

5.8.2. Sampling

Sampling in research refers to the process of selecting a subset of individuals or elements from a larger population to represent that population in a study (Guest, 2014). It is a crucial step in research design as it determines the generalisability and validity of the findings. Different sampling methods can be employed depending on the research objectives and the nature of the study. This study uses a combination of purposeful, snowball, and theoretical sampling to find and select early childhood educators as interview participants.

Purposive sampling is often employed in research studies to ensure that the sample represents the target population, obtaining a deeper understanding of the phenomenon under investigation (Schmidt et al., 2018). It can provide fruitful and in-depth data (Patton, 2015) that aligns with the theoretical framework and research question (Corner et al., 2019; Taylor et al., 2016; Poole, 2017), and can enhance the validity and reliability of findings (Gunawan et al, 2020). From the CGT perspective it also facilitates the discovery of fresh perspectives and emerging theories (Herbert, 2021). Participants are selected based on specific characteristics or competencies (Gunawan et al., 2020) and their ability to provide relevant insights (Biernacki & Waldorf, 1981; Etikan, 2016). However, it is important to acknowledge that purposive sampling may result in missing potentially useful content and may limit the generalisability of the findings (Schmidt et al., 2018). Purposeful sampling was initially adopted in this study to provide insights into the pedagogical practices and beliefs of early childhood educators, in the context of entrepreneurial education.

Snowball sampling was also employed in this study and occurs when participants are identified and selected by referrals from existing participants, who meet the inclusion criteria (Parker et al, 2019). It is useful in situations when the research population is small, or difficult to reach (Noy, 2008; Heckathorn, 2011; Au, 2022), as is the case with early childhood educators in Ireland. Snowball sampling is based on the assumption that individuals within a specific network tend to have similar experiences, characteristics, and traits (Naderifar et al., 2017). However, snowball sampling can result in sampling bias because participants are recruited through referrals within an existing network. The selected sample may over-represent or may indeed under-represent certain perspectives or characteristics of participants. Due to its non-probability nature, the potential bias may limit generalisability to the broader population

(Spence et al., 2016; Marcus et al., 2016; Roy et al., 2015). However overall, snowball sampling allows trust building, increases participation, and efficiency in recruitment; enhances data quality and positive participant experience (Noy, 2008; Parker et al., 2019) and was an advantageous approach in this study, aiding in the recruitment of a male representative of the sample population.

The subsequent use of theoretical sampling led to a more comprehensive understanding of the phenomenon under investigation (Conlon et al., 2020). Theoretical sampling involves selecting participants based on emerging theoretical concepts and collecting data to develop, refine, and enrich the emerging theories (Davoudi et al., 2016; Lapan et al., 2011), and is a key element in Constructivist Grounded Theory (Charmaz, 2014). Theoretical sampling is particularly useful in CGT as it allows for the integration of methodological innovations in qualitative inquiry and supports the exploration of diverse perspectives and experiences (Charmaz, 2016). This approach enhances the depth and richness of the analysis by ensuring that the data collected aligns with the evolving theoretical framework, generating theory grounded in the data and reflective of the complexity of the phenomenon being studied (Charmaz, 2006, 2014; Glaser 2012; Coskun, 2020).

The integration of purposeful, snowball, and theoretical sampling strategies in this study illustrates a comprehensive approach to understanding entrepreneurial education within early childhood education. This multi-faceted approach collectively contributed to a comprehensive exploration of pedagogical beliefs, experiences, and practices, ensuring that data gathered was rich, varied and closely aligned with the constructivist grounded theory framework.

5.8.3. Semi-Structured Intensive Interview Participants

In conducting a comprehensive exploration of entrepreneurial education within early childhood settings, this study meticulously selected a sample of early childhood educators to interview, adhering to carefully defined inclusion and exclusion criteria, designed to ensure the relevance, depth, and rigor of the insights gathered.

Inclusion criteria mandated participants to be currently employed as early childhood educators with a minimum of one year of experience in the field, holding relevant qualifications in early

childhood education or closely related disciplines. This was to guarantee a foundational understanding of early educational practices, allowing for a comprehensive exploration of their experiences and perspectives. Conversely, the exclusion criteria were carefully designed to maintain the study's clarity and relevance, specifically excluding individuals not directly involved in early childhood education or those lacking sufficient proficiency in the language of the interviews, thereby addressing potential communication barriers (Morse, 2015). The geographical location of participants was also a consideration, aiming to capture a diversity of educational contexts while adhering to the study's logistical constraints. Through this meticulous selection process, the study seeks to construct a comprehensive understanding of the current practices and challenges within early childhood education, thereby contributing valuable insights to the field without a leading focus on entrepreneurial education initiatives. Table 5.2. illustrates the inclusion and exclusion criteria for this research study. The initial purposeful sample was recruited based on these criteria.

Table 5.2. Initial Inclusion and Exclusion Criteria

| Inclusion Criteria | Exclusion Criteria |
|--|--|
| <u>Early Years Setting:</u> Setting must offer the ECCE programme | <u>Non - Early Years Setting:</u> Settings that do not offer the ECCE programme will be excluded |
| <u>Professional Role:</u> Currently employed as an early childhood educator in a preschool setting | <u>Non-Early Childhood Educators:</u> Individuals working outside an early childhood setting or not directly involved in early childhood education will be excluded. |
| <u>Preschool Experience:</u> Must have a minimum of 1 year experience working within a preschool context | <u>Limited Preschool Experience:</u> Educators with less than 1-year experience working within a preschool context will be excluded to ensure participants have sufficient knowledge of the professional experience of teaching preschool |
| <u>ECCE Experience:</u> Must have a minimum of 1 year experience working within an ECCE classroom | <u>Limited ECCE Experience:</u> Educators with less than 1-year experience working within an ECCE context will be excluded to ensure participants have sufficient knowledge of the ECCE programme |
| <u>Educational Background:</u> Must have a minimum of a level 7 qualification in Early Childhood Education / Early Years Education / Montessori or an equivalent. | <u>Lack of Relevant Qualifications:</u> Individuals without formal qualifications, or lower than a level 7 in early childhood education / Early Years Education / Montessori or an equivalent will be excluded |
| <u>Language Proficiency:</u> Must be able to speak the language in which the interviews will be conducted, to ensure clear communication and understanding | <u>Language Barriers:</u> Individuals who do not possess sufficient proficiency in English will be excluded due to potential communication challenges during the interview |
| <u>Geographical Location:</u> Must be working within the Republic of Ireland to be inclusive of all educators delivering or who have delivered the ECCE programme | <u>Geographical Limitations:</u> Educators working outside of the Republic of Ireland will be excluded due to potential communication challenges during interviews. |

Source: *Authors own*

Drawing on established methodological guidance in qualitative research (Creswell & Poth, 2016), the sample was chosen based on specific professional, experiential, and educational parameters. 19 in-depth semi-structured intensive interviews were completed in addition to 1 pilot and 2 withdrawals. Table 5.3 illustrates the sample of participants who completed interviews for the purpose of this study.

Table 5.3. *Study’s Semi-Structured Intensive Interview Participants*

| Participants | Location | Facility Type | Curriculum Represented | Level of Education |
|---|------------------------|-------------------------------|---|---|
| Female (n=18) Male (n=1) Withdrawals (n=2) Pilot (n=1) | Rural – 8 Urban -11 | Private – 10 Community - 9 | Play-based (n=3) Montessori (n= 4) High Scope (n=2) Reggio Emilio (n=1) Steiner Kindergarten (n=1) Forest (n=1) Te Whāriki (n=1) Combination (n = 6) | Level 5 (n=2) Level 6 (n=4) Level 7 (n=4) Level 8 (n = 6) Level 9 (n=3) |

Source: *Authors own*

Each interview lasted between 60 and 90 minutes and averaged 70 minutes in duration. Interviews took place via Zoom between March 2023 and July 2023. Research evidence’s that Zoom is a viable tool for the collection of qualitative data because of its relative ease of use, rich therapeutic value, cost-effectiveness, data management features, and security options (Oliffe et al, 2021; Archibald et al, 2019; Gray et al, 2020). All conversations were recorded using a digital audio recorder.

Interviews took place on days and times convenient to the participants. Interviews were not possible in person during the working day, as children were in the setting and the researcher would require garda vetting and parental consent to enter the setting. In addition, the work demands of the educators meant that it was more convenient and conducive for the interviews to take place after working hours. Participants were provided with a consent form (see Appendix D) before each interview and were provided with the opportunity to ask any questions. Each participant was informed of their right to stop the interview, withdraw from the interview, and request for their data to be excluded from the study at any point. To protect anonymity, alphabetical representations were chosen by the researcher to maintain a degree of security and privacy for the interviewee, in line with qualitative interpretative research (Kaiser, 2009).

With a CGT approach, Charmaz (2014) recommends that the researcher develop a comprehensive interview protocol to gain clarity on the type of information required to answer the research question. A detailed and comprehensive interview guide was designed, comprising of questions aimed at exploring participants’ experiences and opinions (see Appendix E).

Questions must cover a wide range of experiences yet be narrow enough to elicit and elaborate on the participants' specific experiences (Charmaz, 2006) allowing for the gathering of specific data for developing theoretical frameworks as interviews proceed. Grounded theory interviewers must ensure they remain active in the interview, and be alert to interesting leads (Holstein et al., 2013).

Initial opening questions established geographical location, length of time working in early childhood education, whether the setting was a private or public facility, philosophical and curriculum position of the setting, and each participant was asked what influenced their choice of career in early childhood education. These initial questions proved useful in establishing a wide and varied sample of early childhood educators who were being interviewed in terms of location, type of facility, experience, and curriculum delivered, and also established a degree of rapport with the participants.

The number of participants involved was dependent on the saturation point. With regards to a CGT approach (Charmaz, 2014, p.108) advises that researchers should learn '*what constitutes excellence rather than adequacy*' in one's field and conduct as many interviews as needed to achieve this excellence. Guest et al (2006) argue that 12 is a sufficient number when research identifies common views and experiences among relatively homogenous people. With regards to a grounded theory approach, the saturation point is '*when no new data are identified*' (Aldlabat & Le Navanec, 2018, p5), that is when new data does not add any further insights to the core categories and/or the discovery of additional properties for those categories (Charmaz, 2006; Glaser & Strauss, 1971; Galvin, 2015). To expand, data saturation in grounded theory is referred to as theoretical saturation (Charmaz, 2006). It is '*the phase of qualitative data analysis in which the researcher has continued sampling and analysing data until no new data appear and all concepts of the theory are well developed....and their linkages to other concepts are clearly described*' (Morse, 2004, p. 1123) and thus data collection can cease. Following five rounds of data collection (1 x 3 participants and 4 x 4 participants), it was deemed no new data, opinions or experiences were emerging and the researcher considers 19 interviews to have provided '*excellence rather than adequacy*' (Charmaz, 2014, p.108) in terms of data gathered.

5.9. Researcher Positionality

Positionality depicts the individual philosophical worldview and position adopted to answer the research question (Rowe, 2014). The individual worldview concerns ontological and epistemological assumptions about what is known about the world (Holmes, 2020). This research seeks to establish how early childhood educators can foster and nurture entrepreneurial thinking, skills, and values in preschool children. Within this process, the research position aligns with the concept of relational reflexivity research practice, whereby the aim of the study is to *'maximise the authenticity and resonance of the understandings generated....through drawing attention to and building on the richness of their situated interpretive stance, as much as possible'* (Hibbert 2021, p.113).

Throughout the process of engaging with relational reflexivity, the research aims to transcend the traditional hierarchical relationship between research and participant, fostering a collaborative and inclusive research environment. A relationally reflexive approach involves practices that address the need to *'question the way we position ourselves in relation to others in the research, in our methodology, interactions, and research accounts'* (Cunliffe & Karunanayake 2013, p.385). By adopting a relational reflexive approach, this research strives to establish meaningful connections with the research participants; the early childhood educators, recognising the reciprocal influence between the researcher and the participant. Relational reflexive research promotes active engagement with the research process, where the role of the researcher is not to merely observe, but to actively participate in shaping knowledge and understanding (Hibbert et al., 2014). As a researcher, by engaging in this process there is an acknowledgment of the complex social and cultural dynamics that shape early childhood educator's perspectives on entrepreneurship education, and it encourages critical reflection on both the researcher's and participant's assumptions and biases (Lambrechts et al., 2009; Steyaert & Von Looy, 2010). By embracing relational reflexivity, research practice seeks to contribute to theory development, challenging existing ideologies that preschool children can engage in entrepreneurial learning as they are too young and foster a more inclusive understanding of entrepreneurship education in early childhood contexts.

As both an educator and parent, this relationally reflexive approach has enabled the researcher of this study to reflect after each interview and to assess the tone, pace, and value of questioning

during the intensive interview process. This process has coincided with the CGT data analysis process of memoing and constant comparison, ensuring rigor and an appreciation of emerging concepts and theories. It has also facilitated the researcher in positioning themselves as an evolving constructivist grounded theorist, aware of the limitations and benefits of this strategy and approach to data analysis, providing reassurance that this chosen methodology and analysis is fitting to address the research question. This study holds very personal importance to the researcher, both as an entrepreneurship educator, eager to develop, grow, and expand the education of the phenomenal skill's entrepreneurial education fosters, and as a parent, keen to provide her young children with the opportunity to be independent, innovative, creative and opportunistic individuals with the freedom of choice to pursue their interests and add value to society, community, economy, and their personal lives.

5.10. Ethical Considerations

'Ethics begins and ends with you, the researcher' (Neuman, 2011, p.143). Ethical considerations are very important in qualitative research as qualitative research approaches often intrude into participants' lives (Punch, 1998). Best practice when undertaking any research study is to take careful consideration of what is right and what is wrong regarding our actions as qualitative researchers, and the people we are studying (Creswell & Miller, 2000). As such a good qualitative researcher should be accountable and transparent (Kalu & Bwalya, 2017).

A researcher's axiological position influences the ethical considerations of a study. Axiology refers to the role of values and ethics (Saunders et al., 2018), an important element to consider if one's research has any ethical complexities. As this research involves educators of young children, the research will need to be cognisant of the axiological values and beliefs that will play a part in the process. An axiological implication of this research study is that interpretivists recognise that their interpretation of research materials and data, and thus their own values and beliefs, play an important role in the research process. Crucial to the interpretivist philosophy is that the researcher has to adopt an empathetic stance. The challenge for the interpretivist is to enter the social world of the research participants and understand that world from their point of view (Saunders et al., 2009, 2019).

An array of ethical issues arises throughout the grounded theory process. According to Creswell (2012), these ethical issues range from how the grounded theorist advances the purpose of the study, how appropriate authority and power are assigned to the interviewees and documenting a logical framework for the grounded theory research to enable other grounded theorists to replicate similar research (Chong & Yeo, 2015).

The researcher in consideration of the ethical implications of this research study, completed a Digital Badge in Research Ethics & Integrity and completed a module on Research Skills, which covered all aspects of research ethics. The research study plan went through a rigorous process with the Research Ethics and Integrity panel at Munster Technological University where full ethics approval was granted (see Appendix C). Participants were provided with a detailed outline of the study, a consent form, and the opportunity to discuss any queries and questions, and provided with an opportunity to withdraw at any time, all measures recommended by Khan (2014). Measures to protect the anonymity of the participants and all data have been fully planned for and outlined in the ethics plan.

5.11. Ensuring Quality and Rigour

Standards for ‘good research’ can vary when discussing quantitative or qualitative research. The overarching aim of the research process is to ensure reliability, rigour, and validity in research, enabling the researcher to draw meaningful conclusions and contribute to existing knowledge (Morse, 2015; Klenke et al., 2015; Kirk & Miller, 1986). However, as this research study engages in a qualitative research paradigm, reliability, and validity can pose problems. If a qualitative study is discussed with reliability as a criterion, the consequence is that the study is no good (Stenbacka, 2001). The term ‘validity’ has a multiplicity of meanings, it is *‘a contingent construct inescapably grounded in the processes and intentions of particular research methodologies and projects’* (Winter, 2000, p.2). For these reasons, this research study will follow Lincoln and Guba’s (1985) approach, giving preference to credibility, neutrality or confirmability, consistency or dependability, and applicability or transferability as criteria for quality in qualitative research.

To achieve data that is rigorous, consistent, and credible, the four actions to assess this include reflexivity, member checking, clear documentation, and triangulation (Shenton, 2004; Ash & Guappone, 2007).

- **Reflexivity:** this involves the researcher's awareness of their assumptions, biases, and preconceptions throughout the data analysis process. The researcher reflects by documenting their perspectives or prior knowledge about entrepreneurial education which may influence data interpretation. Addressing these biases can increase the trustworthiness of the analysis (Olmos-Vega et al., 2022).
- **Member checking:** involves revisiting analysed findings to verify their accuracy and interpretation. Researchers can share findings with participants and seek insights and feedback. Member checking allows confirming or challenging to ensure alignment between emerging theories and experiences (Birt et al., 2016) with entrepreneurial teaching and learning practices.
- **Documentation:** detailed and clear documentation throughout data analysis is important for trustworthiness and transparency. The researcher should record their reflections, decision-making, and interpretation in field notes and memos (Stahl & King, 2020). A detailed audit trail in the CGT approach illustrates the development of categories and their integration into cohesive theory that addresses the research question.
- **Triangulation:** triangulation in qualitative research enhances the credibility, validity, and depth of the study's findings (Fusch et al., 2018). Traditionally triangulation involves using multiple methods or data sources to validate findings (Natow, 2020; Creswell, 2014). In this research, only a single method (semi-structured intensive interviews) was employed. However, triangulation was achieved through the diversity of participants, utilising diverse analytical tools, the application of different theoretical perspectives to analyse the data (Flick, 2018), researcher reflexivity, and the application of constructivist grounded theory principles (Charmaz, 2006). This approach ensured a comprehensive and credible exploration of how entrepreneurial learning is fostered in early childhood education, despite the reliance on a single methodological approach. The triangulation approaches used in this study are discussed as follows:

Methodological Triangulation within a Single Method

- **Diverse Analytical Tools:** employing memos and reflective vignettes as analytical tools within the constructivist grounded theory approach allows for methodological triangulation from within the singular data collection method of this research study. This strategy aligns with Charmaz's (2014) assertion that the constructivist approach is reflexive and iterative, enabling rich analysis through active engagement with the data (Charmaz, 2014). By documenting the researcher's thought processes, assumptions, and evolving understanding, memos serve as a critical reflective tool that contributes to the triangulation process, enhancing the analytical depth and grounding the emerging theory in the data.
- **Iterative Coding Process:** the iterative process of initial, focused, and theoretical coding further exemplifies methodological triangulation. Through this process, data are continuously revisited, compared, and contrasted, which allows for multiple perspectives on the same dataset to emerge. This iterative engagement with the data ensures a comprehensive exploration of the phenomenon, enhancing interpretative validity through methodological rigour (Patton, 2015).

Theoretical Triangulation

- **Integration of Literature:** theoretical triangulation is achieved by embedding the study's findings within an existing body of scholarly work. By critically engaging with relevant literature throughout the coding process and in the development of theoretical codes, the study contributes to the broader academic discourse on entrepreneurial learning in early childhood education. This approach enriches the study by providing a multidimensional view of the phenomenon under investigation, grounded in both empirical data and theoretical frameworks (Denzin, 1978).
- **Conceptual Density:** the development of concepts and categories from initial gerund codes to emerging theoretical codes demonstrates a robust theoretical triangulation. This density ensures that the emergent theory is not only rooted in the data but also resonates with, and is informed by existing theoretical constructs, thereby enhancing the credibility and scholarly contribution of the research.

Data Triangulation

- **Participant Diversity:** within the constructivist grounded theory approach, data triangulation can also be achieved through the depth and variety of participant experiences (Flick, 2018) captured in the in-depth interviews. By engaging with a broad spectrum of early childhood educators across Ireland, this research study illustrates a diverse range of insights, perspectives, and reflections on fostering entrepreneurial learning in preschool children. This diversity enriches the data and enables a more comprehensive understanding of the phenomenon.

Reflexivity and Researcher's Role

- A crucial aspect of triangulation in the context of CGT is the researcher's reflexivity, which is documented through the study's memos and reflective vignettes. This reflexivity acknowledges the researcher's influence on the research process and outcomes, thereby enhancing the transparency and trustworthiness of the study. Reflexive practices ensure that the emerging theory is a product of a rigorous, self-aware, and critically engaged research process.

Adhering to Lincoln and Guba's (1985) criteria of credibility, confirmability, dependability, and transferability ensures that this research study meets the standards of quality and rigor, while fully aligned with the study's constructivist grounded theory approach. Through the application of participant diversity, and methodological, theoretical, and data triangulation strategies, this study also overcomes the limitations of using a single data collection method. These processes ensure a credible, comprehensive, and reflexive exploration of entrepreneurial education within early childhood education, contributing to the body of knowledge with rich, grounded, and reliable insights.

5.12. Research Methodology Limitations

Within academic research, and the study of entrepreneurship education, the methodology employed plays a pivotal role in shaping the insights and conclusions drawn. This research study, while novel in its approach is not immune to the inherent limitations associated with qualitative research methodologies, mono-method research strategies, and specifically the

adoption of a Constructivist Grounded Theory approach. Recognising and addressing these limitations is crucial for ensuring the credibility of the study.

- (1) Limitation of Qualitative Research - entrepreneurship research has in many cases been traditionally associated with positive, deductive quantitative approaches, imposing the researcher's values (Dana & Dana, 2005). This research study applies an inductive qualitative approach, exploring values, opinions, and experiences and interpreting the meanings behind these concepts. Qualitative research in entrepreneurship education studies has been criticised due to limited comparability, generalisability, and researcher bias (Blenker et al., 2014). Indeed extensive and rigorous qualitative research methods skills can take many years to acquire (Kohler et al., 2022; Locke, 2008).
- (2) Limitation of Mono-Method Research - semi-structured intensive interviews can be time intensive, generalisable, subject to researcher bias, and may take a longer verification process to extract compared information (Queiros et al., 2017). In addition, focusing on one method may be inadequate for publication requirements (Kohler et al., 2022).
- (3) Limitation of Constructivist Grounded Theory - Glaser (2012) criticises the Charmazian (2014) interview protocol arguing that long-guided interviews can push interviewees in a specific direction, resulting in a bias in the data. It is argued that the presence of the researcher during the interview can also influence participant responses and participants may provide socially desirable responses. As a result, a limitation of the study could involve the qualitative data analysis resulting in interpretative bias or the possibility of overlooking alternative perspectives (Livesey, 2014). This study applies a CGT strategy, and Myers (2009) suggests that novice researchers can become inundated with the laborious and time-consuming process of coding in grounded theory. Charmaz (1989) also contends that novice researchers using grounded theory have a high potential for methodological error.

Acknowledging these limitations within this study is essential for a comprehensive understanding of the study's scope and potential impact. These limitations highlight the importance of researcher reflexivity, methodological rigor, and the pursuit of analytical generalisability as core components of the research process. Despite these challenges, the employment of CGT in exploring entrepreneurship education among early childhood educators

remains a methodologically sound choice, offering depth and insight into complex phenomena that quantitative approaches might overlook.

5.13. Conclusion

Researchers embark on a systematic process to acquire knowledge, solve problems, address questions, and validate or contribute to theories. Research Methodology depicts a plan of action or strategy of inquiry (Creswell, 2009) behind the selection and use of methods, providing a structured framework for planning and executing research, as well as procedures for data collection and analysis (Crotty, 1998; Saunders et al., 2007, 2015, 2019).

The objective of this chapter is to illustrate how qualitative research helps understand the studied phenomenon to ultimately address the research question. Consequently, the chosen interpretivist paradigm *'has much to offer'* (Creswell, 2007, p.3). This study adopts the 'research onion' methodological design (Saunders et al., 2007, 2015, 2019), a framework that ensures this research is both well justified and explained. Each layer – research philosophies, choices, strategy, approaches, time horizons, techniques, and procedures are discussed to demonstrate the core building blocks that are crucial to the development of a research design. The 'research onion' design is appropriate for theory development, aligning with the need to develop a theory on entrepreneurial education within early childhood education; it facilitates creativity to the extent of the researcher being able to reflect and encourages the creative development of a researcher's own tools and techniques (Sahay, 2016). This chapter has shared the methodological journey of this research study and described and justified the research approach and strategy adopted and employed as summarised in Table 5.4.

Table 5.4. Key Study Research Decisions

| Research Decision | Approach Chosen | Justification |
|------------------------------|---|--|
| Paradigm/Philosophy | Interpretivist - Saunders et al. (2009, 2016); Collis & Hussey (2014); Easterby-Smith et al. (2021); Lincoln et al. (2011); Quinlan et al. (2015); Zukauskas et al. (2018). | Holds that all knowledge is a matter of interpretation. Complex, rich, and socially constructed through language. Multiple meanings and interpretations. |
| Theory Development | Inductive (Bergdahl & Berterö, 2015; Soiferman, 2010; Pathirage et al., 2008) | A method of reasoning that moves from specific observations to broader theories and generalisation. |
| Methodological Choice | Mono-Method Qualitative (Creswell, 2014, 2009; Saunders et al, 2016). | Qualitative research involves exploring and understanding the meaning people, either as individuals or in groups attribute to social or human problems and interpreting the meaning of the data collected. |
| Research Strategy | Constructivist Grounded Theory (Charmaz, 2006). | A qualitative research methodology that seeks to understand and explore a complex social process where no <i>adequate</i> prior theory exists and encourages innovation and the development of new understandings and novel theoretical interpretations of studied life. |
| Time Horizon | Cross-Sectional (Neuman, 2014). | Data is collected only once within a specific time period. This indicates that researchers do not follow up on the same data subjects or collect data over an extended period of time. This approach provides a snapshot of information at a particular point in time. |
| Data Collection | Semi-structured intensive interviews (Charmaz, 2006; Leavy 2020). | A semi-structured interview is a verbal interchange where one person, the interviewer, attempts to elicit information from another person by asking questions. It involves a systematic, yet flexible approach to data collection from participants. <i>'Intensive qualitative interviewing fits grounded theory methods particularly well'</i> (Charmaz, 2006). |
| Data Analysis | Constructivist Grounded Theory (Charmaz, 2006; Knight & Watson, 2014). | The analytical technique used for qualitative data under the CGT strategy involves an inductive, iterative, and systematic process for data analysis to generate theoretical explanations and insights. |

Source: *Authors own*

The methodological approach was largely selected as the researcher-participant interaction creates the knowledge that is generated (Poku et al., 2019), highlighting the importance of a mutual and reciprocal relationship to reveal depth, feelings, and reflective thoughts (Mills et

al., 2014). This approach has also been selected as it enables the researcher to explore the studied phenomena holistically (Cho & Lee., 2014), where phenomena are considered from new perspectives, and findings should be theoretically dense, richly and tightly linked to one another (Corbin & Strauss, 1990).

To understand the phenomenon researched in this thesis, the researcher drew upon a qualitative, explorative stance, collecting data via semi-structured intensive interviews (n=19). Data was analysed through several rounds of coding, data comparison, and memo writing which will be discussed in Chapter 6. The overall strategy for this study is Constructivist Grounded Theory (CGT), with the objective of developing a conceptual model for embedding entrepreneurial education within the early childhood education and care sector and addressing the research question: *'How can early childhood educators foster and nurture entrepreneurial learning in preschool children?'*.

CHAPTER 6
FINDINGS

6.1. Introduction

The purpose of this chapter is to present the empirical findings from the qualitative interviews conducted in this study to address the research question: How can Early Childhood Educators foster Entrepreneurial Education in Preschool Children?. Using Constructivist Grounded Theory (CGT), this chapter translates raw data into new knowledge and findings. It presents findings and coding phases sequentially, adhering to the research steps of CGT - initial, focused, and theoretical coding. This successive presentation demonstrates the study's methodological rigour, addressing the key challenges of subjective interpretation in the emerging field of entrepreneurial education within early childhood education. The chapter features excerpts and quotations from interview transcripts, memos, and vignettes from post-interview reflections, to support theoretical integration.

6.2. Structuring The Analytical Process

Grounded Theory (GT) has established itself as a rigorous process that allows in-depth analysis. However, the complexity of GT demands that application processes be made easy to understand and adopt, especially for novice grounded theorists (Chun Tie et al, 2019; Qureshi & Unlu, 2020), who may require assistance in benefiting from GT as an analytical tool (Urquhart, 2013). How to conduct coding in GT has been illustrated and exemplified by various scholars adopting different GT approaches. However, a clear agreement on (a) the terms used in coding and (b) the order of the coding within each stage (Qureshi & Unlu, 2020) has been absent from these works.

Given the nascent timing of this research study and the lack of empirical evidence in the area of entrepreneurial education in early childhood education, it was deemed necessary to explore multiple analytical frameworks to assess the most appropriate framework for this study. Employing a framework in CGT data analysis is not only methodologically sound but also enhances the depth, rigour, and transparency of the research. Through a structured, yet flexible approach, a researcher can navigate the complexities of qualitative data, ensuring that their findings and theoretical contributions are both robust and grounded in the participants' experiences. The decision to employ a framework also supports the reflective, and iterative process inherent in CGT (Charmaz, 2006, 2014). Implementing a structured analytical approach to CGT for the purposes of this research study facilitates the following:

- Enhanced Reflexivity

By adopting a structured framework for CGT analysis, this study ensures enhanced reflexivity, enabling a deeper examination of how the perspectives, biases and assumptions of the researcher (Charmaz, 2006) influence the interpretation of educators' roles in fostering entrepreneurial skills. This reflexivity is crucial for authentically representing the educational practices observed and ensuring the emerging theory accurately reflects the complexities of early childhood entrepreneurial education.

- Theoretical Sensitivity

An analytical framework fosters theoretical sensitivity from the onset (Glaser & Strauss, 1967), guiding attention to the subtle yet significant ways in which educators lay the groundwork for entrepreneurial learning. For instance, it aids in identifying specific interactions or teaching methods that particularly resonate with the principles of entrepreneurial education, thereby enriching the understanding of effective practices in early childhood settings.

- Ensures Rigour and Transparency

The use of a framework in CGT enhances methodological rigour and transparency in analysis, a crucial element in examining the multifaceted dynamics of entrepreneurial education in early childhood education. By outlining a clear and replicable approach to coding and data analysis (Morse et al., 2009) it ensures credibility in the study's findings.

- Facilitates Theory Building

The ultimate goal of CGT is to construct theories that offer deep insights into studied phenomena (Charmaz, 2014). A framework supports the integration of codes and categories into a cohesive theoretical narrative, ensuring that the emerging theory is grounded in empirical data and reflective of preschool educators' experiences and practices. This process is essential for constructing theory that not only captures the spirit of entrepreneurial education at this critical stage of a child's development but also provides actionable insights for educators and policymakers.

- Adaptability and Flexibility

Despite its structured approach, a good analytical framework in CGT maintains flexibility, allowing researchers to adapt their analysis in response to the data as new insights emerge

(Bryant & Charmaz, 2007). This adaptability is crucial when exploring entrepreneurial education in early childhood, where educators' practices and experiences may reveal unexpected patterns or themes.

To ensure the above are all facilitated, three analytical frameworks were considered in advance of data analysis in this study:

- (1) The Conditional and Consequential Matrix
- (2) The Gioia Methodology
- (3) The Unlu-Quereshi Instrument

The Conditional and Consequential Matrix:

Strauss and Corbin (1998) developed this tool to help researchers analyse the varying conditions that influence a phenomenon and its outcomes. This matrix encourages researchers to consider a wide range of factors, from micro to macro levels, that affect the phenomenon. It also prompts an examination of the resulting actions and interactions, ultimately leading to specific consequences (Strauss & Corbin, 1998). While this matrix is highly regarded for its ability to offer a comprehensive understanding of the complexity of a phenomenon, the matrix was discounted from this study as there is a risk of focusing too much on conditions and consequences, potentially underplaying the role of human agency (the early childhood educator) and as such going against the fundamentals of the CGT approach.

The Gioia Methodology:

The Gioia methodology (Gioia et al, 2012) is a systematic approach to data analysis that emphasises the creation of data structures from qualitative data. It involves first generating first-order codes based on participants' terms, then developing second-order themes, and finally aggregating the data in two theoretical dimensions (Gioia et al., 2012). Its strengths lie in that it provides a clear and structured way to organise and present qualitative data, and ensures theories are closely tied to the data, with a strong emphasis on participants' perspectives. However, this method was discounted from this study due to its structured nature which might oversimplify the richness of qualitative data emerging from the interviews with early childhood educators. In addition, it was considered that this method may not fully capture the complexity of the conditions influencing entrepreneurial education in preschool settings.

The Unlu-Qureshi Instrument:

The Unlu-Qureshi Instrument was selected as the analytical framework for this study due to its clear alignment with the study's focus on entrepreneurial education in preschool settings. This instrument facilitates a structured yet flexible approach for the organisation of data and coding in a sophisticated manner with productive results (Qureshi & Unlu, 2020). It supports the process of constant comparison and memo writing while also ensuring rigour and theoretical saturation. This analytic tool for grounded theorists comprises of four steps: (1) code, (2) concept, (3) category, and (4) theme. Each step helps in understanding, interpreting, and organising the data in a way that leads toward theory emerging from the data.

Using this instrument data is reviewed and revised multiple times to enable the researcher to reflect on codes at each iteration. This reflexive approach later helps the researcher during the theoretical coding stage where the researcher is encouraged to look beyond the obvious while also adding to the transparency of the research. The continuous interaction with data creates familiarity and facilitates the researcher in developing the major theories emerging from the data. The flexibility of the instrument informs the researcher of the requisite steps yet provides the freedom to organise the analytic process according to the needs of the study.

The decision to adopt the Unlu-Qureshi instrument for data analysis within a constructivist grounded theory framework represents a methodological commitment to representing the complexities of entrepreneurial education in preschool settings. This choice reflects a comprehensive understanding of the theoretical and practical demands of the research question ensuring that the findings are rooted in empirical data. The application of the instrument illustrated in section 6.4.1. and 6.6, demonstrating how it has enabled a comprehensive exploration and appreciation of early childhood educators' practices.

6.3. Stages of the Analytical Process

This section presents the analytical stages that have been utilised to reveal insights into how early childhood educators can foster entrepreneurial learning in preschool children. Following the guidance of Charmaz (2006, 2014), and drawing on the diverse approaches to qualitative content analysis identified by Hsieh and Shannon (2005), this study involves an inductive, iterative, and systematic process for data analysis to generate theoretical explanations and insights (Charmaz, 2006; Stough & Lee, 2021) that reflects both the researcher's engagement

with the data and the participants' experiences (Charmaz, 2014; Chun Tie et al., 2019). Table 6.1. summarises the coding terminology in constructivist grounded theory, contrasting it to the traditional approach (Draucker et al., 2007).

Table 6.1. *Coding Terminology in Constructivist Grounded Theory*

| Grounded theory | Coding | | |
|-----------------------|----------------|------------------|--------------------|
| | Initial | Intermediate | Advance |
| Traditional | Open coding | Selective coding | Theoretical coding |
| Evolved | Open coding | Axial coding | Selective coding |
| Constructivist | Initial coding | Focused coding | Theoretical coding |

Sources: *Birks & Mills (2015); Chun Tie et al. (2019); Saldana & Omasta (2016)*

As per the Charmazian approach, coding for this study was conducted in the format of initial, focused, and theoretical coding (Charmaz, 2014). Memoing, constant comparison, and theoretical sampling are also part of this rigorous process.

Initial Coding

Analysis begins with line-by-line coding of data, where the researchers break down data into discrete parts, closely examining each line or segment for its underlying meaning and potential conceptual labels (Rieger, 2019). This stage is exploratory and aims to remain close to the data, capturing the key ideas and patterns in the data (Charmaz, 2016). Initial coding allows for the emergence of insights without imposing preconceived categories and the codes serve as building blocks for further analysis and theoretical development (Rieger, 2019; Chun Tie et al., 2019).

Focused Coding

After the initial coding, the researcher moves to focused coding. This is a more refined and selective process of coding compared to initial coding, where the researcher narrows down the codes to focus on specific aspects of the data (Rieger, 2019). Focused coding helps to identify patterns, relationships and connections within the data, leading to the development of more comprehensive concepts and categories (Charmaz & Thornberg, 2021).

Memo Writing

Throughout the coding process, memo-writing plays a crucial role in CGT analysis. Memos capture thoughts, hypotheses, questions, and reflections about the data and the emerging analysis. They help in elaborating categories, exploring their properties, and identifying conceptual connections. Memo-writing is central to developing the depth and complexity of the analysis, providing a space for creativity and theoretical exploration (Charmaz, 2006, 2014).

Constant Comparison

Constant comparison involves comparing elements within and across data sources, codes, and categories, to identify variations, similarities, and differences. This iterative process is crucial for refining codes, developing categories, and identifying relationships between categories. By continually comparing data and codes researchers can generate new insights and refine their theoretical framework (Charmaz & Thornberg, 2021). Through constant comparison, the researcher works towards saturation, where no new information seems to emerge from data analysis, indicating that categories are well-developed and robust (Glaser & Strauss, 1967).

Theoretical Sampling

Guided by the emerging analysis, theoretical sampling entails seeking out new data to refine categories further, fill in gaps, and deepen the emerging theory (Chun Tie et al., 2019, Charmaz, 2006, 2014). This targeted data collection is driven by the analysis needs, highlighting the iterative nature of CGT where analysis and data collection are interdependent processes.

Theoretical Integration

The final phase of analysis involves integrating categories into a coherent theoretical framework that explains the studied phenomenon. This includes identifying a core category that represents the main theme of the research and linking other categories around it to form a grounded theory (Charmaz, 2014).

In synthesising the stages of analysis within this constructivist grounded theory study, a rich theoretical understanding of early childhood entrepreneurial education is facilitated. While specifics of the approach and findings from the different stages will be discussed in subsequent sections, it is important to acknowledge the methodological approach that supports dialogue between theory and practice.

6.4. Initial Coding Phase

The initial coding phase set the foundation for exploring entrepreneurial education in early childhood settings. This phase is characterised by an immersive and reflective engagement with qualitative data, aiming to examine, understand and conceptualise how entrepreneurial thinking and spirit is fostered in preschool children.

Initial coding in CGT refers to the process of breaking down qualitative data into discrete parts, closely examining them, and conceptualising these fragments to define what they suggest about the phenomena under study (Bryant & Charmaz, 2007). The purpose of initial coding is to *'remain open to all possible theoretical directions indicated by your readings of the data'* (Charmaz, 2014, p. 114).

To achieve this goal the researcher reflected on initial questions while undertaking initial coding as suggested by Charmaz (2014, p.116)

- What is this data a study of? (Glaser, 1978; Glaser & Strauss, 1967)
- What does the data suggest? Pronounce? Leave unsaid?
- From whose point of view?
- What theoretical category does this datum indicate? (Glaser, 1978)

These questions aid in keeping the focus on the data while also helping with aspects of credibility and originality as they enable the assurance that concepts, categories, themes, and ultimately theories emerge from the data.

6.4.1. Initial Coding Procedure and Analysis

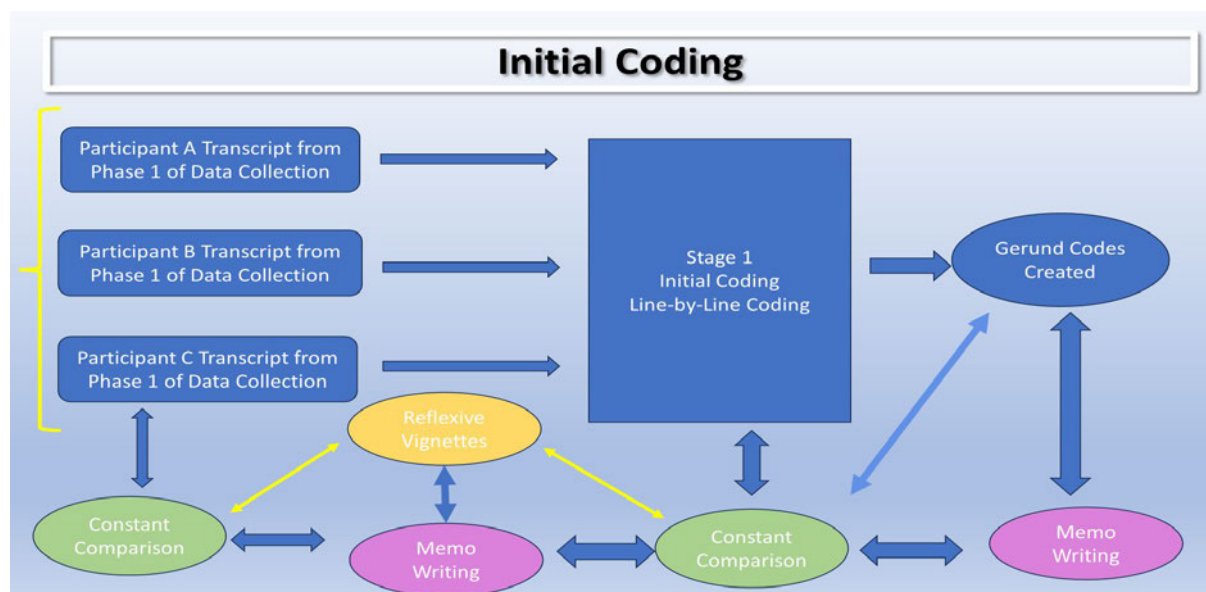
The researcher analysed the first round of interviews using an adapted version of the Unlu-Qureshi instrument to create initial codes. The first round comprises initial data from the first three interviews conducted by the researcher. The three interview transcripts were coded independently of each other. This process involved line-by-line coding of the data to generate dynamic action-oriented codes in the form of gerunds ("-ing" words) (Charmaz, 2006, 2014; Sbaraini et al, 2011), emphasising the experiential nature of entrepreneurial learning. Saldana (2013) argues for the vitality of action-orientated coding in qualitative analysis to better capture the complexities of human behaviour and interaction. Through meticulous examination of the

data, 125 codes emerged. These initial codes captured the 3 participants' narratives, laying the foundation for the emerging theory in this study.

Memo-writing accompanied the coding process, serving as a reflective and analytical tool to deepen engagement with the data (Birks & Mills, 2015; Charmaz, 2014). These memos captured insights, hypotheses, and reflections, fostering a dialogue between data and emerging theory. The iterative process of constant comparison was rigorously applied, comparing codes, memos, and their interrelations to refine codes and reveal patterns that anchor the developing theory in the data (Glaser & Strauss, 1967; Corbin & Strauss, 2008; Birks & Mills, 2015; Thornberg & Charmaz, 2014; Lauridsen and Higginbottom, 2014; Albert et al, 2019).

Incorporating vignettes provided insight into the lived experiences and challenges of early childhood educators in fostering entrepreneurial learning. Crafted from reflective documentation, vignettes offered rich, contextual narratives that brought to life the complexities of the educational setting (Morrison, 2015; Holley & Gillard, 2018; Elliot, 2005; Finch, 1987). These narrative vignettes, grounded in actual participant experiences, yet anonymised, enrich the analysis by illustrating key themes and dilemmas, thereby enhancing the narrative and theoretical depth of the study (Hughes, 2002; Barter & Renold, 2000). The initial coding procedure for this research study is represented below in Figure 6.1.

Figure 6.1. *Initial Coding Procedure for eEE in ECE study*



Source: Authors own

The initial coding phase set the stage for a rich and detailed exploration of how entrepreneurial learning is fostered in early childhood education. By systematically breaking down and reflecting upon the data through codes, memos, and vignettes, the study begins to capture an understanding and appreciation of early entrepreneurial education practices. The upcoming sections will inquire deeper into the specifics of initial codes, memos, and vignettes, providing concrete examples of how these analytical tools have contributed to uncovering the complexities of early childhood educators' roles in nurturing entrepreneurial mindsets among preschoolers.

6.4.2. Initial Codes

A comprehensive analysis generated 125 initial codes from intensive line by line coding of the transcripts from the first round of data collection. Each code took the form of a gerund and an explanation of each code was created, to capture the ongoing actions and processes of the participants. The coding was driven by a series of self-reflective questions aimed at discovering participants' beliefs and experiences within the data. Questions included: what action is evident? What is the participant saying/doing? What does the data reflect? This section delves into the process of initial coding in this study.

The initial coding procedure was completed in NVivo. To ensure methodological transparency and to facilitate the analysis, each code was classified to distinguish perspectives – those reflecting the educators' opinions, beliefs, and practices (notated as 'Educator') and those centred on children's learning and development (notated as 'Children'). This distinction is crucial for understanding the dual impact of educational strategies - how they are perceived by educators and how they resonate with or influence the children in their preschool classroom.

Table 6.2. provides an example of the code "Promoting Independence (Children)". This code emerged from discussions where educators emphasised encouraging and nurturing self-sufficiency in daily tasks. This encouragement of independence is viewed as foundational in cultivating entrepreneurial capabilities from an early age.

Table 6.2. Example of CGT line by line coding from first round of data collection
 (“Children”)

| Data | Line-by-Line Coding (gerund code) | Code Description |
|--|--|--|
| <p><i>‘creating an environment where the child is able, you know, to zip up their own jacket, to be able to go to the toilet, daily skills that create independence, for example, for the child to be able to use a spoon’.</i> [Participant A]</p> <p><i>‘I’d encourage them ‘oh you can do it yourself’.</i> [Participant B]</p> <p><i>‘I’d encourage independence, life skills, self-help skills - putting on a coat, shoes, opening their lunch box’.</i> [Participant C]</p> | <p>Promoting Independence (Children)</p> | <p>This code refers to the view of the participants in terms of fostering independence in the child.</p> |

The example in Table 6.3. illustrates another code generated. This code is from the viewpoint of the actions of the educator. “Understanding the term ‘entrepreneurial education’ (Educator)” reveals educators’ understanding or lack of understanding of the term entrepreneurial education. This code also illustrates participants’ strategies for embedding entrepreneurial thinking through practical examples and discussions in the preschool classroom.

Table 6.3. Example of CGT line by line coding from first round of data collection
(‘Educator’)

| Data | Line-by-Line Coding (gerund code) | Code Description |
|--|--|---|
| <p><i>‘Orla wanted to open a restaurant and school there today now and discuss how much should Orla pay for that pizza, or pay for that porridge, you know, having that open conversation, that brainstorming’.</i> [Participant A]</p> <p><i>‘that would be kind of introducing, you know, self-employed people to the children - stuff like that, I suppose’.</i> [Participant A]</p> <p><i>‘The kind of the idea of the shopkeeper - introducing the idea of kind of giving and taking money’.</i> [Participant B]</p> <p><i>‘I never really thought of it before - I'm assuming it's to do with like problem-solving and coming up with ideas’.</i> [Participant C]</p> <p><i>‘And then like that would turn means in later life coming up with ideas to be able to make a business – I think’.</i> [Participant C]</p> | <p>Understanding the term ‘entrepreneurial education’ (Educator)</p> | <p>This code refers to the educator's interpretation of the term ‘entrepreneurial education’.</p> |

These two codes in Tables 6.2. and 6.3. illustrate that the data gathered was from two perspectives, that of the educator themselves, who they are, what they believe and how their beliefs and experiences have shaped them as educators. This in turn filters into the second perspective, where the focus is on how the educator teaches and nurtures preschool children, and their opinions, beliefs, and experiences in working with preschool children, and the effects of preschool education on children.

Integration of Dual Perspective:

A unique aspect of this initial coding process was the creation of codes from dual perspectives, illustrating the mutual relationship between educators’ actions and their impact on children’s development. This approach broadens the scope of the inquiry, expands understanding of the preschool educational ecosystem and highlights the interconnectedness of teaching strategies and their direct and indirect influences on children’s learning experiences. The following codes in Table 6.4. and Table 6.5. illustrate this dual perspective, and how they compare and contrast.

Table 6.4. *Example of CGT line by line coding from first round of data collection
(Educators’ beliefs and opinions)*

| Data | Line-by-Line Coding (gerund code) | Code Description |
|--|--|---|
| <p><i>‘I think the child learns through play...and that kids learn to play absolutely’.</i> [Participant A]</p> <p><i>‘play based, to me it just felt like it was a free for all... I suppose I always like encouraging more structured activities’.</i> [Participant B]</p> <p><i>‘play just teaches us everything’.</i> [Participant C]</p> | <p>‘Encouraging Play (Educators)’</p> | <p>This code refers to the educator's opinions and beliefs on play as a pedagogical strategy.</p> |

Table 6.5. Example of CGT line by line coding from first round of data collection
(Educator’s observations and experience)

| Data | Line-by-Line Coding (gerund code) | Code Description |
|--|---|--|
| <p><i>‘either through free play or group play... the child decides what they want to do, if they want to work with a friend or they want to work independently by themselves’.</i> [Participant A]</p> <p><i>‘they want to tell you, this is what I done in school today...I did the binomial cube by myself. You can just see the confidence oozing from them’.</i> [Participant B]</p> <p><i>‘so in terms of life skills with toys... the boys love washing the dolly and the girls love washing the dinosaur.... they actually don't care because they just want to wash things...they actually learn exactly the same way’.</i> [Participant C]</p> | <p>'Observing Play-based Learning (Children)'</p> | <p>This code refers to the skills, capabilities, and competencies the educators observe the children learning and developing through play.</p> |

Exploring “Encouraging Play (Educators)” alongside “Observing Play-Based Learning (Children)” illustrates the reciprocal relationship between educators’ beliefs in play as a learning medium and their observations of children’s developmental gains through play-based activities. This dual analysis offers rich insights into the pedagogical foundations of play and its tangible outcomes for children’s learning.

While challenging, the initial coding phase lays a foundational stone for the ongoing analysis, with the principle of constant comparison playing a key role. As codes were generated, they were continuously compared and contrasted against each other and the emerging data, enabling an iterative refinement of the codes. A key element of constructivist grounded theory, the constant comparison method ensures robustness and depth to emerging concepts and facilitates an understanding of how early childhood educators can nurture entrepreneurial qualities in preschool children. Through this process, the study progressively builds toward a theory grounded in the experiences, beliefs, and practices of the educators. They also shed light on the

entrepreneurial capabilities fostered in preschool children such as independence, problem-solving, and creative thinking.

6.4.3. Memo Writing for Initial Coding

As each code was created from the data, a memo was also created to accompany the code. The memos also serve as a reflective tool where the researchers' initial thoughts, reactions, observations, and analysis of each code are captured. This includes reflections on the significance of the code, questions that were arising from the code, and how the code connected to the broader research question. The memos developed and evolved as data emerged from the three transcripts and noted insights of interest to examine further in the next round of data analysis. The evolving memos relating to the codes are illustrated in Tables 6.6., 6.7., 6.8., and 6.9.

Table 6.6. *Memo: 'Promoting Independence (Children)'*

| Memo – Promoting Independence |
|--|
| <p>The code 'Promoting Independence (Children)' reflects a central theme in early childhood education emphasising the intentional efforts by educators to foster autonomy and self-help skills among preschool children. Participants A, B, and C, describe using daily activities such as using a spoon, dressing, and personal hygiene, as opportunities to promote independence.</p> <p>Participant A supports integrating learning with everyday tasks to enhance children's physical skills, cognitive understanding, and emotional confidence.</p> <p>Participant B's use of verbal encouragement (<i>'oh you can do it yourself'</i>) reinforces positivity and supports children's efforts in mastering new tasks.</p> <p>Participant C extends the scope of independence to include life skills like putting on a coat and opening a lunch box, highlighting the importance of problem-solving and fine motor skills.</p> <p>The researcher is interested in exploring this theme further with other participants, as the data suggests that promoting independence among preschoolers is a fundamental part of preschool education. It is interesting that such a strong entrepreneurial skill is highlighted as being a key skill to foster among the children and is deemed a key skill for school and life. This relates to the memo discussing 'Preparing for School and Life' where the educators consider a core element of their role as a preschool educator is to prepare the child for primary school, and life in general, by encouraging and promoting key skills. These key skills have been described as independence, problem-solving, teamwork, communication, and creativity.</p> |

The memo on ‘Promoting Independence (Children)’ reveals several key findings relevant to the role of early childhood educators in fostering entrepreneurial education in preschool children, as per the constructivist grounded theory approach. These findings include:

- **Autonomy as a Pedagogical Focus:** The educators intentionally focus on promoting autonomy and self-help skills among preschool children. This is seen as a foundational aspect of early childhood education by the participants.
- **Integration of Learning with Daily Tasks:** The educators use practical, everyday activities (e.g., using a spoon, dressing, managing personal hygiene) as key opportunities for teaching independence. This approach supports the development of physical skills, enhances cognitive understanding, and builds emotional confidence in children's capabilities.
- **Positive Reinforcement and Support:** The strategy of verbal encouragement, exemplified by Participant B's statement (“*oh you can do it yourself*”), highlights the importance of positive reinforcement. Such interactional techniques create a supportive environment that motivates children to engage in and master new tasks.
- **Broad Scope of Independence:** Participant C's description highlights that fostering autonomy involves a comprehensive range of activities. It extends beyond basic self-care to include tasks that necessitate problem-solving and fine motor skills, indicating a broad conceptualisation of what it means to promote independence in preschoolers.
- **Connection with Entrepreneurial Skills:** The memo identifies promoting independence as not only a pedagogical goal but also an entrepreneurial skill. This is significant because it aligns with the broader objective of preparing children for school and life by equipping them with skills like problem-solving, teamwork, communication, and creativity.
- **Preparation for School and Life:** There is a clear link between promoting independence and preparing children for future challenges. Educators view fostering key skills, including independence, as essential for preparing children for primary school and life in general. This preparation encompasses a range of skills considered vital for entrepreneurial success and general life competence.

This memo in Table 6.6. illustrates an understanding of how promoting independence in preschool children is intricately linked to broader educational goals, including the development of entrepreneurial skills. It highlights the intentional efforts of educators to integrate learning

opportunities into everyday tasks and the potential impact of these efforts on children's preparedness for school and life.

Table 6.7. Memo: 'Understanding the term Entrepreneurial Education (Educator)'

| Memo: Understanding the term Entrepreneurial Education (Educator) |
|--|
| <p>The code 'Understanding the term Entrepreneurial Education (educator)' captures how educators' interpret and apply entrepreneurial education within early childhood settings. The educators tend to associate the term primarily with business concepts ranging from practical applications, like role-playing 'doing business', to broader interpretations such as fostering problem-solving and idea generation.</p> <p>Participant A's description of children engaging in role-play, such as running a restaurant, offers a vivid example of how entrepreneurial concepts can be introduced to young learners. This approach familiarises children with basic economic principles, such as transactions, but also encourages creative thinking and conversation.</p> <p>Participant B highlights the importance of introducing children to various entrepreneurial roles like shopkeepers, to understand the dynamics of giving and taking money. This exposure helps children grasp fundamental economic concepts, the value of goods and services, while also developing their communication skills.</p> <p>Participant C admits to not having fully considered the term entrepreneurial education before, associating it with problem-solving and the generation of ideas that could, in the future, translate into business creation. This reflection points to a broader interpretation of entrepreneurial education beyond immediate business concepts to include critical thinking and innovation.</p> <p>The researcher notes that while educators, like participants A & B, demonstrate an application of entrepreneurial education through practical business concepts. There is a need to broaden this understanding. The principle of entrepreneurial education encompasses fostering an innovative mindset, critical thinking, resilience, and the ability to act on one's experiences, even when it leads to disappointment as Jones and Penaluna (2013) discuss in their perspectives on developing entrepreneurial capabilities. The researcher is very keen to see if other participants share this narrow understanding of this term and to investigate the factors influencing their understanding and interpretation of the term.</p> |

The memo titled 'Understanding the term Entrepreneurial Education (Educator)' offers several insights into how early childhood educators perceive and (may) implement entrepreneurial education within preschool environments. The key findings and their implications and their implications are as follows:

- **Varied Interpretations of Entrepreneurial Education:** Educators' understanding of entrepreneurial education ranges from associating it with direct business concepts to broader educational goals like problem-solving and idea generation. This variance suggests a variety of interpretation and application in early childhood settings.
- **Practical Applications Through Role-Play:** Participant A's example of children engaging in role-play activities, such as running a restaurant, illustrates a practical approach to introducing entrepreneurial concepts. This method not only familiarises children with basic economic principles but also fosters creative thinking and conversation, indicating a hands-on strategy for teaching entrepreneurial skills.
- **Introduction to Economic Concepts:** Participant B emphasises the importance of exposing children to entrepreneurial roles, like shopkeepers, to help them understand economic transactions and the value of goods and services. This approach aims to ground children in fundamental economic concepts through interactive learning experiences.
- **Broad Conceptual Understandings:** Participant C reflects a broader interpretation of entrepreneurial education, linking it to problem-solving and idea generation. This perspective points towards understanding entrepreneurial education as encompassing critical thinking and innovation, beyond just business creation.
- **Need for a Broader Understanding:** The memo highlights a recognition of the need to expand educators' understanding of entrepreneurial education beyond practical business concepts. It suggests fostering an innovative mindset, critical thinking, resilience, and the ability to learn from experiences, including failures.
- **Exploration of Educators' Perspectives:** The researcher is interested in further exploring educators' understandings of entrepreneurial education. There's an intent to investigate the breadth of interpretations among other participants and the factors influencing these perspectives.

The memo in Table 6.7. reveals the complexity of integrating entrepreneurial education into early childhood settings, highlighting the need for an approach that encompasses both practical and conceptual understandings of entrepreneurship. It points towards the potential for enriching early childhood education with entrepreneurial concepts, provided there is clarity and consensus on what constitutes entrepreneurial education and how best to implement it.

Table 6.8. Memo: 'Analysis of Educator's Perspective on Play-based Learning'

Memo – Analysis of Educator's Perspective on Play-based Learning

This memo provides an analysis of the data derived from the first iteration of CGT coding focused on educators' beliefs about play-based learning, intending to foster entrepreneurial capabilities in preschool education. This code encapsulates educators' opinions and beliefs regarding play as a crucial pedagogical strategy, a pedagogy that is ideal for embedding entrepreneurial skills development in early childhood. The emphasis is on the active role educators play in facilitating or encouraging this form of learning, however there is a variance in terms of preferences for a more structured educational approach. This diversity suggests that educators' beliefs about play-based learning are influenced by their personal pedagogical philosophies, experiences, and the educational outcomes they prioritise e.g. Montessori.

Participant A highlights a belief in the value of play in learning, suggesting that play is not only a natural behaviour for children but also a critical learning mechanism. The use of *"learns through play"* illustrates a process-oriented view of education, where learning is seen as a natural outcome of play activities.

Participant B offers a contrasting perspective by expressing a preference for more structured activities over free play. This viewpoint reflects a tension between unstructured play and structured educational frameworks, indicating a belief that learning outcomes may be enhanced through more guided or structured approaches. Participant B values structured activities that presumably offer more control over learning objectives and outcomes

Participant C supports the comprehensive educational value of play, suggesting that play is a foundational method through which children learn a wide array of skills and knowledge. The statement *"play just teaches us everything"* speaks to a holistic view of play's role in learning. Participant C embraces a broad, perhaps idealistic, belief in the universal educational value of play, suggesting a deep-rooted confidence in the intrinsic ability of play to facilitate learning across various domains, in this context entrepreneurial education.

The memo titled 'Analysis of Educator's Perspective on Play-based Learning' illustrates the views held by early childhood educators regarding the role of play in learning, specifically in the context of fostering entrepreneurial capabilities. The following findings are derived from the memo:

- Play as a Crucial Pedagogical Strategy: Educators recognise play-based learning as a vital pedagogical approach within early childhood education. It seems especially conducive to embedding entrepreneurial skill development, highlighting play's versatility as a learning medium.

- **Active Role of Educators:** There's a significant emphasis on the educator's role in facilitating and encouraging play-based learning. This suggests that while play is considered a natural and effective learning process, its success in developing specific skills, like those related to entrepreneurship, may be enhanced by intentional educator guidance.
- **Variance in Pedagogical Preferences:** The memo reveals differing preferences among educators for structured versus unstructured play. This diversity highlights the impact of personal pedagogical philosophies and experiences on educators' approaches to play-based learning, as well as the outcomes they prioritise, such as those aligned with Montessori methods.
- **Diverse Perspectives on Play's Educational Value:** Participant A views play as a natural and critical mechanism for learning, endorsing a process-oriented approach to education where play is seamlessly integrated with learning. Participant B prefers more structured activities, suggesting a belief that learning outcomes can be better achieved through guided or structured play. This reflects a tension between embracing play's spontaneity and directing play towards specific educational goals. Participant C advocates for the comprehensive educational value of play, suggesting that play inherently teaches a wide array of skills and knowledge. This perspective represents a holistic view of play's role in education, emphasising its universal value in facilitating learning across domains, including entrepreneurial skills.

The memo in Table 6.8. draws attention to the complexity of integrating play-based learning into early childhood education to foster entrepreneurial skills. It reveals that educators' personal beliefs and pedagogical philosophies significantly influence their approach to play-based learning, suggesting a need for a more considered understanding of how play can serve as a foundation for developing a broad range of skills, including those pertinent to entrepreneurship.

Table 6.9. Memo: 'Insights on Play-Based Learning from Educators' Observations'

| Memo – Insights on Play-Based Learning from Educators' Observations |
|---|
| <p>This memo builds on the initial analysis of educators' beliefs about play-based learning by incorporating their observations on how play influences children's learning and development, particularly with a focus on fostering entrepreneurial skills in preschool settings. It explores the specific skills, competencies, and attitudes children develop through different play activities, highlighting how these elements lay the groundwork for entrepreneurial skills and capabilities. The emphasis is on the importance of autonomy, confidence, and gender-neutral activities during play.</p> <p>Participant A observes the importance of autonomy in play, noting that children decide their activities, highlighting the development of independence and decision-making skills.</p> <p>Participant B observes the confidence children gain through achievements in play, such as completing tasks independently, indicating the role of play in building self-esteem, a can-do attitude and a sense of accomplishment.</p> <p>Participant C comments on the gender-neutral nature of play activities, emphasising that children learn life skills through play regardless of the gender stereotyping of toys, illustrating the universal learning opportunities play provides. Children learn that their abilities to innovate and lead are not constrained by societal expectations. This observation is key for encouraging a diverse and inclusive mindset from an early age, essential for the collaborative and creative demands of entrepreneurship.</p> |

The memo titled 'Insights on Play-Based Learning from Educators' Observations' provides a rich analysis that builds upon educators' beliefs about play-based learning, focusing more concretely on the outcomes of such learning approaches in preschool settings. The primary findings from this memo, related to the development of entrepreneurial skills and capabilities in children, are as follows:

- **Observation of Autonomy:** Participant A's observation emphasises the importance of autonomy in play, highlighting how play allows children to make their own decisions about their activities. This autonomy is directly linked to the development of independence and decision-making skills, foundational components of entrepreneurial education.
- **Building Confidence through Play:** Participant B observes that play contributes significantly to building children's confidence, particularly through achievements such as completing tasks independently. This confidence, characterised by a can-do attitude and a sense of accomplishment, is pivotal for entrepreneurial education.

- Observation of Gender-Neutral Play: Participant C notes the gender-neutral nature of play activities, emphasising that play provides universal learning opportunities. This approach allows children to learn life skills beyond the constraints of gender stereotypes, fostering a sense of innovation and leadership.

The memo in Table 6.9. highlights how educators' observations of play-based learning outcomes directly contribute to understanding the development of entrepreneurial capabilities in preschool children. By fostering autonomy, confidence, and gender-neutral learning opportunities, play-based learning aligns with the goals of entrepreneurial education, emphasising the development of independence, resilience, and an inclusive mindset. The exploration of memos developed from the initial coding phase has illustrated the diverse ways in which play-based learning fosters essential entrepreneurial skills among preschoolers.

6.4.4. Vignettes for Initial Coding

Following the rigorous process of initial coding, where 125 codes were meticulously generated to capture the narratives of participants, and the subsequent development of reflective memos, the study required further analysis into the lived experiences and practices that foster entrepreneurial learning in early childhood settings. It is at this point that the researcher introduces the use of vignettes, a methodological tool designed to offer unique insights into these experiences. Vignettes, crafted from reflective documentation following each interview, provide rich, detailed accounts that inform the complexities of participants' experiences. Vignettes are instrumental in qualitative research for exploring sensitive topics and facilitating discussions that might not emerge through direct questioning (Morrison, 2015; Hughes, 2002). By integrating vignettes into the analysis, it not only brings the data to life but also allows for a more detailed interpretation and presentation of the findings. This approach enriches the narrative and theoretical density of the research study, enabling scenarios and challenges related to fostering entrepreneurial learning to be highlighted, thereby reflecting the complexities of preschool educational settings. Table 6.10. illustrates a reflective vignette from the first participant interviewed as part of this study.

Table 6.10. Reflective Vignette – Participant A

In the quiet, reflective corners of her classroom, where every toy and book bear the mark of a young, inquisitive mind, the essence of early childhood education unfolds. Participant A, an early year's educator based in Glanmire, Cork, embodies the passion and dedication that form the backbone of this profession. Her journey from IT to early childhood education reveals a path led by heart and curiosity, a testament to the transformative power of finding one's true calling.

Through her Montessori-based approach, Participant A champions a child-led curriculum, allowing children's interests to guide learning experiences. This philosophy not only respects each child's individuality but also nurtures their independence and creativity - qualities essential for the budding entrepreneur in every child. Her reflections emphasise the importance of patience, open-mindedness, and a caring disposition in nurturing these young minds, highlighting the profound impact educators have on children's early educational journeys.

Complimenting the Montessori approach, Participant A's adoption of the principles of the Aistear curriculum shape her pedagogical approach to prioritise autonomy, creativity and the individuality of each child. Participant A's subconscious fostering of entrepreneurial capabilities and skills – a reflection of her innovative spirit and the Montessori and Aistear curriculums' encouragements of independence– inspire her educational philosophy.

As Participant A navigates the challenges and joys of her role, she advocates for greater recognition and support for early childhood educators as true education professionals. Her aspirations for the profession reflect a desire for change that respects the significance of their contribution to children's development. In her vision, educators are not just facilitators of learning but shapers of a next generation, where every child is empowered to explore, innovate, and lead, even in the face of systematic obstacles.

This vignette, inspired by Participant A's narrative, captures the essence of early childhood education - a field where dedication, love, and a belief in the potential of every child create the foundation for a brighter, more innovative future. She is an educator bridging the gap between passion and profession, innovation and recognition, in the nurturing grounds of early childhood education.

This vignette, inspired by Participant A's narrative, captures the essence of a child-led curriculum that prioritises autonomy and creativity. It serves as a strong illustration of how early childhood educators can foster entrepreneurial skills in young learners by respecting each child's individuality and nurturing their independence. The educator's adoption of the Montessori approach, coupled with the principles of the Aistear curriculum, highlights a pedagogical strategy that subconsciously promotes entrepreneurial capabilities such as problem-solving, critical thinking, and the ability to innovate. This vignette facilitates a

reflection on the role of educator's beliefs and pedagogical approaches in shaping learning environments conducive to entrepreneurial learning. The researcher needs to consider analysing how a child-led curriculum can serve as a foundation for developing entrepreneurial qualities from a young age.

Table 6.11. *Reflective Vignette – Participant B*

In the heart of a vibrant classroom filled with the sounds of playful learning and imaginative discovery, stands an educator whose journey from various corners of the world to self-employment in Mallow, Cork. This educator is passionate about nurturing young minds. This educator, Participant B, who once navigated the strict and structured paths of Montessori in Germany and embraced the fluidity of play-based learning in Limerick, now interlinks her dynamic array of experiences into her own unique pedagogical philosophy.

Her story is one of resilience and innovation, facing the challenges of recognition and support in the early childhood sector, yet steadfast in her commitment to fostering individuality, autonomy, and life skills among her preschool students. Through practical life activities and sensory play, she lays the foundation for emotional well-being alongside educational achievement, guided by the belief that every child deserves to feel secure, valued, and understood.

As she reflects on her journey, Participant B envisions a future where early childhood professionals are acknowledged for their pivotal role in shaping society's youngest members. She imagines a world where the Aistear curriculum's principles of well-being, identity, and exploratory learning are celebrated and expanded upon, recognising the transformative power of early education in fostering a generation of confident, creative, and collaborative individuals.

Participant B's journey, characterised by resilience and innovation, sheds light on the challenges and opportunities in the early childhood sector. The educator's commitment to fostering individuality, autonomy, and life skills highlights the significant role of practical life activities and sensory play in emotional well-being and educational achievement. This narrative emphasises the importance of recognising and supporting early childhood professionals in their pivotal role in shaping future innovators. Consideration needs to be given to the impact of educator resilience and innovation on the promotion of entrepreneurial learning in preschool settings. The researcher may consider the relationship between emotional well-being and the development of entrepreneurial competencies.

Table 6.12. Reflective Vignette – Participant C

In a cozy classroom nestled in the southwest, where imagination and reality perfectly blend, an educator with over two decades of dedication reveals the phases of her journey. From an initial dream of law to the unexpected discovery of Montessori education, her path reflects a fusion of passion and purpose. Amidst the laughter and learning, she grapples with societal underestimations of her profession, promoting a mission to elevate the recognition of early childhood education.

Her Montessori background, together with the inclusive ethos of Aistear, shapes a learning environment where entrepreneurial spirits are nurtured. Here, children engage in role-play, turning simple games into complex economies of pizza shops and markets, unknowingly engaging in the first stages of entrepreneurial thought.

Despite the challenges of private sector constraints and the longing for broader acknowledgment, her dedication never wavers. She champions the cause for more substantial support and acknowledgment, all while fostering an atmosphere where independence, creativity, and emotional intelligence flourish, preparing her young students not just for school, but for life.

Through role-play activities, such as running pizza shops and markets, children engage in complex economies, laying the groundwork for entrepreneurial thought. This vignette illustrates the practical application of entrepreneurial education, highlighting how everyday play activities can introduce basic economic principles and foster creative thinking. Exploring the role of play in introducing entrepreneurial concepts to young learners needs to be considered. Consideration also needs to be given to how educators can further support the development of entrepreneurial skills through structured and unstructured play activities.

These vignettes not only shed light on the diverse strategies early childhood educators employ to subconsciously foster entrepreneurial learning but also illustrate the complexity and richness of early childhood education settings as environments ideal for nurturing the entrepreneurial spirit. The vignettes exhibit the educators' creativity, resilience, and dedication to crafting educational experiences that are not only grounded in play and imagination but also strategically aligned with cultivating the foundational skills necessary for entrepreneurial thinking and mindset. Through these vivid snapshots of classroom life, we gain invaluable insights into the practical, day-to-day demonstrations of entrepreneurial learning principles.

Through interpretation of educators' observations and beliefs, this study delves into the capabilities such as autonomy, confidence, and the fostering of a gender-neutral environment - each playing a pivotal role in shaping the foundational competencies crucial for

entrepreneurial success. These insights not only affirm the value of play as a pedagogical strategy but also highlight its profound impact on developing competencies such as decision-making, resilience, and an inclusive mindset from an early age. As the study transitions to discussing the overall findings of the initial coding phase, it becomes evident that the themes emerging from these codes, memos and vignettes are not isolated insights but integral components of a broader understanding of entrepreneurial education in early childhood settings. This exploration sets the stage for an in-depth analysis of how these initial observations and educators' practices contribute to a cohesive theory of entrepreneurial skills and mindset development, emphasising the significance of constructivist grounded theory in uncovering the complex dynamics of learning and development in preschool education.

6.4.5. Core Findings from Initial Coding

The findings from the initial round of data analysis, exploring how early childhood educators may contribute to fostering entrepreneurial skills and capabilities in preschool environments reveal unintentional facilitation of entrepreneurial education to preschool children. Levels of educational qualifications, the early childhood curricula and philosophies applied in settings and adopted by educators, and distinctions between private and government funded settings emerged as key influencing factors. The core findings that set the initial basis for developing concepts and categories in the focused coding are discussed below:

(1) The Subconscious Facilitation of Entrepreneurial Education:

The data reveals that early childhood educators may be instrumental in nurturing entrepreneurial competencies, albeit without deliberate intent, among preschoolers.

'it [entrepreneurial learning] probably comes up more naturally, then I put an effort into it, but then again, I never really thought of it before.... I might look into more now'

(Participant C)

Key activities such as *'exploring their creative side'*, *'solving problems'*, *'developing confidence'*, *'enhancing critical thinking'*, *'encouraging teamwork'* highlight an environment where children are encouraged to think independently and creatively.

'I want them to be independent. There's no better feeling as an educator to have a child that's going to primary school in September, and you feel comfortable within you that the child is confident and independent' (Participant A)

These competencies are crucial foundational aspects of entrepreneurial education, suggesting that, even without explicit intent, educators are laying the groundwork for entrepreneurial learning.

'I teach them their everyday life skills.... putting on your coat, closing your coat....I'd encourage them oh you can do it yourself, or we'll do it together' (Participant B)

(2) Continuous Professional Development (CPD):

Educators highlight the importance of ongoing professional development and specialised training, particularly in areas of inclusion, additional needs and entrepreneurship education, as expressed in emerging codes and themes such as *'engaging in CPD for entrepreneurship education'*, *'advancing career options'* and *'exploring further professional upskilling'*.

'There should be more courses out there....every different type of learning is valuable.... if you come out with even two things' (Participant C)

The need for training that goes beyond basic care to cover developmental, educational, and inclusive practices is emphasised as a gap in the current professional development offerings.

'the more courses and CPD hours there is on different subjects like entrepreneurial education, and inclusion... the better... because somebody will pick it up'
(Participant C)

(3) Variation in Qualification Levels and Impact of Educator Qualifications:

The level of educational qualification among educators emerges as an impacting factor. The educators express a consensus that while qualifications are crucial, there is a noticeable difference in the quality of service provided by educators with higher qualifications (level 7 and level 8 degree's versus those with lower qualifications (level 5 and level 6 qualifications).

'I just feel that a one or two year course is not enough to know about children'

(Participant C)

'I suppose the level five and level six qualifications are purely about care - anything like developmental wise, educational wise, they don't have very much knowledge. And I think it's very important to increase that knowledge' (Participant B)

Educational qualifications, particularly those highlighted in codes such as '*evaluating HEI courses*', '*feeling unprepared post higher education*' and '*discussing the effects of education and training on practice*' suggest a correlation between the level of formal education of the educators and their effectiveness in fostering a conducive environment for entrepreneurial skills development.

'I have a level 8 BA Honours in Montessori Education..... I feel like the training that I received has guided me in huge ways.... the course was very informative.... I do feel like its aided me in where I am in my education' (Participant A)

The dialogue suggests that higher educational qualifications, such as degrees, are associated with a better understanding of child development, more effective pedagogical strategies, and consequently, a higher quality of early childhood education. There is a noted gap in the availability of specific training on entrepreneurial education within early childhood education qualifications, suggesting a need for curriculum development in this area.

'I did a module in final year about setting up my own early years facility but that was it'

(Participant A)

(4) Curriculum as a Catalyst:

The early childhood curriculum plays a pivotal role in shaping the entrepreneurial skills imparted to children. These curriculum frameworks emphasise the values of child agency, autonomy, and inclusivity.

'The curriculum is child led....we ask the children what they'd like to learn' (Participant A)
It inadvertently provides a structured, yet flexible approach to the development of entrepreneurial capabilities.

'problem solving and confidence and all these buzzwords are included in Aistear, absolutely'
(Participant A)

The curriculum, especially as seen through codes such as *'linking to Aistear and Síolta curriculum frameworks'*, *'Implementing inclusive practices in this classroom'*, *'exploring teaching philosophies'*, and *'advocating for ECE syllabus changes or updates'* emerge as critical drivers in supporting the development of entrepreneurial competencies but requires a deeper connection to current world challenges to embrace an entrepreneurial ethos.

'I think they do need to develop the syllabus for early years educators quite a bit more, they need to introduce a lot more' (Participant B)

(5) Implications for Pedagogy and Practice:

The discussions also touch on how qualifications influence pedagogical approaches, with a call for curricula that include more hands-on, practical training alongside theoretical knowledge as illustrated in the code *'suggesting inclusion of EE in Aistear curriculum'*,

'I think it would definitely be of benefit to the children to introduce those kinds of [entrepreneurial] concepts like that very early on. Because I suppose it would foster like, even confidence... that oh, yes, I can do this idea' (Participant B)

The educators advocate for a more holistic approach to training that encompasses the full spectrum of skills needed to support children's diverse needs effectively.

'Not that everyone gets the same thing...its that everyone gets what they need'

(Participant C)

(6) Professional Recognition:

There is an underlying frustration regarding the lack of recognition for early childhood educators as professionals within the education sector as illustrated through codes such as, *'recognising ECE as an education profession'* and *'identifying term to describe self as an ECE professional'*.

'I'd call myself an educator' (Participant B)

'we are educators....we're not babysitters' (Participant A)

'I have a career...it's a career, not just a Mickey Mouse job' (Participant C)

This tied to both the level of qualification and societal perceptions.

'Why is there a difference between primary school junior infant teachers and someone who teaches Montessori?' (Participant C)

Educators feel that higher qualifications do not necessarily translate to better recognition or compensation within the sector, highlighting a disconnect between the qualifications held and the professional acknowledgment received as illustrated by educators through the code *'valuing education and self in the education profession'*

'I think all of us would like to be appreciated... we are a big part of a child's life'

(Participant A)

'I think it's a case of you're trying to add value to the early years, because like it is the most formative time in a child's life - actually in a humans life - and people just kind of dismiss it I suppose' (Participant B)

(7) Sectoral Challenges:

There is a clear desire from the educators for the early years educational sector, including policymakers and training institutions, to better support educators through improved qualification pathways, more targeted CPD opportunities, and greater recognition of their professional status.

'I think that the people who have written the policies have never worked a day in their life with a child' (Participant B)

Codes such as *'promoting the importance of the educator's voice'*, *'perceiving consultation in policy decisions'*, *'experiencing policy exclusion'* and *'navigating career challenges'* indicate a pressing need for greater recognition of educators as professionals and for their inclusion in policy-making processes.

'I would love to obviously see policies change with regards pay... and for us [educators] to be actually genuinely appreciated' (Participant A)

'there is not enough people who want to join our profession....because society doesn't see it as a valuable sector' (Participant C)

(8) Centrality of Child Individuality and Agency:

The individuality of the child and the importance of fostering child agency, autonomy, and inclusion, evidenced by codes such as *'giving the child the freedom of choice'*, *'recognising the individual personality of the child'*, *'supporting the child'* and *'valuing the child'* emerge as fundamental in early childhood education.

'they are children at the end of the day, but they've got most crazy minds, beautiful minds....and they have so much to tell you' (Participant A)

Recognising and valuing each child's unique capabilities and voice supports foundational development and learning in early years education. The emphasis on child individuality and agency respects each child's unique path and pace of learning.

'everyone's different with different personalities' (Participant C)

6.4.6. Conclusion of Initial Coding Phase

The findings from the initial coding phase reveal a complex relationship of factors contributing to the subconscious facilitation of entrepreneurial education in preschool. The data indicates the potential for more deliberate efforts in cultivating entrepreneurial competencies, guided by enhanced educator qualifications, supportive curricula, equitable settings, government recognition, and an unwavering commitment to child individuality and agency.

The thorough process of line-by-line coding illustrates the fostering of independence, creativity, problem-solving, and teamwork, as highlighted by the educators' narratives. Transitioning from these initial codes to a more focused and theoretical analysis, it is evident that the seeds of entrepreneurial thinking are sown early in education, through everyday interactions and activities guided by educators' intuitive practices. The initial coding process not only demonstrates the educators' pivotal role in shaping future innovators but also supports further exploration into how these foundational skills are intentionally cultivated and expanded upon in preschool settings, directing towards a comprehensive understanding of entrepreneurial education in early childhood.

6.5. Theoretical Sampling

The application of theoretical sampling in constructivist grounded theory is pivotal in understanding complex phenomena, such as early childhood entrepreneurial education. As discussed in Chapter 5, this research commenced with purposive sampling, selecting educators based on specific criteria to capture initial insights into educational practices and pedagogies. Following the initial coding phase, a pattern regarding the significant influence of educators' qualifications on their pedagogical approaches began to surface, leading to a further refined sampling strategy. This strategy not only encompasses a wider range of qualifications but also seeks to understand the impact of different early years' educational philosophies on fostering entrepreneurial learning. Educators representing Montessori, Reggio Emilia, Te Whāriki, Outdoor, High Scope, Steiner Waldorf Kindergarten, and Forest philosophies were included.

The iterative sampling process further evolved to compare settings, distinguishing between privately owned and government-funded facilities, based on emerging data suggesting this is a

significant factor influencing the availability of resources and opportunities for entrepreneurial learning, a theme resonating with the work of Dalli et al. (2011) on the contextual factors shaping early childhood education. This progression in sampling criteria highlights the dynamic interaction between theoretical insights and empirical data collection, a principal objective of grounded theory methodology that emphasises its ability to adaptively refine research focus based on ongoing analysis (Bryant & Charmaz, 2007).

6.6. Focused Coding Phase

Charmaz (2014) highlights that initial codes are provisional, and the researcher has the flexibility to add new codes and/or to rename existing codes, as necessary. Following the completion of line by line coding in the initial coding phase, the study applied Charmaz's approach to verify the credibility and authenticity of the codes.

Focused coding, as emphasised by Charmaz (2014) involves concentrating on the most prominent or frequently occurring codes to manage large data sets. The phase in the study generated 125 gerund codes, each with a detailed descriptor. The Unlu-Qureshi instrument (2020) was adapted in this research to structure focused coding into two stages:

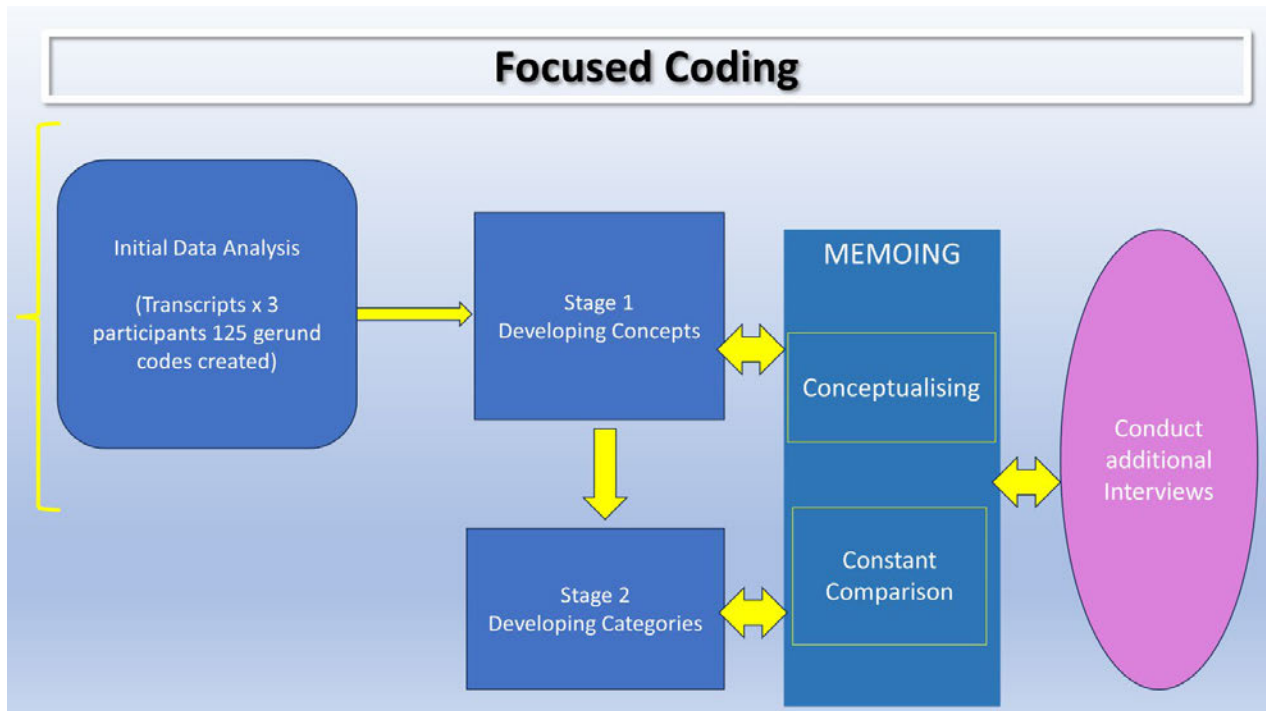
- Focused Coding stage 1 – Concepts
- Focused Coding stage 2 – Categories

In this focused coding stage, the initial codes were organised into concepts, which then informed the creation of refined categories. The analysis initially centred on data from 3 participants, ensuring a rigorous approach to concept and category development. The adapted Unlu-Qureshi instrument (2020) helped ensure the final theoretical framework is extremely well-grounded in, and meticulously developed from data.

6.6.1. Focused Coding Procedure and Analysis

The second stage of the Unlu-Qureshi instrument (2020) involved grouping similar codes into broader concepts through constant comparison until saturation was achieved. This process, supported by the comparison of memos and reflective vignettes, effectively organised the 125 initial gerund codes into concepts. Figure 6.2. illustrates the focused coding process of this research study.

Figure 6.2. *Focused Coding Procedure in eEE in ECE study*



Source: *Authors own*

As focused coding directs the development of emerging theory (Charmaz, 2014), this phase was meticulously designed using the adapted Unlu-Qureshi Instrument, accompanied by memoing and reflective vignettes. The stages of developing concepts and categories provided critical insights into how early childhood educators can foster entrepreneurial thinking in preschool children.

6.6.2. Developing and Analysing Concepts

The initial stage of the focused coding procedure of this study involved developing concepts from 125 gerund codes generated during the initial coding process. In CGT, concepts act as initial building blocks for developing a theoretical framework. These concepts emerge through a rigorous process of identifying patterns and themes within the data, which are then refined and integrated into a cohesive theoretical framework (Charmaz, 2014).

This researcher plays an active role in this process, interpreting the data and acknowledging that both data and analysis are co-constructed through interactions between the researcher and participants (Charmaz, 2014). Moving beyond surface-level codes, CGT emphasises the

importance of developing deeper conceptual understandings that capture the complexities of social phenomena.

In the context of entrepreneurial education in preschool, this involved identifying the underlying principles, practices, and interactions that either facilitate or hinder the development of entrepreneurial skills and mindsets among young learners. By grouping initial codes into broader concepts, the researcher began to construct a theory that reflects the role of early childhood educators in fostering entrepreneurial capabilities in young children.

During this phase the concepts were used as focused umbrella terms to organise the data into manageable portions of information. Table 6.13. illustrates the 26 concepts generated, highlighting key insights into how early childhood educators facilitate entrepreneurial learning.

These 26 concepts represent a critical step in understanding the role of early childhood educators in fostering entrepreneurial capabilities. They serve as a scaffold for further analysis, providing a comprehensive view of the factors influencing the integration of entrepreneurial education in early childhood settings.

Table 6.13. Finding from Concepts

| | |
|---|---|
| Advocacy, Policy, Governance, and Professional Standards | This concept highlights the importance of a supportive framework at policy and governance level for the effective integration of entrepreneurial education in ECE. It suggests a need for advocacy to align professional standards with the requirements of entrepreneurial learning, highlighting how systemic changes and professional recognition can facilitate or hinder the implementation of EE. |
| Child Autonomy and Agency | The emphasis on child autonomy and agency points to the recognition of children as active participants in their learning processes. This concept aligns with the constructivist approach, indicating that fostering entrepreneurial skills involves empowering children to make choices and take initiative within their learning environments. |
| Child-Centred Learning and Development | This concept reflects a pedagogical approach that places the child at the centre of learning activities, tailoring educational experiences to their interests, abilities, and developmental stages. It suggests that for EE to be effective, it must be integrated into practices that prioritise the child's holistic development. |
| CPD in Entrepreneurial Education | Continuous Professional Development (CPD) in Entrepreneurial Education highlights the need for educators to continually update their skills and knowledge in EE. It suggests that professional growth is critical for the successful implementation of entrepreneurial learning in preschool. |
| Curriculum Development and Educational Reform | The focus on curriculum development and educational reform indicates the necessity of integrating EE into the curriculum in a way that reflects contemporary educational goals and societal needs. This concept suggests a move towards curricular innovations that incorporate EE principles. |
| Curriculum, Innovation with EE Integration | This concept builds on the previous one by specifically emphasising the innovative integration of EE into the curriculum. It suggests that EE should not be an add-on but a natural supportive approach in early childhood education that helps foster a culture of innovation and creativity from an early age. |
| ECE Environment and Context | The environment and context of ECE are important in shaping the effectiveness of EE. This concept suggests that the physical, social, and cultural settings of preschool education play a significant role in the implementation and outcomes of entrepreneurial learning. |
| Educational Impact and Programme Evaluation | This concept addresses the importance of evaluating the impact of EE programmes in ECE settings. It suggests a need for systematic assessment to understand how EE influences learning outcomes and child development. |
| Educational Roles and Practices | This concept focuses on the roles and practices of educators in facilitating EE, highlighting the pedagogical strategies and educator-child interactions that support entrepreneurial learning. |
| Educator-Child Dynamics | Educator-child dynamics are central to the effective implementation of EE, emphasising the relationship and interaction patterns between educators and children that foster an entrepreneurial mindset. |
| Educator Perspectives on EE | This concept reveals the views and beliefs of educators regarding EE in ECE, offering insights into their understanding, acceptance, and implementation challenges. |
| Entrepreneurial Education in Early Childhood Education | This overarching concept encapsulates the integration of entrepreneurial learning principles within the early childhood educational framework, suggesting its potential to enhance children's development and prepare them for future challenges. |
| Entrepreneurial Skills, Attitudes, and Mindset | This concept focuses on the specific skills, attitudes, and mindsets that EE aims to develop in preschool children, such as creativity, independence, risk-taking, and problem-solving. |

| | |
|--|--|
| Gender Dynamics and Stereotyping | The inclusion of gender dynamics and stereotyping indicates an awareness of how societal and cultural norms influence the implementation and reception of EE, particularly concerning gender equity and the encouragement of all children to engage in entrepreneurial learning. |
| Impact of EE on Child Development | This concept explores the effects of EE on the holistic development of children, suggesting that EE can contribute significantly to cognitive, social, and emotional growth. |
| Inclusive Education and Diversity (EDI) in ECE | The focus on inclusivity and diversity highlights the importance of ensuring that EE is accessible to all children, regardless of their background, abilities, or circumstances, promoting an equitable approach to entrepreneurial learning. |
| Innovation and Creativity in ECE | This concept highlights the role of innovation and creativity as core components of EE, suggesting that fostering these qualities in early childhood can lay the foundation for lifelong entrepreneurial thinking. |
| Innovative Teaching Methodologies and Strategies | The emphasis on innovative teaching methodologies and strategies reflects the need for educators to adopt novel approaches to facilitate EE, incorporating active learning, problem-based learning, and other pedagogies that support entrepreneurial skills development. |
| Learning Outcomes and Educational Impact | This concept addresses the desired outcomes of EE, focusing on the specific knowledge, skills, and dispositions children may acquire through entrepreneurial learning experiences. |
| Parental and Societal Engagement and Perceptions | The role of parents and the wider society in supporting EE is highlighted in this concept, suggesting that external attitudes and involvement can significantly influence the success of entrepreneurial learning initiatives. |
| Policy and Advocacy for EE in ECE | Reiterating the need for supportive policies, this concept focuses on the advocacy efforts required to embed EE within the ECE policy framework, ensuring that it is recognised and prioritised at all levels of decision-making. |
| Professional Growth and Challenges in ECE | This concept examines the challenges faced by educators in implementing EE and their professional development needs, highlighting the obstacles and opportunities for growth within this educational innovation. |
| Professional Identity and Recognition | The focus on professional identity and recognition underscores the impact of EE on educators' self-perception and societal value, indicating that successful integration of EE can enhance the professional status of ECE practitioners. |
| Professional Qualifications and Training | This concept emphasises the importance of specialised training and qualifications for educators to effectively deliver EE, suggesting a need for targeted professional development programmes. |
| Professional Reflections, Experiences, and Insights | By exploring educators' personal reflections and experiences, this concept provides valuable insights into the practical aspects of implementing EE in ECE settings, including successes, challenges, and lessons learned. |
| The ECE Educator and Professional Identity | Similar to the concept of professional identity and recognition, this theme delves into how EE influences the professional identity of ECE educators, reflecting on the integration of entrepreneurial learning within their pedagogical practice. |

Source: Authors own

The findings from these concepts reveal that entrepreneurial education is already present, albeit subconsciously, in preschools across Ireland. Educators show a strong interest in expanding their knowledge of entrepreneurial education, particularly if it benefits children’s learning and development. The analysis highlights the multifaceted nature of fostering entrepreneurial education, from policy and curriculum development to educator roles and child-centred approaches. Each concept contributes to a holistic understanding of how entrepreneurial education can be effectively integrated into early childhood education.

The findings also emphasise the complexity of implementing entrepreneurial education, indicating the need for systemic support, professional development, and pedagogical innovation to nurture entrepreneurial skills from an early age.

6.6.3. Constant Comparison – Concepts and Codes

In the course of developing and refining the core concepts critical to understanding the integration of entrepreneurial education in early childhood settings, further examination was conducted. This examination entailed comparisons of emerging concepts themselves and the relationship between the initial codes and these refined concepts. Table 6.14. illustrates the first example of constant comparison between codes and concepts.

Table 6.14. *Findings of Concepts Process in EE in ECE Study*
Example A ‘Promoting Independence (Children)’

| Data | Code | Code Description | Concept |
|---|--|---|--|
| <p><i>‘creating an environment where the child is able to zip up their own jacket, to be able to go to the toilet, daily skills that create independence, for example, for the child to be able to use a spoon’.</i> [Participant A]</p> <p><i>‘I encourage them.. oh you can do it yourself’.</i> [Participant B]</p> <p><i>‘I encourage independence, life skills, self-help skills - putting on a coat, shoes, opening their lunch boxes’.</i> [Participant C]</p> | <p>Promoting Independence (Children)</p> | <p>This code refers to the view of the participants in terms of fostering independence in the child</p> | <p>(1) Child Autonomy & Agency</p> <p>(2) Child-Centred Learning & Development</p> <p>(3) EE in ECE</p> <p>(4) Entrepreneurial Skills, Attitudes & Mindset</p> |

The code ‘promoting independence (children)’ emerges as a key finding in the study, reflecting a strong focus among participants on nurturing children’s independence in ECE settings. This finding aligns closely with four key concepts in the research study: (1) Child Autonomy & Agency – illustrating how fostering independence enhances a child’s ability to make choices and take initiative; (2) Child-Centred Learning & Development – indicating that promoting independence is fundamental to teaching practices that prioritise the needs and potential of each child; (3) Entrepreneurial Education (EE) in Early Childhood Education (ECE), where independence is seen as key to cultivating entrepreneurial mindsets and abilities from a young age; and (4) Entrepreneurial Skills, Attitudes and Mindset – demonstrating that independence contributes significantly to the development of skills and attitudes essential for entrepreneurial thinking. The findings highlight the importance of independence in nurturing a learning environment that supports autonomy, entrepreneurial spirit, and holistic development in children.

This memo in Table 6.15. highlights the key finding of ‘Promoting Independence’ in Entrepreneurial Education (EE) within Early Childhood Education (ECE), emphasising its significant role in shaping the foundational skills and mindsets of young learners. It connects directly to the finding that independence may be crucial in developing entrepreneurial qualities from an early age.

Table 6.15. *Memo from Concepts Process in EE in ECE study*

Example A ‘Promoting Independence (Children)’

| Memo: Significance of ‘Promoting Independence (Children)’ in EE in ECE |
|--|
| <p>Considering the code ‘Promoting Independence’ within the context of EE in ECE highlights how it shapes learning and development from a young age.</p> <p>Independence appears central to EE in ECE as it has the potential to develop entrepreneurial mindsets and capabilities.</p> <p>Through educators’ practices that encourage autonomy and self-directed learning, it is evident that there is an alignment with child-centred learning principles and the necessity for embedding EE in early childhood curricula. ‘Promoting Independence (Children)’ emerges as a crucial educational goal, advocating for its integration alongside other learning objectives to foster a future generation of creative and resilient individuals. This memo acts as a call to action for educators and policymakers to embrace the role of independence in creating innovative, capable learners prepared for future challenges.</p> |

In exploring the findings, the researcher also identified several other key codes: ‘encouraging teamwork’, ‘encouraging risk’, ‘enhancing critical thinking’, ‘exploring leadership’, ‘exploring your creative side’, and ‘solving problems’ that aligned with the concepts: Child Autonomy & Agency, Child-Centred Learning & Development, Entrepreneurial Education (EE) in ECE, and Entrepreneurial Skills, Attitudes & Mindset. The presence of these codes across the data set indicates an interconnected approach to entrepreneurial learning in early childhood settings. In particular, the emphasis on ‘promoting independence’ emerges as a significant theme highlighting its potential importance in fostering an entrepreneurial mindset from a young age. These findings are further discussed and supported in the memo in Table 6.16.

Table 6.16. *Memo: Interconnectedness of codes and concepts in fostering entrepreneurial mindsets in ECE*

| Memo: Interconnectedness of codes and concepts in fostering entrepreneurial mindsets in ECE |
|--|
| <p>This memo highlights the relationship between certain codes and the core concepts of Child Autonomy & Agency, Child-Centred Learning & Development, EE in ECE, and Entrepreneurial Skills, Attitudes & Mindset have been identified. Code such ‘encouraging teamwork (children)’, ‘encouraging risk (children)’, ‘enhancing critical thinking (children)’, ‘exploring leadership (children)’, ‘exploring their creative side (children)’, and ‘solving problems (children)’ - along with ‘promoting independence’, demonstrate the comprehensive nature of EE in fostering essential entrepreneurial capabilities.</p> <p>The connection between codes and concepts forms a comprehensive, yet rational framework that supports EE in ECE suggesting that nurturing an entrepreneurial mindset involves a holistic educational strategy. This approach focuses on developing autonomous, creative, and confident young individuals capable of teamwork, leadership, and problem-solving. This synergy suggests that fostering an entrepreneurial mindset in children is not a singular or isolated activity but a comprehensive pedagogical strategy that integrates various dimensions of learning and development. The constant comparison process used in this process emphasises the collective impact of these codes on achieving the aims of EE, advocating for a flexible and dynamic pedagogical method that meets the varied needs and potentials of young children. It underlines the potential need for educational environments that support creativity, risk-taking, and independence, preparing children to be future innovators and leaders.</p> <p>This memo reflects on the multifaceted task of developing entrepreneurial skills in early childhood, urging continued exploration of these connections to improve EE’s effectiveness and impact in ECE settings.</p> |

The code ‘observing play-based learning (children)’ in Table 6.17. captures the educators’ observations of the various ways in which children acquire skills, capabilities, and competencies through play. This observation is key, as it highlights the natural, child-led processes of learning and development within early childhood education (ECE) environments.

Table 6.17. Findings of Concepts Process in EE in ECE Study
Example B ‘Observing Play-Based Learning (Children)’

| Data | Code | Code Description | Concept |
|--|---|---|--|
| <p><i>‘either through free play or group play... the child decides what they want to do, if they want to work with a friend or they want to work independently by themselves’.</i> [Participant A]</p> <p><i>‘they want to tell you, this is what I done in school today....I did the binomial cube by myself. You can just see the confidence oozing from them’.</i> [Participant B]</p> <p><i>‘so in terms of life skills with toys... the boys love washing the dolly and the girls love washing the dinosaur.... they actually don't care because they just want to wash things...they actually learn exactly the same way’.</i> [Participant C]</p> | <p>‘Observing Play-based Learning (Children)’</p> | <p>This code refers to the skills, capabilities, and competencies the educators observe the children learning and developing through play</p> | <p>(1) ECE Environment and Context</p> <p>(2) Innovation and Creativity in ECE</p> <p>(3) Innovative Teaching Methodologies and Strategies</p> <p>(4) Learning Outcomes and Educational Impact</p> |

As discussed in the memo in Table 6.18., it is further evident through the constant comparison process, the code ‘observing play-based learning (children)’ connects directly with four essential concepts in the study: (1) ECE Environment and Context - highlighting how play is integrated into the early years learning environment; (2) Innovation and Creativity in ECE - demonstrating play as a source of creation exploration for children; (3) Innovative Teaching

Methodologies and Strategies - where play-based learning is seen as an effective pedagogical approach in early years education; and (4) Learning Outcomes and Educational Impact - showing that play influences key developmental areas such as independence, problem-solving and social skills.

Table 6.18. *Memo: Role of observing play-based learning in ECE*

| Memo: Role of observing play-based learning in ECE |
|--|
| <p>The analysis of ‘observing play-based learning (children)’ within the context of this research reveals the impact of play on children's learning journeys. This code, aligned with the concepts of ECE Environment and Context, Innovation and Creativity in ECE, Innovative Teaching Methodologies and Strategies, and Learning Outcomes and Educational Impact, highlights the important value of play as both a natural and effective means for children to explore, learn, and develop essential skills. The educators' observations, as expressed by participants, highlight the diversity of learning experiences facilitated by play, whether through individual exploration or group collaboration. These observations are important in understanding how play-based learning not only supports the development of specific skills and competencies but also cultivates an environment for innovation and creativity. Such an environment is conducive to the emergence of entrepreneurial skills, attitudes, and mindsets, even from an early age.</p> <p>Furthermore, the constant comparison of this code with related concepts reinforces the importance of play in achieving desired educational outcomes. It suggests that innovative teaching methodologies that incorporate play-based learning strategies are not merely supplementary but central to the holistic development of children in ECE settings. This memo acts as a reflection on the transformative potential of play in education and the broader implications for pedagogical practice, curriculum development, and educational policy in support of play-based learning.</p> |

The memo highlights the importance of play in helping children to learn and develop in early childhood education. It illustrates play’s significant impact on children’s ability to explore, learn, and develop essential skills within a creative and innovative environment. Moving to the next stage of the findings, concepts will be grouped into broader categories. The organisation of concepts into categories helps to see the bigger picture of how these concepts connect and impact early entrepreneurial education.

6.6.4. Developing Categories

Organising concepts into categories simplifies complex data and illustrates the interconnectedness of ideas, providing insights into effective ways to encourage innovative and

entrepreneurial thinking in young learners. This categorisation process is essential for advancing the research study toward meaningful theoretical contributions, as it helps to identify core patterns and themes related to entrepreneurial learning in preschool environments. The iterative nature of this approach ensures a comprehensive understanding of educators experiences, perspectives, and ideas.

The creation of categories from the 26 identified concepts allows for connections to be drawn between empirical evidence and theoretical frameworks in early childhood and entrepreneurial education. Table 6.19. presents the final categories derived from the focused coding process, based on the coding, memoing and constant comparison of all 19 interviews in the study.

Table 6.19. *Final Developed Categories from Concepts*

| Categories |
|--|
| 1. Policy, Advocacy and Community Engagement. |
| 2. Inclusion, Diversity and Gender Dynamics. |
| 3. Evaluation and Impact. |
| 4. Entrepreneurial Education and Skills Development. |
| 5. ECE Educator Professional Development and Identity. |
| 6. Dynamics within ECE. |
| 7. Curriculum and Pedagogical Innovation. |
| 8. Child Development and Agency. |

Source: *Authors own*

These eight significant categories, derived from the detailed exploration of the concepts, are instrumental in advancing our understanding of how entrepreneurial learning unfolds in ECE settings. Table 6.20. is pivotal as it aligns these concepts with their respective categories, serving as a key step toward developing a comprehensive theoretical framework.

Table 6.20. *Final Developed Categories with Corresponding Concepts*

| Category | Concept |
|---|--|
| <i>Policy, Advocacy and community Engagement</i> | <ul style="list-style-type: none"> ▪ Advocacy, Policy, Governance, and Professional Standards ▪ Policy and Advocacy for E in ECE |
| <i>Inclusion, Diversity and Gender Dynamics</i> | <ul style="list-style-type: none"> ▪ Gender Dynamics and Stereotyping. ▪ Inclusive Education and Diversity EDI in ECE. |
| <i>Evaluation and Impact</i> | <ul style="list-style-type: none"> ▪ Educational Impact and Programme Evaluation ▪ Impact of EE on Child Development ▪ Learning Outcomes and Educational Impact |
| <i>Entrepreneurial Education and Skills Development</i> | <ul style="list-style-type: none"> ▪ Educator Perspectives on EE. ▪ Entrepreneurial Education in Early Childhood Education. ▪ Entrepreneurial Skills, Attitudes and Mindset |
| <i>ECE Educator Professional Development and Identity</i> | <ul style="list-style-type: none"> ▪ CPD in Entrepreneurial Education. ▪ Professional Growth and Challenges in ECE. ▪ Professional Identity and Recognition. ▪ Professional Qualifications and Training. ▪ Professional Reflections, Experiences and Insights. ▪ The Educator and Professional Identity. |
| <i>Dynamics within ECE</i> | <ul style="list-style-type: none"> ▪ ECE Environment and Context. ▪ Educator Child Dynamics. |
| <i>Curriculum and Pedagogical Innovation</i> | <ul style="list-style-type: none"> ▪ Curriculum Development and Educational Reform ▪ Curriculum Innovation and EE Integration ▪ Educational Roles and Practices ▪ Innovation and Creativity in ECE. ▪ Innovative Teaching Methodologies and Strategies |
| <i>Child Development and Agency</i> | <ul style="list-style-type: none"> ▪ Child Autonomy and Agency ▪ Child Centred Learning and Development ▪ Entrepreneurial Skills, Attitudes and Mindset |

Source: *Authors own*

Table 6.20. outlines how the 26 concepts fit into eight key categories, setting a foundation for understanding how entrepreneurial learning can be integrated into early childhood education. This structure helps move the research forward. The next stage will explore what these categories reveal about teaching entrepreneurial skills to young children, highlighting the practical strategies and their effects. This exploration will illustrate how these educational approaches can shape innovative and entrepreneurial mindsets in early learners.

6.6.5. Finding from Categories

The 8 categories identified, and their corresponding concepts reveal insights that address the research question. The following section presents the main findings from these categories, as

detailed in Section 6.6.4. focusing on the key contributions they offer to understanding entrepreneurial education in preschool education.

- Category 1: Policy, Advocacy, and Community Engagement

Finding 1 - Need for Policy Change & Advocacy: There is a clear need for policies that support entrepreneurial education in preschools. As one participant highlighted, *“there is huge disparity between levels of education....particularly between preschool and primary school”*, (Participant D), suggesting that current policies may not sufficiently meet the needs for entrepreneurial learning in ECE. This highlights the importance of mobilising support for policy changes that better match the objectives of entrepreneurial education.

Finding 2 - Promoting Community Engagement: Active community involvement helps make entrepreneurial learning work better in preschool. As one participant noted, *“parents, businesses and community....they need to get more involved”*, (Participant K), emphasising the need for collaborative efforts beyond the early years settings themselves to foster a conducive environment for entrepreneurial learning. Table 6.21. reflects on the findings of this category.

Table 6.21. Memo: Policy, Advocacy, and Community Engagement

| Memo: Policy, Advocacy, and Community Engagement |
|---|
| Reflecting on the discussions around Policy, Advocacy, and Community Engagement, it is evident that a supportive policy framework and strong community engagement are considered essential for the successful integration of entrepreneurial learning in ECE. The observation that <i>“there is huge disparity between levels of education”</i> points to a gap in current educational policies, particularly between preschool and primary school, which advocacy efforts aim to address. Meanwhile, the call for more involvement from <i>“parents, businesses, and in the community”</i> highlights the importance of community partnerships in enriching the entrepreneurial learning experience. These insights emphasise the need for a united approach that includes policy reform, advocacy and community collaboration to help young learners develop an entrepreneurial spirit and mindset. |

- Category 2: Inclusion, Diversity, and Gender Dynamics

Finding 1 - Creating Equitable Opportunities: ensuring every child has equal opportunities for entrepreneurial learning, regardless of gender is crucial. Educators play a key role in counteracting traditional stereotypes, promoting a learning environment where gender does not determine participation. Participant statements such as, “*the gender kind of thing doesn't really play too much of a role*”, (Participant C), and “*it's [preschool] very inclusive, with different genders engaging in play together*”, (Participant K), highlight the importance of treating all children equally and fostering an inclusive setting.

Finding 2 - Diverse Understandings of Inclusion: The research shows varying understandings of the term inclusion among educators, from recognising its significant value to superficial acknowledgements. Phrases such as, “*inclusion is treating children like individuals...you'll see more of their development, you'll see more of their personality... who they really are*”, (Participant N), and “*no child is excluded, or you know seen as different. I just think every child should be included in everything*”, (Participant F), contrast with others who suggest a more general understanding of the term. This variation highlights the necessity of recognising and treating each child as an individual to truly achieve inclusion.

Finding 3 - Educator's Role in Challenging Stereotypes: There's a consensus among educators that a child's engagement in learning and play is influenced by their personality rather than by their gender. Statements such as, “*there's no difference in the way children play from a gender perspective - it's a personality thing*”, (Participant G), and, “*it's not about their [the child] gender, it's about their personality*”, (Participant Q), illustrate the central role educators have in designing learning experiences that cater to the unique personalities of children, rather than adhering to gender norms. Table 6.22. below reflects on the findings of this category.

Table 6.22. Memo: Inclusion, Diversity, and Gender Dynamics

| Memo: Inclusion, Diversity, and Gender Dynamics |
|---|
| <p>Reflecting on today's insights into EDI in preschool it is clear that fostering a learning environment where every child is valued equally, and stereotypes are actively challenged, is essential. The educators' observations reveal a shared belief in prioritising personality over gender stereotypes, suggesting a shift towards more personalised, inclusive education.</p> <p>The emphasis on comments like <i>"it's not about them being boys or girls, it's just like their personality"</i> (Participant D) calls for an educational approach that adapts to individual needs and characteristics, moving beyond traditional gender roles. This approach not only makes learning more inclusive but also ensures that educational experiences are more engaging and reflective of each child's unique identity.</p> <p>By focusing on creating learning environments that recognise and celebrate every child's individuality, educators can better support the development of entrepreneurial skills in a way that is accessible and relevant to all, promoting a culture of equality and inclusion within the classroom.</p> |

- Category 3: Evaluation and Impact

Finding 1 - Evaluating Entrepreneurial Learning: Understanding the impact of entrepreneurial education in early childhood education (ECE) requires developing comprehensive evaluation criteria that captures the comprehensive nature of these learning outcomes. The emphasis on direct observation and intervention by educators as stated in, *"if I'm asking a child to do a task...I observe, I watch them"*, (Participant F), highlights the need for unconventional assessment approaches that capture children's problem-solving and creativity processes.

Finding 2 - Positive Developmental Impacts: entrepreneurial learning contributes significantly to children's problem-solving abilities, creativity, and self-confidence. This suggests that such learning experiences offer more than just academic benefits; they foster a well-rounded development.

Finding 3 - Need for Inclusive Evaluation: There is a gap in assessing and measuring aspects like equality, diversity, and inclusion in preschools. Progress tracking and effective evaluation methods are essential for understanding the effects of entrepreneurial learning on both educators' knowledge and practices, and children's development.

Finding 4 - Transition to Primary Education: Educators express a strong belief that an inclusive and entrepreneurial approach in ECE should continue into primary education. They point out the current lack of support for children's emotional and social development in primary schools, as seen in quotes like, “*there is an awful lot they could do in primary schools to try and support their [children’s] feelings and stuff*”, (Participant R). Table 6.23. below reflects on the findings of this category.

Table 6.23. Memo: Evaluation and Impact

| Memo: Evaluation and Impact |
|--|
| <p>Evaluating the impact of entrepreneurial education in ECE is challenging given the limitations of traditional educational assessments. Approaches suggested by Participant F who emphasises observation and problem-solving, and Participant R, who calls for extended support into primary education, emphasise the need for a broader approach to evaluating learning outcomes. This goes beyond just academic skills, touching on social, emotional, and cognitive development areas.</p> <p>These reflections point towards a significant positive effect of entrepreneurial learning on children, enhancing not only their problem-solving skills and creativity but also their resilience and self-efficacy. The challenge now lies in devising assessment methods that can fully capture these diverse outcomes. Insights from participants suggest a move towards more innovative and holistic evaluation strategies that consider the child's development in its entirety.</p> <p>Broadening evaluation criteria can enable a deeper understanding of entrepreneurial education's contribution to child development and learning, ensuring that such programmes not only support educational experiences and growth but also support lifelong learning and adaptability in a rapidly changing world.</p> |

- Category 4: Entrepreneurial Education and Skills Development

Finding 1 - Expanding the Scope of Entrepreneurial Education: Entrepreneurial education in early childhood goes beyond business-related skills, to include critical thinking, creativity, resilience, and the ability to solve problems independently. This broad skill set is crucial for fostering a mindset of innovation and adaptability from a young age. Participants observe this shift noting the importance of self-assuredness and independent decision-making as signs of developing confidence and leadership in children, suggesting these are integral to entrepreneurial learning, “*I see the little, quieter ones...they’re quiet but they’re quite strong in themselves, and they’re like No, thank you, I’m going to do this... you know like, or I don’t want to...*”, (Participant N).

Finding 2 - Development of Core Skills: The development of soft skills, including confidence, independence, problem-solving, and teamwork, are highlighted as essential components of entrepreneurial education. Participants observe a sense of self-assuredness, and the ability to assert their preferences, *“no thank you, I don’t want to do that right now”* (Participant J).

Finding 3 - Challenges in Understanding and Implementing EE: There's a gap in educators' understanding and implementation of entrepreneurial education, with some not fully grasping its concept or how to integrate it into teaching. Educators face challenges in fully integrating it into their pedagogical practices, partly due to a lack of understanding, but also due to a lack of training and resources. However, some perceptions such as, *“I’d be thinking in a classroom it is where the children would kind of be the leaders of what they learn”*, (Participant R), highlight the potential shift in educational approaches once the concept of entrepreneurial education is fully grasped. Table 6.24. below reflects on the findings of this category.

Table 6.24. Memo: Entrepreneurial Education and Skills Development

| Memo: Entrepreneurial Education and Skills Development |
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| <p>Reflecting on the findings and observations from educators show a growing recognition of the value of fostering an entrepreneurial mindset through education, one that includes but is not limited to business acumen. Skills such as independence, creativity, and the ability to engage in thoughtful problem-solving and teamwork are frequently mentioned as outcomes of learning experiences by participants.</p> <p>However, challenges remain in fully understanding and applying the principles of entrepreneurial education within early childhood settings. The varied interpretations and applications of EE highlight the need for clearer guidance and resources for educators. The insights shared by educators underline the transformative impact of EE on both children's development and pedagogical approaches, suggesting a shift towards more child-led, inquiry-based learning processes that encourage experimentation and resilience.</p> <p>Integrating EE into early childhood education presents both challenges and opportunities. By focusing on the development of a broad skill set that includes critical thinking, creativity, and leadership, alongside traditional academic skills, young learners can be better prepared for transitions. Encouraging confidence, independence, and a strong sense of self in early learners, as seen through the educators' narratives, points towards a promising path for entrepreneurial education in shaping well-rounded, innovative individuals.</p> |

- Category 5: ECE Educator Professional Development and Identity

Finding 1 - Essential Professional Development: Educators emphasise the need for targeted professional development opportunities to prepare educators for incorporating entrepreneurial education into their teaching. *“I’m all for any kind of CPD and anything that we could help children build on”*, (Participant G). These opportunities are key to equipping educators with the necessary skills to foster an environment that encourages creativity, resilience and problem-solving in preschool education. Participant D mentions, *“we’re starting to get recognised as educators but we’re definitely not there...I think there’s a missing link between people on the ground and the government”*, highlighting the gap between educator recognition and support and the need for better alignment between educational policy and ground-level practices.

Finding 2 - Identity Recognition as Educators: The professional identity of early childhood educators plays a significant role in their teaching approach. Most participants expressed a strong desire for formal recognition of their expertise and contribution from both the government and the educational community. Participant G points out that the term, *“educarer”*, is patronising, preferring to be acknowledged as an *“educator”*. Participant D’s statement, *“I have a level 8 degree...I am a professional...we are educators”*, reflects the need for acknowledgement of their professional status and contributions.

Finding 3 - Impact of Educator's Personal Perceptions: Educators' personal perceptions and identities influence their approach to entrepreneurial education. The data shows a range of educator views on their roles, from seeing themselves as primarily caregivers to identifying as educators or practitioners. This diversity in self-perception emphasises the importance of professional development that includes reflective practice and identity work, that will facilitate a cohesive understanding and approach to entrepreneurial education. Table 6.25. reflects on the findings of this category.

Table 6.25. Memo: ECE Educator Professional Development and Identity

| Memo: ECE Educator Professional Development and Identity |
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| <p>The connection between professional development and the successful facilitation of entrepreneurial learning in early childhood settings is increasingly clear. Educators call for professional growth opportunities that align with the practical demands of embedding entrepreneurial skills in education, alongside formal recognition of their roles. The insights from participants highlight a broader need for policies and programmes that both acknowledge and support educators' vital contributions.</p> <p>To address these needs, developing comprehensive professional development initiatives focused on entrepreneurial education is crucial. Such programmes should offer educators the tools and knowledge to innovate within their teaching practices, enhancing the learning experience for young learners. In addition, establishing a culture that values and recognises educators' professional identities can further empower them as key agents of change in early childhood education.</p> |

- Category 6: Dynamics within ECE

Finding 1 - Impact of ECE Environment on EE: The internal dynamics within Early Childhood Education (ECE) settings, including leadership, organisational culture, and resources, significantly influence the implementation of entrepreneurial learning. *Participant R* pointedly notes the challenge of balancing educational goals with operational demands, “*I don’t think profit and childcare you know mix*”, highlighting the tension between business objectives and educational quality.

Finding 2 - Educator-Child Relationships: Positive relationships between educators and children are essential for fostering an effective entrepreneurial education environment. These relationships, based on mutual respect and empathy, foster a learning atmosphere conducive to exploration and innovation. However, *Participant E* contrasts experiences in different settings, “*In my private setting we do have a very structured environment... whereas when I’m in a community setting the parents don’t ask much about their children’s development*”, indicating how structural differences can affect educational focus and interactions.

Finding 3 - Variability in Educational Settings: The effectiveness of entrepreneurial education may vary greatly depending on the structure and management of the ECE setting. *Participant S* describes differences in curricular implementation, “*Now I’m a Montessori teacher so I work in a Montessori school so I could follow that curriculum along with Aistear. I guess in the community place we weren’t doing that*”, which shows how educational approaches can differ.

Similarly, *Participant O* finds it “*challenging in terms of classroom management*”, in community settings, in comparison to private settings, further highlighting the impact of the environment on educational delivery. Table 6.26. reflects on the findings of this category.

Table 6.26. Memo: Dynamics within ECE

| Memo: Dynamics within ECE |
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| <p>The exploration of dynamics within ECE settings highlights the importance of both the physical and interpersonal environments in facilitating or hindering the implementation of entrepreneurial education (EE). As <i>Participant E</i> and <i>Participant S</i> reflect on their experiences across different educational settings, it becomes clear that the structure and expectations within these environments can greatly influence how EE is integrated and practiced.</p> <p><i>Participant E</i>’s remark on the contrast in parental engagement between private and community settings, along with <i>Participant S</i>’s insights into curricular differences, emphasise the need for adaptive educational strategies that consider these varying conditions. Furthermore, <i>Participant O</i>’s struggle with classroom management in less structured environments points to the necessity for more robust support systems that can accommodate diverse educational challenges.</p> <p>To promote effective EE, a holistic approach that enhances both the learning environment and the educator-child relationships is crucial. This involves not only adapting physical spaces and resources to encourage creativity and entrepreneurial activities but also strengthening the professional development of educators to build positive, empowering interactions with students. By addressing these key aspects, we can better equip ECE settings to nurture innovative thinkers and problem-solvers, ensuring that entrepreneurial education is a transformative component of early childhood learning experiences.</p> |

- **Category 7: Curriculum and Pedagogical Innovation**

Finding 1 - Enhanced Learning through Play: The curriculum needs to be flexible enough to integrate entrepreneurial learning in ways that engage and are developmentally appropriate for young children. *Participant D* emphasises the natural learning style of children, and the effectiveness of play-based learning as the primary method through which children explore and understand their world, “*the only way that a child can learn is through play...their language is play*”. This highlights the need for a curriculum that supports playful and experiential learning as a means to develop entrepreneurial skills.

Finding 2 - Importance of Pedagogical Innovation: The study identifies innovative teaching methodologies and strategies such as project-based activities, and child-led initiatives for nurturing an entrepreneurial mindset. These approaches are recognised for their ability to foster creativity, resilience and problem-solving. *Participant G* clarifies the supportive role of existing frameworks, *“I think what needs to be remembered with Aistear, it’s not a curriculum in itself, it’s a framework...I’ll fill this framework with the Montessori curriculum”*, highlighting its adaptability with a variety of curriculum approaches and methodologies.

Finding 3 - Curricular Constraints and Educator Frustration: Despite enthusiasm for innovative educational approaches, educators face constraints imposed by traditional, rigid educational frameworks, standardised testing, and insufficient resources. These challenges highlight a tension between the desire to innovate and the practical limitations within current educational structures. *Participant F’s* critique of Aistear, *“I just think sometimes the words just are meaningless....just words on paper”*, points to the frustration with rigid or overly broad curricular directives. Table 6.27. reflects on the findings of this category.

Table 6.27. Memo: Curricular and Pedagogical Innovation

| Memo: Curricular and Pedagogical Innovation |
|---|
| <p>The exploration of curricular and pedagogical innovation in early childhood education settings highlights the transformative potential of embedding entrepreneurial learning within these environments. The findings reveal a critical need for curricula that support dynamic and experiential learning methods, such as play-based and project-based activities, which effectively foster entrepreneurial skills in young learners.</p> <p>Educators like Participant D and Participant G provide insights into the practical application of these methods within existing frameworks like Aistear, advocating for the use of these curricula as flexible guidelines rather than rigid instructions. However, the frustration voiced by Participant F regarding the inefficacy of broad, unfocused curricular content highlights the need for more tailored, specific, and practical frameworks that facilitate real-world application and genuine learning experiences.</p> <p>Moving forward, it is crucial to address these challenges by developing and advocating for curricular reforms that prioritise flexibility, relevance, and the integration of innovative teaching strategies. This involves not only rethinking the structure and content of educational frameworks but also ensuring that educators are equipped with the necessary resources and professional support to implement these changes effectively.</p> |

- Category 8: Child Development and Agency

Finding 1 - Enhanced Development Through Entrepreneurial Learning: Entrepreneurial learning can significantly enhance children's cognitive, social, and emotional development. It empowers children to actively participate and make decisions in learning activities which contributes to their overall growth. As *Participant N* explains, recognising children as individuals allows for a more inclusive environment that facilitates deeper engagement and development; *"if you are able to do that ...you'll see more of their development, you'll see more of their personality"*. *Participant E* also supports this stating *"we just let them explore whatever they want to explore"*.

Finding 2 - Children's Agency in Learning: Children's agency is evident in their active participation and decision-making during entrepreneurial activities. This agency is fundamental to their learning experience and outcomes, enhancing their confidence and engagement. *Participant P* highlights the importance of listening to children and offering them choices, *"they [the children] can voice their opinion all the time and we are listening and because we are giving them choices throughout the day...they feel confident"*.

Finding 3 - Supportive Environments for Agency: The learning environment is crucial in nurturing children's agency, with security and self-expression playing key roles. *Participant O* notes the impact of a secure environment on children's sense of importance and self-awareness, *"That they feel secure in space as well and know they have their own voice and that they are important...they learn by where they are in their own little self"*. Table 6.28. reflects on the findings of this category.

Table 6.28. Memo: Child Development and Agency

| Memo: Child Development and Agency |
|--|
| <p>The exploration of child development and agency within the context of entrepreneurial education (EE) in Early Childhood Education (ECE) highlights the profound role that autonomy and personalised learning play in fostering young learners' development. The data demonstrates how child-centred approaches, which prioritise the interests, choices, and active involvement of children, significantly contribute to nurturing entrepreneurial skills.</p> <p>The feedback from educators, such as Participant N's insight into individual treatment and Participant P's comments on providing choices, emphasise the effectiveness of strategies that empower children to take charge of their learning experiences. These strategies not only support cognitive and skill-based development but also enhance social and emotional competencies, essential for lifelong learning and adaptability.</p> <p>However, aligning these pedagogical approaches with current educational frameworks presents challenges, particularly in maintaining environments that fully support children's agency. As reflected in Participant O's observation, creating a secure and empowering space is vital for children to feel important and capable of influencing their learning outcomes.</p> <p>To advance these efforts, it is crucial to continue developing and implementing educational strategies that emphasise child autonomy and agency. This involves fostering environments that encourage exploration, respect children's voices, and recognise them as capable learners. By doing so, we can ensure that ECE settings not only accommodate but actively promote the principles of entrepreneurial education.</p> |

6.6.6. Conclusion of Focused Coding Stage

The focused coding stage has provided detailed insights into how early childhood educators foster entrepreneurial education in preschool settings. By synthesising data from initial codes into 26 refined concepts and 8 categories, this stage has illustrated the multifaceted approaches ECE educators can use to integrate entrepreneurial skills into early learning. These approaches range from enhancing policy and advocacy to nurturing child development and agency, highlighting the importance of a supportive environment, dynamic educator-child interactions, and innovative curricular strategies.

The findings demonstrate that fostering entrepreneurial education in ECE settings requires a holistic approach, encompassing tailored educational practices, strategic interventions, and supportive frameworks. This analysis provides for the development of a theoretical framework

that outlines effective strategies for embedding entrepreneurial thinking in preschool education, aiming to equip young learners with the skills necessary to navigate an innovative future. This directly addresses the study's research question by illustrating how various teaching methods and learning environments work together to develop entrepreneurial mindsets in young children. The categories identified will be further explored in the theoretical coding stage to refine and integrate these insights into a cohesive theoretical framework that can guide practical implementations and policy formulations in early childhood education.

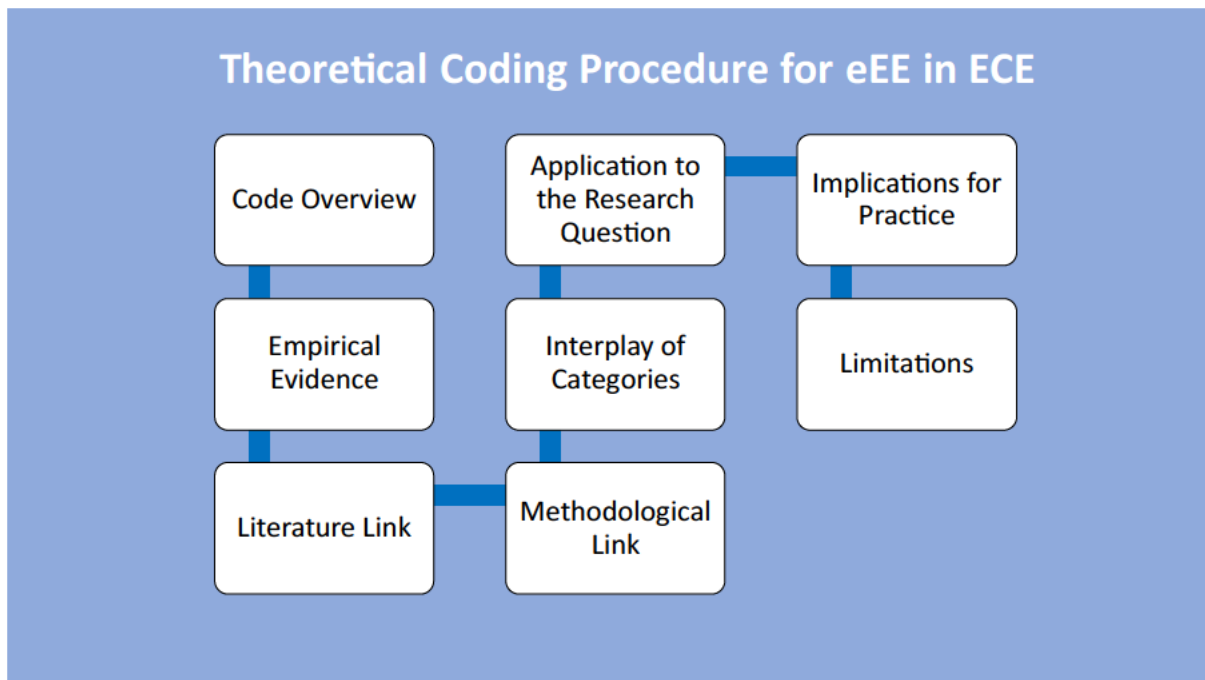
6.7. Theoretical Coding Phase

The theoretical coding stage continues to build upon the rigorous analysis conducted during the focused coding stage. This phase is pivotal in refining the concepts and categories previously identified into a structured theoretical framework. Guided by the research question, 'How can early childhood educators foster entrepreneurial education in preschool children?', this stage aims to combine insights from educational methods, pedagogical innovations, and learning environments into a cohesive theory. The theoretical codes developed here will capture the key aspects of entrepreneurial education in early childhood, focusing on practices and insights that can significantly enhance learning outcomes. This stage ensures that the emerging theory is deeply grounded in data, providing a robust foundation for practical applications and policy recommendations in early childhood education.

6.7.1. Theoretical Coding Procedure and Analysis

To construct a grounded theory for fostering entrepreneurial education in preschool children, the development of theoretical codes stands as a critical phase. This stage builds on the comprehensive findings from earlier coding processes, transforming raw data into a structured theoretical framework that reflects the intricacies of early childhood education practices. A rigorous process integrating constant comparison, the use of memos, vignettes, and a systematic analysis of emergent categories was utilised to develop theoretical codes. This process ensures theory that is rooted in the empirical data collected from early childhood education settings. To advance a theoretical framework grounded in the emergent data the steps that were taken are illustrated in Figure 6.3.

Figure 6.3. *Theoretical Coding Procedure in eEE in ECE study*



Source: *Authors own*

The development of theoretical codes is a foundational step in creating a practical framework that can guide educators in implementing effective entrepreneurial education strategies. This stage has established a robust set of codes that not only reflect the empirical data but also provide actionable insights that can be applied in early childhood educational settings. The detailed theoretical codes developed here are instrumental in progressing towards a comprehensive understanding of how entrepreneurial education can be effectively facilitated in preschool environments. Subsequent elements of Figure 6.3. will be examined in Chapter 7.

6.7.2. Findings from Theoretical Codes

The theoretical coding stage identified five critical theoretical codes that are instrumental in shaping entrepreneurial education in early childhood settings. These codes encapsulate core educational dynamics and offer extensive empirical insights into effective teaching practices. The following is an overview of Theoretical Codes developed from the findings.

(1) Interconnected Development

Interconnected Development emerges as a central theoretical code that advocates for a holistic approach to teaching that integrates cognitive, social, emotional, and physical development,

recognising that these elements are interdependent and collectively contribute to fostering entrepreneurial mindsets in children.

Empirical Support: Interviews with educators revealed observations of enhanced problem-solving abilities and decision-making skills in children who experienced integrated learning environments. Educators noted significant improvements in children's engagement and adaptability when learning activities connected to different developmental areas, reinforcing the value of a holistic educational approach.

(2) Inclusivity and Empowerment

This code represents the focus on ensuring that all children, regardless of their backgrounds or abilities, have equal opportunities to participate in and benefit from entrepreneurial learning. This code emphasises the importance of creating learning experiences that respect diversity, and individuality, and empowers children to take control of their learning processes.

Empirical Support: Data shows that children in inclusive settings where their ideas and choices were respected demonstrated higher levels of engagement and confidence. Educators reported that such environments allowed children to express their creativity more freely and take initiative in activities, leading to observable boosts in self-esteem and motivation.

(3) Collaborative Engagement

Collaborative Engagement highlights the role of teamwork and social interactions in developing essential entrepreneurial skills. This code points to the effectiveness of collaborative projects and group problem-solving in cultivating skills like negotiation, leadership, and collective decision-making.

Empirical Support: Observations from classroom settings indicated that children engaged in group activities were more likely to exhibit leadership qualities and were better at resolving conflicts and brainstorming solutions. Feedback from educators suggested that these collaborative experiences were critical in teaching children how to work together to achieve common goals, mirroring the collaborative nature of the business world.

(4) Transformative Practice

Transformative Practice involves teaching strategies that challenge conventional learning methods and encourage children to think critically and creatively. This code promotes practices that provoke significant cognitive and behavioural changes, encouraging children to question norms and think innovatively.

Empirical Support: Several educators highlighted instances where children exposed to non-traditional, inquiry-based learning activities displayed remarkable changes in their approach to challenges. They noted improvements in children's ability to approach problems from multiple angles and a willingness to experiment and take risks, traits that are essential for entrepreneurial success.

(5) Evaluative Insight and Impact

Evaluative Insight and Impact is concerned with the systematic assessment of how entrepreneurial education strategies are implemented and their effectiveness in achieving educational outcomes. This code highlights the importance of continuous reflection and adjustment based on evaluative feedback to optimise educational practices.

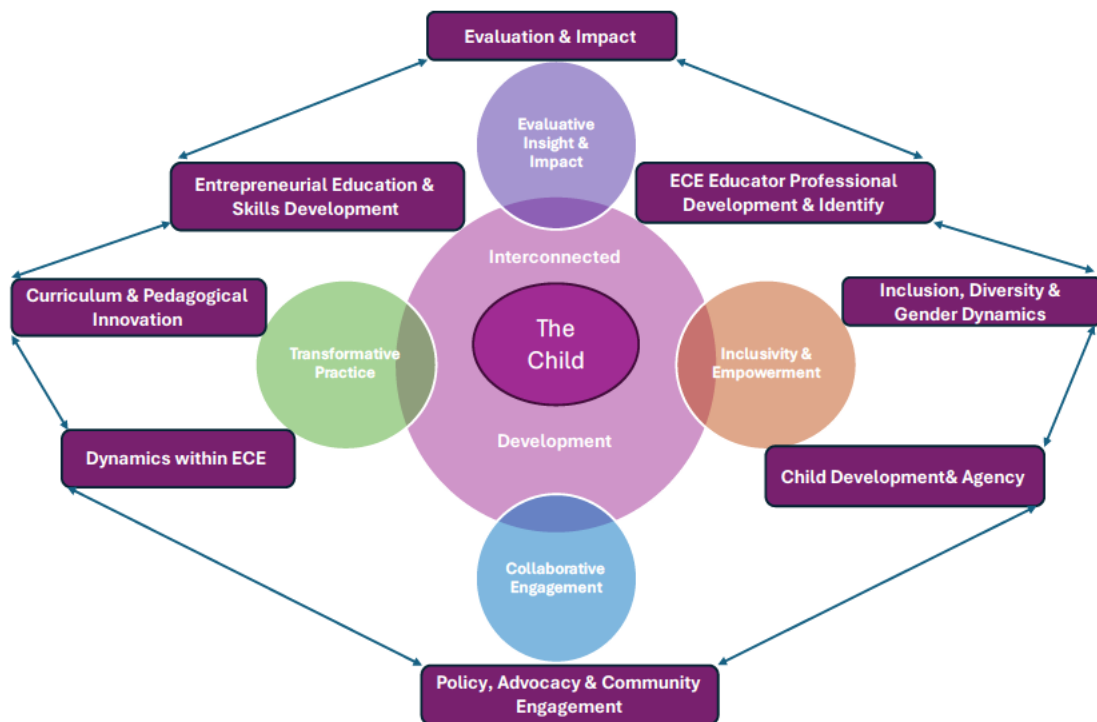
Empirical Support: The data revealed that settings where regular assessments of educational methods were conducted showed a more consistent application of effective teaching strategies. Educators who used insights from assessments to refine their approaches reported better student outcomes, particularly in terms of engagement and the practical application of learned concepts.

These five theoretical codes form the core of the proposed 'eEE in ECE Model', depicted in Figure 6.4. This model represents a sophisticated amalgamation of practices that are foundational for nurturing entrepreneurial spirit among preschoolers. It is essential to emphasise the core principle that underpins the theoretical framework is the preschool child, positioned at the centre of the model. This central positioning reflects the fundamental belief that children are the primary beneficiaries of educational processes and innovations. In the context of entrepreneurial education in early childhood settings, focusing on the child ensures that all pedagogical strategies and curricular developments are tailored to enhance their developmental journey, align with innate capabilities, and address their unique needs.

Placing the child at the centre of the framework acknowledges their role not just as passive recipients of knowledge but as active participants in their learning. This perspective is crucial for fostering an educational environment that encourages children to explore, experiment and engage meaningfully with their surroundings. By prioritising the child’s perspective, this framework aims to nurture a holistic development integrating cognitive, social, emotional and physical growth through an entrepreneurial learning approach. This child-centric approach aligns with contemporary educational philosophies that advocate for education systems designed to adapt to the individual rather than requiring the individual to adapt to the system. It emphasises the importance of understanding and supporting each child's personal learning path and pace, thereby ensuring that the educational intervention fosters not only academic skills but also critical life skills such as creativity, resilience and autonomy.

Figure 6.4. The eEE in ECE Model

Proposed Theoretical Framework (eEE in ECE Model) for early entrepreneurial education (eEE) within the Irish preschool context.



Source: *Authors own*

Each theoretical code, supported by empirical evidence, highlights distinct yet interconnected strategies that collectively enhance the entrepreneurial learning environment. This holistic approach ensures that children not only gain essential skills but also develop the confidence and creativity needed to navigate future challenges. Each aspect of the framework, each strategy and each outcome have been developed with the intention of supporting, empowering, and enhancing the educational experiences of the preschool child. This foundational work establishes a basis for discussions on the practical applications and broader implications of these findings in subsequent sections of this study.

6.7.3. Conclusion of Theoretical Coding Phase

The theoretical coding process is a pivotal stage in the research study, utilising a constructivist grounded theory approach to synthesise and refine the data into a comprehensive theoretical framework. This methodology has enabled the rigorous examination and understanding of the various ways early childhood educators can foster entrepreneurial education in preschool children. Through iterative cycles of coding and analysis, robust theoretical codes have been developed that accurately capture the dynamic interplay of pedagogical strategies, environmental influences, and child-centric practices. Transitioning into Chapter 7, these findings will be discussed in depth and analysed in relation to existing literature. This next chapter will critically engage with the theoretical framework to evaluate its practical implications, ensuring that the conclusions of the study are not only theoretically sound but also practically viable for enhancing entrepreneurial education in early childhood settings.

6.8. Conclusion of Findings

Through the application of Constructivist Grounded Theory (CGT), this research provides a comprehensive understanding of the subconscious facilitation of entrepreneurial competencies among preschool children. Key themes such as promoting independence, encouraging teamwork, and enhancing critical thinking emerged as integral to the educators' practices, often implemented without deliberate intent. The study highlights the significant impact of educators' qualifications, continuous professional development, and the adoption of child-centred curricula like Aistear on the successful integration of entrepreneurial education. The educators' narratives highlight the importance of fostering autonomy, creativity, and problem-solving skills, aligning with the broader objectives of preparing children for future challenges.

Moreover, the use of reflective vignettes and detailed memos enriched the analysis, offering deeper insights into the lived experiences and pedagogical strategies of early childhood educators. These tools illustrated the critical role of educator beliefs and practices in shaping a conducive environment for entrepreneurial learning. In conclusion, the initial coding phase sets a solid foundation for understanding how early childhood educators can nurture entrepreneurial thinking in preschool settings. The transition to focused and theoretical coding further refines these insights, ultimately contributing to a comprehensive theory of entrepreneurial education in early childhood. This study's findings emphasise the need for deliberate efforts, enhanced training, and supportive curricula to intentionally cultivate entrepreneurial competencies from a young age.

CHAPTER 7
DISCUSSION OF FINDINGS

7.1. Introduction

Grounded in the constructivist grounded theory methodology, this discussion synthesises findings from Chapter 6, including analysis of initial coding and theoretical model development, to offer insights into the systemic, pedagogical, and individual influences that shape entrepreneurial learning. By examining the interactions between policy, educational practice, and community engagement, this discussion does not merely recount the findings but critically engages with them to propose a cohesive framework for entrepreneurial education in early childhood settings, highlighting practical applications, theoretical underpinnings, and future directions for research and practice.

7.2. Discussion

Initial analysis of findings revealed distinct concepts and categories that critically shaped the development of theoretical codes. These theories subsequently formed the foundation of a framework that is aimed at enhancing entrepreneurial learning for preschool children. Key themes have been identified from the theory and each theme plays an important role in understanding and facilitating the processes through which young learners acquire entrepreneurial skills. This framework not only provides a structure for examining the efficacy of current educational practices but also offers actionable insights for educators, thus laying a solid foundation for innovative and reflective educational strategies in early childhood education.

7.2.1. Discussion of Initial Findings

The initial coding process revealed how early childhood educators may unintentionally foster entrepreneurial skills in preschool settings. These findings, rooted in the principles of the Aistear curriculum and various educational theories, indicate that everyday interactions and activities in preschools play a crucial role in shaping entrepreneurial competencies. Additionally, the unique pedagogical approaches and personal beliefs of educators significantly influence the development of these skills.

- **Theoretical Implications**

The initial codes provide a strong foundation for discussing the theoretical roots of early entrepreneurial education. For example, codes like “Promoting Independence (Children)” and “Understanding the term ‘entrepreneurial education’ (Educator)” highlight the constructivist

view that learning is an active, dynamic process shaped through interactions between educators and children. These codes suggest that entrepreneurial skills such as independence, creativity, and problem-solving are cultivated in a socially interactive environment. This aligns with the Vygotskian perspective, which posits that cognitive development is significantly enhanced through social interaction. Therefore early childhood educators can play a crucial role in creating environments that encourage entrepreneurial traits, reinforcing the importance of socially driven learning processes in early education.

- **Linking Theory to Practice**

Practically, the insights from the codes indicate that everyday interactions and activities in preschools play a pivotal role in shaping entrepreneurial competencies. For example, promoting independence and problem-solving through daily tasks and structured play can establish the foundation for key entrepreneurial skills. This can be theoretically grounded in experiential learning theory, which suggests that education is most effective when rooted in direct experience and reflection. These findings highlight the need for early childhood educators to consciously integrate these elements into their daily routines and pedagogical strategies to systematically nurture entrepreneurial skills.

- **Practical Implications**

- (1) **Integration of Entrepreneurial Concepts**

The analysis indicates that entrepreneurial education is not fully recognised or intentionally integrated within the standard preschool curriculum. To address this, curriculum revisions could explicitly include entrepreneurial activities, such as problem-solving games, team projects, and role-play that introduce basic entrepreneurial principles.

- (2) **Role of Educators**

The findings highlight the central role of educators in modelling and facilitating entrepreneurial skills. To enhance this role, training programmes should be developed to equip educators with specific strategies for incorporating entrepreneurship education into their daily interactions with children. This could involve workshops on innovative pedagogical approaches and adapting current curricula to embed entrepreneurial thinking within the early childhood education environment.

(3) Enhancing Pedagogical Approaches

Given the findings' emphasis on play-based learning and its role in developing entrepreneurial skills, there is a need for pedagogical strategies that balance structured and unstructured play. Achieving this balance will maximise the developmental benefits of play while ensuring that children are introduced to entrepreneurial concepts in an engaging and age-appropriate manner.

- Reflections for Future Practice

Reflecting on the initial findings, there is a clear opportunity to enhance the intentional teaching of entrepreneurial skills in early childhood settings. Future practice could focus on the following areas:

(1) Curriculum Development

A systematic approach is needed to incorporate entrepreneurship into the early childhood curriculum. Embedding specific objectives related to entrepreneurial skills within the Aistear framework, for example, would ensure these objectives are explicitly recognised and valued.

(2) Professional Development and Continuous Learning

Specialised training modules and ongoing professional development focused on entrepreneurial education can equip educators with the knowledge and strategies needed to integrate these concepts effectively into their teaching practices.

(3) Research and Evaluation

Future research could prioritise longitudinal studies to track the efficacy of entrepreneurial education from preschool onward. Evaluating the impact of targeted entrepreneurial education initiatives will provide empirical data to support curriculum enhancements and pedagogical innovations.

(4) Engagement with the Community and Parents

Active engagement with parents and the community is essential for promoting an understanding of the benefits of entrepreneurial education. This could involve community workshops, parent-educator meetings focused on entrepreneurial learning outcomes, and the inclusion of community members in classroom activities to provide real-world insights.

(5) Policy Advocacy

Advocating for policies that support the integration of entrepreneurial education in early childhood education is crucial. This includes working with educational boards to highlight the importance of entrepreneurial skills, ensuring that these skills are part of educational standards and assessments, securing the necessary support and recognition for these initiatives.

- **Summary**

The analysis of initial findings provides an overview of the potential of entrepreneurial education in preschool settings. It highlights the need for more deliberate efforts to cultivate entrepreneurial competencies. By aligning theoretical insights with practical strategies, this discussion paves the way for a more in-depth analysis of the findings.

7.2.2. Discussion of Concepts

This analysis explores the systemic influences, pedagogical strategies, and educator roles that shape the educational landscape. By examining factors such as advocacy, policy, curriculum development, gender dynamics, and the role of educators, the discussion highlights how these elements collectively impact the implementation of entrepreneurial concepts in preschool environments. The goal is to uncover the underlying dynamics that could influence the effectiveness of entrepreneurial education (EE), offering insights into how early childhood educators can be empowered to foster an entrepreneurial mindset and capabilities among young learners.

- *Systemic Influences on Entrepreneurial Education*

- (1) **Advocacy, Policy, Governance, and Professional Standards for EE in ECE**

Supportive policies and governance are critical for integrating entrepreneurial education into early childhood settings. Effective advocacy plays a key role in shaping policies that promote innovative educational practices and elevate professional standards aligned with entrepreneurial education goals. Continuous advocacy is necessary to ensure that educational systems evolve and adapt to support entrepreneurial education effectively.

(2) Curriculum Development and Educational Reform & Curriculum, Innovation with EE Integration

The findings highlight the need for curricular innovations that integrate entrepreneurial education into early childhood programmes. Advocating for a curriculum that evolves to reflect contemporary educational goals and societal needs, the emphasis is on embedding entrepreneurial education naturally into educational content and delivery. This approach emphasises the importance of flexibility and responsiveness in curriculum design to ensure that it meets the demands of a dynamic educational landscape.

(3) Gender Dynamics and Stereotyping & Inclusive Education and Diversity (EDI) in ECE

These concepts emphasise the importance of creating an equitable and inclusive educational environment by exploring the impact of social and cultural factors on learning experiences. Addressing gender dynamics and stereotyping reveals how societal norms and biases can influence the implementation of entrepreneurial education. In contrast, inclusive education and diversity focus on broader changes to inclusivity. The interplay between these concepts suggests the need to combat gender biases and promote diversity, ensuring that EE is accessible and equitable for all children.

- *Pedagogical Strategies for Fostering EE*

(1) Child Autonomy and Agency & Child-Centred Learning and Development

These concepts emphasise the importance of viewing children as active participants in their learning, again aligning with constructivist pedagogies that can nurture entrepreneurial skills. Emphasising independence, choice, and agency empowers children to take initiative and make decisions – key elements of an entrepreneurial mindset. This approach is integral to child-centred learning, which promotes holistic growth by allowing children to engage deeply with entrepreneurial principles in a supportive, developmentally appropriate setting.

(2) Innovation and Creativity in ECE & Innovative Teaching Methodologies and Strategies

Focusing on the need for innovation and creativity in the curriculum, these concepts advocate for adopting novel teaching methods that prioritise holistic development. Tailoring learning experiences to foster entrepreneurial thinking requires the implementation of innovative teaching strategies that support the child's overall growth.

- *Professional Development and Educator Roles*

- (1) CPD in Entrepreneurial Education & Professional Qualifications and Training

These concepts highlight the importance of equipping educators with the necessary knowledge and skills through robust professional qualifications and continuous professional development (CPD). Integrating entrepreneurial education into early childhood programmes delivered by Higher Education Institutions ensures that educators are prepared from the outset to foster a culture of innovation and creativity.

- (2) Educator Perspectives on EE & Professional Identity and Recognition

Understanding how educators perceive entrepreneurial education and its impact on their professional identity is crucial. This analysis reveals that effective integration of entrepreneurial education not only enhances educators' roles but also elevates their professional stature and self-perception within the educational community.

- Summary

The analysis of interview data highlights the interconnectedness of key concepts critical to integrating EE into ECE. Each concept uniquely contributes to understanding how early childhood educators can support entrepreneurial learning, highlighting the complex relationships between policy, pedagogy, educator development, and systemic support. This comprehensive understanding is essential for developing strategies that are effective, inclusive, and capable of fostering a culture of innovation and child-centred learning, preparing children for future challenges.

7.2.3. Discussion of Categories

In the effort to effectively integrate entrepreneurial education into early childhood settings, eight key categories have been identified that collectively shape the framework for fostering entrepreneurial skills in young learners. These categories, which include policy advocacy, community engagement, curriculum innovation, and pedagogical strategies, each offer unique theoretical implications, practical applications, and opportunities for future development. This section provides a comprehensive analysis of these categories, examining how each contributes to the preschool context and how they interact to create a supportive environment for entrepreneurial education.

- Category 1 - Policy Advocacy and Community Engagement

Theoretical Implications

This category emphasises the significance of supportive policies and governance in embedding entrepreneurial education (EE) in early childhood settings (ECE). Educational policy theories (Burch, 2007) and advocacy theory (Gen & Wright, 2013) suggest that effective advocacy can lead to policy changes, making the educational landscape more conducive to innovative concepts like EE.

Practical Implications

Effective policy advocacy bridges gaps in educational practices, particularly between preschool and primary education levels. Engaging community stakeholders, including businesses and families, enriches the educational experience by providing diverse resources and perspectives, essential for holistic entrepreneurial education.

Future Directions

Advocating for policy reforms to explicitly include entrepreneurial education in early childhood curricula, and strengthening community partnerships, will create a supportive ecosystem for implementing these educational innovations.

- Category 2 - Inclusion, Diversity, and Gender Dynamics

Theoretical Implications

This category aligns with contemporary educational theories that advocate for equity in education, emphasising the need for inclusive and gender-neutral environments to ensure all children have equal opportunities to engage in entrepreneurial learning.

Practical Implications

Creating gender-neutral learning spaces and addressing traditional stereotypes are crucial steps for making entrepreneurial education accessible and relevant to all children.

Future Directions

Enhancing educator training to focus more on inclusion and diversity, and developing curricula that reflect various cultures and experiences, are vital. Longitudinal studies can assess the

impact of inclusive curricula on entrepreneurial mindset development, guiding the creation of best practices for educators.

- Category 3 - Evaluation and Impact

Theoretical Implications

Evaluation assessment theories suggest that evaluating entrepreneurial learning requires comprehensive methods that capture a broad spectrum of skills and attitudes (Pittaway & Edwards, 2012; Morselli, 2019).

Practical Implications

Developing innovative assessment tools that go beyond traditional academic measures to include social, emotional, and cognitive aspects of learning will provide a fuller understanding of the impact of entrepreneurial education.

Future Directions

Establishing robust frameworks for continuous evaluation and adapting assessment methodologies to be age appropriate (e.g. observational and portfolio methods) will enhance the implementation and understanding of entrepreneurial education in early childhood settings.

- Category 4 - Entrepreneurial Education and Skills Development

Theoretical Implications

Kolb's (1984) experiential learning theory emphasises the importance of active participation in learning, which is crucial for developing entrepreneurial skills (Kolb, 2014). This theory supports integrating hands-on activities that foster critical thinking, creativity, and problem-solving into the ECE curriculum. This is further supported by theories in cognitive and developmental psychology that emphasise the importance of fostering these skills from an early age.

Practical Implications

Enhancing curricula to incorporate entrepreneurial skills development into everyday learning activities and teaching strategies is essential for nurturing an entrepreneurial mindset.

Future Directions

Targeted professional development programmes and resources to support curriculum innovation are necessary for effectively implementing entrepreneurial education.

- Category 5 - ECE Educator Professional Development and Identity

Theoretical Implications

The development of educators' professional identity is key to effectively facilitating entrepreneurial learning. Professional development theories suggest that educators' self-perception significantly influences their teaching style and engagement with educational innovations (Zaslow et al., 2010).

Practical Implications

Targeted professional development programmes that enhance educators' understanding and implementation of entrepreneurial education are necessary to bridge the gap between current practices and innovative educational demands.

Future Directions

Enhancing the recognition of early childhood educators as professionals and providing continuous support for professional growth are critical for sustaining innovation in educational practices.

- Category 6 - Dynamics within ECE

Theoretical Implications

Organisational theories emphasise that the culture within educational settings - including norms, values, and practices - affects the implementation and success of new educational initiatives (Bush, 2006). A positive, supportive, and flexible organisational culture is essential for integrating entrepreneurial education successfully.

Practical Implications

Creating supportive environments that encourage innovative teaching and learning practices is crucial. Leadership within ECE settings must advocate for and facilitate a culture that embraces entrepreneurial education.

Future Directions

Adapting organisational structures to support innovative educational practices and ensuring resources are aligned with these goals is essential for the successful implementation of entrepreneurial education.

- Category 7 - Curriculum and Pedagogical Innovation

Theoretical Implications

Constructivist Learning Theory suggests that learners construct knowledge best through active engagement, supporting the need for curricular and pedagogical innovations that allow children to explore, experiment, and engage in problem-solving activities.

Practical Implications

Developing flexible curricular frameworks that integrate entrepreneurial education and adopting innovative teaching methodologies will support the fostering of skills necessary for future success.

Future Directions

Advocating for educational reforms that support flexibility in curriculum design and fostering collaboration among educators, parents, policymakers, and the community will enhance the implementation of entrepreneurial education.

- Category 8 - Child Development and Agency

Theoretical Implications

Fostering autonomy and agency in young learners aligns with developmental theories that emphasise self-directed learning and the development of personal agency during early childhood (Mashford et al., 2011).

Practical Implications

Creating learning environments that promote autonomy, respect children's choices, and encourage active participation will enhance the development of entrepreneurial skills such as problem-solving, resilience, and creativity.

Future Directions

Developing educational strategies that support child autonomy and agency and conducting research to evaluate their impact on child development are essential for understanding and enhancing the role of entrepreneurial education in early childhood education.

- Summary

The detailed exploration of these categories reveals a dynamic relationship between policy, practice, and pedagogy all of which collectively address the research question. Each category not only enhances our understanding of specific aspects of educational innovation but also contributes to a holistic approach to a child's learning. Building on this foundation, the next section will introduce the early Entrepreneurial Education Framework (eEE Framework), which has emerged from these categorical analyses and subsequent theoretical findings. This discussion will illustrate how the framework provides a comprehensive roadmap for effectively fostering entrepreneurial education in preschool settings, while also outlining its implications for practice and policy in early childhood education.

7.3. The eEE (early Entrepreneurial Education) Framework

The eEE Framework proposed in this study represents a pioneering advancement in entrepreneurial education, offering a holistic and dynamic approach to embedding entrepreneurial concepts into early childhood education. This framework aligns with contemporary educational needs while addressing the gaps in current pedagogical strategies, providing a fresh perspective on nurturing essential entrepreneurial skills from a young age. By integrating a multi-dimensional, interconnected approach that emphasises policy advocacy, curriculum innovation, and inclusive educational practices, the framework aims to cultivate an entrepreneurial mindset among preschool children.

- Proposed Framework for Early Entrepreneurial Education within the Irish Preschool Context:

The eEE (early Entrepreneurial Education) framework is built upon five major interlinked theoretical findings derived from the constructivist grounded theory analysis of the data.

1. Interconnected Development
2. Transformative Practice

3. Inclusivity and Empowerment
4. Evaluative Insights and Impact,
5. Collaborative Engagement.

These theoretical contributions are closely connected and supported by the eight categories discussed in section 7.2.3. Each of these five elements will be discussed under the following areas to highlight the framework's contribution to the field of early entrepreneurial education:

- Empirical Evidence
- Literature Link
- Methodological Application
- Interplay of Categories
- Application to the Research Question and Implication for Practice
- Limitations

By addressing these areas, the framework provides a comprehensive guide for educators and policymakers, laying a strong foundation for future research and practical implementation. It ensures a robust approach to integrating entrepreneurial education in early childhood settings.

In advance of exploring the intricacies of this framework, it is important to acknowledge the strategic repetition of two foundational categories – '*Child Development & Agency*' and '*Entrepreneurial Education and Skills Development*'. These categories appear twice within different theoretical components of the framework, each serving a distinct yet complementary purpose.

The repeated inclusion of '*Child Development & Agency*' in both 'Interconnected Development' and 'Inclusivity and Empowerment' is deliberate. It highlights the holistic nature of this framework, emphasising that the developmental needs of preschool children are both diverse and interconnected. This dual focus ensures that all children, regardless of their background, have the opportunity to thrive in an environment that nurtures their individuality while fostering essential life skills.

Similarly, the category '*Entrepreneurial Education and Skills Development*' is featured in both 'Interconnected Development' and 'Transformative Practice' to highlight its dual role. In

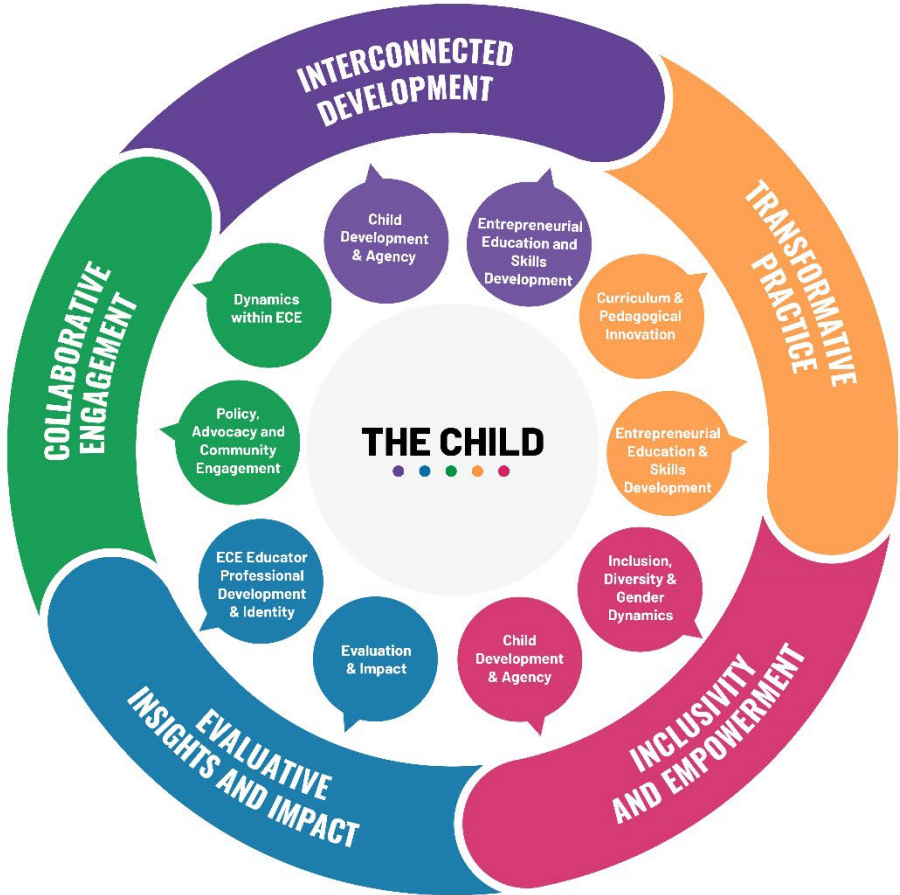
‘Interconnected Development’, it is crucial for embedding foundational entrepreneurial skills within the broader context of children’s daily learning activities, ensuring these skills are not isolated, but part of a comprehensive developmental journey. In ‘Transformative Practice’, it aims to reshape traditional learning paradigms, encouraging children to engage with the world innovatively and creatively, which is essential for fostering an entrepreneurial mindset.

By discussing these two categories across different components of the framework, this thesis offers a multi-dimensional perspective on early childhood entrepreneurial education. This approach not only aligns with contemporary educational needs but also addresses gaps in current pedagogical strategies. The following sections will elaborate on the specific contributions of these categories within the framework.

Figure 7.1. The eEE (early Entrepreneurial Education) Framework

The early
**ENTREPRENEURIAL
EDUCATION
FRAMEWORK**

(eEE)



Source: Authors own

(1) Interconnected Development

Interconnected Development emerges as a central theoretical finding, encapsulating a holistic approach to fostering entrepreneurial learning in preschool children. This theoretical code emphasises the importance of nurturing cognitive skills such as problem-solving and decision-making, alongside social, emotional, and physical capabilities that support these cognitive functions.

- **Empirical Evidence**

Empirical evidence from educator interviews suggests that when cognitive, emotional, social and physical development are interconnected, children's propensity for entrepreneurial thinking is significantly enhanced. This comprehensive developmental framework encourages children to take initiative, manage risks, and develop the resilience necessary for entrepreneurial activities, highlighting the broad benefits of entrepreneurial education.

- **Literature Link**

'Interconnected Development' draws significantly from Vygotsky's (1978) sociocultural theory, which emphasises the role of social interactions in learning (Vygotsky, 1978; Steiner & Mahn, 1996). This theory supports the notion that early childhood education should encompass not just cognitive development but also social, emotional, and physical growth, aligning with holistic education models that advocate for the education of the 'whole child' (Slade and Griffith, 2013). Contemporary research on entrepreneurial education further advocates for a comprehensive model that nurtures varied skills and competencies (Jones & Iredale, 2010; Jones & English, 2004).

- **Methodological Application**

Using constructivist grounded theory, this component emerged from iterative cycles of data coding, constant comparison, memo writing, and integration with emerging categories. Categories such as 'Entrepreneurial Education & Skills Development' and 'Child Development & Agency' were frequently linked to instances of entrepreneurial learning, establishing 'Interconnected Development' as a key conceptual pillar.

- Interplay of Categories

Two categories intersect to promote entrepreneurial learning within this framework:

Entrepreneurial Education & Skills Development - This category embeds entrepreneurial skills such as creativity, innovation, leadership, and problem-solving within a broader developmental framework, ensuring these skills are not taught in isolation, but part of daily learning activities, thereby enhancing their practical relevance. This includes activities that are designed to foster not only individual competencies but also to promote social interaction and emotional resilience

Child Development & Agency - This category focuses on cultivating agency in children through environments that encourage exploration and decision-making, crucial for developing entrepreneurial skills. By supporting children in becoming agents of their own learning, educators can further entrepreneurial thinking that is adaptive, innovative, and resilient.

- Application to the Research Question and Implications for Practice

To address the research question: ‘how can early childhood educators can foster entrepreneurial education?’, one must consider how these categories can be operationalised in an educational setting. Practically, ‘Interconnected Development’ implies a shift in educational strategies. Educators are encouraged to design interventions that do not isolate entrepreneurial skills development but rather embed it within the overall learning experiences that cater to all aspects of child development. Educators can:

- Integrate entrepreneurial concepts into daily activities, making them a natural part of the learning environment.
- Use pedagogical innovations to create learning experiences that encourage children to explore, experiment, and engage in creative problem-solving.
- Advocate for educational policies that recognise and support entrepreneurial learning as a valid and valuable component of early childhood education.
- Be attuned to individual and group dynamics within the classroom to nurture a culture that values initiative and innovation.

By implementing these strategies, educators can create environments that not only promotes entrepreneurial skills but also support holistic child.

- Limitations

‘Interconnected Development’ is not without its challenges, such as the risk of prioritising specific outcomes over holistic development, as cautioned by Biesta (2013). Additionally, it necessitates educators to skilfully blend and balance diverse developmental needs, which can be complex in heterogeneous classroom settings. The capacity to tailor this approach to individual learners varies and can be constrained by existing educational policies, curricula, and resources. Children progress at different rates across the developmental domains, making it challenging to devise learning experiences that are universally engaging and effective (Berk, 2015). This complexity necessitates individualised learning plans, which can be difficult to manage in larger classroom settings or without adequate support, potentially leading to disparities in learning outcomes.

(2) Transformative Practice

‘Transformative Practice’ in entrepreneurial learning within ECE focuses on creating experiences that shift how children think, perceive, and engage with the world. It represents a shift from traditional rote learning to a dynamic, inquiry-based approach that aligns with the core of entrepreneurial education - fostering creativity, critical thinking, and the capacity for innovation.

- Empirical Evidence

Empirical evidence indicates that ‘Transformative Practice’ in ECE significantly enhances children’s cognitive, emotional, and social development. Educator interviews suggest that engaging children in dynamic, inquiry-based learning activities promotes deeper cognitive processing, enabling them to perceive and interact with the world in novel ways. This approach, fosters creativity, critical thinking, and innovation, marking a departure from traditional learning methodologies.

- Literature Link

‘Transformative Practice’ is rooted in transformative learning theory and constructivist principles. Mezirow's theory of transformative learning involves deep, structural shifts in thought, feelings, and actions (Mezirow, 1991). Piaget’s constructivist theory supports the idea that children actively construct knowledge through their interactions with their environment, making hands-on, experiential learning crucial for transformative experiences (Piaget & Cook,

1952). Zepke (2013) further connects transformative practices with entrepreneurial learning, emphasising the importance of fostering innovation, risk-taking, and creativity in education.

- Methodological Application

‘Transformative Practice’ emerged through the rigorous methodological application of constructivist grounded theory. This involved data triangulation, constant comparative analysis, and iterative coding cycles, highlighting how transformative practices can enhance entrepreneurial learning experiences in early childhood.

- Interplay of Categories

Two categories significantly contribute to ‘Transformative Practice’:

Curriculum & Pedagogical Innovation - This category encourages the development of a curriculum that is dynamic and inquiry-based, where children are not merely passive recipients of information but active participants in their learning journey. Incorporating entrepreneurial concepts into the curriculum, like problem-solving, creativity, and critical thinking, challenges children to think differently and question their existing knowledge and assumptions. This not only stimulates intellectual growth but also fosters an innovative mindset.

Entrepreneurial Education & Skills Development - This category focuses on equipping children with entrepreneurial skills such as leadership, resilience, and the ability to innovate. It supports ‘Transformative Practice’ by introducing children to real-world entrepreneurial scenarios that require innovative thinking and problem-solving, transforming their learning journey into an exploration of entrepreneurial principles.

- Application to the Research Question and Implications for Practice

Educators can foster entrepreneurial learning through Transformative Practice by:

- Implementing project-based learning where children work on real-world problems, collaborative tasks that require negotiation and teamwork, or technology integration that opens up new ways of interacting with information.
- Designing learning experiences that challenge conventional thinking and encourage children to think outside the box.

- Introducing entrepreneurial concepts through storytelling, play, and projects that promote experimentation and reflection.

Adopting these practices cultivates an environment that nurtures critical thinking, creativity, and resilience.

- Limitations

Transformative practices may require a longitudinal perspective to fully assess their impact. Challenges include the developmental appropriateness for young learners, who may not yet be equipped for the complex cognitive, emotional, and social challenges posed by transformative learning experiences originally theorised by Mezirow (1991). The effectiveness of such practices heavily relies on educator preparedness and the availability of supportive professional development, which often falls short, leaving teachers ill-equipped to facilitate deep, reflective learning experiences (Hoggan, 2016). Additionally, curricular and systemic constraints often prioritise academic achievements over the introspective outcomes central to transformative learning, complicating the integration of these practices (Mezirow & Taylor, 2009), hindering the progression of entrepreneurial learning into primary school. Assessing the intangible nature of ‘transformative practice’ also presents difficulties in traditional educational frameworks (Cranton and Taylor, 2012).

(3) Inclusivity and Empowerment

‘Inclusivity and Empowerment’ are essential for laying the foundation for entrepreneurial learning in ECE by creating learning environments that are accessible and engaging for all children, regardless of their backgrounds or abilities. Inclusivity recognises the diverse talents and perspectives that each child brings, which is central to entrepreneurial thinking. Empowerment involves giving children the voice and autonomy to explore ideas, make decisions, and take ownership of their learning - key elements in developing an entrepreneurial attitude.

- Empirical Evidence

Empirical evidence from the educator interviews suggests that inclusive and empowering practices significantly enhance engagement and participation among students. These practices promote richer, more diverse interactions that spur creativity, innovation and problem-solving skills.

- Literature Link

Embedding inclusivity within educational reforms is not without its challenges (Ainscow et al., 2006), particularly in balancing policy pressures with a commitment to inclusive practices. ‘Inclusivity and Empowerment’ draw heavily from transformative learning theory and empowerment theory, advocating for educational experiences that are accessible to all students and actively engage them in their learning process. Mezirow's (1991) transformative learning theory supports the idea that effective learning involves profound changes in the ability to think critically and reflectively. Zimmerman (2000) adds that psychological empowerment, characterised by increased personal control and a proactive approach to life, is essential for nurturing such transformative experiences. Additionally Dockett and Perry (2007) emphasise the importance of supportive transitions in early childhood education, advocating for inclusive and empowering practices that enable positive educational journeys and lay a foundation for lifelong learning and innovation.

- Methodological Application

The identification of ‘Inclusivity and Empowerment’ was achieved through a constructivist grounded theory approach, where data coding, analysis, and synthesis highlighted recurring themes of diversity and agency. This methodological approach highlights the pervasive influence of these concepts on educational outcomes, reinforcing the need for their integration into educational practices.

- Interplay of Categories

Key categories influencing ‘Inclusivity and Empowerment’ in entrepreneurial learning include:

Inclusion, Diversity & Gender Dynamics - This category emphasises the importance of creating an educational space where all children, regardless of cultural, social, or personal backgrounds, feel valued and included. By fostering an environment where diversity is celebrated and leveraged, educators help children to develop a broad perspective and the ability to collaborate across differences.

Child Development & Agency - Encouraging children's agency is pivotal in empowering children to take control of their learning, essential for cultivating entrepreneurial attributes. This category focuses on enhancing children's ability to act as agents in their own education,

making decisions that affect their learning experiences and outcomes. Children are viewed as '*subjects in their own right*' (Biesta, 2021, p.2).

- Application to the Research Question and Implications for Practice

Educators can foster entrepreneurial learning by:

- Designing materials and activities that are inclusive and accessible, providing multiple entry points for engagement.
- Creating a classroom culture that celebrates diversity and leverages it as a foundation for innovative thinking and problem-solving.
- Encouraging children to lead their learning, set goals, and reflect on their progress, thereby fostering a sense of ownership and self-efficacy.

These strategies create an inclusive and empowering educational environment where every child can develop entrepreneurial skills. By recognising and leveraging diverse backgrounds and abilities, educators can inspire a generation of creative and confident problem-solvers.

- Limitations

Promoting inclusivity and empowerment, while aspirational, faces challenges in practice, such as diverse learner needs, the potential for unequal participation among children, and the need for educator training. The wide range of abilities, interests, and cultural backgrounds in a classroom requires tailored approaches, which may be constrained by factors like that class size, time, and resources (Ainscow et al., 2006). This complexity necessitates adaptability and resourcefulness, often beyond the current scope of professional development programmes, highlighting a gap in educator preparedness for truly inclusive teaching.

Empowerment of young learners, crucial for fostering autonomy and initiative, can also lead to increased classroom management challenges. As Zimmerman (2000) notes, empowerment promotes a sense of agency, which can result in a more dynamic and unpredictable classroom environment. Educators must balance encouraging autonomy with maintaining a structured learning environment, a task that can be especially challenging with younger children who are still developing self-regulation skills.

Systemic barriers that exist within the early education sector and broader societal contexts can further complicate the implementation of inclusivity and empowerment. Policies and practices may not align with these ideals, making it difficult for educators to put these principles into practice (Ainscow et al., 2006). Societal attitudes towards education and entrepreneurship may also influence the extent to which these approaches are valued and supported, potentially limiting the resources and recognition for programmes prioritising inclusivity and empowerment in entrepreneurial learning.

Lastly, assessing inclusivity and empowerment in early educational settings presents challenges. Traditional educational metrics may not fully capture inclusive practices or learner empowerment, necessitating the development of alternative assessment methods to reflect the impact of these approaches on children's learning and development (Dockett & Perry, 2007).

(4) Evaluative Insight and Impact

‘Evaluative Insight and Impact’ refers to the ongoing reflection and assessment of educational practices, particularly their effectiveness in achieving desired learning outcomes. In fostering entrepreneurial learning, this element highlights the importance of continuous evaluation to determine how entrepreneurial concepts can be best integrated into early childhood education and how they impact children's development.

- **Empirical Evidence**

Empirical evidence from studies and educator interviews indicate that continuous evaluation helps identify practices that best support entrepreneurial skills development in young children. Feedback from these evaluations enables educators to refine their teaching strategies, enhancing children's engagement and learning progression. The iterative process of assessment and adjustment ensures that educational practices remain aligned with the goals of fostering creativity, problem-solving abilities, and innovative thinking. Although development evaluation is being conducted, incorporating entrepreneurial development into these evaluations is still in progress, with educators showing support for its inclusion.

- **Literature Link**

The theoretical foundation for ‘Evaluative Insight and Impact’ is well supported by literature emphasising the importance of reflective practices and assessment in education. Scriven's

(1996) distinction between formative and summative evaluation, emphasises the importance of ongoing feedback mechanisms. Schön's (1983) theory of reflective practice reinforces the value of educators' critically reflecting on their teaching methods as essential for effective pedagogy and professional growth (Visser, 2010). Empirical studies by Black and Wiliam (1998) validate the impact of formative assessment on learning outcomes, particularly in developing critical and innovative thinking skills. Guskey (2002) also highlights how evaluative data can influence educational policy, advocating for informed decisions that promote effective and innovative teaching strategies.

- Methodological Application

Using a constructivist grounded theory approach, this component was identified and refined through detailed analysis of codes, concepts, memos, and reflective vignettes from 19 research participants. The iterative nature of this methodology facilitated the emergence of 'Evaluative Insight and Impact' as a key factor influencing the effectiveness of entrepreneurial education, demonstrating how structured evaluations can guide and improve educational practices.

- Interplay of Categories

Key categories contributing to 'Evaluative Insight and Impact' include:

Evaluation & Impact - This category focuses on systematically assessing the effectiveness of educational practices, particularly how these practices influence the development of entrepreneurial skills in young learners. It provides actionable feedback and insights that can significantly shape educational outcomes.

ECE Educator Professional Development & Identity - This category highlights the importance of professional growth and development, recognising that educators' skills and identities are crucial for effectively implementing entrepreneurial education. Professional development opportunities that focus on assessment techniques and reflective practices empower educators to utilise feedback constructively, enhancing their teaching methods and supporting their professional growth.

- Application to the Research Question and Implications for Practice

Educators can apply these categories to foster entrepreneurial learning by:

- Implementing assessment strategies to gauge children's engagement with entrepreneurial activities, their understanding of entrepreneurial concepts, and the development of related skills.
- Using insights from these evaluations to adjust and refine teaching methods and curricular content to better meet the needs of learners.

Incorporating these evaluative insights ensures that teaching practices remain responsive and effective. This ongoing assessment and refinement process creates a dynamic learning environment that continuously evolves to support the entrepreneurial development of each child, enhancing both individual and collective educational outcomes.

- Limitations

The limitations for ‘evaluating insight and impact’ in enriching early childhood education and nurturing entrepreneurial skills range from methodological to practical and systemic issues. Methodologically, traditional quantitative assessment tools may struggle to capture the full range of entrepreneurial competencies, such as creativity and resilience, presenting challenges in measuring educational impacts (Earl, 2003). Practically, the integration of in-depth evaluative practices into daily educational routines is constrained by time, resources, and expertise, often limited in educational settings already grappling with extensive curricular demands (Guskey, 2002).

The variability in educators’ ability to interpret and apply evaluative data further limits the effectiveness of these insights, highlighting the need for training and support mechanisms to equip teachers with the necessary analytical and pedagogical skills (Darling-Hammond, 2017). Systemic and policy-related barriers also play a role, as the emphasis on standardised testing and quantifiable metrics may marginalise the long-term benefits of entrepreneurial education, discouraging the adoption of comprehensive evaluative frameworks (Kellaghan & Stufflebeam, 2003). Additionally, issues of equity and access point to the need for evaluative practices that reflect and address the diverse needs and experiences of all young learners, helping to mitigate disparities in educational opportunities and outcomes (Moss, 2007).

(5) Collaborative Engagement

‘Collaborative Engagement’ emphasises the significance of social interactions and shared experiences in cultivating an entrepreneurial mindset. This component reflects the belief that children learn about entrepreneurship not only through individual experiences but also through interactions with peers, educators, and the community. In collaborative settings, children can develop key entrepreneurial skills such as negotiation, shared decision-making, and teamwork.

- Empirical Evidence

Educator interviews reveal that children involved in collaborative activities exhibit significant improvements in social skills, creativity, and problem-solving abilities. These group interactions and community initiatives teach children to negotiate, make collective decisions, and work within teams - key entrepreneurial skills.

- Literature Link

Theoretical frameworks supporting ‘Collaborative Engagement’ emphasise the importance of social interaction in learning. Katz and Chard's (1992) Project Approach advocates for collaborative group projects to enhance learning, aligning with Vygotsky's (1978) social constructivism, which posits that learning is a social process. This approach is also supported by Gillies (2007) who highlights the benefits of cooperative learning strategies in enhancing communication skills, self-esteem, and appreciation for diverse perspectives - qualities essential to the entrepreneurial spirit. Bauman and Lucy (2021) further reinforce that collaborative environments encourage collective exploration and problem-solving, essential elements in early entrepreneurial education.

- Methodological Application

‘Collaborative Engagement’ was identified through the analysis of educator transcripts using constructivist grounded theory. This methodology highlighted patterns and themes related to how social interactions and shared experiences influence learning, demonstrating the importance of collaborative settings in developing entrepreneurial skills.

- Interplay of Categories

Key categories that support ‘Collaborative Engagement’ include:

Policy, Advocacy & Community Engagement - Strong community and policy support are crucial for fostering collaborative environments. Initiatives that encourage community involvement and collaboration in educational settings provide a solid foundation for children to engage in entrepreneurial activities with peers and community members.

Dynamics within ECE - This category supports ‘Collaborative Engagement’ by facilitating environments where social dynamics are conducive to cooperative learning. Effective management of group dynamics, promotion of inclusive participation, and a classroom culture that values teamwork are essential components supported by this category.

- Application to the Research Question and Implications for Practice

Educators can foster entrepreneurial learning through collaborative engagement by:

- Designing activities that require children to work in teams, collective problem-solving, and interaction with community members.
- Creating opportunities for children to present their entrepreneurial ideas to peers and community stakeholders, encouraging feedback and shared learning.

These strategies help children develop essential teamwork and communication skills, enhancing their entrepreneurial abilities while strengthening their sense of community and belonging.

- Limitations

Despite its potential, ‘Collaborative Engagement’ faces several challenges. The variability in children's social and cognitive development stages can lead to imbalances in group dynamics, where more advanced children may dominate, leaving others less engaged (Henrich et al., 2010). Educators’ limited training in managing group dynamics and facilitating inclusive environments further complicates the effective implementation of collaborative activities (Gillies et al., 2007). Structural and curricular constraints within early years settings, such as rigid timetables (e.g. the ECCE timetable of just 3 hours a day) and traditional classroom layouts, can also restrict opportunities for spontaneous, child-led collaborative engagements (Marcon, 1999), which are vital for nurturing entrepreneurial thinking and skills.

Assessing the outcomes of ‘Collaborative Engagement’ presents another challenge, as traditional assessment methods often focus on evaluating individual achievement rather than group processes, making it difficult to capture the full extent of the benefits of collaborative learning (Slavin, 1999). Additionally consistency and continuity in collaborative practices can be difficult to maintain across different learning experiences and environments, potentially confusing children and diluting the potential benefits of this approach (Dyson, 2001).

7.4. Conclusion

This research study has culminated in the development of a robust theoretical framework that deepens our understanding of early childhood education, while offering a novel approach to fostering entrepreneurial skills in young learners. Through the meticulous analysis of ‘Interconnected Development’, ‘Inclusivity and Empowerment’, ‘Collaborative Engagement’, ‘Transformative Practice’, and ‘Evaluative Insights and Impact’, the framework emerges as a comprehensive guide for educators and policymakers. It advocates for a holistic, reflective, and inclusive approach to education, emphasising the importance of nurturing critical, creative, and collaborative skills from the earliest stages of learning.

Each theoretical code contributes uniquely to a cohesive structure, addressing both opportunities and inherent limitations. The framework challenges conventional pedagogical models by promoting a dynamic, integrated approach to education - essential for preparing future generations to navigate and innovate within an ever-changing global landscape. By highlighting the pivotal role of evaluative practices, this study reinforces the need for ongoing assessment and adaptation in educational strategies, ensuring that they remain relevant, effective, and inclusive.

Looking ahead, this framework serves as a catalyst for continued research, discussion, and application, driving the evolution of educational practices that are capable of unlocking the entrepreneurial potential inherent in every young child.

This comprehensive analysis emphasises the complexity and dynamism of integrating entrepreneurial education into early childhood settings. Through the lens of the constructed theoretical model and rigorous examination of categorical data, it becomes evident that fostering an entrepreneurial mindset requires a holistic approach that transcends traditional

educational methodologies. The findings highlight the critical roles of policy advocacy, community engagement, and innovative pedagogical strategies in creating environments conducive to entrepreneurial learning. Moreover, the discussion emphasises the indispensable role of educators in modelling and facilitating these skills, advocating for professional development aligned with contemporary educational demands.

Future practice should focus on closing the identified gaps through enhanced policy frameworks, improved educator training programmes, and robust community partnerships that collectively support the entrepreneurial spirit in early education. Additionally, ongoing research is essential to continually refine the integration of entrepreneurial concepts in preschool curricula, ensuring that they are both effective and inclusive. Ultimately, the goal is to equip young learners not only with entrepreneurial skills but also with the confidence and creativity needed to navigate and influence their future worlds. This chapter establishes a foundational framework - '*The eEE Framework*' - that stakeholders across educational domains can utilise to advocate for and implement a more expansive, entrepreneurial approach to early childhood education.

CHAPTER 8
CONCLUSION

8.1. Introduction

This thesis has undertaken an in-depth exploration of how early childhood educators can effectively foster entrepreneurial education, mindset, and capabilities in preschool children. Positioned within the broader discourse of entrepreneurial education, this study has navigated through theoretical underpinnings, empirical investigations, and practical applications, culminating in the development of a proposed framework for integrating entrepreneurial education in early childhood settings. The importance of fostering entrepreneurial skills at a young age is highlighted by the evolving demands of the global economy and the increasing recognition of entrepreneurial skills as crucial for future success. This concluding chapter synthesises the key findings of the study, revisits the research question in light of these findings, and elaborates on the contributions, limitations, and potential future directions stemming from this research. It aims to integrate the insights gained through this inquiry and reflect on the implications for educators, policymakers, and the educational community at large, advocating for a systematic and reflective approach to embedding entrepreneurial thinking and spirit into early the preschool stage of education.

8.2. Summary and Conclusion of Studies

The research conducted in this thesis highlights the importance and feasibility of integrating entrepreneurial education into early childhood curricula. Chapters 2, 3 and 4 identify a substantial gap in current educational practices regarding the intentional integration of entrepreneurial concepts in early childhood education. These chapters demonstrate the potential of entrepreneurial education to significantly enhance children's problem-solving skills, creativity, independence, and other entrepreneurial capabilities from a young age. The literature review emphasises the necessity of embedding entrepreneurial activities within the curricula to systematically cultivate these skills, rather than leaving their development to chance.

Chapter 5 outlines the methodological approach used in this research, guided by the 'research onion' framework. This study operates within an interpretivist paradigm, ensuring that the research is deeply rooted in understanding the subjective experiences and realities of the participants. Employing a Constructivist Grounded Theory methodology allowed for the development of a comprehensive theoretical framework grounded in empirical data. This

approach was instrumental in uncovering the complexities of early entrepreneurial education, providing a robust foundation for analysis and framework development.

The empirical research conducted in Chapter 6 offers valuable insights into the practical aspects of implementing entrepreneurial education in preschool settings. It was found that early childhood educators play a crucial role in this process, but often lack specific training and resources to effectively integrate entrepreneurial concepts into their teaching practices. The study reveals that many educators intuitively promote entrepreneurial skills through play-based activities, an unconscious effect of early childhood philosophies, curricula and the Irish national curriculum Aistear. However, a structured or purposeful approach to entrepreneurial education is largely absent. The findings highlight the importance of daily interactions and activities in shaping children's entrepreneurial competencies, suggesting that the deliberate incorporation of entrepreneurial education could significantly enhance these informal learning processes. Moreover, the research indicates that children who engage in activities designed to foster entrepreneurial skills in preschool demonstrate increased independence, problem-solving abilities, and creativity.

Chapter 7 integrates these findings with theoretical frameworks, emphasising the alignment between constructivist approaches to learning and entrepreneurial education. The discussion advocates for a pedagogical strategy that balances both structured and unstructured play to maximise developmental benefits and entrepreneurial skill acquisition. The discussion also highlights the pivotal role of educators in modelling entrepreneurial behaviours and creating an environment conducive to entrepreneurial learning. The synthesis of empirical findings and literature review leads to the development of a proposed framework for entrepreneurial education in early childhood settings, emphasising the need for curriculum revisions, educator training, and policy advocacy to support the systematic integration of entrepreneurship into early childhood education.

Overall, this study has illustrated the complex interplay between early childhood education practices and the potential for fostering entrepreneurial skills among preschool children. It has shown that with intentional and structured educational approaches, coupled with supportive training and resources for educators, entrepreneurial education can be effectively integrated

into early childhood curricula, laying a solid foundation for developing the entrepreneurial capabilities of young learners.

8.3. Proposed Framework for Entrepreneurial Education in Early Childhood Education

The conceptual framework for early entrepreneurial education (eEE) has evolved significantly throughout this research, reflecting deeper insights and a more refined understanding of the interplay between educational practices and entrepreneurial learning in early childhood settings.

The initial eEE Framework was developed after a comprehensive literature review, which revealed a significant gap in research and practice concerning entrepreneurial education within the early childhood education and care (ECEC) sector. This framework was adapted from the entrepreneurship education model by Jones and Matlay (2011) and incorporated five major elements, emphasising the central role of the child and the integration of pedagogy, curriculum, and governmental support. It proposed embedding entrepreneurial education within the holistic development of children, viewing them as active participants rather than passive learners.

Following the focused and preliminary theoretical coding phase, the conceptual framework was refined to incorporate insights gained from empirical data. This stage identified five critical theoretical codes - Interconnected Development, Inclusivity and Empowerment, Collaborative Engagement, Transformative Practice, and Evaluative Insights and Impact. These codes emphasised a holistic approach to child development, inclusive and empowering educational practices, the importance of collaborative and transformative learning experiences, and the necessity for ongoing evaluation and adjustment of educational strategies. This model highlighted the interconnected nature of these elements in fostering entrepreneurial skills among preschool children.

The final conceptual framework, developed after rigorous theoretical coding, further integrates these insights into a comprehensive and structured approach to entrepreneurial education in early childhood settings. This framework underlines the importance of a multi-dimensional approach, incorporating empirical evidence, literature links, methodological applications, and practical implications for educators. It emphasises policy advocacy, curriculum innovation, and

inclusive practices to cultivate an entrepreneurial mindset from a young age. Each element - Interconnected Development, Transformative Practice, Inclusivity and Empowerment, Evaluative Insights and Impact, and Collaborative Engagement - is linked to specific pedagogical strategies and supported by detailed categorical analysis, which collectively contribute to shaping a holistic entrepreneurial education environment.

- Interconnected Development focuses on the holistic development of children, merging cognitive, social, emotional, and physical growth to comprehensively foster entrepreneurial skills. This addresses the need for a developmental approach that enhances all facets of a child's growth, crucial for nurturing entrepreneurial thinking.
- Transformative Practice underlines the shift from traditional teaching and learning methods to more dynamic, inquiry-based teaching and learning where children engage in activities that stimulate creative and critical thinking. This practice is essential for developing the problem-solving skills and adaptability required in today's innovation-driven world.
- Inclusivity and Empowerment ensures that the entrepreneurial education framework is accessible and relevant to all children. This component advocates for educational equity, emphasising that entrepreneurial skills should be developed in every child to prepare them for diverse future challenges.
- Evaluative Insights and Impact provides a mechanism for ongoing assessment and refinement of educational strategies, ensuring that they remain effective and relevant. This continuous evaluation supports educators in adapting their teaching methods to better meet the learning needs of their students.
- Collaborative Engagement promotes learning through social interaction and community involvement, which are key to developing negotiation and teamwork skills. This component highlights the importance of social dynamics in learning, encouraging children to engage in group activities that foster entrepreneurial competencies.

The eEE Framework addresses the significant gap in early childhood education by systematising the integration of entrepreneurial skills into daily learning activities. Unlike

traditional educational models, which often overlook these essential skills, the eEE Framework ensures that entrepreneurial learning is an integral part of the curriculum from the earliest stages of education. By offering detailed guidelines and practical steps for educators, the eEE Framework serves as a roadmap for the conscious integration of entrepreneurial education. It outlines specific pedagogical strategies and activities that can be implemented to foster an entrepreneurial mindset, thereby supporting educators in transforming their teaching practices.

Furthermore, the framework supports educational progression by aligning early childhood education with future educational requirements. By cultivating skills such as creativity, problem-solving, and independence early on, the eEE Framework ensures that children are well-prepared to tackle more complex educational challenges as they advance through the educational system.

In summary, the eEE Framework not only fills a crucial gap in current educational models but also provides a structured, scalable approach to nurturing essential entrepreneurial skills in young learners. This strategic integration of entrepreneurial concepts into early childhood education promises to enhance educational outcomes and equip children with the capabilities to become entrepreneurial in all facets of life.

8.4. Contributions of this Thesis

8.4.1. Contribution to Theory

This research has made significant theoretical contributions to multiple fields, notably in entrepreneurship education, early childhood education, and broader education theory. Each of these contributions enhances our understanding and implementation of educational strategies that foster entrepreneurial capabilities from an early age.

- Entrepreneurship Education

This study contributes significantly to entrepreneurship education theory by pioneering the examination of entrepreneurial education in early childhood, an area previously underexplored. It establishes a foundational framework for understanding and implementing entrepreneurial education for children as young as three, expanding the scope of when and how entrepreneurial skills can be nurtured. Building on the advocacy of Lackéus (2015) for fostering interest, joy, engagement, creativity, and societal value creation through entrepreneurial education, this

study adapts these concepts to the early childhood context, arguing that these outcomes are not only achievable but particularly impactful when introduced at an early age. By initiating entrepreneurial education in early childhood, this research expands the developmental timeline considered by current entrepreneurship education theories, which predominantly focus on primary school students and above. Consistent with Penaluna and Penaluna's (2015) perspective, this thesis demonstrates that entrepreneurial education need not be confined to specific modules but can be seamlessly integrated into the everyday learning experiences of young children through a methodological approach. The eEE Framework operationalises this by embedding experiential learning within the natural play-based activities typical in early childhood education settings, thereby fostering an entrepreneurial taste and a spirit of enterprise from a very young age.

This study presents a novel eEE Framework that serves as a comprehensive and practical guide for integrating entrepreneurial education in early childhood settings. This framework represents the first systematic effort to offer detailed actionable strategies not only for educators but also for policymakers, curriculum developers, and community stakeholders, recognising that the successful implantation of entrepreneurial education requires a supportive ecosystem. It systematically bridges the theoretical aspects of entrepreneurship education with practical application, providing a template for replication and adaptation across various educational contexts. Extending the work of Fayolle & Klandt (2006), who discuss the broad implications and purposes of entrepreneurship education, this study applies their insights to the earliest stages of education, advocating for a broad interpretation of entrepreneurship as a valuable educational approach that supports the comprehensive development of young learners. By doing so, it challenges traditional educational paradigms and suggests a shift towards more inclusive, innovative, and value-creating educational practices from the outset of a child's educational journey.

Finally, this study lays the groundwork for future research in the field by establishing early childhood as a viable starting point for entrepreneurial education. This represents a significant theoretical contribution, opening new avenues for academic inquiry and practical implementation, encouraging a re-evaluation of how and when entrepreneurial skills are developed. This shift has the potential to transform the landscape of entrepreneurship education, making it more inclusive and fundamentally integrated into the structure of early

education. In summary, this study not only contributes to existing entrepreneurship education theory by adapting and applying its principles to a younger demographic but also innovates within the field by proposing early childhood as a critical period for developing entrepreneurial capacities. This innovative approach enriches the theoretical landscape and sets a precedent for future explorations into the efficacy and impact of early entrepreneurial education.

- Early Childhood Education Theory

This study also reaffirms and extends the principles found in established early childhood education curricula such as Montessori, Reggio Emilia, High Scope, Te Whāriki, Steiner Kindergarten, and the Irish National Curriculum Aistear. These curricula champion a child-led, child-centred approach, aligning with the foundations of entrepreneurial education that promote autonomy, discovery, and self-directed learning.

While existing early childhood curricula inherently support developmental capabilities that are entrepreneurial in nature, this study explicitly identifies and frames these capabilities within the context of entrepreneurial education. By doing so, it provides a conceptual bridge between traditional early childhood developmental goals and the specific objectives of fostering entrepreneurial skills. This study outlines how activities that promote exploration and self-discovery in early childhood can be systematically recognised and enhanced to explicitly develop entrepreneurial skills such as independence, risk-taking, creativity, innovation, and resilience. This approach is supported by the constructivist educational theory, which posits that children learn best through active engagement and social interaction, key components emphasised within the proposed eEE Framework.

The eEE Framework advances early childhood education theory by explicitly focusing on nurturing entrepreneurial capabilities as a distinct educational outcome. It advocates for the intentional incorporation of entrepreneurial elements into the child-centred pedagogical practices, already endorsed by the various curricula. It offers educators structured strategies to enhance the entrepreneurial outcomes of their existing practices, ensuring that these capabilities are not only fostered incidentally but are a deliberate focus of early childhood education.

Furthermore, this study contributes to early childhood education theory by integrating constructs from entrepreneurial education, such as opportunity recognition and initiative, into the early childhood narrative. It proposes that these skills can be cultivated through methodologies and activities typical of early childhood settings, such as play-based learning, thus enriching the theoretical underpinnings of what constitutes comprehensive early childhood education. This enhanced theoretical contribution recognises and builds upon the inherently entrepreneurial nature of established early childhood practices, providing a deeper understanding that bridges educational theory and entrepreneurship. By explicitly connecting these dots, the research supports a more holistic approach to developmental education, ensuring that early childhood settings not only nurture innate entrepreneurial skills but also recognise and refine them with clear intent and purpose.

- Education Theory

This research enriches general education theory by demonstrating the practical application of constructivist principles within early childhood settings through entrepreneurial education. It illustrates how constructivism - not just as a theoretical concept but as a practical educational approach - can be effectively utilised to engage young learners in activities that foster critical thinking, creativity, and problem-solving. By integrating these principles with entrepreneurial education, the study showcases how educators can create a learning environment that is both child-centred and growth-oriented, facilitating the natural curiosity and innovative capabilities of young children.

The findings highlight the role of educators not merely as instructors but as facilitators of a learning environment that encourages students to explore, question, and engage in ways that are meaningful to them. This approach aligns with progressive educational theories that advocate for making learning relevant to students' lives and experiences, thereby increasing their engagement and the retention of knowledge.

The study emphasises the dynamic role of educators in adapting their teaching strategies to foster an entrepreneurial spirit within early childhood education. This contribution extends beyond traditional teaching methodologies to include strategies that promote autonomy and initiative. Educators are seen as crucial agents who enable and support the developmental

processes necessary for cultivating entrepreneurial skills, thereby playing a pivotal role in the educational outcomes of their students.

Furthermore, the study's focus on 'Evaluative Insights and Impact' significantly contributes to educational assessment theories by emphasising the need for ongoing and formative assessments specifically tailored to entrepreneurial education. This aligns with and contributes to contemporary educational theories that advocate for dynamic, responsive educational practices which adapt to the needs of students and the evolving educational landscape. This research advocates for the integration of assessment tools that are capable of capturing the complexities of entrepreneurial learning - tools that assess not only cognitive achievements but also non-cognitive skills such as resilience, creativity, and the ability to navigate uncertainties. Such assessments are crucial for providing educators with the feedback needed to tailor their instructional strategies to better support developmental goals.

By emphasising the importance of adaptive learning strategies and the continuous improvement of educational practices, this study contributes to the broader discourse on educational adaptability. It calls for educational systems to be flexible and responsive to the needs of learners, particularly in the fast-evolving context of the 21st century, where skills such as adaptability and innovation are increasingly critical. This research supports theories advocating for educational systems that not only respond to the immediate needs of students but also anticipate future educational requirements and challenges.

In synthesis, this research provides a comprehensive expansion of general education theory by bridging constructivist educational practices with entrepreneurial learning, emphasising the transformative role of educators, and enhancing educational assessment strategies. These contributions collectively foster a more comprehensive understanding of how educational theories can be applied and adapted to meet the unique needs of early childhood education.

8.4.2. Contribution to Irish Context

This research offers significant contributions to early childhood education in Ireland, particularly within the framework of the Early Childhood Care and Education (ECCE) scheme. By focusing on the preschool children within this inclusive, state-sponsored programme, the study offers insights that are both reflective and prescriptive, aligning with and potentially

enhancing the implementation of the Aistear curriculum. The findings and implications drawn from this context provide several key lessons:

1. Integration of Entrepreneurial Education with Aistear Curriculum

The Aistear curriculum emphasises themes like Well-being, Identity and Belonging, Communicating, and Exploring and Thinking, which naturally align with entrepreneurial education's focus on creativity, problem-solving, and self-directed learning. This study illustrates how entrepreneurial concepts can be readily integrated into Aistear's framework to foster a broader range of skills and competencies. It demonstrates that entrepreneurial education does not necessitate a standalone approach but can be incorporated within existing curricular structures, enhancing the developmental outcomes Aistear aims to achieve.

2. Implications for Inclusive Education Practices

The ECCE scheme in Ireland is designed to be universally accessible to all children within the specified age range (3 years 8 months to 5 years 6 months), offering a unique opportunity to implement educational innovations at a national level. The OECD's 2023 policy brief on Equity, Diversity and Inclusion in Early Childhood Education and Care builds on the 2020 Starting Strong Teaching and Learning International Survey (OECD, 2020) and suggests that high-quality early childhood education and care (ECEC) adapted to children's needs can create strong opportunities for all children to develop and learn, regardless of socio-economic and cultural backgrounds. This research highlights the potential for entrepreneurial education to be included as part of an inclusive educational approach, ensuring that all children have the opportunity to develop essential skills early in life. This aligns with the principles of equity and inclusivity that are central to the ECCE scheme and OECD policy.

3. Addressing the Need for Educator Training and Support

A significant finding of this study is the crucial role of educators in effectively delivering entrepreneurial education. The Irish context, with its structured but flexible curriculum, highlights the need for targeted professional development that prepares educators to integrate new teaching methods and content effectively. This research advocates for comprehensive training programmes that equip educators with the necessary skills and knowledge to foster entrepreneurial capabilities in young learners, in line with the pedagogical goals of Aistear.

4. Policy Implications and Support Systems

The findings from this study are particularly relevant for policymakers looking to enhance the scope and impact of the ECCE scheme. By demonstrating the added value of entrepreneurial education in early childhood settings, this research supports the case for policy enhancements that include funding, resources, and guidelines to embed entrepreneurial learning within preschool education. Such integrations can lead to long-term educational and societal benefits, aligning with national goals of economic innovation and social development.

5. Lessons on Scalability and Replication

The Irish context provides a model for scalability and replication in other regions and countries with similar educational structures. The successful integration of entrepreneurial concepts within the ECCE scheme could serve as a blueprint for other nations seeking to enhance their early childhood education frameworks. The research offers detailed insights into the processes, challenges, and outcomes of such integration, presenting valuable lessons on adapting educational innovations to diverse cultural and systemic contexts.

6. Evaluation and Continuous Improvement

This study contributes to the ongoing dialogue on educational assessment and improvement within Ireland's ECCE scheme. It emphasises the importance of evaluative insights and impact assessment in understanding the effectiveness of integrating entrepreneurial education into early childhood settings. The findings advocate for developing assessment tools sensitive to the unique aspects of entrepreneurial learning, ensuring that educational strategies are continuously refined and aligned with children's developmental needs.

In summary, this research enriches the Irish educational context by highlighting the practicalities, benefits, and challenges of introducing entrepreneurial education in early childhood settings. It provides a comprehensive understanding of how such education can be embedded within existing curricular frameworks like Aistear, leveraging and enhancing Ireland's inclusive educational policies.

8.4.3. Contribution to Empirical Evidence

This study significantly contributes to empirical understanding of how entrepreneurial education can be practically implemented in early childhood settings within Ireland, with

particular focus on children enrolled in the ECCE scheme. The findings from Chapter 6 provide a comprehensive exploration of how entrepreneurial education can be integrated into the existing Aistear curriculum and other early childhood curricula, identifying both challenges and opportunities. The key empirical insights include:

1. Practical Application of Entrepreneurial Concepts

The research demonstrates how educators integrate entrepreneurial concepts into daily activities and interactions with children. Strategies that promote skills like independence, problem-solving, and creativity – key elements of entrepreneurial thinking – are regularly employed. However, challenges such as insufficient specific training in entrepreneurial education and limited resources are highlighted, underlining the need for systemic support.

2. Educators Perspectives on Entrepreneurial Education

The study provides a detailed descriptions of educators' understanding and implementation of entrepreneurial education within the Aistear framework. This includes the spontaneous integration of entrepreneurial skills into play-based learning and routine classroom activities, which, while not always labelled as 'entrepreneurial', embody the essence of fostering such skills from an early age.

3. Impact on Learning Outcomes

The research provides empirical support for the effectiveness of integrating entrepreneurial education in early childhood settings. Outcomes include improved problem-solving abilities, increased creativity, and higher engagement levels among preschool children, demonstrating the added value of entrepreneurial education from a young age.

4. Innovative Pedagogical Approaches

The study documents innovative teaching methods that effectively develop entrepreneurial competencies. These approaches include creating a learning environment that promotes curiosity, autonomy, and the capacity to tackle challenges - all foundational aspects of an entrepreneurial mindset.

5. Refinement of Educational Practices

Evidence from the research shows how ongoing reflection and adaptation of teaching practices, informed by educators' direct observations and interactions with children, contribute to the effectiveness of entrepreneurial education. This continuous adaptation is crucial for addressing the evolving needs of children and the dynamic demands of educational settings.

6. Feedback and Evaluation

The study also explores the role of ongoing feedback and formative assessments in enhancing the teaching and learning process within entrepreneurial education. By implementing these assessments, educators can better tailor their approaches to meet the developmental needs of children, ensuring that the educational content is both age-appropriate and impactful.

- Theoretical and Practical Implications

The empirical evidence gathered in this study supports the theoretical underpinnings discussed in the literature review, but also provides practical insights that can be applied in similar educational contexts globally. By demonstrating the effective integration of entrepreneurial concepts into the Aistear curriculum, other early childhood curricula and everyday classroom practices, the study offers a model that can be adapted and replicated in different countries and educational systems.

Furthermore, this contribution to empirical evidence emphasises the importance of educator training and systemic support in expanding the reach and impact of entrepreneurial education in early childhood. There is a clear need to align educational innovations with national educational standards and frameworks to ensure coherence and garner support from the broader educational community. These findings advocate for policy enhancements that include improved training, resources, and guidelines to embed entrepreneurial learning within preschool education, potentially leading to significant educational and societal benefits.

In summary, the empirical findings from this research enrich the academic and practical understanding of how entrepreneurial education can be integrated into early childhood education. They set a precedent for future research and policy development in this area, particularly by filling a crucial gap in the existing research on entrepreneurial education for

very young learners. This study provides a solid foundation for further exploration and development of this important educational field.

8.4.4. Contribution to Methodology

This study makes substantial methodological contributions to the field of entrepreneurial education in early childhood, particularly through its innovative approach to research design and methodology. Several key methodological contributions emerge from the comprehensive analysis presented in Chapter 5.

1. Adoption of the Constructivist Grounded Theory (CGT)

The study employs Constructivist Grounded Theory (CGT), which is particularly well-suited for exploring dynamic and context-dependent phenomena like entrepreneurial learning in early childhood. CGT's emphasis on the co-construction of knowledge between the researcher and participants allows for an in-depth examination of educators' pedagogical practices and beliefs. This approach acknowledges the subjective experiences of educators and provides a nuanced understanding of how entrepreneurial education is conceptualised and practiced.

2. Methodological Alignment with Philosophical Underpinnings

The research methodology is carefully aligned with its constructivist and interpretivist philosophical underpinnings. This alignment ensures that the methods used are appropriate for capturing the complex, subjective, and contextually influenced nature of teaching and learning within early childhood settings. By integrating these philosophical approaches, the study offers a robust framework for understanding how entrepreneurial education can be implemented and experienced in early childhood environments.

3. Use of the 'Research Onion' Framework

The study's methodological design is structured around the 'research onion' framework (Saunders et al., 2009), which provides a systematic approach to navigating methodological complexity. This model guides the selection of strategies, techniques, and processes, ensuring that each methodological choice is justified and coherent. The 'research onion' framework articulates a clear path from philosophical assumptions to practical research applications, enhancing the study's overall rigour and coherence.

4. In-Depth Qualitative Analysis

The methodological approach emphasises qualitative analysis, allowing for an in-depth exploration of the multi-faceted interactions and practices within early childhood education settings. Detailed data collection through intensive interviews, reflective memos and vignettes, analysed using CGT principles, facilitates the emergence of a grounded theoretical framework rooted in empirical data. The iterative coding processes enables a comprehensive understanding of how entrepreneurial education is conceptualised and practised by educators.

5. Integration of CGT with Educational Research

Integrating CGT with educational research, particularly in the context of entrepreneurial education for young children, provides a novel methodological pathway that enhances the depth and quality of qualitative research. This integration helps uncover the tacit knowledge and implicit practices that are often overlooked in more structured or hypothesis-driven research approaches.

6. Empirical Grounding of Theoretical Constructs

By employing CGT, the study not only gathers empirical evidence but also contributes to the theoretical constructs around entrepreneurial education in early childhood. This involves identifying key themes and patterns that inform the development of 'The eEE Framework', ensuring that the framework is both empirically validated and theoretically robust.

7. Contribution to Qualitative Research in Education

This research advances the broader field of qualitative research in education by demonstrating how constructivist and interpretative methods can yield significant insights into educational practices. The detailed, ground-level view provided by CGT enhances understanding of the pedagogical dynamics and offers methodological lessons on capturing the complexity of educational interactions.

8. Reflexivity and Adaptation

The study underscores the importance of reflexivity in the research process, where the researcher's insights and iterative analysis contribute to a deeper understanding of the subject matter. Reflexivity is crucial for maintaining the rigour and authenticity of CGT, enhancing the overall trustworthiness of the research findings.

9. Enhancing Methodological Discourse

Finally, the study contributes to methodological discourse by providing a detailed justification and reflection on the choices made throughout the research process. This transparency in methodological reasoning is vital for the academic community, offering a template for future studies and promoting a more thoughtful and reflexive approach to research design in educational research.

In summary, the methodological contributions of this study enrich the field by offering a detailed design for conducting novel and philosophically aligned research in early childhood educational settings. These contributions advance the methodological tools available for studying entrepreneurial education and enhance the understanding of how educational research can be effectively designed and implemented to explore complex educational interactions.

8.4.5. Contribution to Practice

The research presents significant practical recommendations for educators, curriculum developers and higher education institutions, underpinned by the findings of this study and the subsequent development of ‘The eEE Framework’. These recommendations are designed to facilitate the effective integration of entrepreneurial concepts into everyday teaching practices, with potential applications both within the Irish context and broader global settings.

- Practical Recommendations for Educators

1. Formal Integration of Entrepreneurial Skills in Daily Activities

While many educators are unconsciously and informally integrating entrepreneurial skills, this study advocates for a more formal and structured approach. This involves establishing clearly defined objectives and outcomes for entrepreneurial skills within daily classroom activities, ensuring a consistent and comprehensive strategy across educational settings.

2. Expanding Play-Based Learning to Foster Entrepreneurial Traits

Play-based learning should be utilised not only to introduce basic economic concepts but also to cultivate a broader range of entrepreneurial traits such as independence, resilience, creativity, problem-solving, and teamwork. This approach should align with the Aistear curriculum’s goal of supporting children’s holistic development, fostering an entrepreneurial mindset that contributes to personal, social, and community contexts.

3. Reflection and Adaptation in Teaching

Educators should continually reflect on and adapt their teaching practices to better support entrepreneurial skills. This involves observing how children respond to different activities and modifying approaches to meet their varying needs, ensuring that learning remains engaging and effective.

- Recommendations for Curriculum Developers

1. Curriculum Integration of Entrepreneurial Education

Curriculum developers should work towards embedding entrepreneurial education more explicitly within the Aistear curriculum. This could involve specific guidelines and resources that help educators integrate entrepreneurial skills into the curriculum's themes of Well-being, Identity and Belonging, Communicating, and Exploring and Thinking. The curriculum should highlight how these skills contribute to the broader educational outcomes envisioned by Aistear.

2. Assessment and Feedback Mechanisms

Develop and implement assessment strategies that can effectively measure the development and impact of entrepreneurial skills in young learners. These strategies should align with Aistear's holistic assessment approach, focusing on children's interests, experiences, and developmental milestones.

- Recommendations for Higher Education Institutions

1. Incorporation of Entrepreneurial Education in Early Childhood Programmes

Higher Education Institutions (HEIs) in Ireland should integrate modules focused on entrepreneurial education within early childhood education degree programmes. These modules should extend beyond the traditional business creation to emphasise fostering an entrepreneurial mindset and teaching pedagogies that can be applied in early childhood settings, providing future educators with a strong foundation in their initial training to take an entrepreneurial approach to their teaching and learning.

2. Professional Development Programmes

HEIs should offer professional development courses and workshops that equip current and future educators with the skills to implement entrepreneurial teaching pedagogies effectively. This training should cover both the theory and practice of fostering entrepreneurial skills in young children, ensuring educators are well-prepared to integrate these concepts into their teaching. The Supporting Early Childhood Education and Care Staff in the Beginning of their Careers Policy brief (OECD, 2024) draws on the TALIS Starting Strong Survey (OECD, 2018) and supports professional development for novice ECEC educators, ensuring greater skills development, enhanced quality and professionalism throughout the workforce.

- Global Applications

1. Adaptable Educational Practices for Global Curricula

The practices and frameworks developed through this research should be adaptable to various educational settings beyond Ireland. Sharing case studies and best practices, and any modifications to the Aistear framework that include entrepreneurial education, could serve as a model for other countries to enhance their early childhood education systems.

2. International Collaborations and Research

This research may encourage international collaborations to research and develop best practices in integrating entrepreneurial education in early childhood settings. Comparative studies between different educational systems could help refine and adapt approaches based on diverse cultural and educational contexts.

In summary, this research offers actionable recommendations for educators, curriculum developers and higher education institutions. While these recommendations are grounded in the Irish ECCE scheme and Aistear curriculum, they also have the potential for broader application in diverse international contexts. These contributions to practice aim to prepare children not only for academic success but also for lifelong learning and adaptability in a rapidly changing world.

8.4.6. Contribution to Policy

This study offers significant contributions to policy, particularly within the contexts of Irish entrepreneurship education and early childhood education policies. By integrating entrepreneurial education into early childhood curricula, this research aligns with and extends the objectives of The National Skills Strategy 2025, and other relevant policy frameworks in Ireland. It also emphasises the professional recognition of early childhood educators and has broader implications for global policies on entrepreneurship education.

- Contributions to Irish Policy

1. Alignment with The National Skills Strategy

This research aligns with The National Skills Strategy 2025, which emphasises innovation and skills development from an early age. By advocating for the integration of entrepreneurial education in preschool, the study supports the strategy's goals, contributing to Ireland's economic and social growth by fostering foundational skills that encourage lifelong adaptability and creativity (Department of Education and Skills, 2021).

2. Enhancement of Early Childhood Education Policy

The findings advocate for enhancements in early childhood education policy, specifically the inclusion of structured entrepreneurial education within the Aistear curriculum (NCCA, 2009). The study highlights the importance of nurturing entrepreneurial competencies from an early age, promoting a holistic education approach that maximises every child's potential. This aligns with policies outlined by Siolta (CECDE, 2006).

3. Professional Recognition of Early Childhood Educators

By highlighting educators' pivotal role in fostering entrepreneurial skills and capabilities, the study supports policy discussions aimed at elevating the professional status of early childhood educators. It advocates for defined career pathways, continuous professional development and adequate compensation, in line with recent policy initiatives that push for better training and recognition of early childhood educators (DCEDIY, 2022).

- Broader Global Policy Contributions

1. Alignment with EU and OECD Policies

The research resonates with the EU's EntreComp framework, which seeks to instil entrepreneurial skills from an early age. By providing a practical application of this framework, the study offers a model that other EU countries can emulate, contributing to the broader EU agenda of fostering entrepreneurial skills as outlined in the 'Guide to fostering Entrepreneurial Education' Report (European Commission, 2021).

2. Global Policy Implications for Early Childhood Entrepreneurship Education

The framework developed in this research can serve as a model for other countries looking to incorporate entrepreneurship education into early childhood curricula. It aligns with OECD guidelines which advocate for early childhood education as foundational to lifelong learning. By demonstrating how entrepreneurial education can be integrated into early education frameworks, the research supports OECD objectives of enhancing educational outcomes and supports economic development, as discussed in the OECD 'Strengthening Early Childhood Education and Care in Ireland Review', (OECD, 2021). This framework is particularly relevant for EU nations and those following OECD educational guidelines, offering a scalable and adaptable approach to fostering entrepreneurial skills among young learners.

- Policy Recommendations

1. Revise National Educational Curricula

Policymakers should consider revising national educational curricula to explicitly include entrepreneurial education from the early years, ensuring that these competencies are built progressively throughout a child's education.

2. Support Professional Development

Implement policies that fund and support professional development for early childhood educators in entrepreneurial education, recognising the complexity and importance of their role in fostering these skills.

3. Integrate Global Competence Framework

Consider integrating global frameworks like EntreComp into national education systems starting from early childhood education. This would foster a universally competitive and innovative mindset among young learners, preparing them for future success across various life domains. EntreComp principles, such as creativity, problem-solving, critical thinking, collaboration, and resilience, can significantly benefit preschool children by laying a strong foundation for their future education, work, and social interactions.

The following are ways in which preschool children can benefit from EntreComp principles.

- **Creativity and Innovation** - EntreComp emphasises the importance of generating ideas and being creative. Preschool children can benefit from activities that encourage them to think outside the box, explore new possibilities, and express their creativity through play and exploration.
- **Problem-Solving Skills** - EntreComp focuses on problem-solving as a key competence. Preschool children can develop problem-solving skills through activities that challenge them to find solutions, make decisions, and overcome obstacles in a supportive environment.
- **Critical Thinking** - EntreComp promotes critical thinking as an essential skill. Preschool children can benefit from activities that encourage them to analyse information, ask questions, and make connections, laying the foundation for future critical thinking abilities.
- **Collaboration and Communication** - EntreComp highlights the importance of collaboration and communication. Preschool children can benefit from activities that promote teamwork, sharing, and effective communication with peers and adults.
- **Resilience and Adaptability** - EntreComp emphasises the ability to adapt to change and bounce back from setbacks. Preschool children can benefit from experiences that teach them resilience, coping strategies, and the importance of perseverance in the face of challenges.

Conclusion of Contributions

This study has made substantial contributions across various dimensions of educational research and implementation, particularly in the field of entrepreneurial education in early childhood settings. By integrating entrepreneurial concepts into early childhood curricula, the

research extends existing literature and provides a new framework for understanding and teaching entrepreneurial skills to very young learners. The adoption of Constructivist Grounded Theory has enriched the methodology, offering a nuanced approach to exploring and understanding educators' experiences and interactions. Empirically, the study provides robust evidence of the practical benefits and challenges of integrating entrepreneurial education into early childhood, with specific recommendations for practice that support educators and curriculum developers. In terms of policy, the research aligns with and advances national strategies and frameworks, advocating for systematic changes that support the development of entrepreneurial skills from an early age. Overall, this study contributes not only to academic discourse but also offers practical and policy-oriented solutions that have the potential to transform early childhood education.

8.5. Limitations of this Research Study

In exploring the integration of entrepreneurial education in early childhood settings within Ireland, it is essential to recognise the limitations that accompany the methodologies and contextual factors of this study. These limitations shape the interpretation and applicability of the findings, and provide a basis for identifying areas where further research could extend current knowledge. This study employed qualitative methods, specifically in-depth intensive interviews, within the context of Ireland's unique Early Childhood Care and Education (ECCE) scheme and the Aistear curriculum. While these approaches have provided rich, detailed insights, they come with constraints related to generalisability, cultural specificity, and methodological focus. Additionally, limitations related to the sample's gender diversity and ethical constraints on direct observation of children may influence the breadth and depth of the conclusions. Acknowledging these factors is necessary for a balanced understanding of the research outcomes and for guiding future inquiries into this evolving field. The following limitations are recognised:

- **Limitations of Using Qualitative Research**

Qualitative research offers rich insights but is limited in terms of generalisability and objectivity. Typically involving smaller, non-random samples, qualitative studies might not represent broader populations adequately, limiting the ability to generalise findings across different early childhood education settings or diverse demographic distributions. Additionally, qualitative research is subject to researcher bias, where the researcher's perspectives and

interpretations can influence data collection and analysis. This subjectivity can affect the objectivity and reproducibility of the research, potentially skewing the results based on the researcher's viewpoints.

- **Limitations of Using a Mono-Method Approach: In-depth Intensive Interviews**

Relying solely on in-depth interviews, while providing profound insights into participants' experiences and perceptions, may not capture broader patterns or behaviours that could be observed through other methods such as surveys or observational studies. This mono-method approach limits the breadth of data collected, focusing on depth over breadth. Furthermore, in-depth interviews depend heavily on the participants' willingness and ability to express their thoughts and experiences accurately, which can sometimes result in incomplete or biased data due to memory lapses, self-censorship, or misinterpretation of questions.

- **Limited Gender Diversity in the Sample**

The limited gender diversity in the sample, with only one male participant, may restrict the understanding of male perspectives in a field predominantly occupied by females. This limitation can affect the comprehensiveness of the study and the general applicability of findings, particularly to male educators or stakeholders who might have different experiences or viewpoints in the context of early childhood education.

- **Context-Specific to the Irish ECCE Scheme and Aistear Curriculum**

The study's findings are rooted in the specific context of Ireland's specific early childhood education policies and the Aistear curriculum. This cultural and systemic specificity may limit the direct applicability of findings to other countries with different educational systems, policies, or cultural contexts. Moreover, focusing exclusively on the Aistear curriculum might not provide insights relevant to settings without a national curriculum or those that have curricula with different focuses and structures.

- **Use of Constructivist Grounded Theory**

Employing Constructivist Grounded Theory (CGT) in the context of entrepreneurship education research is both innovative and challenging, especially given the researcher's novice status. This approach could impact the depth and accuracy of theory development. Constructivist grounded theory heavily relies on the interpretation of data, which can vary

significantly based on the researcher's background and theoretical inclinations, potentially influencing the study's neutrality and the validity of emergent theory.

- Lack of Observational Data

The inability to observe educators teaching the children directly, due to the study's ethical constraints, significantly limits the capacity to capture non-verbal cues, behaviours, and interactions that could provide additional insights into how entrepreneurial concepts are understood and applied by children in real-time. This lack of observational data restricts the depth of understanding regarding the practical implementation and impact of entrepreneurial concepts within the learning environment.

While the limitations are acknowledged and appreciated, these limitations have been mitigated in the following ways:

- Choice of Constructivist Grounded Theory (CGT)

Constructivist Grounded Theory was chosen for its strength in developing a comprehensive understanding of complex phenomena, particularly in new or underexplored areas. The iterative nature of CGT, with its continuous comparison and refinement of data, provided a rigorous framework that enhanced the depth and accuracy of the analysis. This methodological approach facilitated a flexible yet systematic exploration of how early childhood educators understand and implement entrepreneurial concepts, ensuring that findings were deeply grounded in the participants' experiences and perspectives.

- Cultural and Global Relevance of the Aistear Curriculum

While the Aistear curriculum is specific to Ireland, its child-centred principles are universally applicable, making the study's insights relevant on a global scale. By comparing approaches used in other countries, the research demonstrates that similar child-centred, play-based, and developmentally appropriate practices are increasingly valued worldwide, reinforcing Aistear's relevance as a model for other nations.

- Representativeness of the ECCE Scheme

The Irish Early Childhood Care and Education (ECCE) scheme's inclusive design, representing children of all genders, backgrounds, and socioeconomic statuses, ensures that the study offers

a comprehensive view of the impact and implementation of entrepreneurial education in diverse early childhood settings. The scheme's universal nature emphasises the generalisability of the research within Ireland and offers a framework for other countries considering similar inclusive educational policies.

- Choice of In-Depth Interviews Over Other Methods

The use of in-depth interviews was driven by the need to capture the passion, dedication, experiences, and perspectives of early childhood educators, which might not have been effectively conveyed through surveys or observational methods. Interviews allowed for rich, detailed narratives that provided deeper insights into the educators' daily practices and challenges. The use of CGT further enhanced the rigour and depth of the inquiry by refining participant samples and interview questions.

- Philosophical Alignment and Research Objectives

The qualitative nature of this study aligned with the researcher's philosophical approach, prioritising understanding and interpreting the complex dynamics of educational settings over quantifying variables. This approach was well-suited to the study's objectives, which aimed to explore the novel area of integrating entrepreneurial education into early childhood. Supported by CGT, the qualitative method uncovered new themes and patterns that quantitative methods might have overlooked, providing a richer, more comprehensive understanding of the subject matter.

While recognising the inherent limitations of the research design - the methodologies and strategies employed in this study were carefully chosen to address these limitations effectively. This ensured that the research outcomes were both meaningful and robust. The study's approach not only adheres to rigorous academic standards but also aligns with the practical realities and complexities of implementing entrepreneurial education in early childhood environments. This balanced approach provides a solid platform for future research and offers practical insights that can inform educational practices and policy development.

8.6. Future Research Directions

As the field of entrepreneurial education in early childhood continues to evolve, several promising avenues for future research have emerged. These potential studies aim to deepen our understanding of the implications and effectiveness of introducing entrepreneurial concepts at an early age and to refine the methods and tools for doing so effectively. The following are detailed suggestions for future research directions.

- Longitudinal Impact of Early Entrepreneurial Education

A crucial area for future research involves a longitudinal study that tracks the impact of early entrepreneurial education on children as they progress into primary education. This study would explore how early development of skills such as innovativeness, creativity, and other entrepreneurial traits influence children's learning experiences and outcomes in primary school. The hypothesis is that the autonomy and individuality fostered through entrepreneurial education in preschool may sometimes clash with the more standardised systems of teaching and learning commonly found in primary education. Such a study could provide valuable insights into how early educational experiences shape cognitive and social development over time, and how primary education systems might adapt to better support these entrepreneurial skills.

- Comparative Studies Across Different Educational Systems

Comparative research across different early childhood educational systems could shed light on the global applicability and adaptability of the eEE Framework proposed in this study. By examining how different countries or regions integrate entrepreneurial education into their early childhood curricula, researchers can identify best practices and common challenges. These studies would highlight cultural and systemic differences, and allow for the development of a more universally applicable set of guidelines for integrating entrepreneurship into early childhood education.

- Development of Educator Training Programmes

Another promising direction for future research involves the development and assessment of specialised training programmes for early childhood educators. These programmes would aim to equip educators with the skills and knowledge necessary to integrate entrepreneurial

education into their teaching practices effectively. One potential outcome of such training could be the awarding of digital badges to educators who demonstrate proficiency in entrepreneurial education methods. This certification could help standardise and recognise the professional development efforts of educators in this emerging field.

- **Implementation and Evaluation of an Entrepreneurial Toolkit**

Building on the idea of educator training, another valuable study could involve the creation and implementation of a comprehensive toolkit for early childhood educators. This toolkit would include resources, lesson plans, and pedagogical strategies focused on fostering entrepreneurial skills in young children. The research would involve not only the toolkit's development but also its practical application within preschool classes. A subsequent study could observe and evaluate the effectiveness of these tools in real-world educational settings. This approach would provide direct feedback on how such resources impact teaching practices and student outcomes, offering a practical examination of the proposed educational interventions.

- **Postdoctoral Study Focused on Toolkit Application**

For a more in-depth exploration, the researcher is keen to undertake a postdoctoral study focusing on the development, utilisation, and refinement of the entrepreneurial toolkit in preschool environments. This research could involve detailed case studies, feedback cycles with educators, and adjustments to the toolkit based on real-world usage and outcomes. Such a study would contribute to academic knowledge and practical applications, bridging the gap between theoretical research and tangible educational practice.

Each of these future research directions offers a pathway to deepen our understanding of how entrepreneurial education can be effectively integrated into early childhood education and how it impacts children's development. By pursuing these studies, researchers can contribute to optimising educational practices that foster essential entrepreneurial skills from an early age, supporting holistic development and preparing children for the challenges and opportunities of the future.

8.7. Final Thoughts

This study has highlighted the transformative potential of entrepreneurial education in early childhood settings. By fostering an entrepreneurial mindset from a young age, educators can equip children with the skills necessary to navigate and innovate their future educational and professional journeys. The proposed framework and findings from this study contribute to a growing body of literature that supports a holistic, integrated approach to education that values creativity, innovation, and problem-solving skills - skills that are essential for the 21st century.

Recognising the profound receptiveness of young children to entrepreneurial concepts is a critical first step. At such a tender age, children are uniquely positioned to absorb and adapt to new ways of thinking and acting. By fostering entrepreneurial capabilities, attitudes, skills, behaviours, and engagement with entrepreneurial activities from a young age, we lay the foundation for a future that is both innovative and dynamic.

However, central to the success of this endeavour are the educators - arguably the most pivotal professionals in our educational system. It is imperative that they are equipped with the necessary tools and training to effectively embrace and engage in entrepreneurial education. The potential for transformation is immense if these educators are supported and empowered to nurture the seeds of entrepreneurship in our youngest learners.

In the words of the late, great, John Lennon - *'Imagine'*. Imagine a world where entrepreneurial thinking becomes a natural progression of learning, starting from the age of just under three. What kind of graduates would our schools and universities be turning out? What kind of productive employees would enter the workforce? What kind of innovative ventures would be created? And perhaps most importantly, what kind of society would emerge? The possibilities are as vast as they are inspiring.

By thoughtfully and effectively integrating entrepreneurial education into early childhood settings, we are not just teaching children to think differently; we are setting the stage for a future where innovation, creativity, resilience, and adaptability are not just valued traits, but inherent characteristics of our society. This thesis is not just a call to action - it is a vision for a future where every child is empowered to think and act entrepreneurially, transforming our world one idea at a time.

REFERENCES

- Aarstad, J., Pettersen, I.B. and Henriksen, K.E., (2016). Entrepreneurial experience and access to critical resources: a learning perspective. *Baltic Journal of Management*, 11(1), pp.89-107.
- Abutabenjeh, S., & Jaradat, R. (2018). Clarification of research design, research methods, and research methodology. *Teaching Public Administration*, 36(3), 237–258. Sagepub. <https://doi.org/10.1177/0144739418775787>
- Adomako, S., Danso, A., Uddin, M. and Damoah, J.O., (2016). Entrepreneurs' optimism, cognitive style and persistence. *International Journal of Entrepreneurial Behaviour & Research*, 22(1), pp.84-108.
- Aeri, P. and Verma, S.K., (2004). Child's socialization through play among 2-4 years old children. *The Anthropologist*, 6(4), pp.279-281.
- Agboola, O.W., (2021). Framework for school stage entrepreneurship education in Nigeria. *Entrepreneurship Education and Pedagogy*, 4(3), pp.312-345.
- Ahmetoglu, G. and Chamorro-Premuzic, T., (2017). An individual differences approach to studying entrepreneurial tendencies. *The Wiley handbook of entrepreneurship*, pp.231-255.
- Ainscow, M., Muijs, D. and West, M., (2006). Collaboration as a strategy for improving schools in challenging circumstances. *Improving schools*, 9(3), pp.192-202.
- Ajzen, I., (1991). The theory of planned behaviour. *Organizational behaviour and human decision processes*, 50(2), pp.179-211.
- Akpan, B. (2020). Classical and Operant Conditioning—Ivan Pavlov; Burrhus Skinner. *Springer Texts in Education*, pp.71–84. doi:10.1007/978-3-030-43620-9_6.
- Al-Ababneh, M.M., (2020). Linking ontology, epistemology and research methodology. *Science & Philosophy*, 8(1), pp. 75-91
- Alasuutari, M., Markström, A.M. and Vallberg-Roth, A.C., (2014). *Assessment and documentation in early childhood education*. Routledge.
- Albert, M., Mylopoulos, M. and Laberge, S., (2019). Examining grounded theory through the lens of rationalist epistemology. *Advances in Health Sciences Education*, 24, pp.827-837.
- Aldiabat, K. and Le Navenec, C. (2018) 'Philosophical roots of classic grounded theory: Its foundations in symbolic interactionism', *Qualitative Report*, 16(4), pp. 1063–80
- Alghamdi, A. H., & Li, L. (2013). Adapting Design-Based Research as a Research Methodology in Educational Settings. *International Journal of Education and Research*, 1(10), 1–11. <https://doi.org/2201-6740>
- Al-Lawati, E.H., Abdul Kohar, U.H. and Shahrin Suleiman, E., (2022). Entrepreneurial culture in educational institutions: A scoping review. *Cogent Business & Management*, 9(1), p.1997237.

- Allen, E. and Cowdery, G., (2015). Facilitating speech, language, and communication skills from the exceptional child: inclusion in early childhood education. *Cengage learning*.
- Allen, K.E. and Cowdery, G.E. (2015). The exceptional Child : inclusion in early childhood education.
- Allen, K.E., Cowdery, G.E., Paasche, C.L., Langford, R., Nolan, K. and Cipparrone, B., (2015). *Inclusion in early childhood programs: Children with exceptionalities*. Nelson Education
- Allen, L. and Kelly, B.B. eds., (2015). *Transforming the Workforce for Children Birth through Age 8: a Unifying Foundation*. [online] *PubMed*. Washington (DC): National Academies Press (US).
- Allen, L., Kelly, B.B. and National Research Council, (2015). Child development and early learning. In *Transforming the workforce for children birth through age 8: A unifying foundation*. National Academies Press (US).
- Almeida, P.I., Ahmetoglu, G. and Chamorro-Premuzic, T., (2014). Who wants to be an entrepreneur? The relationship between vocational interests and individual differences in entrepreneurship. *Journal of Career Assessment*, 22(1), pp.102-112.
- Amineh, R.J. and Asl, H.D., (2015). Review of constructivism and social constructivism. *Journal of Social Sciences, Literature and Languages*, 1(1), pp.9-16
- An Leanbh Óg (2015). 'Framework for Early Learning', In Murphy, R., Radley, P., and Ridgway, A.(eds.), *The OMEP Ireland Journal of Early Childhood Studies* 3(1), 55-72.
- Arasti, Z. (2008). L'entrepreneuriat Feminin En Iran: Les Structures Socioculturelles. *Revue Libanaise de Gestion et D'Économie*, 1(1), 1–29. [https://doi.org/10.1016/s1999-7620\(08\)70001-6](https://doi.org/10.1016/s1999-7620(08)70001-6)
- Arasti, Z., Falavarjani, M.K. and Imanipour, N., (2012). A study of teaching methods in entrepreneurship education for graduate students. *Higher education studies*, 2(1), pp.2-10.
- Archibald M. M., Ambagtsheer R. C., Casey M. G., Lawless M. (2019). Using zoom videoconferencing for qualitative data collection: Perceptions and experiences of researchers and participants. *International Journal of Qualitative Methods*, 18, 1-8. <https://doi-org.cit.idm.oclc.org/10.1177/F1609406919874596>.
- Argyris, C. and Schön, D.A., (1989). Participatory action research and action science compared: A commentary. *American behavioural scientist*, 32(5), pp.612-623.
- Arksey, H. and O'Malley, L., (2005). Scoping studies: towards a methodological framework. *International journal of social research methodology*, 8(1), pp.19-32
- Arnott, L. (2018). Children's negotiation tactics and socio-emotional self-regulation in child-led play experiences: the influence of the preschool pedagogic culture. *Early Child Development and Care*, 188(7), pp.951–965.

- Ash, J. S., & Guappone, K. P. (2007). Qualitative evaluation of health information exchange efforts. *Journal of Biomedical Informatics*, 40(6), S33–S39. <https://doi.org/10.1016/j.jbi.2007.08.001>
- Au, A., 2022. An ethnographic toolkit for studying the networking pathways of hard-to-reach populations: the case of cosmetic surgery consumers in South Korea. *International Journal of Qualitative Methods*, 21, p.16094069221101962.
- Audretsch, D.B., Obschonka, M., Gosling, S.D. and Potter, J., (2017). A new perspective on entrepreneurial regions: linking cultural identity with latent and manifest entrepreneurship. *Small Business Economics*, 48(3), pp.681-697.
- Aurini, J. D., Heath, M., & Howells, S. (2016). *The How To of Qualitative Research*. SAGE.
- Axelsson, K., Hagglund, S., & Sandberg, A. (2015). Entrepreneurial Learning in Education: Preschool as a take-off for the entrepreneurial self. *Journal of Education and Training*, 2 (2), 40 – 58
- Azungah, T., (2018). Qualitative research: deductive and inductive approaches to data analysis. *Qualitative research journal*, 18(4), pp.383-400.
- Bachmann, A.K., Maran, T., Furtner, M., Brem, A. and Welte, M., (2021). Improving entrepreneurial self-efficacy and the attitude towards starting a business venture. *Review of Managerial Science*, 15, pp.1707-1727.
- Bacigalupo, M., Kamylyis, P., Punie, Y. and Van den Brande, G., (2016). EntreComp: The entrepreneurship competence framework. *Luxembourg: Publication Office of the European Union*, 10, p.593884.
- Bae, T.J., Qian, S., Miao, C. and Fiet, J.O., (2014). The relationship between entrepreneurship education and entrepreneurial intentions: A meta-analytic review. *Entrepreneurship theory and practice*, 38(2), pp.217-254.
- Baier-Fuentes, H., Merigó, J.M., Amorós, J.E. and Gaviria-Marín, M., (2019). International entrepreneurship: a bibliometric overview. *International Entrepreneurship and Management Journal*, 15, pp.385-429.
- Bajwa, S.U., Shahzad, K. and Aslam, H., (2017). Exploring Big Five personality traits and gender as predictors of entrepreneurs' cognitive adaptability. *Journal of Modelling in Management*, 12(1), pp.143-161.
- Baker, S. and Edwards, R., (2017). How many qualitative interviews is enough? Expert voices and early career reflections on sampling and cases in qualitative research. *National centre for research methods review paper*.
- Baker, T., and Welter. T. (2018). Contextual entrepreneurship: An interdisciplinary perspective. *Foundations and Trends® in Entrepreneurship* 14, no. 4 (2018): 357-426

- Balladares, J. and Kankaraš, M., (2020). Attendance in early childhood education and care programmes and academic proficiencies at age 15.
- Bandura, A. (1997). Self-efficacy: The exercise of control. Freeman
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioural change. *Psychological Review*, 84(2), 191–215.
- .Bandura, A. and Walters, R.H., (1977). *Social learning theory* (Vol. 1). Prentice Hall: Englewood cliffs.
- Bandura, A., (1985). Model of causality in social learning theory. In *Cognition and psychotherapy* (pp. 81-99). Boston, MA: Springer US.
- Barbarin, O.A. and Wasik, B.H. (2009). *Handbook of child development and early education : research to practice*. New York: Guilford Press
- Barnard, A., Pittz, T. and Vanevenhoven, J., (2019). Entrepreneurship education in US community colleges: a review and analysis. *Journal of Small Business and Enterprise Development*, 26(2), pp.190-208.
- Baron, R. A., & Ward, T. B. (2004). Expanding Entrepreneurial Cognition’s Toolbox: Potential Contributions from the Field of Cognitive Science. *Entrepreneurship Theory and Practice*, 28(6), 553– 573. <https://doi.org/10.1111/j.1540-6520.2004.00064.x>
- Baron, R.A., (2014). Thinking about cognition and its central role in entrepreneurship: confessions of a ‘reformed’ behaviourist. In *Handbook of entrepreneurial cognition* (pp. 61-85). Edward Elgar Publishing.
- Barrett, D. (2023). Research spotlight: constructivist grounded theory. *Evidence-Based Nursing*, 31(8), ebnurs-2023-103747. <https://doi.org/10.1136/ebnurs-2023-103747>
- Barrett, R. and Mayson, S., (2008). *Introduction: at the intersection of entrepreneurship and human resource management* (pp. 1-17). Edward Elgar Publishing.
- Barter, C. and Renold, E., (2000). 'I wanna tell you a story': exploring the application of vignettes in qualitative research with children and young people. *International journal of social research methodology*, 3(4), pp.307-323.
- Barth, R.S. (2001b). Teacher leader. *Phi Delta Kappan*, 82(6), 443-449.
- Baum, A.C., (2000). *Exploring the beliefs of early childhood preservice teachers*. Iowa State University.
- Baum, J. R., Frese, M., & Baron, R. (2006). *The Psychology of Entrepreneurship*. Routledge
- Bauman, A. and Lucy, C., (2021). Enhancing entrepreneurial education: Developing competencies for success. *The International Journal of Management Education*, 19(1), p.100293.

- Baumol, W. J. (1993). *Entrepreneurship, Management, and the Structure of Payoffs*. Cambridge, Mass.
- Bean, J.C. and Melzer, D., (2021). *Engaging ideas: The professor's guide to integrating writing, critical thinking, and active learning in the classroom*. John Wiley & Sons.
- Beaty, J.J. (2019). *Preschool appropriate practices : environment, curriculum, and development*. Boston, Ma: Cengage.
- Bedi, H.S. and Yadav, N., (2019). Social entrepreneurship: A conceptual clarity. *Bedi, HS & Yadav, N., Social Entrepreneurship: A Conceptual Clarity. Our Heritage, 67(10)*, pp.1006-1016.
- Bekki, J.M., Huerta, M., London, J.S., Melton, D., Vigeant, M. and Williams, J.M., (2018). Opinion: Why EM? The Potential Benefits of Instilling an Entrepreneurial Mindset. *Advances in Engineering Education, 7(1)*, p.n1.
- Belgrave, L.L. and Seide, K., (2019). Grounded theory methodology: Principles and practices.
- Bell, R. and Bell, H. (2020). Applying educational theory to develop a framework to support the delivery of experiential entrepreneurship education. *Journal of Small Business and Enterprise Development, 27(6)*, pp.987–1004. doi:10.1108/jsbed-01-2020-0012.
- Bell, R. and Cui, J., (2023). Addressing progressive educational reforms: Fusing acquisition approaches and participation in Chinese entrepreneurship education. *The International Journal of Management Education, 21(1)*, p.100748.
- Bell, R., (2020). Adapting to constructivist approaches to entrepreneurship education in the Chinese classroom. *Studies in Higher Education, 45(8)*, pp.1694-1710.
- Bell, R. (2019). Adapting to constructivist approaches to entrepreneurship education in the Chinese classroom. *Studies in Higher Education*, pp.1–17. doi:10.1080/03075079.2019.1655724.
- Bell, R. and Bell, H., (2016). Replicating the networking, mentoring and venture creation benefits of entrepreneurship centres on a shoestring: A student-centred approach to entrepreneurship education and venture creation. *Industry and Higher Education, 30(5)*, pp.334-343.
- Bergdahl, E., & Berterö, C. M. (2015). The myth of induction in qualitative nursing research. *Nursing Philosophy, 16(2)*, 110–120.
- Berglund, K., Hytti, U. and Verduijn, K., (2021). Navigating the terrain of entrepreneurship education in neoliberal societies. *Entrepreneurship Education and Pedagogy, 4(4)*, pp.702-717.
- Berglund, K., Hytti, U. and Verduijn, K., (2020). Unsettling entrepreneurship education. *Entrepreneurship Education and Pedagogy, 3(3)*, pp.208-213.
- Bergman, M.M., (2008). Advances in mixed methods research: Theories and applications. *Advances in mixed methods research*, pp.1-200.

- Berk, L., (2015). *Child development*. Pearson Higher Education AU.
- Bertram, T. and Pascal, C., (2016). *Early childhood policies and systems in eight countries: Findings from IEA's early childhood education study* (p. 194). Springer Nature.
- Beugré, C., (2016). *Social entrepreneurship: Managing the creation of social value*. Routledge.
- Bhansing, P.V., Hitters, E. and Wijngaarden, Y., (2018). Passion inspires: Motivations of creative entrepreneurs in creative business centres in the Netherlands. *The Journal of Entrepreneurship*, 27(1), pp.1-24.
- Biberhofer, P., Lintner, C., Bernhardt, J. and Rieckmann, M., (2019). Facilitating work performance of sustainability-driven entrepreneurs through higher education: The relevance of competencies, values, worldviews and opportunities. *The International Journal of Entrepreneurship and Innovation*, 20(1), pp.21-38.
- Bierema, L.L., (2019). Adult learning theories and practices. *Connecting Adult Learning and Knowledge Management: Strategies for Learning and Change in Higher Education and Organizations*, pp.3-25.
- Biernacki, P., & Waldorf, D. (1981). Snowball Sampling: Problems and Techniques of Chain Referral Sampling. *Sociological Methods & Research*, 10(2), 141–163.
- Biesta, G., (2021). *World-centred education: A view for the present*. Routledge.
- Biesta, G., (2013). Time out: Can education do and be done without time?. In *Education and the Political* (pp. 75-88). Brill.
- Billups, F. D. (2019). *Qualitative Data Collection Tools*. SAGE Publications.
- Bilton, H., (2010). *Outdoor learning in the early years: Management and innovation*. Routledge.
- Birks, M., & Mills, J. (2015). *Grounded Theory: A Practical Guide (2nd ed.)*. London: Sage
- Birley, S. and Stockley, S., (2017). Entrepreneurial teams and venture growth. *The Blackwell handbook of entrepreneurship*, pp.287-307.
- Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, 26(13), 1802–1811. <https://doi.org/10.1177/1049732316654870>
- Black, P. and Wiliam, D., (1998). Assessment and classroom learning. *Assessment in Education: principles, policy & practice*, 5(1), pp.7-74.
- Blanton, M. L., Westbrook, S. and Carter G. (2005). Using Valsiner's Zone Theory to Interpret Teaching Practices in Mathematics and Science Classrooms. *Journal of Mathematics Teacher Education*, 8, pp. 5-33.

- Blenker, P., Trolle Elmholdt, S., Hedeboe Frederiksen, S., Korsgaard, S. and Wagner, K., (2014). Methods in entrepreneurship education research: a review and integrative framework. *Education+ Training*, 56(8/9), pp.697-715.
- Blenker, P., Frederiksen, S.H., Korsgaard, S., Müller, S., Neergaard, H. and Thrane, C., (2012). Entrepreneurship as everyday practice: towards a personalized pedagogy of enterprise education. *Industry and Higher Education*, 26(6), pp.417-430.
- Blenker, P., Korsgaard, S., Neergaard, H. and Thrane, C., (2011). The questions we care about: paradigms and progression in entrepreneurship education. *Industry and higher education*, 25(6), pp.417-427.
- Blenker, P., Dreisler, P., Faergemann, H. M., & Kjeldsen, J. (2008). A framework for developing entrepreneurship education in a university context. *International Journal of Entrepreneurship and Small Business*, 5(1), 45. <https://doi.org/10.1504/ijesb.2008.015953>
- Bodrova, E. and Leong, D.J., (2018). Tools of the mind: A Vygotskian early childhood curriculum. In *International Handbook of Early Childhood Education* (pp. 1095-1111). Springer, Dordrecht.
- Bodrova, E. (2015). Vygotskian and Post-Vygotskian Views on Children's Play •. *American Journal of Play*, 7(3).
- Bogatić, K., Višnjić Jevtić, A., Campbell-Barr, V. and Georgeson, J., (2018). Initial Literature Review: Interpreting child-centredness to support quality and diversity in early childhood education and care.
- Bosman, L., & Fernhaber, S. (2018). *Teaching the Entrepreneurial Mindset to Engineers*. Springer International Publishing.
- Bowman, B.T., Donovan, S. and Burns, M.S. (2001). *Eager to learn : educating our preschoolers*. Washington, Dc: National Academy Press.
- Boyd, W. and Garvis, S. eds., (2021). *International perspectives on early childhood teacher education in the 21st century*. Singapore: Springer.
- Brännback, M., Carsrud, A.L. and Krueger, N., (2018). Theory of trying and “we-intentions”: from individual to collective intentions in entrepreneurship and family business. In *A Research Agenda for Entrepreneurial Cognition and Intention* (pp. 84-104). Edward Elgar Publishing.
- Branscombe, N.A., Burcham, J.G., Castle, K. and Surbeck, E., (2013). *Early childhood curriculum: A constructivist perspective*. Routledge.
- Bransford, J.D., Brown, A.L. and Cocking, R.R., (2000). *How people learn* (Vol. 11). Washington, DC: National academy press.

- Bravo, C., (2016). Schools of thought in the field of social entrepreneurship. *International Journal of Humanities and Social Sciences*, 10(5), pp.1683-1688.
- Brentnall, C. and Higgins, D., (2022). Problematising philosophical assumptions in EE's Invisible College. *International Journal of Entrepreneurial Behaviour & Research*, 28(4), pp.878-909.
- Bridge, S., (2017). Is “entrepreneurship” the problem in entrepreneurship education?. *Education + Training*, 59(7/8), pp.740-750.
- Bridgmon, K. D., & Martin, W. E. (2012). Quantitative and Statistical Research Methods: From Hypothesis to Results. In *Google Books*. John Wiley & Sons.
- Briggs, M. and Hansen, A. (2012). *Play-based learning in the primary school*. London: Sage, pp.30–46.
- Bristow, A. and Saunders, M., (2014). Heightening awareness of research philosophy: the development of a reflexive tool for use with students. In *British Academy of Management (BAM) Conference Proceedings 2014*.
- Brockbank, A., McGill, I. and Beech, N., (2017). Reflective learning in practice. In *Reflective learning in practice* (pp. 18-28). Routledge.
- Brookfield, S. (1995) *Becoming a critically reflective teacher*. New York: John Wiley & Sons Inc.
- Brookfield, S.D., Rudolph, J. and Yeo, E., (2019). The power of critical thinking in learning and teaching. An interview with Professor Stephen D. Brookfield. *Journal of Applied Learning and Teaching*, 2(2), pp.76-90.
- Brown, C.P., (2013). Reforming preschool to ready children for academic achievement: A case study of the impact of pre-k reform on the issue of school readiness. *Early Education & Development*, 24(4), pp.554-573.
- Brown, F. (2018). *Giving Children Hope: the Value of Therapeutic Play*. Leeds Beckett University.
- Brown, F. (2014). *Play and playwork : 101 stories of children playing*. Buckingham: Open University.
- Bruce, T., Elfer, P., Powell, S. and Werth, L., (2019) The Routledge International Handbook Of Froebel And Early Childhood Practice. *Re-Articulation Research And Policy*. New York: Routledge
- Bruner, J., (1983). Play, thought, and language. *Peabody Journal of Education*, 60(3), pp.60-69.
- Bryant, A. and Charmaz, K. eds., (2019). *The SAGE handbook of current developments in grounded theory*. Sage.
- Bryant, A., & Charmaz, K. (Eds.). (2007). *The SAGE Handbook of Grounded Theory*. SAGE Publications Ltd.
- Bryman, A. (2004). *Social research methods* (2nd ed.). Oxford University Press.

- Bulgarelli, D. and Bianquin, N. (2016). 3 Conceptual Review of Play. *Play development in children with disabilities*, pp.58–70. doi:10.1515/9783110522143-005.
- Burch, P., (2007). Educational policy and practice from the perspective of institutional theory: Crafting a wider lens. *Educational researcher*, 36(2), pp.84-95.
- Burchinal, M., Magnuson, K., Powell, D. and Hong, S.S., (2015). Early childcare and education. *Handbook of child psychology and developmental science*, 4, pp.223-267.
- Burgelman, R.A. and Hitt, M.A., (2007). Entrepreneurial actions, innovation, and appropriability. *Strategic Entrepreneurship Journal*, 1(3-4), pp.349-352.
- Burger, K. (2016). A Transdisciplinary Approach to Research on Early Childhood Education. *GAI - Ecological Perspectives for Science and Society*, 25(3), pp.197–200. doi:10.14512/gaia.25.3.13.
- Burger-Helmchen, T. ed., (2012). *Entrepreneurship: Born, made and educated*. BoD–Books on Demand
- Burrell, G. and Morgan, G., (2019). *Sociological paradigms and organisational analysis: Elements of the sociology of corporate life*. Routledge.
- Busenitz, L. W. (2007). Progress in understanding entrepreneurial behaviour. *Strategic Entrepreneurship Journal*, 1(1-2), 183–185. <https://doi.org/10.1002/sej.5>
- Busenitz, L. W., West III, G. P., Shepherd, D., Nelson, T., Chandler, G. N., & Zacharakis, A. (2003). Entrepreneurship research in emergence: Past trends and future directions. *Journal of management*, 29(3), 285-308.
- Bush, T., (2008). Leadership and management development in education. *Leadership and Management Development in education*, pp.1-184.
- Butina, M., (2015). A narrative approach to qualitative inquiry. *Clinical laboratory science*, 28(3), pp.190-196.
- Butler, A. E., Copnell, B., & Hall, H. (2018). The development of theoretical sampling in practice. *Collegian*, 25(5), 561–566. <https://doi.org/10.1016/j.colegn.2018.01.002>
- Bygrave, W. D. (2010). *The portable MBA in entrepreneurship*. John Wiley & Sons.
- Bygrave, W.D., (2007). The entrepreneurship paradigm (I) revisited. *Handbook of qualitative research methods in entrepreneurship*, 1748.
- Cain, K.M. and Dweck, C.S., (1995). The relation between motivational patterns and achievement cognitions through the elementary school years. *Merrill-Palmer Quarterly (1982-)*, pp.25-52.
- Caird, S., (2013). General measure of Enterprising Tendency Test. Online: <https://doi.org/10.13140/RG.2.1.4243.7520>

- Calefato, F. and Lanubile, F., (2022). Using personality detection tools for software engineering research: How far can we go?. *ACM Transactions on Software Engineering and Methodology (TOSEM)*, 31(3), pp.1-48.
- Campbell-Barr, V., (2017). Quality early childhood education and care—the role of attitudes and dispositions in professional development. *Early Child Development and Care*, 187(1), pp.45-58.
- Capel, C.M., (2012). Mindlessness/mindfulness, classroom practices and quality of early childhood education: an auto-ethnographic and intrinsic case research. *International Journal of Quality & Reliability Management*, 29(6), pp.666-680.
- Carsrud, A. and Brännback, M., (2011). Entrepreneurial motivations: what do we still need to know?. *Journal of small business management*, 49(1), pp.9-26.
- Carter, M.A. and Fewster, C., (2013). Diversifying early years professional learning—one size no longer fits all. *Australasian journal of early childhood*, 38(1), pp.73-80.
- Cascio, E. (2021). Early Childhood Education in the United States: What, When, Where, Who, How, and Why. *SSRN Electronic Journal*. doi:10.2139/ssrn.3834162.
- Cascio, M.A. and Racine, E. eds., (2019). *Research involving participants with cognitive disability and differences: Ethics, autonomy, inclusion, and innovation*. Oxford University Press.
- Casson, M. (2008). *The Oxford handbook of entrepreneurship*. Oxford University Press.
- Casson, M. (2018). *The Multinational Enterprise*. Edward Elgar Publishing.
- Castaño, M.S., Méndez, M.T. and Galindo, M.Á., (2015). The effect of social, cultural, and economic factors on entrepreneurship. *Journal of business research*, 68(7), pp.1496-1500.
- CECDE (2006). Síolta: The National Quality Framework for Early Childhood Education. Online: https://siolta.ie/media/pdfs/final_handbook.pdf
- Chadwick, D. and Webster, A. (2010). *Assessment for Learning in the Early Years Foundation Stage*. London ; Thousand Oaks, Ca: Sage Publications
- Chandler, G. N., DeTienne, D. R., McKelvie, A., & Mumford, T. V. (2011). Causation and effectuation processes: A validation study. *Journal of Business Venturing*, 26(3), 375–390. <https://doi.org/10.1016/j.jbusvent.2009.10.006>
- Charles, M. and Bellinson, J. eds., (2019). *The importance of play in early childhood education: Psychoanalytic, attachment, and developmental perspectives*. Routledge.
- Charmaz, K., (2017). The power of constructivist grounded theory for critical inquiry. *Qualitative inquiry*, 23(1), pp.34-45.
- Charmaz, K. (2014). *Constructing Grounded Theory (2nd ed.)*. London: Sage.

- Charmaz, K. (2006). *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*. Sage
- Charmaz, K. (1989). Discovering chronic illness: Using grounded theory. *Social Science and Medicine*, 30, 1161-1172. [http://dx doi:10.1016/0277-9536\(90\)90256-R](http://dx.doi.org/10.1016/0277-9536(90)90256-R)
- Charmaz, K., & Belgrave, L. L. (2019). Thinking About Data With Grounded Theory. *Qualitative Inquiry*, 25(8). <https://doi.org/10.1177/1077800418809455>
- Charmaz, K. and Thornberg, R., (2021). The pursuit of quality in grounded theory. *Qualitative research in psychology*, 18(3), pp.305-327.
- Chase, S.E., (2013). Still a Field in the Making. *Collecting and interpreting qualitative materials*, 4, pp.55-83.
- Chetty, R., Friedman, J.N. and Rockoff, J.E., (2014). Measuring the impacts of teachers I: Evaluating bias in teacher value-added estimates. *American economic review*, 104(9), pp.2593-2632.
- Children's Rights Alliance (2023). *Child Poverty Monitor 2023*. Dublin, Ireland.
- Cho, J.Y. and Lee, E.H., (2014). Reducing confusion about grounded theory and qualitative content analysis: Similarities and differences. *Qualitative report*, 19(32).
- Cho, Y.S. and Linderman, K., (2019). Metacognition-based process improvement practices. *International Journal of Production Economics*, 211, pp.132-144.
- Cho, Y.S., (2012). In relation to entrepreneurship and export performance of small and medium manufacturing firm, the mediating effect of product differentiation capabilities. *International Commerce and Information Review*, 14(3), pp.113-138.
- Chong, C.H. and Yeo, K.J., (2015). An overview of grounded theory design in educational research. *Asian Social Science*, 11(12), p.258.
- Christensen, J., (2016). A critical reflection of Bronfenbrenner s development ecology model. *Problems of Education in the 21st Century*, 69(1), pp.22-28.
- Christianti, M., Cholimah, N., & Suprayitno, B., (2015). Development of Entrepreneurial Learning Model for Early Childhood. *Asia Pacific Journal of Multidisciplinary Research*, 3 (3), 65 – 70.
- Chun Tie, Y., Birks, M. and Francis, K., (2019). Grounded theory research: A design framework for novice researchers. *SAGE open medicine*, 7, p.2050312118822927.
- Claire, C., Lefebvre, V. and Ronteau, S., (2021). Entrepreneurship as practice: systematic literature review of a nascent field. *Entrepreneurship As Practice*, pp.35-66.
- Clarke, D. and Hollingsworth, H., (2002). Elaborating a model of teacher professional growth. *Teaching and teacher education*, 18(8), pp.947-967.

- Clarke-Stewart, A. and Allhusen, V.D. (2005). *What we know about childcare*. Cambridge, Mass.: Harvard University Press.
- Cockell, J., McArthur-Blair, J. and Schiller, M., (2020). *Appreciative inquiry in higher education: A transformative force*. Friesen Press.
- Collis, J., & Hussey, R. (2014). *Business Research : a Practical Guide for Undergraduate and Postgraduate Students* (4th ed.). Hampshire.
- Collister, C.R. (2021). *Holistic teacher education : in search of a curriculum for troubled times*. Newcastle-Upon-Tyne: Cambridge Scholars Publishing.
- Colliver, Y.J. (2012). The five debates: Simplifying the contemporary play literature. *Early Childhood Folio*, 16(1), pp.15–21. doi:10.18296/ecf.0143
- Conlon, C., Carney, G., Timonen, V., & Scharf, T. (2013). “Emergent reconstruction” in grounded theory: learning from team-based interview research. *Qualitative Research*, 15(1), 39–56. <https://doi.org/10.1177/1468794113495038>
- Cooney, T. and Murray, T., (2008). Entrepreneurship education in the third-level sector in Ireland. *Institute of Minority Entrepreneurship*, Technological University Dublin
- Cooper, D., (2016). Enacting counter-states through play. *Contemporary Political Theory*, 15(4), pp.453-461.
- Cooperrider, D.L. and Srivastva, S., (2013). A Contemporary Commentary on Appreciative Inquiry in Organizational Life. In R. Woodman and W. Pasmore (Eds.), *Research in organizational change and development*, Vol. 1, pp. 129–169. In *Organizational generativity: The appreciative inquiry summit and a scholarship of transformation* (Vol. 4, pp. 3-67). Emerald Group Publishing Limited.
- Cooperrider, D.L., Whitney, D. and Stavros, J.M., (2003). *Appreciative inquiry handbook: The first in a series of AI workbooks for leaders of change* (Vol. 1). Berrett-Koehler Publishers.
- Corbin, J., & Strauss, A. (2015). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Sage publications.
- Corbin, J., & Strauss, A. (2008). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (3rd ed.). London: Sage.
- Corbin, J., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, 13(1), 3-21.
- Corner, E.J., Murray, E.J. and Brett, S.J., (2019). Qualitative, grounded theory exploration of patients’ experience of early mobilisation, rehabilitation and recovery after critical illness. *BMJ open*, 9(2), p.e026348.

- Corr, L., Cook, K., LaMontagne, A.D., Davis, E. and Waters, E., (2017). Early childhood educator mental health: Performing the national quality standard. *Australasian Journal of Early Childhood*, 42(4), pp.97-105.
- Coskun, K. (2020). A New Explanation for the Conflict Between Constructivist and Objectivist Grounded Theory. *International Journal of Qualitative Methods*, 19(1), 160940692093828. <https://doi.org/10.1177/1609406920938280>
- Couchenour, D. and Chrisman, K., (2013). *Families, schools and communities: Together for young children*. Cengage Learning.
- Council of the European Union, (2019). *Council Recommendation on High-Quality Early Childhood Education and Care Systems*. Official Journal of The European Council
- Council of the European Union (2020). *Council Resolution on a strategic framework for European cooperation in education and training towards the European Education Area and beyond (2021-2030)* 2021/C 66/01 (OJ C, C/66, 26.02.2021.
- Couse, L.J. and Recchia, S. eds., (2016). *Handbook of early childhood teacher education*. New York: Routledge.
- Coviello, N. and Yli-Renko, H. eds., (2016). *Handbook of measures for international entrepreneurship research: multi-item scales crossing disciplines and contexts*. Edward Elgar Publishing.
- Cranton, P. and Taylor, E.W., (2012). A theory in progress? Issues in transformative learning theory. *European journal for research on the education and learning of adults*, 4(1), pp.35-47.
- Creswell, J. W. (2014). *Study guide for Research design : qualitative, quantitative, and mixed methods approaches*. Content Technologies.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Sage Publications, Inc.
- Creswell, J.W. and Poth, C.N., (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications, USA
- Creswell, J.W. and Miller, D.L., (2000). Determining validity in qualitative inquiry. *Theory into practice*, 39(3), pp.124-130.
- Crittenden, V. L., Esper, K., Karst, N., & Slegers, R. (2015). *Evolving entrepreneurial education : innovation in the Babson classroom*. Emerald.
- Crotty, M.J., (1998). The foundations of social research: Meaning and perspective in the research process. *The foundations of social research*, pp.1-256.
- Crow, G., & Edwards, R. (2013). *What is Qualitative Interviewing?* Bloomsbury Publishing.

- Cuervo, Á., Ribeiro, D. and Roig, S., (2007). Entrepreneurship: concepts, theory and perspective. Introduction. In *Entrepreneurship: Concepts, theory and perspective* (pp. 1-20). Berlin, Heidelberg: Springer Berlin Heidelberg.
- Cunliffe, A.L. and Karunanayake, G., (2013). Working within hyphen-spaces in ethnographic research: Implications for research identities and practice. *Organizational Research Methods*, 16(3), pp.364-392.
- Cunningham, J.A. and Menter, M., (2020). Micro-level academic entrepreneurship: A research agenda. *Journal of Management Development*, 39(5), pp.581-598.
- Cunningham, J.B. and Lischeron, J., (1991). Defining entrepreneurship. *Journal of small business management*, 29(1).
- Currie, J. and Rossin-Slater, M., (2015). Early-life origins of life-cycle well-being: Research and policy implications. *Journal of Policy Analysis and Management*, 34(1), pp.208-242.
- Dahlberg, G., Moss, P. and Pence, A., (2007). *Beyond quality in early childhood education and care: Languages of evaluation*. Routledge.
- Dalli, C. and Urban, M. eds., (2013). *Professionalism in early childhood education and care: International perspectives*. Routledge.
- Dalli, C., Miller, L., & Urban, M. (2011). Early childhood grows up: Towards a critical ecology of the profession. *Contemporary Issues in Early Childhood*, 12(1), 8-24.
- Dana, L.P. and Dana, T.E., (2005). Expanding the scope of methodologies used in entrepreneurship research. *International Journal of Entrepreneurship and Small Business*, 2(1), pp.79-88.
- Daniel, A.D., (2016). Fostering an entrepreneurial mindset by using a design thinking approach in entrepreneurship education. *Industry and Higher Education*, 30(3), pp.215-223.
- Daries, J., Engdahl, I., Otieno, L., Pramling-Samuels, I., Siraj-Blatchford, J. and Vallabh, P., (2009). Early childhood education for sustainability: Recommendations for development. *International Journal of Early Childhood*, 41(2), pp.113-117.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). Effective teacher professional development. Learning Policy Institute.
- David, C.P., (2015). Policy entrepreneurs and the reorientation of national security policy under the GW bush administration (2001-04). *Politics & Policy*, 43(1), pp.163-195.
- Davidsson, P., (2015). Entrepreneurial opportunities and the entrepreneurship nexus: A re-conceptualization. *Journal of business venturing*, 30(5), pp.674-695.
- Davidsson, P., Delmar, F., & Wiklund, J. (2006). *Entrepreneurship and the Growth of Firms*. Edward Elgar Publishing. <https://doi.org/10.4337/9781781009949>

- Davies, H., (2002). *Enterprise and the Economy in Education*. London: HMSO.
- Davis, M.H., Hall, J.A. and Mayer, P.S., (2016). Developing a new measure of entrepreneurial mindset: Reliability, validity, and implications for practitioners. *Consulting Psychology Journal: Practice and Research*, 68(1), p.21.
- Davoudi, N., Nayeri, N.D., Raiesifar, A., Poortaghi, S. and Ahmadian, S., (2016). Issues of theoretical sampling: A narrative review. *Nursing and Midwifery Studies*, 6(2), pp.1-9.
- De Winnaar, K. and Scholtz, F., (2020). Entrepreneurial decision-making: new conceptual perspectives. *Management Decision*, 58(7), pp.1283-1300.
- Deiner, P. (2012) *Inclusive early childhood education: Development, resources, and practice*. Cengage Learning.
- DelCarmen-Wiggins, R. and Carter, A.S. eds., (2019). *The Oxford handbook of infant, toddler, and preschool mental health assessment*. Oxford Library of Psychology.
- DelliSanti, D., (2021). The dynamism of liberalism: An esoteric interpretation of Adam Smith. *Journal of Economic Behavior & Organization*, 184, pp.717-726.
- Denzin, N. K., & Lincoln, Y. S. (2018). *The Sage handbook of qualitative research*. Sage.
- Denzin, N.K. (1978). *The Research Act: A Theoretical Introduction to Sociological Methods* (2nd ed.). New York: McGraw-Hill.
- Department for Education and Skills, Wales (2015). Curriculum for Wales: Foundation Phase Framework. Online: <https://hwb.gov.wales/storage/d5d8e39c-b534-40cb-a3f5-7e2e126d8077/foundation-phaseframework.pdf>
- Department for Rural and Community Development, (2023). *National Social Enterprise Policy 2024 – 2027*. Public Consultation Document. Irish government publications. Online: <https://www.gov.ie/en/consultation/93961-national-social-enterprise-policy-for-ireland-closing-phase-public-consultation/>
- Department of Business, Enterprise and Innovation (2014), *The Entrepreneurship Forum Report*. Irish government publications.
- Department of Business, Enterprise and Innovation (2014), *The Entrepreneurship Forum Report*. Irish government publications.
- Department of Children, Equality, Disability, Integration and Youth (2022). *Early Childhood Care and Education Programme*. Irish government publications. Online: <https://www.gov.ie/en/publication/2459ee-early-childhood-care-and-education-programme-ecce/>

- Department of Children, Equality, Disability, Integration and Youth (2023). *Early Childhood Care and Education Programme*. Irish government publications. Online: <https://www.gov.ie/en/press-release/97ee2-minister-ogorman-publishes-2023-state-of-the-nations-children-report/>
- Department of Education (2019) Qualifications and Quality Assurance (Education and Training) Bill 2018. Irish government publications. Online: <https://www.oireachtas.ie/en/bills/bill/2018/95/>
- Department of Education (2019). *National Strategy for Higher Education 2030*. Irish government publications. Online: <https://www.gov.ie/en/publication/072a65-national-strategy-for-higher-education-to-2030/>
- Department of Education and Skills, Ireland, (2021). *Action Plan for Education*. Irish government publications. Online: <https://www.gov.ie/en/collection/b1330-action-plan-for-education/>
- Department of Enterprise, Trade and Employment (2022). *National Smart Specialisation Strategy for Innovation 2022 – 2027*. Irish government publications. Online: <https://enterprise.gov.ie/en/publications/national-smart-specialisation-strategy-for-innovation-2022-2027.html>
- Department of Further and Higher Education, Research, Innovation and Science (2022). *Ireland's National Skills Strategy 2025 – Ireland's Future*. Irish government publications. Online: <https://www.gov.ie/en/publication/69fd2-irelands-national-skills-strategy-2025-irelands-future/>
- Department of Further and Higher Education, Research, Innovation and Science (2021). *National Research and Innovation Strategy 2021 – 2027*. Consultation paper. Irish government publications. Online: <https://www.gov.ie/en/publication/a526a-national-research-and-innovation-strategy-2021-to-2027-consultation-paper/>
- Derman-Sparks, L., & Edwards, J. O. (2010). Anti-bias education for young children and ourselves. National Association for the Education of Young Children.
- Dess, G.G., Lumpkin, G.T. and McGee, J.E., (1999). Linking corporate entrepreneurship to strategy, structure, and process: Suggested research directions. *Entrepreneurship theory and practice*, 23(3), pp.85-102.
- Dew, N., Grichnik, D., Mayer-Haug, K., Read, S., & Brinckmann, J. (2015). Situated Entrepreneurial Cognition. *International Journal of Management Reviews*, 17(2), 143–164. <https://doi.org/10.1111/ijmr.12051>
- Dew, N., Read, S., Sarasvathy, S. D., & Wiltbank, R. (2015). Entrepreneurial expertise and the use of control. *Journal of Business Venturing Insights*, 4, 30–37.
- Dewey, J. (1981). *The later works, 1925-1953*. Vol. 16. SIU Press.

- Dickson, P.H., Solomon, G.T. and Weaver, K.M., (2008). Entrepreneurial selection and success: does education matter?. *Journal of small business and enterprise development*, 15(2), pp.239-258.
- Dikilitas, K. and Erten, I (2017). Facilitating In-Service Teacher Training for Professional Development Preface. *Facilitating In-Service Teacher Training For Professional Development*.
- Do Paço, A., & Palinhas., M.J., (2011). Teaching Entrepreneurship to children: a case study. *Journal of Vocational Education and Training*, 63 (4), 593 – 608.
- Dockett, S. and Perry, B., (2007). *Transitions to school: Perceptions, expectations, experiences*. UNSW press.
- Dodd, S., Lage-Arias, S., Berglund, K., Jack, S., Hytti, U. and Verduijn, K., (2022). Transforming enterprise education: sustainable pedagogies of hope and social justice. *Entrepreneurship & Regional Development*, 34(7-8), pp.686-700.
- Draucker, C.B., Martsolf, D.S., Ross, R. and Rusk, T.B., (2007). Theoretical sampling and category development in grounded theory. *Qualitative health research*, 17(8), pp.1137-1148.
- Drucker, P. (2014). *Innovation and Entrepreneurship*. Taylor And Francis.
- Drucker, P.F., (1985). Entrepreneurial strategies. *California management review*, 27(2).
- Duignan, M. et al. (2007): Síolta, the National Quality Framework for Early Childhood Education in Ireland. *The International Journal of Learning*, (13), 17-24.
- Dunkwu, J., (2019). *Corporate governance: a strategic tool for SME sustainability?* (Doctoral dissertation, University of Plymouth).
- Dunst, C.J., Bruder, M.B. and Hamby, D.W., (2015). Metasynthesis of in-service professional development research: Features associated with positive educator and student outcomes. *Educational Research and Reviews*, 10(12), pp.1731-1744.
- Duyen, N.T., (2021). EFL Teachers' Perceptions of Information Gap Activities in Teaching Speaking and Their Reflections on the Use of These Activities in their Classrooms. *International Journal of Science and Management Studies (IJSMS)*, pp.347-359.
- Dweck, C.S. and Yeager, D.S., (2019). Mindsets: A view from two eras. *Perspectives on Psychological science*, 14(3), pp.481-496.
- Dweck, C.S., Walton, G.M. and Cohen, G.L., (2014). Academic tenacity: Mindsets and skills that promote long-term learning. *Bill & Melinda Gates Foundation*.
- Dyson, A. (2001). Special needs in the twenty-first century: Where we've been and where we're going. *British Journal of Special Education*, 28(1), 24-29. DOI: 10.1111/1467-8527.00206
- Dyson, B., (2001). Cooperative learning in an elementary physical education program. *Journal of teaching in Physical Education*, 20(3), pp.264-281.

- Earl, L.M., Katz, S. and Watson, N., (2003). *Large-scale education reform: Life cycles and implications for sustainability*. Reading: CfBT.
- Early Childhood Ireland (2023). *Early Childhood Ireland Barometer 2023*. Online: <https://www.earlychildhoodireland.ie/about/policy/childcare-barometer/childcare-barometer-2023/>
- Easterby-Smith, M., Golden-Biddle, K. and Locke, K., (2008). Working with pluralism: Determining quality in qualitative research. *Organizational Research Methods*, 11(3), pp.419-429.
- Education and Culture Executive Agency, (2016), Eurydice, Bourgeois, A., Balcon, M., Riiheläinen, J. et al., *Entrepreneurship education at school in Europe – Eurydice report*, Publications Office of the European Union, <https://data.europa.eu/doi/10.2797/301610>
- Edwards, C., Gandini, L. and Forman, G. (2012) The Hundred languages of children: the Reggio Emilia experience in transformation. *Choice Reviews Online*, 49(11), 49-6408
- Edwards, C.P. (2006). Montessori education and its scientific basis. *Journal of Applied Developmental Psychology*, 27(2), pp.183–187. doi:10.1016/j.appdev.2005.12.012
- Edwards, C.P., (2002). Three Approaches from Europe: Waldorf, Montessori, and Reggio Emilia. *Early childhood research & practice*, 4(1), p.n1.
- Egan, E.M., (2020). Inquiry-Based Emergent Curriculum using a Transdisciplinary Approach to the Visual Arts in Early Childhood Education and Care: Implications for Policy, Education and Practice. *Doctoral Thesis*.
- Eisenschmidt, E. and Oder, T., (2018). Educational Process: International Journal.
- El Khuluqo, I., (2016). *Early Childhood Entrepreneurship Education: a brief description of an ideal entrepreneurship learning for middle childhood*. The 2nd International Multidisciplinary Conference, 818 – 827.
- Elliott, S.N., Kratochwill, T.R., Littlefield Cook, J. & Travers, J. (2000). *Educational psychology: Effective teaching, effective learning (3rd ed.)*. Boston, MA: McGraw-Hill College.
- Ellis, R. and Shintani, N., (2013). *Exploring language pedagogy through second language acquisition research*. Routledge.
- Ellis, R., (2012). *Language teaching research and language pedagogy*. John Wiley & Sons.
- Epstein, A.S. and Hohmann, M. (2012). *The HighScope preschool curriculum*. Ypsilanti, Mich.: High/Scope Press, A Division Of The High/Scope Educational Research Foundation.
- Epstein, J., (2018). *School, family, and community partnerships, student economy edition: Preparing educators and improving schools*. Routledge.

- Erkkilä, K., (2000). *Entrepreneurial education: mapping the debates in the United States, the United Kingdom and Finland*. Taylor & Francis.
- Ertmer, P.A. and Newby, T.J., (2013). Behaviourism, cognitivism, constructivism: Comparing critical features from an instructional design perspective. *Performance improvement quarterly*, 26(2), pp.43-71.
- Etikan, I. (2016). Comparison of Snowball Sampling and Sequential Sampling Technique. *Biometrics & Biostatistics International Journal*, 3(1), 1–2. <https://doi.org/10.15406/bbij.2016.03.00055>
- European commission (2011). *Entrepreneurship in the EU and beyond*. Luxembourg Publications Office of the European Union, Flash Eurobarometer 354.
- European Commission Thematic Working Group on Entrepreneurship Education (2014) Final Report of the Thematic Working Group on Entrepreneurship Education, established in the framework of the Open Method of Coordination under the work programme of ET2020– Ref. Ares 4211601– 15/12/ 2014.
- European Commission (2006). *Entrepreneurship Education in Europe: Fostering Entrepreneurial Learning through Education and Learning Conference*, 26–27 October 2006. Oslo: European Commission in partnership with Government of Norway.
- European Commission, Directorate-General for Education, Youth, Sport and Culture (2019), *Key competences for lifelong learning*, Publications Office, <https://data.europa.eu/doi/10.2766/569540>
- European Commission, Executive Agency for Small and Medium-sized Enterprises, (2021), Lilischkis, S., Tømmerbakke, J., Melleri, M. et al., *A guide for fostering entrepreneurship education – Five key actions towards a digital, green and resilient Europe*, Publications Office of the European Union, <https://data.europa.eu/doi/10.2826/990680>
- European Commission/EACEA/Eurydice, (2016). *Entrepreneurship Education at School in Europe. Eurydice Report*. Luxembourg: Publications Office of the European Union (PDF)
- European Education and Culture Executive Agency, (2023), Eurydice, *Structural indicators for monitoring education and training systems in Europe – Early childhood education and care*, Publications Office of the European Union, <https://data.europa.eu/doi/10.2797/670097>
- Eurostat, (2023). *Children at risk of poverty or social exclusion*. Online publication: <https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Children at risk of poverty or social exclusion>
- Eurydice, (2015). *The Teaching Profession in Europe: Practices, Perceptions and Policies*. The European Commission.

- Falkang, J., & Alberti, F. (2000). The Assessment of Entrepreneurship Education. *Industry and Higher Education*, 14(2), 101–108. <https://doi.org/10.5367/000000000101294931>
- Fayolle, A. (2019). *A research agenda for entrepreneurship education*. Cheltenham, UK; Northampton, Ma, USA: Edward Elgar Publishing.
- Fayolle, A., (2018). Personal views on the future of entrepreneurship education. In *A research agenda for entrepreneurship education* (pp. 127-138). Edward Elgar Publishing.
- Fayolle, A., (2000). Exploratory study to assess the effects of entrepreneurship programs on French student entrepreneurial behaviours. *Journal of Enterprising Culture (JEC)*, 8(02), pp.169-184.
- Fayolle, A., (2008). Entrepreneurship education at a crossroads: Towards a more mature teaching field. *Journal of Enterprising culture*, 16(04), pp.325-337.
- Fayolle, A. and Gailly, B., (2015). The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence. *Journal of small business management*, 53(1), pp.75-93.
- Fayolle, A., Riot, P., Landström, H., Berglund, K. and Gartner, W.B., (2013). The institutionalization of entrepreneurship. Taylor & Francis.
- Fayolle, A., Verzat, C. and Wapshott, R., (2016). In quest of legitimacy: The theoretical and methodological foundations of entrepreneurship education research. *International Small Business Journal*, 34(7), pp.895-904.
- Fayolle., A, and Riot., (2016). *Rethinking Entrepreneurship: Debating research orientations*. Routledge.
- Fayolle, A. and Gailly, B., (2008). From craft to science: Teaching models and learning processes in entrepreneurship education. *Journal of European industrial training*, 32(7), pp.569-593.
- Fayolle, A. and Klandt, H., (2006). Issues and newness in the field of entrepreneurship education: new lenses for new practical and academic questions. *International entrepreneurship education*, pp.1-17.
- Fayolle, A., Gailly, B. and Lassas-Clerc, N., (2006). Assessing the impact of entrepreneurship education programmes: a new methodology. *Journal of European industrial training*, 30(9), pp.701-720.
- Featherstone, S. and Featherstone, S. (2013). *Supporting child-initiated learning : like bees, not butterflies*. Featherstone Education.
- Feeney, S., (2012). Professionalism in early childhood education: Doing our best for young children. (*No Title*).

- Ferreira, F.A., Jalali, M.S., Bento, P., Marques, C.S. and Ferreira, J.J., (2017). Enhancing individual entrepreneurial orientation measurement using a metacognitive decision making-based framework. *International Entrepreneurship and Management Journal*, 13, pp.327-346.
- Fiet, J. O. (2001). "The Pedagogical Side of Entrepreneurship Theory." *Journal of Business Venturing* 16 (2): 101–17
- Finch, J., (1987). The vignette technique in survey research. *Sociology*, 21(1), pp.105-114.
- Firestone, W. A. (1993). Alternative arguments for generalizing from data as applied to qualitative research. *Educational researcher*, 22(4), 16/23.
- Fisch, M. and Gunzenhauser, K. (2010). *The everything book for child care & preschool*. Minneapolis, Mn: Key Education Publishing.
- Fischer, D., Greven, A., Tornow, M. and Brettel, M., (2021). On the value of effectuation processes for R&D alliances and the moderating role of R&D alliance experience. *Journal of Business Research*, 135, pp.606-619.
- Fisher, J.A. (2019). *Leading or following Children's Learning? a Critical Review of Contradictory Discourses in the Role of Early Childhood Educators*. Oxford Brookes University.
- Fisher, J. (2016). *Interacting or interfering? : improving the quality of interactions in the early years*. Maidenhead: Open University Press.
- Fisher, W.W., Piazza, C.C. and Roane, H.S. eds., (2021). *Handbook of applied behaviour analysis*. Guilford Publications.
- Fleer, M. and van Oers, B., (2018). International trends in research: Redressing the north-south balance in what matters for early childhood education research. *International handbook of early childhood education*, pp.1-30.
- Flick, U. (2018). *Doing grounded theory*. Sage.
- Floris, M. and Pillitu, D., (2019). Improving entrepreneurship education in primary schools: a pioneer project. *International Journal of Educational Management*, 33(6), pp.1148-1169.
- Foliard, S., Pontois, S.L., Fayolle, A. and Diermann, I., (2018). The legitimacy of teachers in entrepreneurship education: what we can learn from a literature review. *Creating entrepreneurial space: Talking through multi-voices, reflections on emerging debates*, pp.7-23.
- Forlin, C., (2012). Diversity and its challenges for teachers. In *Future directions for inclusive teacher education* (pp. 83-92). Routledge.
- Fragkiadaki, G., Fleer, M. and Ravanis, K. (2021). Understanding the complexity of young children's learning and development in science: A twofold methodological model building on

- constructivist and cultural-historical strengths. *Learning, Culture and Social Interaction*, 28(28), p.100461. doi:10.1016/j.lcsi.2020.100461.
- Freire, C., Ferradás, M.D.M., Valle, A., Núñez, J.C. and Vallejo, G., (2016). Profiles of psychological well-being and coping strategies among university students. *Frontiers in psychology*, 7, p.216278.
- French, G., (2013). Aistear: a journey without a road map. *Childlinks*, 2013(2), pp.2-8.
- Fritsch, M., Obschonka, M. and Wyrwich, M., (2019). Historical roots of entrepreneurship-facilitating culture and innovation activity: An analysis for German regions. *Regional Studies*, 53(9), pp.1296-1307.
- Frödén, S. and von Wright, M., (2018). The Waldorf Kindergarten. *International Handbook of Early Childhood Education*, pp.1401-1420.
- Frost, J.L., Wortham, S.C. and Reifel, R.S., (2012). *Play and child development*. Boston, MA: Pearson.
- Fusch, P., Fusch, G.E. and Ness, L.R., (2018). Denzin's paradigm shift: Revisiting triangulation in qualitative research. *Journal of Sustainable Social Change*, 10(1), p.2.
- Gabrielsson, J., Hägg, G., Landström, H. and Politis, D., (2020). Connecting the past with the present: the development of research on pedagogy in entrepreneurial education. *Education+ Training*, 62(9), pp.1061-1086.
- Galloway, L. and Brown, W., (2002). Entrepreneurship education at university: a driver in the creation of high growth firms?. *Education+ training*, 44(8/9), pp.398-405.
- Galvin, R., (2015). How many interviews are enough? Do qualitative interviews in building energy consumption research produce reliable knowledge?. *Journal of Building Engineering*, 1, pp.2-12.
- Gartner, W.B., Carter, N.M. and Reynolds, P.D., (2010). Entrepreneurial behaviour: Firm organizing processes. *Handbook of entrepreneurship research: An interdisciplinary survey and introduction*, pp.99-127.
- Gartner, W.B., (1990). What are we talking about when we talk about entrepreneurship?. *Journal of Business venturing*, 5(1), pp.15-28.
- Gartner, W.B., (1988). "Who is an entrepreneur?" is the wrong question. *American journal of small business*, 12(4), pp.11-32.
- Gartner, W.B., (1985). A conceptual framework for describing the phenomenon of new venture creation. *Academy of management review*, 10(4), pp.696-706.
- Garvis, S., Phillipson, S., Harju-Luukkainen, H. and Sadownik, A.R. (2021). *Parental Engagement and Early Childhood Education Around the World*. London: Routledge

- Garvis, S., Phillipson, S. and Clarke, S. (2019). *Child development and learning*. Australia, Victoria Oxford University Press.
- Gauvain, M. (2022). *Cognitive Development In Infancy And Childhood*. S.L.: Cambridge University Press.
- Gebert, A. and Joffe, M., (2007). Value creation as the aim of education: Tsunesaburo Makiguchi and Soka education. *Ethical visions of education: Philosophies in practice*, pp.65-82.
- Gedeon, S., (2010). What is entrepreneurship. *Entrepreneurial practice review*, 1(3), pp.16-35.
- Gen, S. and Wright, A.C., 2013. Policy advocacy organizations: A framework linking theory and practice. *Journal of Policy Practice*, 12(3), pp.163-193.
- Ghaye, T. (2010) *Teaching and Learning through Reflective Practice*. 2nd Ed., London:Routledge.
- Ghina, A., Simatupang, T.M. and Gustomo, A., (2015). Building a systematic framework for entrepreneurship education. *Journal of Entrepreneurship Education*, 18(2), p.73.
- Ghina, A., Simatupang, T. M., & Gustomo, A. (2014). A Systematic Framework for Entrepreneurship Education within a University Context. *International Education Studies*, 7(12). <https://doi.org/10.5539/ies.v7n12p1>
- Gibb, A., (2008). Entrepreneurship and enterprise education in schools and colleges: Insights from UK practice. *International Journal of Entrepreneurship Education*, 6(2), p.48
- Gibb, A., (2002). In pursuit of a new ‘enterprise’ and ‘entrepreneurship’ paradigm for learning: creative destruction, new values, new ways of doing things and new combinations of knowledge. *International journal of management reviews*, 4(3), pp.233-269.
- Gibb, A., (1987). Enterprise culture—its meaning and implications for education and training. *Journal of European industrial training*, 11(2), pp.2-38.
- Gibb, A. and Hannon, P., (2006). Towards the entrepreneurial university. *International Journal of Entrepreneurship Education*, 4(1), pp.73-110.
- Gieure, C., del Mar Benavides-Espinosa, M. and Roig-Dobón, S., (2020). The entrepreneurial process: The link between intentions and behaviour. *Journal of Business Research*, 112, pp.541-548.
- Gilchrist, G., (2018). *Practitioner enquiry: Professional development with impact for teachers, schools and systems*. Routledge.
- Gillies, R.M., Ashman, A.F. and Terwel, J., (2007). The teacher’s role in implementing cooperative learning in the classroom: An introduction. *The teacher’s role in implementing cooperative learning in the classroom*, p.1.

- Gillin, L.M., (2020). Facilitating intuitive decision-making and an entrepreneurial mindset in corporate culture—a case study. In *Handbook of Intuition Research as Practice* (pp. 226-240). Edward Elgar Publishing.
- Gioia, D.A., Corley, K.G. and Hamilton, A.L., (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational research methods*, 16(1), pp.15-31.
- Glaser, B.G. (2012). Constructivist Grounded Theory? *The Grounded Theory Review*, 11(1).
- Glaser, B. G., & Strauss, A. L. (2017). *Discovery of Grounded Theory*. Routledge.
- Glaser, B.G., (1992). *Emergences. Forcing: Basics of Grounded*
- Glaser B.G. (1978). *Theoretical Sensitivity*. Sociology Press, Mill Valley, CA
- Glaser, B. G., & Strauss, A. L. (2017). *Discovery of Grounded Theory*. Routledge.
- Glaser, B. G., & Strauss, A. (1971). *Status passage: A formal theory*. Chicago, IL: Aldine
- Glaser, B. G., & Strauss, A. L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Routledge.
- Glaser, K. (2014). *Inductive or deductive? : the impact of method of instruction on the acquisition of pragmatic competence in EFL*. Cambridge Scholars Publishing.
- Glaveski, S., (2019). Where companies go wrong with learning and development. *Harvard Business Review*, 2.
- Gliner, J.A., Morgan G.A. and Leech, N.L., (2016). *Research Methods in Applied Settings: An Integrated Approach to Design and Analysis*. Third Edition. Taylor and Frances.
- Godwyn, M. (2022). *Research handbook on the sociology of organizations*. Edward Elgar Publishing.
- Gollwitzer, P.M., (1990). Action phases and mind-sets. *Handbook of motivation and cognition: Foundations of social behaviour*, 2(53-92), p.2.
- Gordon, R.A., Hofer, K.G., Fujimoto, K.A., Risk, N., Kaestner, R. and Korenman, S., (2015). Identifying high-quality preschool programs: New evidence on the validity of the Early Childhood Environment Rating Scale–Revised (ECERS-R) in relation to school readiness goals. *Early Education and Development*, 26(8), pp.1086-1110.
- Gorman, G., Hanlon, D. and King, W. (1997), “Some research perspectives on entrepreneurship education, enterprise education and education for small business management: a ten-year literature review”, *International Small Business Journal*, Vol. 15 No. 3, pp. 56-77.
- Goswami, U.C. (2004). *Blackwell Handbook of Childhood Cognitive Development*. Malden, Mass. ;Oxford: Blackwell.

- Gray L. M., Wong-Wylie G., Rempel G. R., Cook K. (2020). Expanding qualitative research interviewing strategies: Zoom video communications. *The Qualitative Report*, 25(5), 1292–1301. <https://doi-org.cit.idm.oclc.org/10.46743/2160-3715/2020.4212>
- Gray, C. and MacBlain, S. (2015). *Learning theories in childhood*. 2nd ed. London: Sage.
- Griffiths, M.D., Gundry, L.K. and Kickul, J.R., (2013). The socio-political, economic, and cultural determinants of social entrepreneurship activity: An empirical examination. *Journal of small business and enterprise Development*, 20(2), pp.341-357.
- Grivokostopoulou, F., Kovas, K. and Perikos, I., (2019). Examining the impact of a gamified entrepreneurship education framework in higher education. *Sustainability*, 11(20), p.5623.
- Gronlund, G. (2013). *Planning for play, observation, and learning in preschool and kindergarten*. St. Paul, Mn: Redleaf Press.
- Gronlund, G. (2010). *Developmentally appropriate play : guiding young children to a higher level*. St. Paul, Minn.: Redleaf Press.
- Grotewell, P.G. and Burton, Y.R., (2008). *Early childhood education: Issues and developments*. Nova Publishers
- Groundwater-Smith, S. and Campbell, A., (2013). Joining the dots: Connecting inquiry and professional learning. In *Connecting inquiry and professional learning in education* (pp. 200-206). Routledge.
- Guba, E.G. & Lincoln, Y.S. (1994), Competing Paradigms in Qualitative Research, in Denzin, N., and Lincoln, Y.S. (Eds.), *Handbook of Qualitative Research*, California: Sage.
- Guerrero, M., Urbano, D., Fayolle, A., Klofsten, M. and Mian, S., (2016). Entrepreneurial universities: emerging models in the new social and economic landscape. *Small business economics*, 47, pp.551-563.
- Guest, G., (2014). Sampling and selecting participants in field research. *Handbook of methods in cultural anthropology*, 2, pp.215-250
- Guest, G., Bunce, A. and Johnson, L., (2006). How many interviews are enough? An experiment with data saturation and variability. *Field methods*, 18(1), pp.59-82.
- Gueudet, G., (2019). Studying teachers' documentation work: Emergence of a theoretical approach. *The 'resource' approach to Mathematics Education*, pp.17-42.
- Guile, D., (2010). *The learning challenge of the knowledge economy* (Vol. 3). Brill.
- Gul, R., Tahir, T. and Ishfaq, U., (2021). Teaching as a profession, exploring the motivational factors, and the motives to stay in the field of teaching. *Ilkogretim Online*, 20(4).

- Guldberg, H. (2009). *Reclaiming childhood : freedom and play in an age of fear*. London ; New York: Routledge.
- Gunawan, S.T., Dewi, R.S. and An'asy, Z., (2020). The Impact of Teacher's Indirect Written Corrective Feedback on Eleventh Graders' Ability in Writing Explanation Texts. *IJEE (Indonesian Journal of English Education)*, 7(2), pp.201-215.
- Gunbayi, I., (2020). Knowledge-constitutive interests and social paradigms in guiding mixed methods research (MMR). *Journal of Mixed Methods Studies*, (1).
- Günzel-Jensen, F., Moberg, K., Mauer, R. and Neergaard, H., (2017). Self-efficacy and the entrepreneurial mindset revisited. *Revisiting the Entrepreneurial Mind: Inside the Black Box: An Expanded Edition*, pp.319-335.
- Gupta, A. (2015). Pedagogy of third space: A multidimensional early childhood curriculum. *Policy Futures in Education*, 13(2), pp.260–272.
- Gupta, A.K. and Govindarajan, V., (2002). Cultivating a global mindset. *Academy of Management Perspectives*, 16(1), pp.116-126.
- Guskey, T.R., (2002). Professional development and teacher change. *Teachers and teaching*, 8(3), pp.381-391.
- Guterman, E., (2003). Integrating written metacognitive awareness guidance as a ‘psychological tool’ to improve student performance. *Learning and instruction*, 13(6), pp.633-651.
- Habermas, J., (1987). Excursus on levelling the genre distinction between philosophy and literature in: *The philosophical discourse of Modernity*.
- Habidin, N.F., Salleh, M.I., Latip, N.A.M., Jusoh, O., Azman, M.N.A., Fuzi, N.M. and Ong, S.Y.Y., (2016). Kids entrepreneurship for learning and assessment systems (KELAS) for early childhood institution: critical success factor Analysis and decision-making systems. *International Journal of Academic Research in Business and Social Sciences*, 6(9), pp.399-420.
- Hagar, H. (2013). *Teacher Change in relation to Professional Development in Entrepreneurial Learning* (Doctoral Thesis), Gothenburg: University of Gothenburg.
- Hägg, G. and Kurczewska, A., (2021). Toward a learning philosophy based on experience in entrepreneurship education. *Entrepreneurship Education and Pedagogy*, 4(1), pp.4-29.
- Hägg, G. and Gabrielsson, J., (2020). A systematic literature review of the evolution of pedagogy in entrepreneurial education research. *International Journal of Entrepreneurial Behavior & Research*, 26(5), pp.829-861.

- Haile, T.S. and Ghirmai, D.J., (2024). Play-Based Learning: Benefits and Challenges of its Implementation. *ESI Preprints*, 28, pp.15-15.
- Hales, S. D. (2011). *A Companion to Relativism*. John Wiley & Sons.
- Hall, J., Sylva, K., Sammons, P., Melhuish, E., Siraj-Blatchford, I. and Taggart, B., (2013). Can preschool protect young children's cognitive and social development? Variation by centre quality and duration of attendance. *School Effectiveness and School Improvement*, 24(2), pp.155-176.
- Hall, K., Horgan, M., Ridgway, A., Cunneen, M., Cunningham, D. and David, T. (2015). *Loris Malaguzzi and the Reggio Emilia experience*. London: Bloomsbury.
- Hamilton, E., (2014). Entrepreneurial narrative identity and gender: A double epistemological shift. *Journal of Small Business Management*, 52(4), pp.703-712.
- Hammersley, M. and Atkinson, P., (2019). *Ethnography: Principles in practice*. Routledge, UK.
- Hamre, B.K. and Pianta, R.C., (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child development*, 72(2), pp.625-638.
- Handcock, M. S., & Gile, K. J. (2011). Comment: On the Concept of Snowball Sampling. *Sociological Methodology*, 41(1), 367-371. <https://doi.org/10.1111/j.1467-9531.2011.01243.x>
- Handscombe, R.D., Rodriguez-Falcon, E. and Patterson, E.A., (2008). *Embedding enterprise in science and engineering departments*. Education+ Training.
- Hansen, D.J., Monllor, J. and Shrader, R.C., (2016). Identifying the elements of entrepreneurial opportunity constructs: Recognizing what scholars are really examining. *The International Journal of Entrepreneurship and Innovation*, 17(4), pp.240-255.
- Harju-Luukkainen, H., Kangas, J. and Garvis, S. eds., (2022). *Finnish Early Childhood Education and Care: A Multi-theoretical perspective on research and practice*. Cham, Switzerland: Springer.
- Harris, K., and Vazire, S. (2016) "On friendship development and the Big Five personality traits." *Social and Personality Psychology Compass* 10, no. 11: 647-667.
- Hase, S. and Kenyon, C., (2000). From andragogy to heutagogy. *Ulti-BASE In-Site*.
- Haslip, M.J. and Gullo, D.F., (2018). The changing landscape of early childhood education: Implications for policy and practice. *Early Childhood Education Journal*, 46, pp.249-264.
- Hatlevik, O.E., Throndsen, I., Loi, M. and Gudmundsdottir, G.B., (2018). Students' ICT self-efficacy and computer and information literacy: Determinants and relationships. *Computers & Education*, 118, pp.107-119.

- Haynie, J. M., Shepherd, D., Mosakowski, E., & Earley, P. C. (2010). A situated metacognitive model of the entrepreneurial mindset. *Journal of Business Venturing*, 25(2), 217–229. <https://doi.org/10.1016/j.jbusvent.2008.10.001>
- Haynie, M. and Shepherd, D.A., (2009). A measure of adaptive cognition for entrepreneurship research. *Entrepreneurship Theory and Practice*, 33(3), pp.695-714.
- Haynie, M. and Shepherd, D.A., (2007). Exploring the entrepreneurial mindset: Feedback and adaptive decision-making. *Frontiers of Entrepreneurship Research*.
- Hébert, R.F. and Link, A.N., (2007). Historical perspectives on the entrepreneur. *Foundations and Trends® in Entrepreneurship*, 2(4), pp.261-408.
- Heckathorn, D.D., (2011). Snowball versus respondent-driven sampling. *Sociological methodology*, 41(1), pp.355-366.
- Heckman, J.J., (2012). The case for investing in young children. *Defending childhood: Keeping the promise of early education*, pp.235-242.
- Heikka, J., Hirvonen, R., Kahila, S., Pitkäniemi, H., Yada, T. and Hujala, E., (2023). Links between teachers' planning, assessment and development time and implementation of curriculum in early childhood education. *Early Years*, 43(4-5), pp.1102-1117.
- Heinonen, J. and Poikkijoki, S.A., (2006). An entrepreneurial-directed approach to entrepreneurship education: mission impossible?. *Journal of management development*, 25(1), pp.80-94.
- Hennink, M., Hutter, I., & Bailey, A. (2010). *Qualitative Research Methods*. SAGE.
- Henrich, J., Heine, S.J. and Norenzayan, A., (2010). The weirdest people in the world?. *Behavioural and brain sciences*, 33(2-3), pp.61-83.
- Henry, C., Hill, F. and Leitch, C., (2017). *Entrepreneurship education and training: the issue of effectiveness*. Routledge.
- Henry, C., Hill, F. and Leitch, C., (2005). Entrepreneurship education and training: can entrepreneurship be taught? Part I. *Education+ training*, 47(2), pp.98-111.
- Hibbert, P., (2021). *How to be a reflexive researcher*. Edward Elgar Publishing.
- Hibbert, P., Sillince, J., Diefenbach, T. and Cunliffe, A.L., (2014). Relationally reflexive practice: A generative approach to theory development in qualitative research. *Organizational research methods*, 17(3), pp.278-298.
- Higgins, D. and Elliott, C., (2011). Learning to make sense: what works in entrepreneurial education?. *Journal of European Industrial Training*, 35(4), pp.345-367.

- Hiller, J. (2016). 'Epistemological foundations of objectivist and interpretivist research', Chapter 11, in Music Therapy Research, Barcelona Publishers. <https://ecommons.udayton.edu/cgi/viewcontent.cgi?article=1054&context=books>
- Hirsh-Pasek, K., Michnick-Golinkoff, R., Berk, L.E., & Singer, D. (2009). *A mandate for Playful learning in Preschool: Presenting the Evidence*. Oxford University Press, New York.
- Hirsh-Pasek, K., & Golinkoff, R. M. (2003). Action meets word: How children learn verbs. Oxford University Press.
- Hoggan, C.D., (2016). Transformative learning as a metatheory: Definition, criteria, and typology. *Adult education quarterly*, 66(1), pp.57-75.
- Holley, J. and Gillard, S., (2018). Developing and using vignettes to explore the relationship between risk management practice and recovery-oriented care in mental health services. *Qualitative health research*, 28(3), pp.371-380.
- Holmes, A. G. D. (2020). Researcher Positionality - a Consideration of Its Influence and Place in Qualitative Research - a New Researcher Guide. *Shanlax International Journal of Education*, 8(4), 1–10. <https://doi.org/10.34293/education.v8i4.3232>
- Holzman, L., (2016). *Vygotsky at work and play*. Routledge.
- Honey, M. and Kanter, D. (2013). *Design, make, play : growing the next generation of STEM innovators*. London: Routledge
- Hoppe, M., (2016). Policy and entrepreneurship education. *Small Business Economics*, 46(1), pp.13-29.
- Hornby, G. and Greaves, D. (2022). Direct Instruction. *Essential Evidence-Based Teaching Strategies*, pp.45–62. doi:10.1007/978-3-030-96229-6_4.
- Hossain, M.I., Tabash, M.I., Siow, M.L., Ong, T.S. and Anagreh, S., (2023). Entrepreneurial intentions of Gen Z university students and entrepreneurial constraints in Bangladesh. *Journal of innovation and entrepreneurship*, 12(1), pp.1-34.
- Howell, K. E. (2012). *An Introduction to the Philosophy of Methodology*. SAGE.
- Hoy, W.K. and DiPaola, M. eds., (2008). *Improving schools: Studies in leadership and culture*. IAP.
- Hsieh, H.F. and Shannon, S.E., (2005). Three approaches to qualitative content analysis. *Qualitative health research*, 15(9), pp.1277-1288.
- Huber, L.R., Sloof, R. and Van Praag, M., (2014). The effect of early entrepreneurship education: Evidence from a field experiment. *European Economic Review*, 72, pp.76-97
- Hughes, R. and Huby, M., (2002). The application of vignettes in social and nursing research. *Journal of advanced nursing*, 37(4), pp.382-386.

- Huitt, W. and Hummel, J., (2003). Piaget's theory of cognitive development. *Educational psychology interactive*, 3(2).
- Hundt, N.E., Helm, A., Smith, T.L., Lamkin, J., Cully, J.A. and Stanley, M.A., (2018). Failure to engage: A qualitative study of veterans who decline evidence-based psychotherapies for PTSD. *Psychological services*, 15(4), p.536.
- Hussain, M.J, and Gupta, C. (2017) . "Commodifying Childhood: Early Childhood Education in Neo-liberal Regimes." *The Signage*. Vol 5 (1).
- Hynes, B. and Richardson, I., (2008). Creating an entrepreneurial mindset: getting the process right for information and communication technology students. In *Information communication technologies: Concepts, methodologies, tools, and applications* (pp. 3207-3228). IGI Global.
- Hytti, U. and O’Gorman, C., (2004). What is “enterprise education”? An analysis of the objectives and methods of enterprise education programmes in four European countries. *Education+ training*, 46(1), pp.11-23.
- Ihmeideh, F. (2014). The impact of dramatic play centre on promoting the development of children’s earlywriting skills. *European Early Childhood Education Research Journal*, 23(2), pp.250–263. doi:10.1080/1350293x.2014.970848.
- Ingleby, E., (2013). Teaching policy and practice: early years, neoliberalism and communities of practice. *Contemporary social science*, 8(2), pp.120-129.
- Ireland, R. D., Hitt, M. A., & Sirmon, D. G. (2003). A Model of Strategic Entrepreneurship: The Construct and its Dimensions. *Journal of Management*, 29(6), 963–989.
- Isaacs, B., (2018). *Understanding the Montessori approach: Early years education in practice*. Routledge.
- Isabelle, D.A., (2020). Gamification of entrepreneurship education. *Decision Sciences Journal of Innovative Education*, 18(2), pp.203-223.
- Islam, M.A. and Aldaihani, F.M.F., (2022). Justification for adopting qualitative research method, research approaches, sampling strategy, sample size, interview method, saturation, and data analysis. *Journal of International Business and Management*, 5(1), pp.01-11.
- Ismail, A. B., & Sawang, S. (2020). Entrepreneurship Education, Pedagogy and Delivery. *Contributions to Management Science*, 11(2), 1–10. https://doi.org/10.1007/978-3-030-48802-4_1
- Israr, A. and Hashim, N., (2017). Effect of experiential teaching methodology on personality
- Jalongo, M.R., (2007). *Early Childhood Language Arts*. USA: Pearson Education Inc.

- Jamieson, I. (1984). *Schools and Enterprise*, in Watts, A.G. and Moran, P. (Eds), *Education for Enterprise*
- Jans, M., (2004). Children as citizens: Towards a contemporary notion of child participation. *Childhood*, 11(1), pp.27-44.
- Jarvis, M. (2005). *Theoretical Approaches in Psychology*. Routledge.
- Jensen, H., Pyle, A., Alaca, B. and Fesseha, E. (2019). Playing with a Goal in mind: Exploring the Enactment of Guided Play in Canadian and South African Early Years Classrooms. *Early Years*, 41(5), pp.491–505. doi:10.1080/09575146.2019.1619670
- Joensuu-Salo, S., Peltonen, K., Hämäläinen, M., Oikkonen, E. and Raappana, A., (2021). Entrepreneurial teachers do make a difference—Or do they?. *Industry and Higher Education*, 35(4), pp.536-546.
- Johansson, E., Brownlee, J., Cobb-Moore, C., Boulton-Lewis, G., Walker, S. and Ailwood, J. (2011). Practices for teaching moral values in the early years: a call for a pedagogy of participation. *Education, Citizenship and Social Justice*, 6(2), pp.109–124. doi:10.1177/1746197910397914.
- John-Steiner, V. and Mahn, H., (1996). Sociocultural approaches to learning and development: A Vygotskian framework. *Educational psychologist*, 31(3-4), pp.191-206.
- Johnston, K., Hadley, F. and Waniganayake, M., (2020). Practitioner inquiry as a professional learning strategy to support technology integration in early learning centres: Building understanding through Rogoff's planes of analysis. *Professional development in education*, 46(1), pp.49-64.
- Jones, B. and Iredale, N., (2014). Enterprise and entrepreneurship education: towards a comparative analysis. *Journal of Enterprising Communities: People and Places in the Global Economy*, 8(1), pp.34-50
- Jones, B. and Iredale, N., (2010). Enterprise education as pedagogy. *Education+ training*, 52(1), pp.7-19.
- Jones, C., (2019). A signature pedagogy for entrepreneurship education. *Journal of Small Business and Enterprise Development*, 26(2), pp.243-254.
- Jones, C., Penaluna, K. and Penaluna, A., (2020). Value creation in entrepreneurial education: Towards a unified approach. *Education+ Training*, 63(1), pp.101-113.
- Jones, C., Hadley, F., Waniganayake, M. and Johnstone, M., (2019). Find your tribe! Early childhood educators defining and identifying key factors that support their workplace wellbeing. *Australasian Journal of Early Childhood*, 44(4), pp.326-338.
- Jones, C., Matlay, H., Penaluna, K. and Penaluna, A., (2014). Claiming the future of enterprise education. *Education+ Training*, 56(8/9), pp.764-775.

- Jones, C. and Matlay, H., (2011). Understanding the heterogeneity of entrepreneurship education: going beyond Gartner. *Education+ Training*, 53(8/9), pp.692-703.
- Jones, C. and English, J., (2004). A contemporary approach to entrepreneurship education. *Education+ training*, 46(8/9), pp.416-423.
- Jones, E. (2012). *The Emergence of Emergent Curriculum*. YC Young Children, 67 (2), 66 – 68. National Association for the Education of Young Children (NAEYC).
- Jones, P., Maas, G., Kraus, S. and Lloyd Reason, L., (2021). An exploration of the role and contribution of entrepreneurship centres in UK higher education institutions. *Journal of Small Business and Enterprise Development*, 28(2), pp.205-228.
- Jones, P., Maas, G., Dobson, S., Newbery, R., Agyapong, D. and Matlay, H., (2018). Entrepreneurship in Africa, part 2: Entrepreneurial education and eco-systems. *Journal of Small Business and Enterprise Development*, 25(4), pp.550-553.
- Jordan, A., Carlile, O. and Stack, A., (2008). *Approaches to learning: a guide for teachers: a guide for educators*. McGraw-Hill Education (UK).
- Kabir, M.N., (2019). *Knowledge-based social entrepreneurship: Understanding knowledge economy, innovation, and the future of social entrepreneurship*. Springer.
- Kaiser, K. (2009). Protecting respondent confidentiality in qualitative research. *Qualitative health research*, 19(11), 1632-1641.
- Kakouris, A. and Liargovas, P., (2021). On the about/for/through framework of entrepreneurship education: A critical analysis. *Entrepreneurship Education and Pedagogy*, 4(3), pp.396-421.
- Kalu, F.A. and Bwalya, J.C., (2017). What makes qualitative research good research? An exploratory analysis of critical elements. *International Journal of Social Science Research*, 5(2), pp.43-56.
- Karaca, S. and Karakoç, A.Y.Ş.E., (2022). Difficulties Experienced by a Group of Nursing Students during Pandemic Process and Their Coping Strategies: A Qualitative Research. *Clinical and Experimental Health Sciences*, 12(1), pp.169-176.
- Karaoglu, S., (2020). The importance of play in pedagogy in curriculum delivery and play provision for young children's learning and development. *Erciyes Journal of Education*, 4(2), pp.18-34.
- Karavida, V., Tympa, E. and Charissi, A. (2020). Forest Schools: An Alternative Learning Approach at the Preschool Age. *Journal of Education & Social Policy*, 7(4). doi:10.30845/jesp.v7n4p12.
- Kariv, D., (2011). *Entrepreneurship: An international introduction*. Routledge.
- Karlsson, T. and Moberg, K., (2013). Improving perceived entrepreneurial abilities through education: Exploratory testing of an entrepreneurial self-efficacy scale in a pre-post setting. *The International Journal of Management Education*, 11(1), pp.1-11.

- Kassean, H., Vanevenhoven, J., Liguori, E. and Winkel, D.E., (2015). Entrepreneurship education: a need for reflection, real-world experience and action. *International journal of Entrepreneurial Behavior & research*, 21(5), pp.690-708.
- Katz, J.A., (2003). The chronology and intellectual trajectory of American entrepreneurship education: 1876–1999. *Journal of business venturing*, 18(2), pp.283-300.
- Katz, L.G. and Chard, S.D., (1992). The Project Approach. Online: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://files.eric.ed.gov/fulltext/ED340518.pdf
- Kaushik, V. and Walsh, C.A., (2019). Pragmatism as a research paradigm and its implications for social work research. *Social sciences*, 8(9), p.255.
- Kautonen, T., Van Gelderen, M. and Tornikoski, E.T., (2013). Predicting entrepreneurial behaviour: a test of the theory of planned behaviour. *Applied economics*, 45(6), pp.697-707.
- Kavonius, M., Kuusisto, A. and Kallioniemi, A., (2015). Religious Education and tolerance in the changing Finnish society. *Religious Education Journal of Australia*, 31(1), pp.18-24.
- Keenan, T. and Evans, S. (2016). *An introduction to child development*. Los Angeles, Calif. U.A.: Sage.
- Kell, H. J. (2019). Do Teachers' Personality Traits Predict Their Performance? A Comprehensive Review of the Empirical Literature From 1990 to 2018. *ETS Research Report Series*. <https://doi.org/10.1002/ets2.12241>
- Kellaghan, T., and Stufflebeam, D.L. (2003). *International Handbook of Educational Evaluation, Part One: Perspectives/Part Two: Practice* (Vol. 9). Springer Science & Business Media.
- Keränen-Pantsu, R. and Heikkinen, H., (2019). Pedagogical purposes of narratives in worldview education: Teachers' conceptions. *International Journal of Learning, Teaching and Educational Research*, 18(5), pp.58-72.
- Kerr, Sari Pekkala, William R. Kerr, and Tina Xu, (2018). Personality traits of entrepreneurs: A review of recent literature. *Foundations and Trends® in Entrepreneurship* 14, no. 3: 279-356.
- Khan, K., Tahir, T. and Aurangzeb, W., (2019). Effects of early childhood education on students' academic achievement in science at elementary school level. *JECCE*, 3.
- Khan, S. N. (2014). Qualitative research method: Grounded theory. *International Journal of Business and Management*, 9(11), 224-233. <http://dx.doi.org/10.5539/ijbm.v9n11p224>
- Khanal, K.P., (2020). Exploring Dimensions of Accountability in Community Schools: A constructivist grounded theory inquiry. *European Bulletin of Himalayan Research*, (54), pp.96-98.

- Khanal, K. P. (2019). Constructivist Grounded Theory Practice in Accountability Research. *Journal of Education and Research*, 8(1), 61–88. <https://doi.org/10.3126/jer.v8i1.25480>
- Kimmit, J. and Muñoz, P., (2018). Sensemaking the ‘social’ in social entrepreneurship. *International Small Business Journal*, 36(8), pp.859-886.
- Kirk, J., & Miller, M. L. (1986). *Reliability and validity in qualitative research*. Newbury Park, Calif. Sage.
- Kirova, A. and Hennig, K., (2013). Culturally responsive assessment practices: Examples from an intercultural multilingual early learning program for newcomer children. *Power and Education*, 5(2), pp.106-119.
- Kirzner, Israel M. (1973). *Competition and Entrepreneurship*. Chicago: University of Chicago Press.
- Klapper, R.G., Upham, P. and Blundel, R.K., (2021). Insider perspectives on growth: Implications for a non-dichotomous understanding of ‘sustainable’ and conventional entrepreneurship. *Business Strategy and the Environment*, 30(3), pp.1481-1496.
- Klenke, K., Martin, S., & Wallace, J. R. (2015). *Qualitative research in the study of leadership*. Emerald Publishing.
- Knight, F.H., (1921). Cost of production and price over long and short periods. *Journal of political economy*, 29(4), pp.304-335.
- Knight, J, (2009). What can we do about teacher resistance?. *Phi Delta Kappan* 90, no. 7: 508-513.
- Knight, M.G. and Watson, V.W., (2014). Toward participatory communal citizenship: Rendering visible the civic teaching, learning, and actions of African immigrant youth and young adults. *American Educational Research Journal*, 51(3), pp.539-566.
- Knowles, M.S., 1980. From pedagogy to andragogy. *Religious Education*.
- Köhler, T., Smith, A. and Bhakoo, V., (2022). Templates in qualitative research methods: Origins, limitations, and new directions. *Organizational Research Methods*, 25(2), pp.183-210.
- Kolb, D.A., 2014. *Experiential learning: Experience as the source of learning and development*. FT press
- Komulainen, K., Naskali, P., Korhonen, M. and Keskitalo-Foley, S., (2011). Internal Entrepreneurship-a Trojan horse of the neoliberal governance of education? Finnish pre-and in-service teachers' implementation of and resistance towards entrepreneurship education. *Journal for Critical Education Policy Studies (JCEPS)*, 9(1).
- Koralek, D., Nemeth, K. and Ramsey, K., 2019. *Families+ Educators: Building Great Relationships*. National Association for the Education of Young Children.

- Korte, R., 2018. Identifying as an Entrepreneur: A Social Identity Perspective of the Entrepreneurial Mindset. *Advances in Engineering Education*, 7(1), p.n1.
- Kostelnik, M. (2008). *Teaching Young Children Using Themes*. Good Year Books.
- Kothari, C. R. (2004). *Research Methodology : Methods and Techniques*. New Age International.
- Kouakou, K.K.E., Li, C., Akolgo, I.G. and Tchamekwen, A.M., 2019. Evolution view of entrepreneurial mindset theory. *International Journal of Business and Social Science*, 10(6), pp.116-129.
- Kourilsky, M.L. and Walstad, W.B. (1998). Entrepreneurial attitudes and knowledge of Black youth. *Entrepreneurship Theory and Practice*, Vol. 23 No. 2, pp. 5-18.
- Kraus, S., Roig-Tierno, N. and Bouncken, R.B., (2019). Digital innovation and venturing: an introduction into the digitalization of entrepreneurship. *Review of Managerial Science*, 13(3), pp.519-528.
- Krueger, N. and Sussan, F., (2017). Person-level entrepreneurial orientation: clues to the entrepreneurial mindset?. *International Journal of Business and Globalisation*, 18(3), pp.382-395.
- Kuhn, D., & Dean, Jr., D. (2004). Metacognition: A Bridge Between Cognitive Psychology and Educational Practice. *Theory into Practice*, 43(4), 268–273.
- Kuhn, T.S., (2012). *The structure of scientific revolutions*. University of Chicago press.
- Kumar, S. and Das, S., (2019). An extended model of theory of planned behaviour: Entrepreneurial intention, regional institutional infrastructure and perceived gender discrimination in India. *Journal of Entrepreneurship in Emerging Economies*, 11(3), pp.369-391.
- Kuosa, T. (2011). Evolution of future studies. *Futures*. 43 (2011), 327-336
- Kuratko, D. F., & Hodgetts, R. M. (1998). *Entrepreneurship : a contemporary approach*. Fort Worth :Dryden Press.
- Kuratko, D.F., (2005). The emergence of entrepreneurship education: Development, trends, and challenges. *Entrepreneurship theory and practice*, 29(5), pp.577-597.
- Kuratko, D.F., Fisher, G. and Audretsch, D.B., (2021). Unravelling the entrepreneurial mindset. *Small Business Economics*, 57(4), pp.1681-1691.
- Kuratko, D. F., Fisher, G., & Audretsch, D. B. (2020). Unravelling the entrepreneurial mindset. *Small Business Economics*, 57(4). <https://doi.org/10.1007/s11187-020-00372-6>
- Kuratko, D.F., Morris, M.H. and Schindehutte, M., (2015). Understanding the dynamics of entrepreneurship through framework approaches. *Small Business Economics*, 45, pp.1-13.

- Kusio, T. and Fiore, M., (2020). The perception of entrepreneurship culture by internal university stakeholders. *European Business Review*, 32(3), pp.443-457.
- Lackéus, M., (2020). Comparing the impact of three different experiential approaches to entrepreneurship in education. *International Journal of Entrepreneurial Behavior & Research*, 26(5), pp.937-971.
- Lackéus, M., (2018). “What is Value?”—A framework for analysing and facilitating entrepreneurial value creation. *Uniped*, 41(1), pp.10-28.
- Lackéus, M. (2015). Entrepreneurship in education: What, why, when, how. *Entrepreneurship* 360
- Lackéus, M., (2013). *Developing entrepreneurial competencies. An action-based approach and classification in entrepreneurial education*. Chalmers University of Technology, Gothenburg.
- Lackéus, M., Lundqvist, M. and Middleton, K.W., (2015), April. Opening up the black box of entrepreneurial education. In *3E Conference* (pp. 23-24).
- Lahiri, A. and Wadhwa, A., (2021). When do serial entrepreneurs found innovative ventures? Evidence from patent data. *Small Business Economics*, 57(4), pp.1973-1993.
- Lambrechts, F., Grieten, S., Bouwen, R. and Corthouts, F., (2009). Process consultation revisited: Taking a relational practice perspective. *The Journal of Applied behavioural Science*, 45(1), pp.39-58.
- Lancaster, G. (2005). *Research Methods in Management: A Concise Introduction to Research in Management and Business Consultancy*. Oxford: Butterworth-Heinemann.
- Landstrom, H., (2007). *Pioneers in entrepreneurship and small business research* (Vol. 8). Springer Science & Business Media.
- Lapan, S. D., Quartaroli, M. T., & Riemer, F. J. (2011). *Qualitative Research : an Introduction to Methods and Designs*. Wiley.
- Larimore, R.A. (2020). Preschool Science Education: A Vision for the Future. *Early Childhood EducationJournal*. doi:10.1007/s10643-020-01033-9.
- Larios-Hernandez, G.J., Walmsley, A. and Lopez-Castro, I., (2022). Introduction: The ‘Why’, the ‘What’ and the ‘How’ of Entrepreneurship Education. In *Theorising Undergraduate Entrepreneurship Education: Reflections on the Development of the Entrepreneurial Mindset* (pp. 1-12). Cham: Springer International Publishing.
- Larsen, I.B. and Neergaard, H., (2024). What lies beneath: using student reflections to study the entrepreneurial mindset in entrepreneurship education. *International Journal of Entrepreneurial Behavior & Research*, 30(5), pp.1149-1176.

- Larsen, I.B., (2022). Fostering an entrepreneurial mindset: A typology for aligning instructional strategies with three dominant entrepreneurial mindset conceptualizations. *Industry and Higher Education*, 36(3), pp.236-251.
- Laspita, S., Breugst, N., Heblich, S. and Patzelt, H., (2012). Intergenerational transmission of entrepreneurial intentions. *Journal of business venturing*, 27(4), pp.414-435.
- Lauridsen, E.I. and Higginbottom, G., (2014). The roots and development of constructivist grounded theory. *Nurse researcher*, 21(5).
- Laveren, E., Blackburn, R., Hytti, U. and Landström, H., (2019). Introduction: rigour and relevance in European entrepreneurship research. In *Rigour and Relevance in Entrepreneurship Research, Resources and Outcomes* (pp. 1-7). Edward Elgar Publishing.
- Learning and Teaching Scotland (2010). Curriculum for Excellence through Outdoor Play. Online: <https://education.gov.scot/media/isxg4lb0/cfe-through-outdoor-learning.pdf>
- Leavy, P. (2020). *The Oxford Handbook of Qualitative Research*. Oxford University Press.
- Lee, Y., Cortes, A. F., & Joo, M. (2021). Entrepreneurship Education and Founding Passion: The Moderating Role of Entrepreneurial Family Background. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.743672>
- Leffler, E. and Falk-Lundqvist, Å., (2014). What about students' right to the "right" education? An entrepreneurial attitude to teaching and learning. In *International Educational Innovation and Public Sector Entrepreneurship* (pp. 191-208). Emerald Group Publishing Limited.
- Leffler, E., Svedberg, G. and Botha, M., (2010). A global entrepreneurship wind is supporting or obstructing democracy in schools: A comparative study in the North and the South. *Education Inquiry*, 1(4), pp.309-328.
- Leitch, C. M., Hill, F. M., & Harrison, R. T. (2010). The philosophy and practice of interpretivist research in entrepreneurship: Quality, validation, and trust. *Organisational Research Methods*, 13(1), 67-84. <http://doi.org/10.1177/1094428109339839>
- Levac, D., Colquhoun, H. and O'Brien, K.K., (2010). Scoping studies: advancing the methodology. *Implementation science*, 5(1), pp.1-9.
- Levitt, H. M. (2021). *Essentials of Critical-Constructivist Grounded Theory Research*. American Psychological Association.
- Lewis, S., Passmore, J. and Cantore, S., (2016). *Appreciative inquiry for change management: Using AI to facilitate organizational development*. Kogan Page Publishers.
- Liebschner, J. (2006). *A child's work : freedom and play in Froebel's educational theory and practice / monograph*. Cambridge, England: Lutterworth Press.

- Ligozat, F. and Almqvist, J., (2018). Conceptual frameworks in didactics—learning and teaching: Trends, evolutions and comparative challenges. *European Educational Research Journal*, 17(1), pp.3-16.
- Lillard, A.S. (2012). Preschool children’s development in classic Montessori, supplemented Montessori, and conventional programs. *Journal of School Psychology*, 50(3), pp.379–401. doi:10.1016/j.jsp.2012.01.001.
- Lincoln, Y.S., Lynham, S.A. and Guba, E.G., (2011). Paradigmatic controversies, contradictions, and emerging confluences, revisited. *The Sage handbook of qualitative research*, 4(2), pp.97-128.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Sage Publications.
- Linder, S.M. and Emerson, A., (2019). Increasing family mathematics play interactions through a take-home math bag intervention. *Journal of Research in Childhood Education*, 33(3), pp.323-344.
- Lindner, J., (2019). Entrepreneurial spirit for the whole school—ways to become an ee si-Entrepreneurship School. *Discourse and Communication for Sustainable Education*, 10(2), pp.5-12.
- Lindner, J., (2018). Entrepreneurship education for a sustainable future. *Discourse and Communication for Sustainable Education*, 9(1), pp.115-127.
- Lindqvist, H. and Forsberg, C., (2023). Constructivist grounded theory and educational research: constructing theories about teachers’ work when analysing relationships between codes. *International Journal of Research & Method in Education*, 46(2), pp.200-210.
- Lindström, L., (2013). What Do Children Learn at Swedish Preschools?. *International Education Studies*, 6(4), pp.236-250.
- Linton, G. and Klinton, M., (2019). University entrepreneurship education: a design thinking approach to learning. *Journal of innovation and Entrepreneurship*, 8(1), pp.1-11.
- Linton, J.D. and Xu, W., (2021). Research on science and technological entrepreneurship education: What needs to happen next?. *The Journal of Technology Transfer*, 46, pp.393-406
- Livesey, C. (2014). *Cambridge International AS and A level sociology. Coursebook*. Cambridge University Press.
- Löbler, H., (2006). Learning entrepreneurship from a constructivist perspective. *Technology analysis & strategic management*, 18(1), pp.19-38.
- Locke, K. (2008). *Grounded theory in management research*. Sage Publications.
- Lofland, J. and Lofland, L.H., (1995). Developing analysis. *Analysing social setting*, pp.183-203.

- Loi, M., Fayolle, A., van Gelderen, M., Riot, E., Refai, D., Higgins, D., Haloub, R., Salusse, M.A.Y., Lamy, E., Verzat, C. and Cavarretta, F., (2022). Entrepreneurship education at the crossroads: challenging taken-for-granted assumptions and opening new perspectives.
- Lombardi, R., Tiscini, R., Trequattrini, R. and Martiniello, L., (2021). Strategic entrepreneurship: Personal values and characteristics influencing SMEs' decision-making and outcomes. The Gemar Balloons case. *Management Decision*, 59(5), pp.1069-1084.
- Lundström, A., Almerud, M. and Stevenson, L., (2008). Entrepreneurship and Innovation Policies. *Analysing Measuring in European Countries*.
- Lynch, M., Kamovich, U., Andersson, G. and Steinert, M., (2017). The Language of successful entrepreneurs: an empirical starting point for the entrepreneurial mindset. In *European Conference on Innovation and Entrepreneurship* (pp. 384-391). Academic Conferences International Limit
- Lyotard, J.F., (1984). *The postmodern condition: A report on knowledge* (Vol. 10). U of Minnesota Press.
- Maas, G. and Jones, P., (2015). An Overview of Systemic Entrepreneurship. *Systemic entrepreneurship: Contemporary issues and case studies*, pp.1-21.
- Mabagala, S. and Mabagala, D.L., (2012). The importance of play during childhood: the lesson for care givers, parents and pre-schools in Tanzania. *Huria: Journal of the Open University of Tanzania*, 11, pp.111-126.
- Mac Naughton, G. and Williams, G., (2008). *Teaching Young Children: Choices In Theory And Practice: Choices in Theory and Practice*. McGraw-Hill Education (UK).
- MacBlain, S., (2018). Hidden childhoods: the unseen challenges facing professionals in schools today. In *Thriving as a Professional Teacher* (pp. 83-98). Routledge.
- MacBlain, S. and Gray, C., (2015). Learning theories in childhood. *Learning Theories in Childhood*, pp.1-240.
- MacDonald, M., (2015). Early childhood education and sustainability: A living curriculum. *Childhood Education*, 91(5), pp.332-341.
- Machado, C., & Davim, J. P. (2020). *Research methodology in management and industrial engineering*. Springer.
- Macnaughton, G. (2003). *Shaping early childhood : learners, curriculum and contexts*. Maidenhead: OpenUniversity Press.
- Mahieu, R., (2006). *Agents of change and policies of scale: a policy study of entrepreneurship and enterprise in education* (Doctoral dissertation, Svenska och samhällsvetenskapliga ämnen).

- Maitlo, A.A., Memon, S.B. and Kumar, M., (2020). The mediating role of networking orientation between entrepreneurial personality characteristics and entrepreneurial intentions. *Advances in Business-Related Scientific Research Journal*, 11(1), pp.48-65.
- Mäkimurto-Koivumaa, S. and Belt, P., (2016). About, for, in or through entrepreneurship in engineering education. *European Journal of Engineering Education*, 41(5), pp.512-529.
- Manning, M., Wong, G.T., Fleming, C.M. and Garvis, S., (2019). Is teacher qualification associated with the quality of the early childhood education and care environment? A meta-analytic review. *Review of Educational Research*, 89(3), pp.370-415.
- Marcon, R.A., (1999). Positive relationships between parent school involvement and public-school inner-city preschoolers' development and academic performance. *School psychology review*, 28(3), pp.395-412.
- Marcus, B., Weigelt, O., Hergert, J., Gurt, J. and Gelléri, P., (2017). The use of snowball sampling for multi-source organizational research: Some cause for concern. *Personnel Psychology*, 70(3), pp.635-673.
- Maritz, A. and Brown, C.R., (2013). Illuminating the black box of entrepreneurship education programs. *Education + Training*, 55(3), pp.234-252.
- Marotz, L., (2021). *Early Childhood Leadership: Motivation, Inspiration, Empowerment*. Rowman & Littlefield.
- Martínez-Gregorio, S., Badenes-Ribera, L. and Oliver, A., (2021). Effect of entrepreneurship education on entrepreneurship intention and related outcomes in educational contexts: A meta-analysis. *The International Journal of Management Education*, 19(3), p.100545.
- Martyniuk, O.J., Tucker, P. (2014) An exploration of Early Childhood Education students' knowledge and preparation to facilitate physical activity for preschoolers: a cross-sectional study. *BMC Public Health* 14, 727 <https://doi.org/10.1186/1471-2458-14-727>
- Marzano, R.J. and Marzano, J.S., (2003). The key to classroom management. *Educational leadership*, 61(1), pp.6-13.
- Mashford-Scott, A., (2011). How can early childhood educators promote children's agency?. *Every Child*, 17(4), pp.22-23.
- Mathisen, J.E. and Arnulf, J.K., (2013). Competing mindsets in entrepreneurship: The cost of doubt. *The International Journal of Management Education*, 11(3), pp.132-141.
- Matlay, H., (2006). Researching entrepreneurship and education: Part 2: what is entrepreneurship education and does it matter?. *Education+ Training*, 48(8/9), pp.704-718.

- Matlay, H., (2008). The impact of entrepreneurship education on entrepreneurial outcomes. *Journal of small business and enterprise development*, 15(2), pp.382-396
- Mauer, R., Neergaard, H. and Linstad, A.K., (2017). Self-efficacy: Conditioning the entrepreneurial mindset. *Revisiting the Entrepreneurial Mind: Inside the Black Box: An Expanded Edition*, pp.293-317.
- Maynard, T. and Waters, J., (2007). Learning in the outdoor environment: a missed opportunity?. *Early years*, 27(3), pp.255-265.
- Mazzarol, T., and Reboud, S., (2020). Entrepreneurship as a social and economic process. *Entrepreneurship and Innovation: Theory, Practice and Context*, pp.1-34.
- McCaig, C., & Dahlberg, L. (2010). *Practical research and evaluation : a start-to-finish guide for practitioners*. SAGE.
- McDaniel, B.A., (2014). *Entrepreneurship and Innovation: An Economic Approach: An Economic Approach*. Routledge.
- McGrath, R.G. and MacMillan, I.C., (2000). *The entrepreneurial mindset: Strategies for continuously creating opportunity in an age of uncertainty* (Vol. 284). Harvard Business Press.
- McGuigan, P.J., (2016). Practicing what we preach: Entrepreneurship in entrepreneurship education. *Journal of Entrepreneurship Education*, 19(1), p.38.
- McMonagle, A. (2012) Professional Pedagogy Project. Professional Pedagogy for Early Childhood Education - Supporting Every Child's Right to Early Education. National Early Years Association Initiative (NEYAI). Donegal County Childcare Committee Ltd (DCCC).
- McMullan, W.E. and Long, W.A., (1987). Entrepreneurship education in the nineties. *Journal of Business Venturing*, 2(3), pp.261-275.
- McNally, J.J., Honig, B. and Martin, B., (2018). Does entrepreneurship education develop wisdom? An exploration. *A research agenda for entrepreneurship education*, pp.81-102.
- McNally, S.A. and Slutsky, R. (2016). Key elements of the Reggio Emilia approach and how they are interconnected to create the highly regarded system of early childhood education. *Early Child Development and Care*, 187(12), pp.1925–1937. doi:10.1080/03004430.2016.1197920.
- Mehmood, T., Alzoubi, H.M. and Ahmed, G., (2019). Schumpeterian entrepreneurship theory: Evolution and relevance. *Academy of Entrepreneurship Journal*, 25(4).
- Meijer, C. and Watkins, A., (2016). Changing conceptions of inclusion underpinning education policy. *In Implementing inclusive education: Issues in bridging the policy-practice gap* (Vol. 8, pp. 1-16). Emerald Group Publishing Limited.

- Meloy, B. and Schachner, A., (2019). Early Childhood Essentials: A Framework for Aligning Child Skills and Educator Competencies. *Learning Policy Institute*.
- Merriam, S.B., (2018). Adult learning theory: Evolution and future directions. In *Contemporary theories of learning* (pp. 83-96). Routledge.
- Mezirow, J. and Taylor, E.W. eds., (2009). *Transformative learning in practice: Insights from community, workplace, and higher education*. John Wiley & Sons.
- Mezirow, J., (1991). *Transformative dimensions of adult learning*. Jossey-Bass, 350 Sansome Street, San Francisco, CA 94104-1310.
- Michalopoulou, A. (2014). Inquiry-Based Learning through the Creative Thinking and Expression in Early Years Education. *Creative Education*, 05(06), pp.377–385. doi:10.4236/ce.2014.56047.
- Miedema, S. and Bertram-Troost, G., (2015). The challenges of global citizenship for worldview education. The perspective of social sustainability. *Journal of Teacher Education for Sustainability*, 17(2), pp.44-52.
- Mielonen, A. and Paterson, W. (2009). Developing Literacy through Play. *Journal of Inquiry & Action in Education*, 3(1).
- Mikk, J., Veisson, M. and Luik, P. eds., (2010). *Teacher's personality and professionalism* (Vol. 2). Peter Lang.
- Milena, Z.R., Dainora, G. and Alin, S., (2008). Qualitative research methods: A comparison between focus-group and in-depth interview. *Analele Universității din Oradea*, p.1274.
- Miller, R.C., (2019). Is entrepreneurship a virtue?. *Economic Affairs*, 39(2), pp.197-215.
- Mills, G. E., Gay, L. R., & Airasian, P. W. (2014). *Educational research : competencies for analysis and applications*. Pearson.
- Mills, J., Bonner, A. and Francis, K., (2006). Adopting a constructivist approach to grounded theory: Implications for research design. *International Journal of nursing practice*, 12(1), pp.8-13.
- Mills, J., Bonner, A., & Francis, K. (2006). The Development of Constructivist Grounded Theory. *International Journal of Qualitative Methods*, 5(51), 25-35. <https://doi.org/10.1177/160940690600500103>
- Misra, R.K. and Mishra, P., (2016). Entrepreneurial attitude orientation and employability: mediating role of entrepreneurial personality. *International Journal of Management Practice*, 9(1), pp.74-92.
- Mitchell, R.K., Busenitz, L.W., Bird, B., Marie Gaglio, C., McMullen, J.S., Morse, E.A. and

- Mitchelmore, S. and Rowley, J., (2010). Entrepreneurial competencies: a literature review and development agenda. *International journal of entrepreneurial Behavior & Research*, 16(2), pp.92-111.
- Mittal, A., Malik, P. and Singh, H., (2016). Entrepreneurship Profile of Students of Higher Education. *International Journal of Latest Technology in Engineering & Management (IJLTEM)*. Volume 1, Issue 1, PP 23-26
- Moberg, K., (2014). Two approaches to entrepreneurship education: The different effects of education for and through entrepreneurship at the lower secondary level. *The International Journal of Management Education*, 12(3), pp.512-528.
- Moberg, K., (2014). *Assessing the impact of entrepreneurship education: From ABC to PhD*. Frederiksberg: Copenhagen Business School (CBS).
- Mohamed, M., Rashid, R.A. and Alqaryouti, M.H., (2022). Conceptualizing the complexity of reflective practice in education. *Frontiers in psychology*, 13, p.1008234.
- Moloney, M. (2018). *Early Childhood Education Management : insights into businesspractice and leadership*. S.L.: Routledge.
- Montessori, M., (2013). *The Montessori method*. Transaction publishers.
- Moon, K. and Blackman, D., (2014). A guide to understanding social science research for natural scientists. *Conservation biology*, 28(5), pp.1167-1177.
- Morgan, D.L., (2007). Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods. *Journal of mixed methods research*, 1(1), pp.48-76.
- Morris, M. H., & Liguori, E. (2017). *Annals of entrepreneurship education and pedagogy - 2016*. EdwardElgar Publishing.
- Morris, M., Schindehutte, M., & Allen, J. (2005). The entrepreneur's business model: toward a unifiedperspective. *Journal of Business Research*, 58(6), 726–735.
- Morris, N. M., Kuratko, D. F., & Pryor, C. G. (2013). Building Blocks for the Development of University- Wide Entrepreneurship. *Entrepreneurship Research Journal*, 4(1). <https://doi.org/10.1515/erj-2013-0047>
- Morrison, G.S. (2017). *Early childhood education today*. Boston: Pearson
- Morrison, T.L., (2015). Using visual Vignettes: my learning to date. *The Qualitative Report*, 20(4), p.359.
- Morse, J.M., (2015). Critical analysis of strategies for determining rigor in qualitative inquiry. *Qualitative health research*, 25(9), pp.1212-1222.

- Morse, J. M. (2004). Theoretical saturation. In M. S. Lewis-Beck, A. Bryman, & T. F. Liao (Eds.), *The Sage encyclopaedia of social science research methods* (p. 1123). Thousand Oaks, CA: Sage. <http://sk.sagepub.com/reference/download/socialscience/n1011.pdf>
- Morse, J.M. and Cheek, J., (2014). Making room for qualitatively-driven mixed-method research. *Qualitative Health Research*, 24(1), pp.3-5.
- Morselli, D., (2019). *The change laboratory for teacher training in entrepreneurship education: A new skills agenda for Europe* (p. 143). Springer Nature.
- Moses, Chinonye, Oludayo Olumuyiwa, Akinbode Mosunmola, and Agboola Mayowa, (2015). Entrepreneurship education and poverty alleviation: Impact analysis of Covenant University Graduate between 2006-2013. *development* 6, no. 14: 4.
- Moss, P., (2007). Bringing politics into the nursery: Early childhood education as a democratic practice. *European Early Childhood Education Research Journal*, 15(1), pp.5-20.
- Mowder, B.A., Rubinson, F. and Yasik, A.E. (2009). *Evidence-based practice in infant and earlychildhood psychology*. Hoboken, N.J.: John Wiley & Sons.
- Mozahem, N.A. and Adlouni, R.O., (2021). Using entrepreneurial self-efficacy as an indirect measure of entrepreneurial education. *The International Journal of Management Education*, 19(1), p.100385.
- Muhajirah, M., (2020). Basic of learning theory:(behaviourism, cognitivism, constructivism, and humanism). *International Journal of Asian Education*, 1(1), pp.37-42.
- Mukhalalati, B.A. and Taylor, A., (2019). Adult learning theories in context: a quick guide for healthcare professional educators. *Journal of medical education and curricular development*, 6, p.2382120519840332.
- Mukherji, P., & Albon, D. (2022). *Research Methods in Early Childhood*. SAGE.
- Mulder, M., (2017). Competence and the Alignment of Education and Work. *Competence-based Vocational and Professional Education: Bridging the Worlds of Work and Education*, pp.229-251.
- Mulford, B., (2003). *School leaders: Changing roles and impact on teacher and school effectiveness* (pp. 1-58). Education and Training Policy Division, OECD.
- Murphy, B., (2006). Child-centred practice in Irish infant classrooms: A case of imaginary play?. *International Journal of Early Childhood*, 38, pp.112-124.
- Myers, M. D. (2009). *Qualitative research in business & management*. Thousand Oak, CA: Sage

- Nabi, G., Liñán, F., Fayolle, A., Krueger, N. and Walmsley, A., (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Academy of management learning & education*, 16(2), pp.277-299.
- Naderifar, M., Goli, H., & Ghaljaie, F. (2017). Snowball sampling: a Purposeful Method of Sampling in Qualitative Research. *Strides in Development of Medical Education*, 14(3). ResearchGate. <https://doi.org/10.5812/sdme.67670>
- Nath, B., (2009). Formal Environmental Education At Preschool, Primary, And Secondary Levels. *Environmental Education and Awareness-Volume I*, p.72.
- National Research Council (2000). *How People Learn: Brain, Mind, Experience, and School: Expanded Edition*. [online] nap.nationalacademies.org. The National Academies Press (NAP). Available at:<https://nap.nationalacademies.org/catalog/9853/how-people-learn-brain-mind-experience-and-school-expanded-edition>.
- Natow, R.S., (2020). The use of triangulation in qualitative studies employing elite interviews. *Qualitative research*, 20(2), pp.160-173.
- Naumann, C., (2017). Entrepreneurial mindset: A synthetic literature review. *Entrepreneurial Business and Economics Review*, 5(3), pp.149-172.
- NCCA (2009). *Aistear – The Early Childhood Curriculum Framework*. National Council for Curriculum and Assessment. Online: <https://ncca.ie/en/resources/aistear-the-early-childhood-curriculum-framework/>
- NCCA (2009b). *Aistear: the Early Childhood Curriculum Framework*. Consultation Review. Online: <https://ncca.ie/en/updates-and-events/latest-news/2023/october/phase-2-consultation-for-updating-aistear/>
- Ndou, V., Mele, G., & Del Vecchio, P. (2019). Entrepreneurship education in tourism: An investigation among European Universities. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 25(25)
- Neck, C.P., Manz, C.C. and Houghton, J.D., (2019). *Self-leadership: The definitive guide to personal excellence*. Sage Publications.
- Neck, C.P. and Houghton, J.D., (2006). Two decades of self-leadership theory and research: Past developments, present trends, and future possibilities. *Journal of managerial psychology*, 21(4), pp.270-295.
- Neck, C.P. and Manz, C.C., (1996). Thought self-leadership: The impact of mental strategies training on employee cognition, behaviour, and affect. *Journal of organizational behaviour*, 17(5), pp.445-467.

- Neck, H., Greene, P., & Brush, C. (2014). *Teaching Entrepreneurship*. Edward Elgar Publishing.
<https://doi.org/10.4337/9781782540564>
- Neck, H.M. and Greene, P.G., (2011). Entrepreneurship education: known worlds and new frontiers. *Journal of small business management*, 49(1), pp.55-70.
- Neergaard, H., Robinson, S. and Jones, S., (2020). Transformative learning in the entrepreneurship education process: the role of pedagogical nudging and reflection. *International Journal of Entrepreneurial Behavior & Research*.
- Neuman, D., (2014). Qualitative research in educational communications and technology: A brief introduction to principles and procedures. *Journal of Computing in Higher Education*, 26, pp.69-86.
- Neuman, W. L. (2011). *Social Research Methods: Qualitative and Quantitative Approaches*. USA: Allyn and Bacon
- New Zealand Ministry of Education (2017). Te Whāriki Early Childhood Curriculum. Online: <https://education.govt.nz/assets/Documents/Early-Childhood/ELS-Te-Whāriki-Early-Childhood-Curriculum-ENG-Web.pdf>
- Newman, A., Obschonka, M., Schwarz, S., Cohen, M. and Nielsen, I., (2019). Entrepreneurial self-efficacy: A systematic review of the literature on its theoretical foundations, measurement, antecedents, and outcomes, and an agenda for future research. *Journal of vocational behaviour*, 110, pp.403-419.
- Noddings, N., (2013). Freire, Buber, and care ethics on dialogue in teaching. *Paulo freire's intellectual roots: Towards historicity in Praxis*, pp.89-94.
- Nordlund, C., (2013). Waldorf education: Breathing creativity. *Art Education*, 66(2), pp.13-19.
- Novikov, A.M. & Novikov, D.A. (2013) '*Research Methodology: From Philosophy of Science to Research Design*'. CRC Press
- Nowiński, W., Haddoud, M.Y., Lančarič, D., Egerová, D. and Czeglédi, C., (2019). The impact of entrepreneurship education, entrepreneurial self-efficacy and gender on entrepreneurial intentions of university students in the Visegrad countries. *Studies in Higher Education*, 44(2), pp.361-379
- Noy, C. (2008). Sampling Knowledge: The Hermeneutics of Snowball Sampling in Qualitative Research. *International Journal of Social Research Methodology*, 11(4), 327–344.
- Nxumalo, F., Gagliardi, L.-M. and Won, H.R. (2020). Inquiry-Based Curriculum in Early Childhood Education. *Oxford Research Encyclopaedia of Education*.

- O'Connell, M., Fox, S., Hinz, B. and Cole, H., (2016). Quality early education for all: Fostering creative, entrepreneurial, resilient and capable learners.
- O'Connor, A. (2013). A conceptual framework for entrepreneurship education policy: Meeting government and economic purposes. *Journal of Business Venturing*, 28(4), 546–563. <https://doi.org/10.1016/j.jbusvent.2012.07.003>
- O'Connor, A. and Diggins, C., (2002). On reflection. *Reflective practice for early childhood educators*.
- O'Connor, M. (2010). *The development of infant education in Ireland, 1838 - 1948 Epochs and Eras*. Oxford Bern Berlin Bruxelles Frankfurt, M. New York, Ny Wien Lang
- O'Connor, M. K. (2015). *Social Work Constructivist Research*. Routledge.
- Oberski, I., (2006). Learning to think in Steiner-Waldorf schools. *Journal of Cognitive Education and Psychology*, 5(3), pp.336-349.
- O'Brien, E. and Hamburg, I., (2019). A critical review of learning approaches for entrepreneurship education in a contemporary society. *European Journal of Education*, 54(4), pp.525-537.
- Obschonka, M., Moeller, J. and Goethner, M., (2019). Entrepreneurial passion and personality: the case of academic entrepreneurship. *Frontiers in psychology*, 9, p.400253.
- Obschonka, M., Hakkarainen, K., Lonka, K. and Salmela-Aro, K., (2017). Entrepreneurship as a twenty-first century skill: entrepreneurial alertness and intention in the transition to adulthood. *Small business economics*, 48, pp.487-501.
- O'Connor, C., (2017). Embodiment and the construction of social knowledge: Towards an integration of embodiment and social representations theory. *Journal for the Theory of Social Behaviour*, 47(1), pp.2-24.
- OECD (2024), "Supporting early childhood education and care staff in the beginning of their careers", *OECD Education Policy Perspectives*, No. 89, OECD Publishing, Paris, <https://doi.org/10.1787/a6be52bd-en>.
- OECD (2023), "Equity, diversity and inclusion in early childhood education and care", *OECD Education Policy Perspectives*, No. 83, OECD Publishing, Paris, <https://doi.org/10.1787/72ab31c1-en>.
- OECD (2023b), "How do early childhood education systems differ around the world?", in *Education at a Glance 2023: OECD Indicators*, OECD Publishing, Paris. <https://doi.org/10.1787/117c4974-en>
- OECD. (2022). *Starting Strong VI: Supporting Meaningful Interactions in Early Childhood Education and Care*. OECD Publishing. Online publication: <https://www.oecd.org/education/starting->

[strong-vi-f47a06ae-](#)

[en.htm#:~:text=This%20report%20discusses%20five%20main,different%20types%20of%20ECEC%20settings.](#)

- OECD (2022b), "Quality assurance and improvement in the early education and care sector", *OECD Education Policy Perspectives*, No. 55, OECD Publishing, Paris, <https://doi.org/10.1787/774688bf-en>.
- OECD (2021), *Strengthening Early Childhood Education and Care in Ireland: Review on Sector Quality*, OECD Publishing, Paris, <https://doi.org/10.1787/72fab7d1-en>.
- OECD (2021). *Process quality, curriculum and pedagogy in early childhood education and care* *OECD Education*. Working Paper No. 47. Directorate for Education and Skills. Online: [https://one.oecd.org/document/EDU/WKP\(2021\)4/en/pdf](https://one.oecd.org/document/EDU/WKP(2021)4/en/pdf)
- OECD (2020), *Quality Early Childhood Education and Care for Children Under Age 3: Results from the Starting Strong Survey 2018*, TALIS, OECD Publishing, Paris, <https://doi.org/10.1787/99f8bc95-en>.
- OECD (2019), *Education at a Glance 2019: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/f8d7880d-en>.
- OECD, (2018). *The Teaching and Learning International Survey (The TALIS Report)*. OECD Library. Online: <https://www.oecd.org/education/talis/>
- OECD (2018), "The future of education and skills: Position paper". Online: [https://www.oecd.org/education/2030-project/about/documents/E2030%20Position%20Paper%20\(05.04.2018\).pdf](https://www.oecd.org/education/2030-project/about/documents/E2030%20Position%20Paper%20(05.04.2018).pdf).
- OECD (2011), *Entrepreneurship at a Glance 2011*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264097711-en>.
- OECD, (2009), *Evaluation of programmes concerning education for entrepreneurship*, report by the OECD Working Party on SME's and Entrepreneurship, OECD. https://www.oecd.org/cfe/leed/BGP_E entrepreneurship-in-Education.pdf
- Oliffe, J. L., Kelly, M. T., Gonzalez Montaner, G., & Yu Ko, W. F. (2021). Zoom Interviews: Benefits and Concessions. *International Journal of Qualitative Methods*, 20. <https://doi-org.cit.idm.oclc.org/10.1177/16094069211053522>
- Olmos-Vega, F. M., Stalmeijer, R. E., Varpio, L., & Kahlke, R. (2022). A practical guide to reflexivity in qualitative research: AMEE Guide No. 149. *Medical Teacher*, 45(149), 1–11. <https://doi.org/10.1080/0142159x.2022.2057287>

- O'Sullivan, E. (2016). *Practical Research Methods for Nonprofit and Public Administrators*. Routledge.
- Outsios, G. and Kittler, M., (2018). The mindset of UK environmental entrepreneurs: A habitus perspective. *International Small Business Journal*, 36(3), pp.285-306.
- Paez, A., (2017). Gray literature: An important resource in systematic reviews. *Journal of Evidence-Based Medicine*, 10(3), pp.233-240.
- Page, M.J., McKenzie, J.E., Bossuyt, P.M., Boutron, I., Hoffmann, T.C., Mulrow, C.D., Pajares, M.F., (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of educational research*, 62(3), pp.307-332.
- Palaiologou, I., (2016). Children under five and digital technologies: implications for early years pedagogy. *European Early Childhood Education Research Journal*, 24(1), pp.5-24.
- Paniagua, A. and Istance, D., (2018). Teachers as designers of learning environments. *Educational Research and Innovation, OECD: Paris, France*.
- Papatheodorou, T., (2012). Introduction: Early childhood policies and practices. In *Debates on early childhood policies and practices* (pp. 1-14). Routledge.
- Papatheodorou, T., (2010). Being, Belonging and Becoming: Some Worldviews of Early Childhood in Contemporary Curricula. In *Forum on Public Policy Online* (Vol. 2010, No. 2). Oxford Round Table. 406 West Florida Avenue, Urbana, IL 61801.
- Parker, C., Scott, S. and Geddes, A., (2019). Snowball sampling. *SAGE research methods foundations*.
- Parker-Rees, R. and Rees, S., (2011), April. How the Steiner kindergarten environment helps adults and children to get to know each other. In *Meeting the child in Steiner kindergartens* (pp. 41-52). Routledge.
- Pascal, C., Bertram, T. and Rouse, L., (2019). Getting it right in the Early Years Foundation Stage: a review of the evidence. *Centre for Research in Early Childhood*.
- Pascale, C.M., (2010). Epistemology and the politics of knowledge. *The Sociological Review*, 58(2_suppl), pp.154-165.
- Pathirage, C. P., Amaratunga, R. D. G., & Haigh, R. P. (2008). The role of philosophical context in the development of theory: Towards methodological pluralism. *The Built and Human Environment Review*, 1(1).
- Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). Thousand Oaks, CA: Sage.
- Pellegrini, A.D. (2011). *The Oxford Handbook of the Development of Play*. New York: Oxford University Press.

- Pellegrini, A.D. (2009). *The role of play in human development*. New York: Oxford University Press.
- Penaluna, A., Penaluna, K. and Polenakovikj, R., (2020). Developing entrepreneurial education in national school curricula: Lessons from North Macedonia and Wales. *Entrepreneurship education*, 3(3), pp.245-263.
- Penaluna, A. and Penaluna, K., (2019). 'I'm a designer, get me out of here': can entrepreneurial education advance through learning from design education?. In *The Role and Impact of Entrepreneurship Education* (pp. 13-34). Edward Elgar Publishing.
- Penaluna, A. and Penaluna, K., (2015). Entrepreneurial Education in Practice, Part, 2–Building Motivations and Competencies, Entrepreneurship 360 Thematic Paper. *OECD*. Retrieved July, 17, p.2020.
- Penaluna, K., Penaluna, A., Usei, C. and Griffiths, D., (2015). Enterprise education needs enterprising educators: A case study on teacher training provision. *Education+ Training*, 57(8/9), pp.948-963.
- Penaluna, K., Penaluna, A. and Jones, C., (2012). The context of enterprise education: insights into current practices. *Industry and Higher Education*, 26(3), pp.163-175.
- Peterman, N.E. and Kennedy, J., (2003). Enterprise education: Influencing students' perceptions of entrepreneurship. *Entrepreneurship theory and practice*, 28(2), pp.129-144
- Peters, S., (2018). Exploring new approaches to pathways from early childhood education to school. *Early Childhood Folio*, 22(1), p.21.
- Petrakis, P.E., Valsamis, D.G., Kafka, K.I., Petrakis, P.E., Valsamis, D.G. and Kafka, K.I., (2020). Entrepreneurship and Economic Growth. *Economic Growth and Development Policy*, pp.213-234.
- Piaget, J., (1971). The theory of stages in cognitive development.
- Piaget, J. (2008). *Play, dreams and imitation in childhood*. New York: Norton.
- Piaget, J. and Cook, M., (1952). *The origins of intelligence in children* (Vol. 8, No. 5, pp. 18-1952). New York: International Universities Press.
- Pianta, R.C. (2015). *Handbook of early childhood education*. New York: Guilford Press.
- Pidgeon, N. and Henwood, K., 2004. Grounded theory. *Handbook of data analysis*, pp.625-648.
- Pinkham, M. (2021). *Emergent curriculum with toddlers : learning through play*. St. Paul, Mn: Redleaf Press.
- Pittaway, L. (2005), Philosophies in entrepreneurship: A focus on economic theories, *International Journal of Entrepreneurial Behaviour and Research*, 11(3) pp 201-221

- Pittaway, L. and Edwards, C., (2012). Assessment: examining practice in entrepreneurship education. *Education+ Training*, 54(8/9), pp.778-800.
- Pittaway, L. and Cope, J., (2007). Entrepreneurship education: A systematic review of the evidence. *International small business journal*, 25(5), pp.479-510.
- Platz, D.L. and Arellano, J. (2011). Time Tested Early Childhood Theories and Practices. *Education*, 132(1), pp.3–13.
- Plomp, T., (2013). Educational design research: An introduction. *Educational design research*, pp.11-50.
- Pobal, (2022). Annual Early Years Sector Profile Report (2020/2021). Online: https://www.pobal.ie/app/uploads/2022/05/Pobal_22_EY_20-21-Report_final_2.pdf
- Podemska-Mikluch, M., (2021). Taxonomy of entrepreneurship—A Means-Oriented approach. *Emergence, Entanglement, and Political Economy*, pp.63-72.
- Poku, B.A., Caress, A.L. and Kirk, S., (2019). The opportunities and challenges of using photo-elicitation in child-centred constructivist grounded theory research. *International Journal of Qualitative Methods*, 18, p.1609406919851627.
- Politis, D. (2005). The Process of Entrepreneurial Learning: A Conceptual Framework. *Entrepreneurship Theory and Practice*, 29(4), 399–424. <https://doi.org/10.1111/j.1540-6520.2005.00091.x>
- Pollard, V., (2008). Ethics and reflective practice: Continuing the conversation. *Reflective Practice*, 9(4), pp.399-407.
- Poole, A.H., (2017). “A greatly unexplored area”: Digital curation and innovation in digital humanities. *Journal of the Association for Information Science and Technology*, 68(7), pp.1772-1781.
- Pope, J.G., (2009). Class Conflicts of Law II: Solidarity, Entrepreneurship, and the Deep Agenda of the Obama NLRB. *Buff. L. Rev.*, 57, p.653.
- Pound, L. (2011). *Influencing early childhood education : key figures, philosophies and ideas*. New York:Open University Press.
- Powell, B.J., Waltz, T.J., Chinman, M.J., Damschroder, L.J., Smith, J.L., Matthieu, M.M., Proctor, E.K. and Kirchner, J.E., (2015). A refined compilation of implementation strategies: results from the Expert Recommendations for Implementing Change (ERIC) project. *Implementation science*, 10(1), pp.1-14.

- Priestley, M. and Drew, V. (2016). Teachers as agents of curriculum change: closing the gap between purpose and practice. In *European Conference for Educational Research, Dublin, 23-26 September 2016*.
- Punch, K. F. (1998). *Introduction to Social Research: Quantitative and Qualitative Approaches* (1st ed.). London, Thousand Oaks California, New Delhi: SAGE Publications.
- Putsom, W., Suwannarat, P. and Songsrirote, N., (2019). Scale Development for Measuring Entrepreneurial Leadership Competencies. *Human Behavior, Development & Society*, 20(3).
- Pyle, A. (2021). *Play-based Learning*. child-encyclopedia.com.
- QQA Enterprise and Entrepreneurship Review (2018). Enterprise and Entrepreneurship Education: Guidance for UK Higher Education Providers.
Online:https://www.qaa.ac.uk/docs/qaas/enhancement-and-development/enterprise-and-entrepreneurship-education-2018.pdf?sfvrsn=15f1f981_8
- Queirós, A., Faria, D. and Almeida, F., (2017). Strengths and limitations of qualitative and quantitative research methods. *European journal of education studies*.
- Quinlan, C., Zikmund, W.G., Babin, B.J., Carr, J.C. and Griffin, M., (2015). Business research methods. ed. *Hampshire, UK: South-Western, Cengage Learning*.
- Qureshi, H.A. and Ünlü, Z., (2020). Beyond the paradigm conflicts: A four-step coding instrument for grounded theory. *International Journal of Qualitative Methods*, 19, p.1609406920928188.
- Raivio, M., Skaremyr, E. and Kuusisto, A., (2022). Caring for worldviews in early childhood education: Theoretical and analytical tool for socially sustainable communities of care. *Sustainability*, 14(7), p.3815.
- Rajasinghe, D., Aluthgama-Baduge, C. and Mulholland, G., 2021. Researching entrepreneurship: an approach to develop subjective understanding. *International Journal of Entrepreneurial Behavior & Research*, 27(4), pp.866-883.
- Raposo, M., Do Paco, A., (2011). Entrepreneurship Education: Relationship between education and entrepreneurial activity. *Psicothema*.
- Ratten, V. and Usmanij, P., (2021). Entrepreneurship education: Time for a change in research direction?. *The International Journal of Management Education*, 19(1), p.100367.
- Reichow, B., Boyd, B.A., Barton, E.E. and Odom, S.L. (2017). *Handbook of early childhood special education*. Switzerland: Springer.
- Rentzou, K. and Slutsky, R., (2020). Introduction: Contemplating and probing issues of conceptualization, measurement and policy of ECEC quality in Europe and in the USA. In *Early Childhood Education and Care Quality in Europe and the USA* (pp. 1-4). Routledge.

- Rescher, N. (2012). Epistemology: An Introduction to the Theory of Knowledge. In *Jhu.edu*. State University of New York Press. <https://muse.jhu.edu/chapter/410317>
- Reuter, E., (2022). Hybrid business models in the sharing economy: The role of business model design for managing the environmental paradox. *Business Strategy and the Environment*, 31(2), pp.603-618.
- Ricci, A., (2020). Entrepreneurial Transversal Skills and Growth Mindset: an Educational Research. In *INTED2020 Proceedings* (pp. 8791-8796). IATED.
- Rieger, K.L., (2019). Discriminating among grounded theory approaches. *Nursing inquiry*, 26(1), p.e12261.
- Riessman, C.K., (2008). *Narrative methods for the human sciences*. Sage, USA.
- Rinaldi, C., (2020). The child as citizen: holder of rights and competent. The Reggio Emilia educational experience. *Miscellanea Historico-Iuridica*, 19(1), pp.11-22.
- Ritchie, J. (2020). A Brief Historical Overview of Curriculum in Early Childhood Care and Education
- Robinson, P. B. and Gough, V. (2020) ‘The right stuff: Defining and influencing the entrepreneurial mindset’, *Journal of Entrepreneurship Education*, 23(2), p. 1.
- Robinson, P.B., Stimpson, D.V., Huefner, J.C. and Hunt, H.K., (1991). An attitude approach to the prediction of entrepreneurship. *Entrepreneurship theory and practice*, 15(4), pp.13-32.
- Robinson, S., Neergaard, H., Tanggaard, L. and Krueger, N.F., (2016). New horizons in entrepreneurship education: from teacher-led to student-centred learning. *Education+ training*, 58(7/8), pp.661-68
- Robson, C. (2002). *Real world research*. 2nd ed. Malden: Blackwell Publishing Ltd.
- Rockel, J., (2009). A pedagogy of care: Moving beyond the margins of managing work and minding babies. *Australasian Journal of Early Childhood*, 34(3), pp.1-8.
- Rostgaard, T. (2018). Childcare as a global policy agenda. *Handbook of Family Policy*, pp.96–110. doi:10.4337/9781784719340.00016.
- Rowe, W. E. (2014). *Positionality*.” *The Sage Encyclopaedia of Action Research*, edited by Coghlan, David and Mary Brydon-Miller. Sage.
- Roy, K., Zvonkovic, A., Goldberg, A., Sharp, E. and LaRossa, R., (2015). Sampling richness and qualitative integrity: Challenges for research with families. *Journal of Marriage and Family*, 77(1), pp.243-260.
- Rumjaun, A. and Narod, F. (2020). Social Learning Theory—Albert Bandura. *Springer Texts in Education*, [online] pp.85–99. doi:10.1007/978-3-030-43620-9_7.

- Ruskovaara, E. and Pihkala, T., (2015). Entrepreneurship education in schools: empirical evidence on the teacher's role. *The Journal of Educational Research*, 108(3), pp.236-249.
- Ruskovaara, E., (2014). Entrepreneurship education in basic and upper secondary education—measurement and empirical evidence.
- Sabzeh, B. (2019). *Entrepreneurial Education as a New Approach to Preschool Education*. [online] Available at: http://www.jcsicsa.ir/article_85708_66c5d66c5a0798df29d8296d54c273e9.pdf?lang=en
- Sagar, H. (2013). *Teacher change in relation to professional development in entrepreneurial learning*. Gothenburg: Department of Physics, University of Gothenburg.
- Sagar, S., (2024). Entrepreneurship: Catalyst for Innovation and Economic Growth. *International Journal of Innovative Science and Research Technology*. Volume 9, Issue 1, January – 2024
- Sahay, A., (2016). Peeling Saunder's research onion. *Research Gate, Art*, pp.1-5.
- Sahoo, C., (2020). Women Entrepreneurship in India: An Insight into Problems, Prospects and Development. *International Journal of Engineering Research & Technology*, 9(09).
- Saldaña, J. (2013). *The Coding Manual for Qualitative Researchers (2nd ed.)*. London: Sage.
- Saldaña, J. and Omasta, M., (2016). *Qualitative research: Analysing life*. Sage Publications.
- Saliya, C.A., (2023). Research Philosophy: Paradigms, world views, perspectives, and theories. In *Social Research Methodology and Publishing Results: A Guide to Non-Native English Speakers* (pp. 35-51). IGI Global.
- Samuel, A.B. and Rahman, M.M., (2018). Innovative teaching methods and entrepreneurship education: A review of literature. *Journal of Research in Business, Economics and Management*, 10(1), pp.1807-1813.
- Santer, J., Griffiths, C. and Goodall, D.L. (2007). *Free play in early childhood : a literature review*. London: National Children's Bureau.
- Saracho, O.N. (2019). *Contemporary perspectives on research on child development laboratory schools in early childhood education*. Charlotte, Nc: Information Age Publishing, Inc.
- Saracho, O.N. and Evans, R., (2022). Early childhood education pioneers and their curriculum programs. In *The Influence of Theorists and Pioneers on Early Childhood Education* (pp. 159-166). Routledge.
- Saracho, O.N., (2013). Early childhood teacher preparation programmes in the USA. *Early Child Development and Care*, 183(5), pp.571-588.
- Saracho, O.N. and Spodek, B., (2008). Fathers: The 'invisible' parents. *Early Child Development and Care*, 178(7-8), pp.821-836.

- Saracho, O.N. and Spodek, B. (2004). *Contemporary perspectives on language policy and literacy instruction in early childhood education*. Greenwich, Conn.: Information Age Pub.
- Sarasvathy, S. D. (2001). Causation and Effectuation: Toward a Theoretical Shift from Economic Inevitability to Entrepreneurial Contingency. *The Academy of Management Review*, 26(2), 243–263. <https://doi.org/10.2307/259121>
- Saric, M. and Steh, B., (2017). Critical reflection in the professional development of teachers: Challenges and possibilities. *CEPS journal*, 7(3), pp.67-85.
- Sarikaya, M. and Coşkun, E., (2015). A new approach in preschool education: Social entrepreneurship education. *Procedia-Social and behavioural Sciences*, 195, pp.888-894.
- Saunders, M.N. and Townsend, K., (2018). Choosing participants. *The Sage handbook of qualitative business and management research methods*, pp.480-494.
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research Methods for Business students*. (8th ed.). Pearson.
- Saunders, M., Lewis, P., & Thornhill, A., (2016). Research methods. *Business Students 7th edition*. Harlow Pearson
- Saunders, M., Lewis, P., & Thornhill, A. (2015). *Research Methods for Business Students* (7th ed.). Pearson Education Limited.
- Saunders, M., Lewis, P. and Thornhill, A., (2003). Research methods for business students. *Essex: Prentice Hall: Financial Times*.
- Saunders, M., Lewis, P. and Thornhill, A., (2009). *Research methods for business students*. Pearson education.
- Saunders, M., Lewis, P., & Thornhill, A., (2007). Research methods. *Business Students 4th edition* Pearson Education Limited, England, 6(3), pp.1-268.
- Sbaraini, A., Carter, S.M., Evans, R.W. and Blinkhorn, A., (2011). How to do a grounded theory study: a worked example of a study of dental practices. *BMC medical research methodology*, 11, pp.1-10.
- Schmidt, B.M., Colvin, C.J., Hohlfeld, A. and Leon, N., (2018). Defining and conceptualising data harmonisation: a scoping review protocol. *Systematic reviews*, 7, pp.1-6.
- Schmutzler, J., Andonova, V. and Diaz-Serrano, L., (2019). How context shapes entrepreneurial self-efficacy as a driver of entrepreneurial intentions: A multilevel approach. *Entrepreneurship theory and practice*, 43(5), pp.880-920.
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.

- Schriever, V., (2021). Early childhood teachers' management of their changing roles regarding digital technologies in kindergarten: A grounded theory study. *Australasian Journal of Early Childhood*, 46(1), pp.32-49.
- Schumpeter, Joseph A. (1942). *Capitalism, Socialism and Democracy*. New York: Harper and Row. (Reprint, 1950).
- Schweinhart, L.J. (2014). The Value of High-Quality Full-Day Preschool. *JAMA*, 312(20), p.2101. doi:10.1001/jama.2014.15124.
- Schweinhart, L.J., Educational, H., Heckman, J.J., Pinto, R., Moon, S. and Yavitz, A., (2010). The cost-benefit analysis of the Preschool Curriculum Comparison Study. *Final Report to the John D. and Catherine T. MacArthur Foundation. Ypsilanti, MI: HighScope*.
- Schweinhart, L.J. and Weikart, D.P., (1990). The High/Scope Perry Preschool study: Implications for early childhood care and education. *Prevention in Human Services*, 7(1), pp.109-132.
- Scotland, J., (2012). Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English language teaching*, 5(9), pp.9-16.
- Scott, D. (2007). *Critical Essays on Major Curriculum Theorists*. Routledge. doi:10.4324/9780203461884.
- Scott, J.M., Penaluna, A. and Thompson, J.L., (2016). A critical perspective on learning outcomes and the effectiveness of experiential approaches in entrepreneurship education: do we innovate or implement?. *Education + Training*, 58(1), pp.82-93.
- Scriven, M., (1996). Types of evaluation and types of evaluator. *Evaluation practice*, 17(2), pp.151-161.
- Seikkula-Leino, J., Ruskovaara, E., Ikavalko, M., Mattila, J. & Rytkola, T. (2010). Promoting entrepreneurship education: the role of the teacher. *Journal of Education and Training*, 52 (2), 117 – 127.
- Selmi, A.M., Gallagher, R.J. and Mora-Flores, E. (2015). *Early childhood curriculum for all learners : integrating play and literacy activities*. Thousand Oaks, California: Sage.
- Shah, R.K. and Campus, S., (2021). Conceptualizing and defining pedagogy. *IOSR journal of research & method in education*, 11(1), pp.6-29.
- Shamseer, L., Tetzlaff, J.M., Akl, E.A., Brennan, S.E. and Chou, R., (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *Bmj*, 372.
- Shane, S. and Venkataraman, S., (2004). *New horizons in entrepreneurship. Academic Entrepreneurship: University Spinoffs and Wealth Creation*. Edward Elgar Publishing.

- Shane, S. and Venkataraman, S., (2000). The promise of entrepreneurship as a field of research. *Academy of management review*, 25(1), pp.217-226.
- Shane, S.A., (2003). *A general theory of entrepreneurship: The individual-opportunity nexus*. Edward Elgar Publishing.
- Shapiro, C. and Stiglitz, J.E., (1984). Equilibrium unemployment as a worker discipline device. *The American economic review*, 74(3), pp.433-444.
- Sharma, A., & Cockerill, H. (2014). *Mary Sheridan's from Birth to five years: Children's development progress* (4th ed). London: Routledge
- Shaver, K.G. and Commarmond, I., (2019). Toward a comprehensive measure of entrepreneurial mindset. In *Rigour and Relevance in Entrepreneurship Research, Resources and Outcomes* (pp. 70-89). Edward Elgar Publishing.
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), 63–75. <https://doi.org/10.3233/EFI-2004-22201>
- Shepherd, D. A., & Holger Patzelt. (2018). *Entrepreneurial Cognition : Exploring the Mindset of Entrepreneurs*. Springer International Publishing.
- Shepherd, D.A., Patzelt, H. and Haynie, J.M., (2010). Entrepreneurial spirals: Deviation–amplifying loops of an entrepreneurial mindset and organizational culture. *Entrepreneurship theory and practice*, 34(1), pp.59-82.
- Siraj-Blatchford, I., & Manni, L. (2008). "Would you like to tidy up now?" An analysis of adult questioning in the English Foundation Stage. *Early Years*, 28(1), 5-22.
- Siraj-Blatchford, I. and Sylva, K., (2004). Researching pedagogy in English pre-schools. *British educational research Journal*, 30(5), pp.713-730.
- Siraj-Blatchford, I., Muttock, S., Sylva, K., Gilden, R. and Bell, D., (2002). *Researching effective pedagogy in the early years* (Vol. 356). London: Department for Education and Skills.
- Slade, S. and Griffith, D., (2013). A whole child approach to student success. *KEDI Journal of Educational Policy*.
- Slavec Gomezel, A. and Stritar, R., (2023). Does it pay to be an ethical leader in entrepreneurship? An investigation of the relationships between entrepreneurs' regulatory focus, ethical leadership, and small firm growth. *Review of Managerial Science*, 17(1), pp.155-173.
- Slavin, R.E., (1999). Comprehensive approaches to cooperative learning. *Theory into practice*, 38(2), pp.74-79.

- Śledzik, K., (2013). Schumpeter's view on innovation and entrepreneurship. *Management Trends in Theory and Practice*, (ed.) Stefan Hittmar, Faculty of Management Science and Informatics, University of Zilina & Institute of Management by University of Zilina.
- Slot, P., (2018). Structural characteristics and process quality in early childhood education and care: A literature review. *Small Business Economics*, 48(3), pp.681-697
- Smith, J.B., (2007). The central question in entrepreneurial cognition research. *Entrepreneurship theory and practice*, 31(1), pp.1-27.
- Smith, P.K. and Hart, C.H. (2014). *The Wiley Blackwell handbook of childhood social development*. Chichester: Wiley-Blackwell.
- Smyth, L., (2022). Multiple crises, multiple sticky plasters: repositioning regimes of truth in ECEC policy to affirmative ethics of Interconnection. *Irish Educational Studies*, pp.1-16.
- Soiferman, L.K., (2010). Compare and Contrast Inductive and Deductive Research Approaches. *Research Approaches*. University of Manitoba.
- Solomon, G., (2007). An examination of entrepreneurship education in the United States. *Journal of small business and enterprise development*, 14(2), pp.168-182.
- Soomro, B.A. and Shah, N., (2020). Entrepreneurial orientation and performance in a developing country: Strategic entrepreneurship as a mediator. *Business Strategy & Development*, 3(4), pp.567-577.
- Spence, P.R., Lachlan, K.A. and Rainear, A.M., (2016). Social media and crisis research: Data collection and directions. *Computers in Human Behavior*, 54, pp.667-672.
- Srinivasacharlu, A., (2019). Continuing Professional Development (CPD) of Teacher Educators in 21st Century. *Shanlax International Journal of Education*, 7(4), pp.29-33.
- Stacey, S. (2009). *Emergent curriculum in early childhood settings : from theory to practice*. St. Paul, Mn:Redleaf Press.
- Stahl, N., & King, J. (2020). Understanding and using trustworthiness in qualitative research. In *Journal of Developmental Education* (Vol. 44, Issue 1, pp. 26–28). <https://files.eric.ed.gov/fulltext/EJ1320570.pdf>
- Stake, R.E., (1995). *The art of case study research*. Sage.
- Starks, H., & Brown Trinidad, S. (2007). Choose Your Method: A Comparison of Phenomenology, Discourse Analysis, and Grounded Theory. *Qualitative Health Research*, 17(10), 1372–1380. <https://doi.org/10.1177/1049732307307031>
- Stenbacka, C. (2001). Qualitative research requires quality concepts of its own. *Management Decision*, Vol. 39. No. 7, pp. 551-556.

- Stephen, C., (2010). Pedagogy: The silent partner in early years learning. *Early years*, 30(1), pp.15-28.
- Steyaert, C. and Van Looy, B. eds., (2010). *Relational practices, participative organizing*. Emerald Group Publishing Limited.
- Stough , L. M., & Lee, S. (2021). Grounded Theory Approaches Used in Educational Research Journals. *Educational Research Journals*, 1. <https://doi.org/10.1177/16094069211052203>
- Stough, L.M. and Lee, S., (2021). Grounded theory approaches used in educational research journals. *International Journal of Qualitative Methods*, 20, p.16094069211052203.
- Strapasson, B.A. (2020). An Updated Bibliography of John B. Watson. *Perspectives on Behavior Science*,43(2). doi:10.1007/s40614-020-00252-0.
- Strauss, A. and Corbin, J., (1998). Basics of qualitative research techniques. Sage Publications.
- Sullivan, S. and Glanz, J., (2013). *Supervision that improves teaching and learning: Strategies and techniques*. Corwin Press.
- Sullivan, S. and Glanz, J. (2009). *Supervision that improves teaching and learning : strategies and techniques*. Thousand Oaks, Calif.: Corwin Press.
- Sumitra, A., Nurunnisa, R. and Lestari, R.H. (2021). The Role of Teachers in Planning Early Childhood Learning. *Proceedings of the 5th International Conference on Early Childhood Education (ICECE 2020)*,538. doi:10.2991/assehr.k.210322.020.
- Sumsion, J., Lunn Brownlee, J., Ryan, S., Walsh, K., Farrell, A., Irvine, S., Mulhearn, G. and Berthelsen, D., (2015). Evaluative decision-making for high-quality professional development: Cultivating an evaluative stance. *Professional development in education*, 41(2), pp.419-432.
- Suteerachai, B., Suksod, P. and Somjai, S., (2019). A hybrid of cognitive entrepreneurial training and education and their impact on business opportunity recognition in Thailand: Moderating role of entrepreneurial passion. *Journal of Computational and Theoretical Nanoscience*, 16(11), pp.4676-4683.
- Suzanti, L., & Maesaroh, S., (2017). Entrepreneurship Learning for Early Childhood – a case study of children age 4 – 5 in TK Khalifah Ciracas Serang. *2nd International Conference on Economic Education and Entrepreneurship (ICEEE 2017)*, 403 – 410
- Swanson, L.A., (2017). *Entrepreneurship and Innovation Toolkit*. Online: openlibrary-repo.ecampusontario.ca
- Sylva, K., (2010). Quality in early childhood settings. In *Early Childhood Matters* (pp. 86-107). Routledge.

- Sylva, K., Siraj-Blatchford, I., Taggart, B., Sammons, P., Melhuish, E., Elliot, K. and Totsika, V., (2006). Capturing quality in early childhood through environmental rating scales. *Early childhood research quarterly*, 21(1), pp.76-92.
- Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I. and Taggart, B., (2004). *The effective provision of pre-school education (EPPE) project: Final Report: A longitudinal study funded by the DfES 1997-2004*. Institute of Education, University of London/Department for Education and Skills/Sure Start.
- Taggart, J., Ellwood, M., Vasc, D., Chin, S. and Lillard, A.S., (2020). Parents' roles and question-asking during pretend and real activities. *Social Development*, 29(3), pp.767-782.
- Taguma, M., Litjens, I. and Makowiecki, K., (2012). *Quality Matters in Early Childhood Education and Care: Finland*. OECD Publishing. 2, rue Andre Pascal, F-75775 Paris Cedex 16, France.
- Tajeddin, Z. and Watanabe, A. eds., (2022). *Teacher reflection: Policies, practices and impacts* (Vol. 111). Channel View Publications.
- Tan, R., Lichtblau, M., Wehmeier, C. and Werning, R., (2022). Preschool teachers' attitudes towards inclusion: a comparison study between China and Germany. *European Journal of Special Needs Education*, 37(6), pp.994-1008.
- Tang, J., Kacmar, K.M.M. and Busenitz, L., (2012). Entrepreneurial alertness in the pursuit of new opportunities. *Journal of business venturing*, 27(1), pp.77-94.
- Tashakkori, A., & Teddlie, C. (2009). *SAGE Handbook of Mixed Methods in Social & behavioural Research*. SAGE Publications, Inc. <https://doi.org/10.4135/9781506335193>
- Tassoni, P. (2007). *Child care and education : cache level 2*. Oxford: Heinemann.
- Taylor, C. (2016). *Learning and teaching in the early years*. Port Melbourne, Vic.: Cambridge University Press.
- Taylor, M.E. and Boyer, W., (2020). Play-based learning: Evidence-based research to improve children's learning experiences in the kindergarten classroom. *Early Childhood Education Journal*, 48(2), pp.127-133.
- Taylor, T.S., Watling, C.J., Teunissen, P.W., Dornan, T. and Lingard, L., (2016). Principles of fatigue in residency education: a qualitative study. *Canadian Medical Association Open Access Journal*, 4(2), pp.E200-E20
- The European Commission & Norwegian Government, (2006). Entrepreneurship Education in Europe: fostering mind-sets through education and learning. *European Conference on Entrepreneurship Education*. Oslo.
- The European Commission, (2019). *Key Competences for Lifelong Learning*. The European Union.

- The European Commission (2015). 'Entrepreneurship 360 - Promoting entrepreneurial learning in primary and secondary education and in vocational education and training project' . The European Commission, DG Education and Culture.
- Thomassen, M.L., Williams Middleton, K., Ramsgaard, M.B., Neergaard, H. and Warren, L., (2020). Conceptualizing context in entrepreneurship education: a literature review. *International Journal of Entrepreneurial Behaviour & Research*, 26(5), pp.863-886.
- Thornberg, R., & Charmaz, K. (2014). Grounded theory and theoretical coding. In U. Flick (Ed.), *The SAGE Handbook of Qualitative Data Analysis* (pp. 153-169). SAGE Publications Ltd.
- Thornton, L. and Brunton, P., (2015). *Understanding the Reggio approach: Early years education in practice*. Routledge.
- Thornton, M., (2020). Turning the word upside down: how Cantillon redefined the entrepreneur. *Quarterly Journal of Austrian Economics*, 23(3-4), pp.265-280.
- Thornton, L. and Brunton, P. (2015). *Understanding the Reggio Approach*. Routledge. doi:10.4324/9781315744018.
- Thrane, C., Blenker, P., Korsgaard, S. and Neergaard, H., (2016). The promise of entrepreneurship education: Reconceptualizing the individual–opportunity nexus as a conceptual framework for entrepreneurship education. *International Small Business Journal*, 34(7), pp.905-924.
- Tiernan, P. and Deveci, I., (2021). Irish and Turkish pre-service teachers understanding and perceptions of enterprise education. *Heliyon*, 7(7), p.e07591.
- Timmermans, S. and Tavory, I., (2007). Advancing ethnographic research through grounded theory practice. *Handbook of grounded theory*, pp.493-513.
- Torres, A.C. and Weiner, J., (2018). The new professionalism? Charter teachers' experiences and qualities of the teaching profession. *Education policy analysis archives*, 26, pp.19-19.
- Toutain, O., Fayolle, A., Pittaway, L. and Politis, D., (2017). Role and impact of the environment on entrepreneurial learning. *Entrepreneurship & Regional Development*, 29(9-10), pp.869-888.
- Tovey, H. (2017). *Bringing the Froebel approach to your early years practice*. London ; New York: Routledge, Taylor & Francis Group.
- Trochim, W.M. and Donnelly, J.P., (2001). *Research methods knowledge base* (Vol. 2). Cincinnati, OH: Atomic dog publishing.
- Ugwuanyi, C.S., Okeke, C.I. and Ageda, T.A., (2020). Motivation and self-efficacy as predictors of learners' academic achievement. *Journal of Sociology and Social Anthropology*, 11(3-4), pp.215-222.

- UNESCO (2022). Global Partnership Strategy for Early Childhood 2021-2030. Online: <https://www.unesco.org/en/early-childhood-education/partnership-strategy>
- UNICEF (2018). *Learning through play: Strengthening learning through play in early childhood education programmes*. UNICEF Education Section, Programme Division.
- Urban, B. and Kujinga, L., (2017). The institutional environment and social entrepreneurship intentions. *International Journal of Entrepreneurial Behavior & Research*, 23(4), pp.638-655.
- Urban, M. (2008) Dealing with Uncertainty: challenges and possibilities for the early childhood profession, *European Early Childhood Education Research Journal*, 16(2), 135-152.
- Urban, M., Vandebroek, M., Van Laere, K., Lazzari, A. and Peeters, J., (2012). Towards competent systems in early childhood education and care. Implications for policy and practice. *European Journal of Education*, 47(4), pp.508-526.
- Urban, M., Vandebroek, M., Lazzari, A., Van Laere, K. and Peeters, J., (2012b). Competence Requirements in Early Childhood Education and Care. Final Report. *Online Submission*
- Urquhart, C. (2012). *Grounded Theory for Qualitative Research*. SAGE.
- Urquhart, C. and Fernández, W., (2013). Using grounded theory method in information systems: The researcher as blank slate and other myths. *Journal of Information Technology*, 28, pp.224-236.
- Valerio, A., Parton, B., & Robb, A. (2014). *Entrepreneurship Education and Training Programs around the World: Dimensions for Success*. The World Bank. <https://doi.org/10.1596/978-1-4648-0202-7>
- Valliere, D., Gedeon, S.A. and Wise, S., (2014). A comprehensive framework for entrepreneurship education. *Journal of Business and Entrepreneurship*, 26(1), pp.89-120.
- Valsiner, J., (2022). Beyond certificate factory: Intellectual innovation in systems of education. *Human Arenas*, pp.1-13.
- Van Gelderen, M., Verduyn, K. and Masurel, E., (2012). Introduction to 'Entrepreneurship in Context'. In *Entrepreneurship in context* (pp. 1-22). Routledge.
- Van Huizen, T. and Plantenga, J., (2018). Do children benefit from universal early childhood education and care? A meta-analysis of evidence from natural experiments. *Economics of Education Review*, 66, pp.206-222.
- Vandebroek, M., Urban, M. and Peeters, J., (2016). *Pathways to professionalism in early childhood education and care*. Routledge.
- Vandermaas-Peeler, M., Choplin, O., Doehler, K., Sturgill, A., Namaste, N. and Buckmaster, M., (2021). The "Authentic" Me: New Understandings of Self and the World as a Result of Global Learning Experiences. *Teaching and Learning Inquiry*, 9(2).

- Vanover, C., Mihas, P., & Saldana, J. (2021). *Analysing and Interpreting Qualitative Research*. SAGE Publications.
- Vasc, D. and Lillard, A. (2020). Pretend and Sociodramatic Play. *The Encyclopaedia of Child and Adolescent Development*, pp.1–9. doi:10.1002/9781119171492.wecad274.
- Veraksa, N., Sheridan, S. and Colliver, Y. (2021). Balancing child-centred with teacher-directed approaches to early education: Incorporating young children’s perspectives. *Pedagogy, Culture & Society*, pp.1–18
- Verduijn, K. and Berglund, K., (2020). Pedagogical invention in entrepreneurship education: Adopting a critical approach in the classroom. *International Journal of Entrepreneurial Behavior & Research*, 26(5), pp.973-988.
- Vesper, K.H. and Gartner, W.B., (1997). Measuring progress in entrepreneurship education. *Journal of Business venturing*, 12(5), pp.403-421.
- Vincent, S., & O’Mahoney, J. (2018). Critical Realism and Qualitative Research: An Introductory Overview. *The SAGE Handbook of Qualitative Business and Management Research Methods: History and Traditions*, 201–216. <https://doi.org/10.4135/9781526430212.n13>
- Vincett, P.S. and Farlow, S., (2008). “Start-a-Business”: an experiment in education through entrepreneurship. *Journal of small business and enterprise development*, 15(2), pp.274-288.
- Visser, W., (2010). Schön: Design as a reflective practice. *Collection*, (2), pp.21-25.
- Vogel, P., (2017). From venture idea to venture opportunity. *Entrepreneurship Theory and Practice*, 41(6), pp.943-971.
- Volery, T., Müller, S., Oser, F., Naepflin, C. and Rey, N.D., (2013). The impact of entrepreneurship education on human capital at upper-secondary level. *Journal of Small Business Management*, 51(3), pp.429-446.
- Volkman, C. and Audretsch, D., (2017). Entrepreneurship education at universities. *International Studies in Entrepreneurship*, Springer International Publishing AG: 1-10.
- Volkman, C., Wuppertal, B.U., Wilson, K.E., Partners, G.V., Mariotti, S., Rabuzzi, D. and Sepulveda, A., (2009). Unlocking entrepreneurial capabilities to meet the global challenges of the 21st Century A Report of the Global Education Initiative At the World Economic Forum. Geneva: World Economic Forum.
- Von Graevenitz, G., Harhoff, D. and Weber, R., (2010). The effects of entrepreneurship education. *Journal of Economic behaviour & organization*, 76(1), pp.90-112.
- Vygotsky, L.S., (1997). *The collected works of LS Vygotsky: The history of the development of higher mental functions* (Vol. 4). Springer Science & Business Media.

- Vygotsky, L.S. (1987) Imagination and its development in childhood In: Rieber, R.W. and Carton, A.S., ed. (2011) *The collected works of L.S. Vygotsky* New York: Plenum Press. 339-350.
- Vygotsky, L.S. and Cole, M., (1978). *Mind in society: Development of higher psychological processes*. Harvard university press.
- Wadhvani, R.D., Kirsch, D., Welter, F., Gartner, W.B. and Jones, G.G., (2020). Context, time, and change: Historical approaches to entrepreneurship research. *Strategic Entrepreneurship Journal*, 14(1), pp.3-19.
- Wadhvani, R.D. and Lubinski, C., (2017). Reinventing entrepreneurial history. *Business History Review*, 91(4), pp.767-799.
- Wang, L., Dang, R., Bai, Y., Zhang, S., Liu, B., Zheng, L., Yang, N. and Song, C., (2020). Teacher qualifications and development outcomes of preschool children in rural China. *Early Childhood Research Quarterly*, 53, pp.355-369.
- Wardana, L.W., Narmaditya, B.S., Wibowo, A., Mahendra, A.M., Wibowo, N.A., Harwida, G. and Rohman, A.N., (2020). The impact of entrepreneurship education and students' entrepreneurial mindset: the mediating role of attitude and self-efficacy. *Heliyon*, 6(9).
- Watt, J.G. and Colyer, J. (2014). *IQ : a practical guide to inquiry-based learning*. Don Mills, Ontario:Oxford University Press.
- Watts, J.M., (2009). Professionalism in early childhood education. Online: <http://humboldt-dspace.calstate.edu/bitstream/handle/2148/493/Professionalism%20in%20ECE.pdf?sequence=1>
- Weaver, K.M., Marchese, A., Vozikis, G.S. and Dickson, P., (2010). Promoting entrepreneurship across the university: the experiences of three diverse academic institutions. *Journal of Small Business & Entrepreneurship*, 23(sup1), pp.797-806.
- Weikart, D., (1996). High-quality preschool programs found to improve adult status. *Childhood*, 3(1), pp.117-120.
- Weisberg, D., Hirsh-Pasek, K., Golinkoff, R., Kittredge, A. and Klahr, D. (2016) GuidedPlay. *Current Directions in Psychological Science*, 25(3), 177-182.
- Westbrook, J. and Croft, A., (2015). Beginning to teach inclusively: An analysis of newly qualified teacher pedagogy in lower primary classes in Tanzania. *Teaching and Teacher Education*, 51, pp.38-46.
- Westgren, R., (2020). Carl Menger's Grundsätze As A Foundation For Contemporary Entrepreneurship Research. *Quarterly Journal of Austrian Economics*, 23.
- Westhead, P. and Wright, M., (2016). *The habitual entrepreneur*. Routledge.

- White, J., Marwick, H., Rutanen, N., Souza Amorim, K., and Herold, L.M., eds. (2022). *First Transitions to Early Childhood Education and Care: Intercultural Dialogues Across the Globe*. Springer, 2022.
- White, R.E. (2012). *THE POWER OF PLAY A Research Summary on Play and Learning* Dr. Rachel E. White for. Minnesota Children's Museum.
- Whitebread, D., Neale, D., Jensen, H., Liu, C., Solis, S., Hopkins, E., Hirsh-Pasek, K. and Zosh, J. (2017). *The Role of Play in children's development: a Review of the Evidence White Paper*. The LEGO Foundation, DK.
- Whitebread, D., (2015). Introduction: young children learning and early years teaching. In *Teaching and learning in the early years* (pp. 1-22). Routledge.
- Willekens, H. and Scheiwe, K., (2020). Kindergarten and preschool in Europe since the late 18th century. Online: <https://www.researchgate.net/publication/342590323>
- Willekens, H., (2015). Religious Cleavages, the School Struggle and the Development of Early Childhood Education in Belgium, France and the Netherlands. In *The Development of Early Childhood Education in Europe and North America: Historical and Comparative Perspectives* (pp. 51-70). London: Palgrave Macmillan UK.
- Wiltshire, M., (2018). *Understanding the HighScope approach: Early years education in practice*. Routledge.
- Winter, G. (2000). A Comparative Discussion of the Notion of 'Validity' in Qualitative and Quantitative Research. *The Qualitative Report*, 4(3), 114.
- Wong, J.M. and Rao, N., (2015). The evolution of early childhood education policy in Hong Kong. *International Journal of Child Care and Education Policy*, 9, pp.1-16.
- Wood, E., (2020). Learning, development and the early childhood curriculum: A critical discourse analysis of the Early Years Foundation Stage in England. *Journal of Early Childhood Research*, 18(3), pp.321-336
- Wood, E. and Hedges, H., (2016). Curriculum in early childhood education: Critical questions about content, coherence, and control. *The curriculum journal*, 27(3), pp.387-405.
- Wood, E.A., (2013). *Play, Learning and the Early Childhood Curriculum*: SAGE Publications.
- Wood, E. and Attfield, J., (2005). *Play. Learning and the Early Childhood Curriculum. Second Edition*, London: Paul Chapman Publishing.
- Woodrow, C. and Newman, L., (2015). Recognising, valuing and celebrating practitioner research. *Practitioner research in early childhood: International issues and perspectives*, pp.1-16.

- Woods, A., Mannion, A. and Garrity, S., (2022). Implementing Aistear—the Early Childhood Curriculum Framework across varied settings: Experiences of early years educators and infant primary school teachers in the Irish context. *Child Care in Practice*, 28(4), pp.671-690.
- Woods, A., Mannion, A., & Garrity, S. (2021) Implementing Aistear – the Early Childhood Curriculum Framework Across Varied Settings: Experiences of Early Years Educators and Infant Primary School Teachers in the Irish Context, *Child Care in Practice*
- Woods, A. (2017). *Child-initiated play and learning : planning for possibilities in the early years*. London ; New York: Routledge.
- Woods, A., (2014). *The Characteristics of Effective Learning*. Abingdon: Routledge.
- Wraae, B., Brush, C., & Nikou, S. (2020). The Entrepreneurship Educator: Understanding Role Identity.
- Zacca, R. and Dayan, M., (2017). Entrepreneurship: an evolving conceptual framework. *International Journal of Entrepreneurship and Innovation Management*, 21(1-2), pp.8-26.
- Zaheer, H., Breyer, Y. and Dumay, J., (2019). Digital entrepreneurship: An interdisciplinary structured literature review and research agenda. *Technological Forecasting and Social Change*, 148, p.119735.
- Zappe, S.E., (2018). Avoiding Construct Confusion: An Attribute-Focused Approach to Assessing Entrepreneurial Mindset. *Advances in Engineering Education*, 7(1), p.n1.
- Zaslow, M., Tout, K., Halle, T., Whittaker, J.V. and Lavelle, B., (2010). Toward the Identification of Features of Effective Professional Development for Early Childhood Educators. Literature Review. *Office of Planning, Evaluation and Policy Development, US Department of Education*.
- Zeichner, K.M. and Liston, D.P., (2013). *Reflective teaching: An introduction*. Routledge.
- Zepke, N., (2013). Threshold concepts and student engagement: Revisiting pedagogical content knowledge. *Active Learning in Higher Education*, 14(2), pp.97-107.
- Zidny, R., Sjöström, J. and Eilks, I., (2020). A multi-perspective reflection on how indigenous knowledge and related ideas can improve science education for sustainability. *Science & Education*, 29(1), pp.145-185.
- Zimmerman, B.J., (2000). Self-efficacy: An essential motive to learn. *Contemporary educational psychology*, 25(1), pp.82-91.
- Žukauskas, P., Vveinhardt, J. and Andriukaitienė, R., (2018). Philosophy and paradigm of scientific research. *Management culture and corporate social responsibility*, 121(13), pp.506-518.

APPENDICES

Appendix A - Scoping Literature Review.

(Analysis of papers to include - author, year, title of study, publication type and source, study design, key words, study population and schooling context).

| Author and year of Publication | Title of Study | Publication Type | Publication source | Study Design | Key words | Study Population | Country | Context |
|--|--|------------------|--|--------------|--|---|---------|------------------------------|
| Axelsson, K., Hagglund, S., Sandberg, A. (2015) | Entrepreneurial Learning in Education – Preschool as a Take-Off for the Entrepreneurial Self | Journal Article | Journal of Education and Training | Qualitative | Entrepreneurial learning, entrepreneurship, preschool, learning, early childhood education, entrepreneurship education, entrepreneurial self | Early Childhood / Preschool teachers | Sweden | Preschool |
| Insulander, E.; Ehrlin, A & Sandberg, A. (2015) | Entrepreneurial Learning in Swedish preschools: Possibilities for and constraints on children's active participation | Journal Article | Early Child Development and Care | Qualitative | Entrepreneurial learning, preschool, children, participation | Early Childhood / Preschool teachers and preschool children | Sweden | Preschool |
| Ehrlin, A.; Insulander, E. & Sandberg, A. (2015) | Perspectives on Entrepreneurial Learning in Early Years Education | Journal Article | Journal of Education and Human Development | Qualitative | Entrepreneurship Education, entrepreneurial learning, preschool, | Early Childhood / Preschool and primary teachers. Preschool and | Sweden | Preschool and Primary School |

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|---|--|-----------------|---|---------------|--|---|-----------|--|
| | | | | | primary school, early years | primary children | | |
| Jufri, M. & Hillman, W. (2017) | Internalizing the spirit of entrepreneurship in early childhood education through traditional games | Journal article | Education & Training | Quantitative | Early Childhood, Games, Entrepreneurship, Education, Multimedia, Traditional; | Early Childhood Education / preschool teachers and preschool children | Indonesia | Preschool |
| Mbebeb, F. (2009) | Developing productive lifeskills in children: priming entrepreneurial mindsets through socialisation in family occupations | Journal article | International Journal of Early Childhood | Descriptive | Early Childhood, sustainable education, life skills, occupational socialisation, entrepreneurial mindsets, sustainable livelihood | 5-8 year-old African school children (pre + primary) | Africa | 5-8 year old's (Preschool + Primary) Local family business |
| Lindstrom, L (2013) | What do children learn at Swedish Preschools | Journal article | International Education Studies | Quantitative | Children, preschool, citizenship, entrepreneurship, education. | Early Childhood / Preschool educators and personnel working in preschools | Sweden | Preschool |
| Do Paco, A. & Palinhas, M.J. (2011) | Teaching entrepreneurship to children: a case study | Journal article | Journal of Vocational Education and Training | Mixed Methods | Curriculum innovation, pedagogy, vocational education and training, mentoring, class | Primary school children | Portugal | Primary school |

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|--|--|-------------------------------|--|--------------|---|----------------------------------|------------------|--------------------------------|
| Suzanti., L (2017) | Entrepreneurship Learning for Early Childhood – a case study of children age 4 – 5 in TK Khalifah Ciracas Serang | Conference Paper | 2 nd International Conference on Economic Education and Entrepreneurship | Qualitative | Entrepreneurship learning, early childhood | Preschool Children | Indonesia | Preschool |
| Rosendahl Huber, L, Sloof, R. & Van Praag, M. (2014) | The effects of early entrepreneurship education: evidence from a field experiment | Article | European Economics Review | Quantitative | Skill formation, field experiment, entrepreneurship education, entrepreneurship, teamwork | Primary school children | The Netherlands | Primary school |
| Du Toit, A. (2021) | Critiquing Playful Project-Based Learning as Pedagogy for Entrepreneurship Education | Chapter in book (open access) | Book Title: Pedagogy – Challenges, Recent Advances, New Perspectives and Applications | Descriptive | 21 st century skills, competencies, entrepreneurial mindset, life-long learning, meaningful learning, playful problem-based learning | Educators and children (general) | World comparison | Education and Learning for all |
| Zhao, Y. & Gearin, B. (2016) | Paradigm Shift: Fostering an Entrepreneurial Mindset in Schools | Article | Ricercazione – Journal on Learning. Research and Innovation in Education (open access) | Descriptive | Entrepreneurial education, reform, product-based learning | Educators and children (general) | N/A | School system (all levels) |
| Wardani, E., Suharini E. & Setiawan, D. (2019) | The effectiveness of role playing based entrepreneurial pedagogy approach on the values of | Article | The Journal of Primary Education | Quantitative | Entrepreneurial pedagogy, entrepreneurship values, role playing | Primary school children | Indonesia | Primary school |

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|---------------------------------|--|------------------|--|-------------|---|--|-----------|-------------------|
| | entrepreneurship in elementary school | | | | | | | |
| El Khuluqo, I. (2016) | Early Childhood Entrepreneurship Education: a brief description of an ideal entrepreneurship learning for middle childhood | Conference Paper | 2 nd International Multidisciplinary Conference | Descriptive | Entrepreneurship, child development, early childhood education, entrepreneur character, learning method | Primary school children - 6 to 12-year old's | Indonesia | Primary school |
| Bowo, P. (2013) | Kidpreneur an early effort of planting entrepreneurship in children to embrace the future | Article | Indonesian Journal of Early Childhood Education Studies | Descriptive | Entrepreneur, children, labour opportunities | Children (general) | Indonesia | General education |
| Waluyo, E. & Latiana, L. (2014) | Entrepreneurship Learning in Early Childhood Programs | Article | Indonesian Journal of Early Childhood Education Studies | Descriptive | Entrepreneurial Learning, Early Childhood | Preschool Children | Indonesia | Preschool |
| Yohanna, L. & Laya, S. (2019) | The Emergence of Character and Entrepreneurial Spirit since Childhood | Conference paper | Advances in Economics, Business and Management Research -1 st International Conference on Economics, Business, Entrepreneurship & Finance | Qualitative | Entrepreneurship Education, character of entrepreneur, project-based learning | Primary school children | Indonesia | Primary school |

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| Samad, F. et al (2021) | The implementation of 'market day' activities to improve children entrepreneurship at Telkim Preschool Ternate | Article | Jurnal Kependidikan | Qualitative | Entrepreneurship, Early Childhood Education, Market Day | Preschool and Primary children (5-6 year old's) | Indonesia | Preschool |
| Christianti, M., Suprayitno, B. & Chlimah, N. (2019) | The Learning Design of Entrepreneurship Learning Model for Early Age Children | Article | Asia Pacific Journal of Multidisciplinary Research | Qualitative | Entrepreneurship learning model, early age children, learning design | Preschool Children and Early Childhood / Preschool Teacher | Indonesia | Preschool |
| Tasuah, N. | The Implementation of Creative Entrepreneurship and Self-Reliance Values through Role Playing Method in Kindergarten | Article | Indonesian Journal of Early Childhood Education Studies | Qualitative | Creative entrepreneurship, self-reliance, role playing method | Early Childhood / Preschool teachers | Indonesia | Preschool |
| Yetti, E. & Azizah, S. (2017) | Improved Creativity in Early Childhood through Entrepreneurship Education | Conference paper | Advances in Social Science, Education and Humanities Reaerch - 3 rd International Conference on Early Childhood Education | Mixed Methods | Creativity early childhood, entrepreneurship education | Preschool Children | Indonesia | Preschool |
| Christianti, M., Choimah, N. & | Development of Entrepreneurship Learning Model | Article | Asia Pacific Journal of | Qualitative | Entrepreneurship learning, early | Early Childhood / | Indonesia | Preschool |

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|-------------------------------------|--|---------|--|-------------|--|--------------------------------------|-----------|---|
| Suprayitno, B. (2015) | for Early Childhood | | Multidisciplinary Research | | childhood, spirit of entrepreneurship | Preschool teachers | | |
| Hassi, A. | The Effectiveness of early entrepreneurship education at primary school level: evidence from a field research in Morocco | Article | Citizen, Social & Economics Education | Qualitative | Entrepreneurship education, primary school, objectives | Primary school children | Morocco | Primary School |
| Sharpe, P. (1994) | Building an entrepreneurial mindset in young children in Singapore | Article | Journal of Enterprising Culture | Descriptive | None | Children (non-age specific) | Singapore | Parental role in fostering an entrepreneurial mindset in young children |
| Khan, N. Oad, L. & Aslam, R. (2021) | Entrepreneurship skills among young learner through play strategy: a qualitative study | Article | Humanities & Social Sciences Reviews | Qualitative | Entrepreneurship, problem-solving, independent, creativity, early years, decision making | Early Childhood / preschool teachers | Pakistan | Preschool |
| Sankaya, M. & Coskun, E. (2015) | A new approach to preschool education: social entrepreneurship education | Article | Procedia-Social and Behavioural Sciences | Descriptive | None | Preschool children | Turkey | Preschool |

*For the purpose of analysis of this scoping review, those teaching in early childhood education settings to children aged between 3 and 6 are referred to as Early Childhood Educators and/or Preschool Teachers

Appendix B – PhD related Publications

- **Conference Papers**

Murray, T., Kenny, B., McGuirk, H. & Cooney, T.M. (2024) – *‘Playful Seeds of Impact - A Constructivist Grounded Theory Approach to Preschool Entrepreneurial Education Inquiry’*. Paper presented by T. Murray at 3e 2024, Amsterdam, May 2024.

Murray, T., Hogan, A., Kenny, B., McGuirk, H. & Cooney, T.M. (2023) – *‘Breaking Barriers, Shaping the Future! Fostering Inclusive Early Entrepreneurial Education’*. Paper presented by T. Murray at ISBE 2023 (Institute for Small Business & Enterprise), Birmingham, October 2023.

Murray, T., Kenny, B., McGuirk, H. and Cooney, T.M. (2022) – *‘Mind the Gap – a mapping of Entrepreneurship Education Literature relating to Early Childhood Education’*. Paper presented by T. Murray at ISBE 2022 (Institute for Small Business & Enterprise), York, October 2022.

- **Book Chapter**

Murray, T., Cooney, T.M., Kenny, B., McGuirk, H. (2024). *‘Fox Lodge – A Subconscious Journey into Early Entrepreneurial Education’*. Foss, L., Henry, C., Yi Feng, W., (Ed.), *Reimagining Education Through Entrepreneurship: An International Showcase of Leadership and Collaboration to Educate for a Sustainable Future*. Edward Elgar Publishing.

- **Presentations**

Murray, T., Kenny, B., McGuirk, H. & Cooney, T.M. – *‘Early Entrepreneurial Education & The Playful Entrepreneur’*. Presented by T. Murray at The International Entrepreneurship Educators Conference (IEEC 2023), University of Surrey, UK, 2023.

Murray, T., Kenny, B., McGuirk, H. & Cooney, T.M. – *The Playful Entrepreneur* – how can Early Childhood Educators foster an entrepreneurial mindset in preschool children? - Presented by T. Murray at the NARTI Network Conference on Engaged Scholarship for the future of Entrepreneurship, (CEES, Leeds University) January, 2023.

Murray, T., Kenny, B., McGuirk, H. & Cooney, T.M. – *'Playful Entrepreneurship* – a constructivist grounded theory approach to understanding how early childhood educators apply entrepreneurial and value creation pedagogies to foster and nurture entrepreneurial learning, thinking and activities in preschool children'. Presented by T. Murray at The Faculty of Business and Humanities Research Seminar, Munster Technological University, February 2023.

Murray, T., Kenny, B., McGuirk, H. & Cooney, T.M. – *'How can Early Childhood Educators foster an entrepreneurial mindset amongst children in preschool care and education?'*. Presentation by T. Murray at The Faculty of Business and Humanities Research Seminar, Munster Technological University. February 2022.

Murray, T., Kenny, B., McGuirk, H. & Cooney, T.M. – *'How can Early Childhood Educators foster an entrepreneurial mindset amongst children aged 1 to 6?'*. Presentation by T. Murray at The Faculty of Business and Humanities Research Seminar, Munster Technological University. February 2021.

- **Other**

Murray, T., Kenny, B., McGuirk, H. & Cooney, T.M. – *'Fostering an Entrepreneurial Mindset in Children* – Article for E-zine, (Vol 3 No 3), The Entrepreneurial Mindset Network, October 2020.

Appendix C – Ethics Approval Letter



Ms. Trudie Murray
Lecturer
Department of Management & Enterprise
[REDACTED]

21st November 2022

Re: Research Ethics Application (Ms Trudie Murray)

Dear Trudie

The MTU (Cork) Research Ethics Committee (REC) received an application from you, under the supervision of DrBreda Kenny (MTU), Dr. Helen McGuirk (MTU) and Professor Tom Cooney (UCD) for permission to undertake a study entitled “**The Playful Entrepreneur: how can Early Childhood Educators foster an Entrepreneurial Mindset amongst children in preschool care and education?**”

The REC has undertaken a research ethical review of the documentation submitted.

The REC has advised that it is happy that the study has addressed ethical considerations and has recommended to me that it be granted permission to proceed as outlined in the research proposal submitted.

I am therefore pleased to inform you that the University grants you permission to proceed with this study.

MTU Ethics Approval No: MTU22065

APPROVED

Finally, the REC requests that the research team reverts to the REC for review if any changes to the proposed study, its implementation, or to the use of data as outlined are considered in the future.

Yours sincerely

[REDACTED]

Dr Áine Ní Shé

Registrar and Vice President for Academic Affairs

c.c. Dr Breda Kenny (MTU), Dr. Helen McGuirk (MTU) and Professor Tom Cooney (TUDublin)

Appendix D – Consent Form for Early Childhood Educators

Consent Form for Individual Interview Participants

Research Study Title: *“Playful Entrepreneurship: how can Early Childhood Educators foster an Entrepreneurial Mindset amongst children in preschool care and education?”*

Name of Researcher: **Trudie Murray**

Please put your initials in each box, if you are in agreement with the statement

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|--|--|
| I confirm the purpose of this interview and the nature of the questions have been explained to me. | |
| I confirm I have had the opportunity to ask questions and as such understand the purpose and nature of the research study | |
| I understand my participation is entirely voluntary, and I have the right to withdraw at any time from the study. I retain the right to withdraw my data at any stage after it has been collected and request my data to be destroyed. | |
| I consent to take part in the above study. | |
| I consent to be audio-recorded and/or note taking during this interview | |
| I understand I have the right to request a copy of my transcript to review for fairness and accuracy | |
| I consent to direct quotes (under pseudonymisation) being used in the dissemination of the findings of this research, and subsequent publications | |
| I understand that the direct quotes will remove all identifying personal information about my name and organisation. | |
| I agree for my data to be held in a password protected file on the MTU server for the period of the PhD study and up to 5 years after completion of the PhD. | |
| I agree that after the period above my data will be archived in a data repository on an MTU server | |
| I understand that this research has received ethical approval from Munster Technological University (MTU) - ethical approval number MTU22065 . | |
| I understand that this research is conducted as part of a PhD study by Trudie Murray under the supervision of Dr. Breda Kenny, Dr. Helen McGuirk and Professor Thomas Cooney | |

| | | |
|---------------------|------|-----------|
| Name of Participant | Date | Signature |
|---------------------|------|-----------|

| | | |
|--------------------|------|-----------|
| Name of Researcher | Date | Signature |
|--------------------|------|-----------|

Appendix E – Interview Guide

Semi-Structured Interview Questions for Early Childhood Educators *

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|---|---|
| <p style="text-align: center;">The Profession</p> <ul style="list-style-type: none"> • What led you to become involved in ECCE education? • Do you feel ECCE education is a vocation? • What term do you use to describe yourself working in the profession? • Do you think the terms used matter? • What contributes to the status of ECCE? • What characteristics does a professional practitioner have? • How does your education and training affect your practice? • What qualifications are appropriate for a practitioner/educator of ECCE? • How would you like to see the profession recognised? • Have you / do you avail of IPD (Individual Professional Development)? • What IPD would you like to see being offered? | <p style="text-align: center;">Policy</p> <ul style="list-style-type: none"> • What is your understanding of policies in ECCE? • What is your understanding of policies in Entrepreneurship/Entrepreneurship Education? • How do current ECCE regulations and policies affect your everyday practice? • How do current Entrepreneurship policies effect your everyday life? • Do you think there is enough consultation between the ECCE sector and policy makers done? • What additions or changes would you like to see in policy? |
| <p>ECCE Programme (Early Childhood Care and Education Programme)</p> <ul style="list-style-type: none"> • What has been your experience with the ECCE programme? • What are the benefits of the ECCE programme? • What are the drawbacks of the ECCE programme? • What skills does the ECCE programme foster in children? (plus examples) • Do you think it addresses all skills development for children of this age cohort? • What additions or changes would you like to see in the ECCE programme? | <p style="text-align: center;">Values / Skills</p> <ul style="list-style-type: none"> • What values inform your practice as an ECCE educator? • What supports do you need as an ECCE educator? • What characteristics are important for your ECCE setting to have? • What skills are necessary in effectively delivering the ECCE programme? • What values are necessary in effectively nurturing children undertaking the ECCE programme. |

| | |
|--|--|
| <ul style="list-style-type: none"> • What teaching strategies do you use in delivering the ECCE programme? | <ul style="list-style-type: none"> • How do you facilitate a positive relationship with children undertaking the ECCE programme ? • How do you nurture learning and skills development in children undertaking the ECCE programme? |
| <p style="text-align: center;">Curriculum</p> <ul style="list-style-type: none"> • Have you had any training in relation to the regulations or the national framework guidelines? • What is your opinion of Siolta /Aistear? • How have these impacted on your practice? • What changes/additions would you make to Siolta/Aistear? • What can HEI's do, to support the profession and/or IPD? | <p style="text-align: center;">Entrepreneurship Education</p> <ul style="list-style-type: none"> • What is your understanding of entrepreneurship education? • Is entrepreneurship education delivered as part of your practice? • Do you think it should be included in the Aistear curriculum? (Why? Or Why not?) • Are there benefits to entrepreneurial learning in your opinion – for practitioners / for children? • Would you encourage enterprising behaviour in children undertaking the ECCE programme? (Why / Why not?) • Examples of enterprising behaviour in children undertaking the ECCE programme. • Have you engaged in entrepreneurship education as part of your training and/or IPD? • What skills do you feel you need in order to encourage / develop entrepreneurial skills in children undertaking the ECCE programme? |

*For the purpose of protocol, the sector will be referred to as ECCE (Early Childhood Care and Education).