



# Play, Learning and Teaching in a Redeveloped Primary Curriculum

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**NCCA**

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## A Note on the Authors and Learning Partner



**Professor Emer Ring** is an educator, researcher, and leader in Early Childhood and Inclusive Education. As Dean of Education at Mary Immaculate College (MIC), Limerick, she oversees one of Ireland’s largest education faculties, delivering programmes from early childhood to post-primary education, including specialist programmes for neurodiverse learners. Emer is a leading voice in inclusive education and has extensive expertise in education policy, research, child voice, pedagogy across early years and the primary school, neuro-affirmative approaches, universal design for learning and curriculum development. She previously worked as primary school and special education teacher in addition to serving as a Senior Inspector with the Department of Education. Emer has managed and been involved in a wide range of national and international projects focused on promoting the equal participation of children in education. With her colleague Dr Lisha O’Sullivan, Emer is co-author of the forthcoming publication ‘Play from the Inside Out: Perspectives from Theory, Research and Practice’ published by Peter Lang.



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**Gillian Corbally** has been teaching in a large urban school for fifteen years and for the past three years has held the position of Assistant Principal (AP)II with responsibility for code of behaviour and restorative practice, social environmental and scientific education (SESE), science, technology, engineering and mathematics (STEM), staff continuing professional development (CPD) and after-school activities. In 2022, Gillian was a guest speaker for a conference for teachers and spoke on Daily Acts of Wellbeing for Teachers and Students. In 2024, she wrote a Department of Education-approved Extra Personal Vacation (EPV) leave /CPD course for Rahoo CPD called Learning to Play; Playing to Learn and in 2025 co-wrote the EPV/CPD course: The Inclusive Classroom: Nurture, Play, Engage, also for Rahoo CPD. Since early 2025 Gillian has been a creator and presenter of webinars for Education Centres on playful learning. Gillian also writes short CPD articles on the same topic for Folens’ Publishers. Gillian is passionate about playful learning, with particular focus in middle to senior primary school classes.

## Glossary of Terms and Abbreviations

DoE	Department of Education
ECEC	Early Childhood Education and Care
ELC	Early Learning and Care
EPPSE	Effective Preschool, Primary, and Secondary Education
GAIA	Green Awareness in Action
GoI	Government of Ireland
ISTP	International Summit of the Teaching Profession
LIS-YC	Leuven Involvement Scale for Young Children
NCCA	National Council for Curriculum and Assessment
NCSE	National Council for Special Education
OECD	Organisation for Economic Co-operation and Development
PE	Physical Education
PB-L	Project-based Learning
PLaNS Project	Play, Learning and Narrative Skills Project
PLC	Professional Learning Community
Provocations	Provocations are resources that are set out and/or set up to spark curiosity and engagement. They may be open-ended or focused on a specific interest or learning goal. Provocations can be touched, explored, manipulated and inquired about as part of free-play, guided-play or educator-led playful experiences. (Government of Ireland 2024a, p.32)
SAKG	The Stephanie Alexander Kitchen Garden
SEE	Social and Environmental Education
SPHE	Social, Personal and Health Education
SST	Sustained Shared Thinking
STEM	Science, Technology, Engineering and Mathematics
TPs	Teaching Practices
3DVE	Three Dimensional Virtual Environment
UD	Universal Design
UNCRC	United Nations Convention on the Rights of the Child
UNCRPD	United Nations Convention the Rights of Persons with Disabilities

## Introduction

In our research across a myriad of elements of the education system in Ireland, children in early years, primary, post-primary and special school contexts have consistently referenced play in sharing their experiences. The drawings on the cover of this paper are from research exploring provision for autistic children, where children in primary and special schools were invited to communicate their experiences of school-life (Daly et al. 2016)<sup>1</sup>. In this research, play emerged as a key theme across all children's drawings. This theme is evident also in more recent research conducted by the authors using a similar methodological approach (Lynch et al. 2020; Robinson et al. 2025). Play likewise emerged as a leading factor in supporting children's development in our paper with colleagues exploring how theoretical perspectives on children's learning and development can inform a responsive pedagogy in a redeveloped primary school curriculum (Ring et al. 2018). According to the Organisation for Economic Co-operation and Development (OECD) research on what matters most for five-year-olds, playing emerged as more popular than any other activity for children in early learning and care (ELC) settings and school settings (OECD 2021). While it is therefore clear that children place a value on play and that this value is corroborated by research on learning and teaching, the belief in the value of play tends to be associated with younger children, leading to its documented benefits often being dismissed for older children. This paper commissioned by the National Council for Curriculum and Assessment (NCCA) builds on the benefits play has for all children through exploring the potential of play and playful approaches to learning and teaching from early childhood into the early years of post-primary. Underpinned by a desk-based literature review, this paper aims to support teachers through informing a deeper understanding and further elaboration on play and playful approaches to learning and teaching for children from 4-13 years, as envisaged in the *Primary Curriculum Framework for Primary and Special Schools* [hereafter referred to as the *Primary Curriculum Framework*] (Department of Education (DoE) 2023a). The central importance of continuity for children in transitioning from the *Primary Curriculum Framework* to the *Framework for Junior Cycle* (Department of Education and Skills (DES) 2015) underscores the importance of developing a shared understanding of play and playful approaches across primary and post-primary contexts.

Following an overview of the methodological approach adopted for this research paper, the right to play is considered, the parameters of play and playfulness identified, and the implications of the current positions on play in the *Primary Curriculum Framework* (DoE 2023a) presented. Harnessing the potential of play and playful pedagogies to support children's learning and development across all stages in primary and special school contexts is investigated. The value and evidence of the impact of play and playful approaches on learning for children across all stages and in all curriculum areas of the *Primary Curriculum Framework* (DoE 2023a) are discussed and the role of the teacher in facilitating play and playful approaches in this context delineated. Finally, the manner in which indoor and outdoor learning environments can facilitate the use of play and playful approaches is examined. In their work, the authors maintain a commitment to authentically including children's voices. As the timeframe did not allow for eliciting children's views and experiences, the authors have threaded children's insights on play from previously published research throughout the paper. Reference is also made in this context to the analysis of the data from the report *Child's Voice: Consulting with Children as Part of the Redevelopment of the Primary School Curriculum* (Kiely et al. 2024).

<sup>1</sup> These drawings are from research commissioned by the National Council for Special Education (NCSE) to evaluate the range of state-funded education provision for autistic children. Forty-one children participated in child conversations focused on their school experience and were provided with the option of visually representing their experience through drawing. The conversations were derived from the child conferences referenced by Clark and Moss (2011) combined with the draw and tell approach employed by Lambert et al (2014). While a level of caution is always necessary in interpreting children's drawings through an adult lens, the meaning attributed to the drawings in this research was co-constructed with the children during the conversations. As suggested by Clark (2005), the children's drawings were viewed as a visual language to augment the conversations. An extensive multi-faceted methodological approach was employed during the research, which further supported the overall research findings.

## Methodology

*“It’s really, really, fun for me, and it’s fun for other people”*

(Orin, aged 10, Children’s representation of why they valued play, Bergin et al. 2024, p.162)

The methodology adopted for this paper evolved from the authors’ concern to contribute to evidence-based practice regarding the contribution of play and playful approaches to learning and teaching from early childhood into the early years of post-primary school. While remaining cognisant of the limitations in terms of the project’s scale, the authors engaged in a critical review focused on analysing and synthesising evidence from national and international policy, literature and research (Grant and Booth 2009). Critical reviews are designed to present, analyse and synthesise material from a diverse range of sources, evaluate the value of existing literature, resolve competing narratives and suggest future directions (Ibid.).

In sourcing the literature for the review, the authors focused on identifying peer-reviewed and grey literature in English and Irish between 1998 and the present. The rationale for selecting 1998 as the start date was the positioning of early childhood education and associated curriculum implications firmly on the agenda with the National Forum for Early Childhood Education led by Professor John Coolahan (Coolahan 1998). In cases where publications pre-1998 were identified by the authors as relevant in the literature sourced, these were reviewed and included. A two-strand approach to sourcing literature was adopted that incorporated both an empirical and an expert strand. The empirical strand comprised peer-reviewed publications incorporating primary studies and meta-analyses. Publications, articles, reports, reviews, and guidance based on professional experience/expert opinion constituted the expert strand. Findings from both strands are interwoven in the elements of the analysis presented below investigating play and playful approaches to learning and teaching in a redeveloped primary curriculum.

As suggested in the typology of reviews detailed by Grant and Booth (2009), the authors sought to identify the most significant research and maintained a focus on the conceptual contribution of each piece of included literature vis-à-vis the research brief. Having previously engaged in an intensive and comprehensive literature search for their forthcoming publication *Play from the Inside Out: Perspectives from Theory, Research and Practice* (O’Sullivan and Ring 2025), the authors had access to an extensive database of relevant literature. The authors conducted further literature searches explicitly related to the research brief. Decisions to include or exclude literature were based on the authors’ view of the potential of the literature to contribute to answering the specific questions posed by the NCCA in commissioning the paper together with the identified timeline.

Gillian Corbally was invited by the authors to contribute to this paper as a ‘learning partner’. Stenhouse first proposed the role of a ‘critical friend’ or ‘critical colleague’ to support research in 1975, and this was later re-conceptualised by McNiff as a ‘learning partner’ (Stenhouse 1975; McNiff 2002). Gillian’s experience as a primary school teacher combined with her extensive expertise in play and playfulness across the curriculum greatly enriched this project, bringing a crucial lens to practice through providing critical and constructive feedback on all drafts of the paper.



## The Right to Play

*“When I play I am more confident sharing my ideas and creative work with others”*

**(Response of 88% of children to survey comprising 25,532 children across 36 global contexts aged 5-12 (The LEGO® Group 2024, p. 38)**

As the most ratified human rights agreement, endorsed by 195 governments, the *United Nations Convention on the Rights of the Child* (UNCRC) is widely recognised globally as a milestone achievement for children’s rights (O’Sullivan and Ring 2025). For the purposes of the UNCRC, a child is described as “every human being below the age of eighteen years...” (UNCRC 1989: Article 1). Described as “one of the most innovative aspects of the UNCRC” (Davey and Lundy 2011, p.4), the right to play is enshrined in Article 31:

1. States Parties recognise the right of the child to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts.
2. States Parties shall respect and promote the right of the child to participate fully in cultural and artistic life and shall encourage the provision of appropriate and equal opportunities for cultural, artistic, recreational and leisure activity.

Although play is linked to recreational activities, it is viewed as a different pursuit from rest and leisure, culture life and the arts and should be appropriate to the age of the child. In *General Comment No. 17*, the UN Committee on the Rights of the Child elaborates on the meaning and value of play as envisaged in Article 31.

Children’s play is any behaviour, activity or process initiated, controlled and structured by children themselves; it takes place whenever and wherever opportunities arise. Caregivers may contribute to the creation of environments in which play takes place, but play itself is non-compulsory, driven by intrinsic motivation and undertaken for its own sake, rather than as a means to an end. Play involves the exercise of autonomy, physical, mental or emotional activity, and has the potential to take infinite forms, either in groups or alone. These forms will change and be adapted throughout the course of childhood. The key characteristics of play are fun, uncertainty, challenge, flexibility and non-productivity. Together, these factors contribute to the enjoyment it produces and the consequent incentive to continue to play. While play is often considered non-essential, the Committee reaffirms that it is a fundamental and vital dimension of the pleasure of childhood, as well as an essential component of physical, social, cognitive, emotional and spiritual development.

**(UN Committee on the Rights of the Child 2013, p. 6).**

This right is mirrored in Article 30(5d) of the *UN Convention on the Rights of Persons with Disabilities* (UNCRPD), which refers to the right of children with disabilities to have equal access with other children to participate in play and specifically notes that this right includes equal access and participation in the “school system” (UNCRPD 2006).

Enshrined in both the UNCRC and the UNCRPD, the right of all children to play therefore places a responsibility on those states who have ratified these conventions to realise this right in practice for all children up to the age of eighteen. Rights are purposefully couched in broad principles to allow them to be interpreted in accordance with local values and traditions (Alderson 2008). In ratifying the UNCRC, states commit to positioning play as a right rather than a privilege (Suoto-Manning 2017). While play is embedded in many of these countries’ curriculum frameworks, developing a shared understanding of play and its value at policy and practice levels is identified as central to realising this right in practice (Murray 2018; Bogatić 2021). Ireland ratified the UNCRC on 28 September 1992 and the UNCRPD on 20 March 2018 (Ring 2024). In the Irish context, the positioning and aligning of play across curriculum frameworks reflect the state’s commitment to realising this right in educational contexts (DoE 2023a; 2023b; DES 2015; Government of Ireland (GoI) 2019; 2024a; NCCA 2009). The ongoing commissioning of research to support play in practice further indicates the state’s attentiveness to its obligations and responsibilities under the conventions.

## Identifying the Parameters of Play and Playfulness

*While play gets mentioned less as ‘play’, children speak at length about sports, skipping, ball play, yard games, spending time with friends and learning through games, experiments, hands-on activities and outdoors, all of which are playful in nature, reflecting children’s shifting engagement with play as they get older.*

**(Analysis of data in 5th and 6th class, Kiely et al. 2024, p.24)**

As play is highly individual and can involve a diverse range of activities, it is a concept that has defied neat definition. Advances in neuroscience now provide evidence that mammals are born wired to play with distinct neural or play circuits, found deep in the mid-brain, building us to play and allowing us to be built by play (Eberle and Brown 2024). This line of research explains play as a natural inclination which is rewarded by the pleasure experienced while playing. Research suggests that play is sensitive to prevailing conditions and is dependent on basic physical needs being met and the presence of non-stressful conditions (Burghardt 2011; Bateson 2014). Play, foremost, is an activity that children are biologically primed to engage in when conditions are conducive. Classrooms that promote emotional warmth and security, feelings of control, cognitive challenge, and articulation of learning, enable all children to learn playfully (Whitebread 2010; 2015).

In the literature the activity of play is generally defined as something that is: freely chosen; emotionally satisfying; active; imaginative; flexible; controlled by the player; and concerned with means over ends (Krasnor and Pepler 1980; Rubin et al. 1983; Pellegrini 2009; Gray 2013). As these characteristics have more to do with motivation or mental attitude than behaviour, per se, the term ‘playfulness’ is increasingly being used to describe how the same activity can be approached with very different attitudes (Gray 2013; Howard 2019; Mardell et al. 2023; Eberle and Brown 2024). Running for leisure, for example, is likely to involve a different attitude to running to win a race. Moreover, opportunities to engage playfully support the development of a playful disposition which can transcend activities (Barnett 2018; Fink et al. 2020). The word ‘play’, therefore, can be understood as an activity while ‘playfulness’ denotes a particular mindset or approach

to an activity (Gray 2013; Mardell et al. 2023; Eberle and Brown 2024). Mardell et al. (2023, p.17) conclude that “a playful mindset is the active ingredient that turns activities and other experiences into play”.

In the school context, the concept of playfulness can overcome the well-established dichotomies of play/learning and teacher-led/child-led activities. Playfulness becomes a characteristic of all teacher-child interactions, not just of activities traditionally characterised as play (Walsh et al. 2011). Playful learning “occurs when the learning goals of adults and the interests and curiosities of students align” (Mardell et al. 2023, p. 17). Following an extensive review of the research, Zosh et al. (2018) propose that learning activities which leverage children’s natural inclination for playfulness harness the five characteristics in Figure 1.

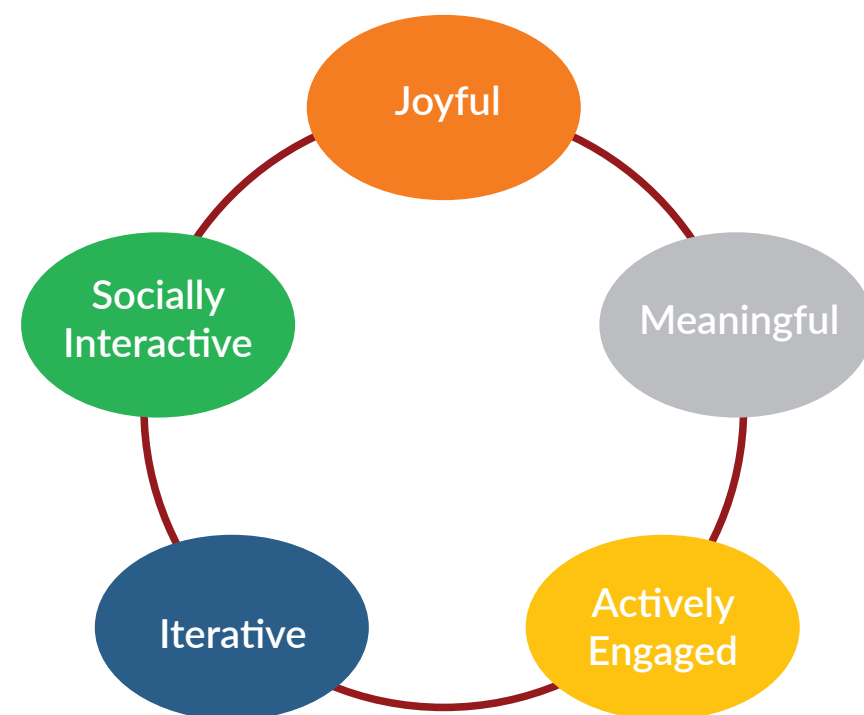


Figure 1. The Characteristics of Playful Learning (Zosh et al. 2017; 2018)

- **Joyful learning** involves children enjoying achieving what they set out to do, it is associated with feelings of satisfaction and can involve elements of surprise or novelty.
- **Meaningful learning** occurs when new learning is easily connected with what is already known, and when children care about what they are learning.
- **Actively engaged learning** is hands-on and minds-on, which fosters deep involvement.
- **Iterative learning** is all about overcoming challenges, problem-solving, and learning through trial and error.
- **Socially interactive learning** meets children’s needs to connect with others and provokes socially-shared regulation processes that impact positively on overall learning.

While not all social activity is playful, neither is all playful activity social (Zosh et al. 2018). While solitary engagement in play can be joyful, meaningful, iterative, and active, Whitebread et al. (2017) propose that “playing with other children, watching them and learning from them, may be one of the ways in which playful learning exerts its effect”. Moreover, play that is supported by adults is equally powerful for learning and development. Typically, in school, children have opportunities to engage in playful activities which are:

- Child-led e.g., deciding to play hopscotch during break-time;
- Child-led but teacher-guided e.g., a teacher creating a literacy rich environment and modelling vocabulary during child-led sociodramatic play;
- Teacher-led e.g., children collaboratively solving problems using concrete resources in a maths lesson designed by the teacher.

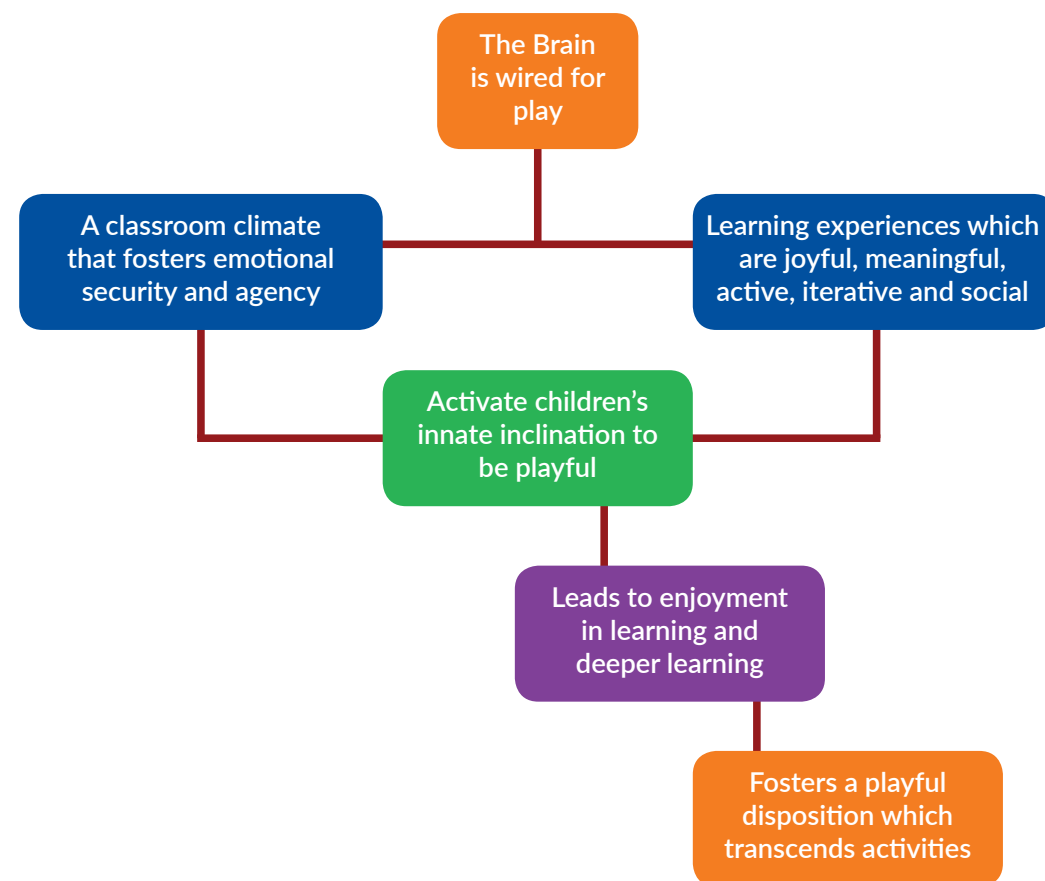
In this spectrum of playful activities (Zosh et al. 2018), leadership oscillates between the teacher and the child, creating variation in the levels of child agency. Harnessing the five characteristics in Figure 1. can support children to approach learning activities playfully. The parameters of play and playfulness in the literature are reflected in the current positions on a pedagogy of play across existing curriculum frameworks.

## Current Positions on a Pedagogy of Play Across Curriculum Frameworks

*“It just makes you feel happier”*

(Paul, age 10, children’s representation of why they valued play, Bergin et al. 2024, p. 162)

Pedagogy is described as encompassing an expectation that teachers “use appropriate and evidence-based approaches and strategies to foster children’s engagement, ownership, and challenge” that connect with “children’s life experience, circumstances, strengths, and interests” (DoE 2023a, p.6). A growing corpus of research (Zosh et al. 2018; Parker et al. 2022) supports the view that learning is more enjoyable and effective when it taps into children’s natural propensity to be playful. Being playful involves being optimistic, agentic, imaginative, collaborative, creative, solving problems, and taking risks. Consequently, it fosters the dispositions, skills, knowledge, and values needed for lifelong wellbeing and learning success. Teachers have a central role in fostering playfulness in a classroom rooted in the principles summarised at Figure 2. below.



**Figure 2. Principles to Consider for Fostering Playfulness in the Classroom**

The alignment of *Aistear: the Early Childhood Curriculum Framework* (NCCA 2009; 2015a; GoI 2024a; 2024b), the *Primary Curriculum Framework* (DoE 2023a) and the *Framework for Junior Cycle* (DES 2015) is designed to support continuity and progression for all children on their journey through ELC, primary and post-primary settings. A key feature of this alignment between *Aistear* and the *Primary Curriculum Framework* is the affirmation of the benefits of a pedagogy of play for children's learning and development. *Aistear* describes pedagogy as referring "to all the educator's actions or work in supporting babies, toddlers and young children's learning and development", noting that "it infers a negotiated, respectful and reflective learning experience for all involved" (GoI 2024a, p. 32). There is a focus in *Aistear* on adopting a slow relational pedagogy to "nurture supportive, stable, warm relationships" that promote secure attachments with caregivers, cultivate healthy and safe environments and meaningful learning experiences (GoI 2024a, p. 33). *Aistear* prioritises play for babies', toddlers' and young children's learning and development, envisaging a daily routine that flows between free-play, guided play and educator-led playful activities (GoI 2024b, p. 21). Playfulness is identified as a learning disposition that can be fostered intentionally by the educator through role-modelling.

Pedagogy in the *Primary Curriculum Framework* recognises the role of teachers "as committed, skilful, and agentic professionals in a complex role" and acknowledges the impact of "teachers' actions, words, and judgements on what and how children learn" (DoE 2023a, p. 23). Pedagogy is identified as one of the eight overarching principles of learning, teaching and assessment summarised at Figure 3. below to be considered by schools in pursuing their curriculum vision.



**Figure 3. The Eight Overarching Principles for Consideration by Schools in Pursuing the Vision of the Primary Curriculum Framework (DoE 2023a, p. 6)**

These principles are deliberately broad to accommodate individual school contexts and each child's unique circumstances, experiences and abilities. Importantly they reflect what is valued in primary and special education and are together identified as encompassing the heart of high-quality learning, teaching, and assessment.

The approach to assessment advocated by the *Primary Curriculum Framework* incorporates a continuum of assessment ranging from 'intuitive' to 'planned interactions' to 'assessment events' that provides a mechanism in identifying the outcomes of learning through play (DoE 2023a). This continuum of assessment provides information on the knowledge skills, concepts, dispositions, attitudes and values that the play experience has fostered and supports children's development and progress across the curriculum. Figure 4. below provides an exemplar of a possible application of the continuum of assessment to playful pedagogies for the Oral Language Strand in the *Primary Language Curriculum* (GoI 2019). A learning outcome related to the element of understanding the content and structure of language across the four stages of the primary school focuses on, inter-alia, oral vocabulary.



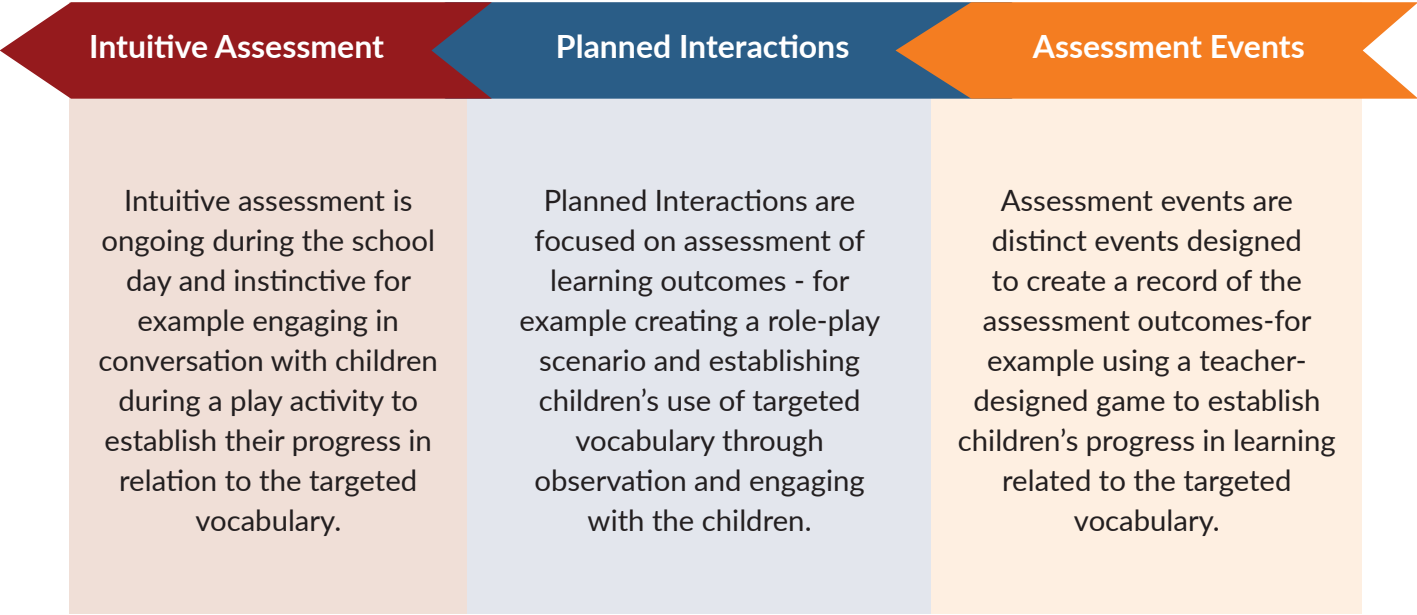


Figure 4. Applying the Continuum of Assessment to Playful Pedagogies for the Oral Language Strand in the Primary Language Curriculum (GoI 2019)

A myriad of ways of documenting children’s achievement of learning outcomes can be adopted including notes, videos, photographs and learning stories (DoE 2023a). The Pedagogy of Play project at Project Zero Harvard University has developed a range of tools to support teachers in designing playful pedagogical approaches in the classroom context (Project Zero 2022). These resources can be accessed [HERE](#) and provide useful guidance for early years educators and teachers in realising the current positions on a pedagogy of play across curriculum frameworks.

While ‘a pedagogy of play’ is not specifically referenced in the *Framework for Junior Cycle*, there is a discernible relationship between ‘a pedagogy of play’ and the principles and key skills of the Framework. Play and playfulness align to a degree with all of the eight principles, specifically the principles of Choice and Flexibility; Creativity and Innovation; Engagement and Participation and Inclusive Education have particular application in this context. Similarly play and playfulness have potential to support the eight key skills required for successful learning by students across the curriculum and for learning beyond school identified in the Framework. For example, in the ‘Being Creative’ key skill, one of the mental blocks to creativity is identified as having a belief that “play is frivolous” (Teaching and Learning Scotland cited in NCCA 2015b, p.16). ‘Being Creative’ is associated with imagining; exploring options and alternatives; implementing ideas and taking action; learning creatively and stimulating creativity using digital technology, all of which can be supported by play and playfulness. Equally the acquisition of the key skill of ‘Working with Others’ in terms of developing good relationships and dealing with conflict; co-operating; respecting difference; contributing to making the world a better place; learning with others and working with others digitally can be acquired and enhanced through a pedagogy of play.

The *Primary Curriculum Framework* (DoE 2023a, p.25.) suggests that “play and playful approaches generally happen in three different ways”: play that is completely led by children; playful activities that are planned for and led by the teacher; and times when the teacher and the children share play activity, developing the play together”. Successful implementation of playful pedagogies involves both planning for the intended learning outcomes and employing appropriate assessment of learning as an integral element of the learning and teaching process. The characteristics of play discussed above that imbue the design of the learning and teaching event can also be applied to the assessment of learning outcomes. The authors suggest that there is scope for the continuum of assessment at Figure 4. above to be joyful; meaningful; actively engaging; iterative and socially interactive, creating the possibility of greater authenticity (Macy 2023).

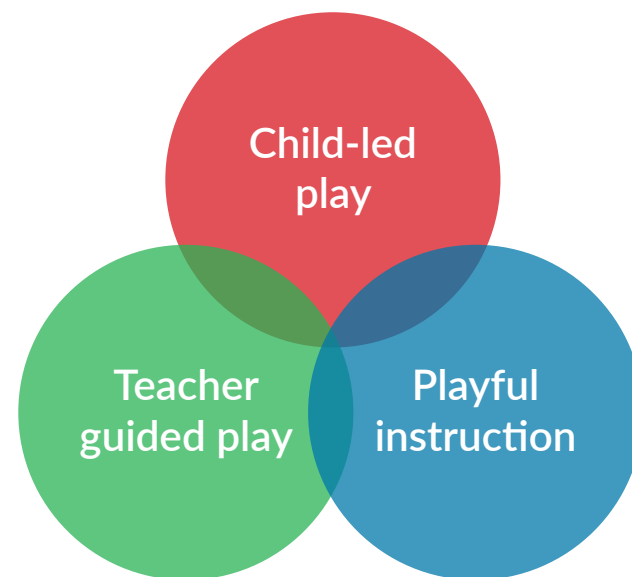
# Learnings from Play and Playful Pedagogies Underpinning Early Learning and Development for Primary and Special School Contexts

*“I like doing indoor homeroom fun activities. I like chatting with my four friends because they’re Nintendo fans”*

(Post-primary student, Midleton CBS Secondary School Cork, Ring 2024, p. 114)

The research on quality early childhood education affirms that high-quality programmes emphasise holistic learning and development, and balance child-led and adult-led activity (Schweinhart et al. 2005; Fuligni et al. 2012; Taggart et al. 2015; Slot et al. 2016; Goble and Pianta 2017). Moreover, sensitive adult interactions during child-led activity, which extend talking and thinking, are particularly advantageous for learning and development (Taggart et al. 2015; Goble and Pianta 2017). The United Kingdom (UK) *Effective Preschool, Primary, and Secondary Education* (EPPSE) study refers to this as ‘sustained shared thinking (SST)’ while the Curriculum Quality Analysis and Impact Review of European ECEC (CARE) uses the term ‘educational dialogues’ (Slot et al. 2016). Taken together, this research suggests that an effective child-centred approach includes opportunities for child-led learning, child-led learning which is sensitively guided by teachers, and teacher-led activities tailored to support children achieving curriculum learning outcomes (Veraksa et al. 2021). This type of balanced pedagogical approach has a range of immediate and downstream benefits for children’s wellbeing and learning achievement (Whitebread et al. 2015). Aligned with this research, Zosh et al. (2018) propose that an effective playful pedagogical approach includes a similar spectrum of playful activities as illustrated in Figure 5.





**Figure 5. A Playful Pedagogical Approach Involves a Spectrum of Playful Learning Activities**  
(Adapted from Zosh 2018)

When activity is child-led children have more agency around what they play, where they play, and with whom they play (Johnson et al. 2005). Child-led play is beneficial for aspects of self-regulation (Elias and Berk 2002), problem-solving (Ramani 2012), and oral language (Neuman and Roskos 1992). It can also foster creativity as children have more freedom to pursue their own ideas (Gray 2013). Guided play has emerged as a middle ground between child-led play and direct instruction. It allays concerns that a preponderance of child-led play may not suitably support children to achieve all curriculum learning outcomes or that a reliance on direct instruction may inhibit learner agency and active engagement (Weisberg et al. 2015). Guided play remains child-led but involves teachers arranging environments to guide children towards specific curriculum content (i.e. the provision of measuring utensils in a sand tray) and sensitively scaffolding play and learning (i.e. through modelling vocabulary or asking an open-ended question to extend thinking). The research suggests that guided play can have advantages over both child-led play and direct instruction for aspects of language and literacy learning (Toub et al. 2018), and mathematics learning (Fisher et al. 2013) in the early years. While instruction has often been seen as the anthesis of play, recent research illustrates that teacher-led learning activities can provoke playfulness when they leverage the five characteristics of play (Parker et al. 2022; Blinkoff et al. 2024). Making instruction playful can increase children's engagement in learning, their communication, and their use of learning resources (Blinkoff et al. 2024).

Taken together, the evidence on playful learning suggests that wellbeing and learning are accelerated when children experience a balanced and integrated curriculum which locates the "Sweet Spot" or ideal balance of playful learning activities, in school (Sahlberg and Doyle, 2019, p.309). Recent research from Pyle et al. (2024), for example, outlines how core language and literacy skills can be promoted across child-led play (i.e., oral language), guided play (i.e., comprehension), and teacher-led playful activities (i.e., writing), in kindergarten classrooms. As child-led play, guided play, and playful instruction can have a differential impact on various aspects of learning, employing a spectrum of activities seems best suited to propelling the whole child (Marbina et al., 2011; Fuligni et al. 2012; Pyle et al., 2024). When teachers forge connections across this spectrum of playful learning activities, further consolidation and generalisation of learning are supported (Chilvers, 2012; Marbina et al., 2011).

## Play and Playful Approaches: The Value and Evidence of Impact on Learning



*"In the school playground, I would love to read and invent games, card games for example (...) because I would be free to choose what I read or invent, not like in the classroom"*

(Elizabeth, age 10, (assessed with language disorder and a crutches-user)  
Orain et al. 2025: 7)

While the research on playful learning has historically been concerned with early childhood education, a developing research base now provides evidence that playful approaches continue to have currency as children progress through school stages (Parker et al. 2022; Mardell et al. 2023). Embedding playful modes of learning and teaching, in the school context, forges connections between learning in preschool and school through allowing children to connect old and new ways of learning (Whitebread 2015). Moreover, it harnesses the research evidence that school-aged learners' motivation and engagement are enhanced when learning is joyful, meaningful, active, iterative, and social (Zosh et al. 2018). Pedagogical continuity may also have a role in addressing concerns in relation to the 'fadeout' effects of high-quality early childhood education. The research in this area suggests that to sustain learning and development gains arising from high-quality preschool programmes, the quality of education in school must be similarly high (Ansari and Pianta 2018). As illustrated in the previous section, a playful pedagogical approach capitalises on the benefits of child-led, teacher-guided, and teacher-led activities. According to Parker et al. (2022), pedagogies grounded in constructivist and sociocultural theories such as active learning, collaborative learning, experiential learning, inquiry-based learning, and project-based learning, align well with a playful pedagogical approach. The research reviewed in the following sections supports the view that a playful approach is valid in the primary school context and remains responsive to school-aged learners' needs and interests. The selected evidence is not exhaustive, rather it is selected to illustrate the variety of ways in which playful learning and teaching can be facilitated across stages and curriculum areas.

Aligned with the theoretical models in the literature, the research reviewed involves a blend of facilitation practices combining child-led, teacher-guided, and teacher-led instruction, to varying degrees. There is also evidence, across these studies, that the five characteristics of play (joyful, meaningful, iterative, active, and social) are being leveraged to support children achieving a range of cognitive, linguistic, physical and socio-emotional learning outcomes through the provision of learning activities which foster learner motivation, agency, and engagement. Finally, the learning activities reported in these studies reflect the five ways of playing and learning identified by Whitebread (2012) which are outlined in Table 1.

Table 1: The Five Types of Play (Whitebread 2012)

Play Type	Sub-type	Examples	
Physical Play	Active play	Walking, running, swinging, skipping, running, jumping, climbing.	
	Rough and tumble play	Simulated playfighting or rough-housing involving chasing, catching, kicking, or wrestling.	
	Fine motor play	Practicing a range of skills such as threading, cutting, colouring, drawing or writing, manipulating materials, embroidery.	
Object Play	Exploring and experimenting	Sensory exploration of materials (e.g., sensory, natural, open-ended and junk materials), scientific inquiry, researching topics.	
	Constructing and making	Constricting and making with blocks and bricks, junk modelling, jigsaw puzzles, origami, woodwork, virtual building on computers and apps, Makerspaces.	
Symbolic Play	Play with language, music, visual media, writing, reading, and mathematical graphics	Riddles, joking, rhymes, singing, making music, mark-making, drawing, painting, scribbling, playful writing, playful reading, playful representation of mathematical thinking.	
Pretend Play		Sociodramatic play, small world play, storytelling, puppetry, drama, mime, hot-seating, debating, engagement with literature, movies, and theatre.	
Games with Rules		Interaction games (e.g. clapping games), movement games (e.g. tag), playground games (e.g. Red Rover), board games (e.g., Chutes and Ladders), card games (e.g., Uno), sporting games (e.g., Rounders), digital games (e.g., games made on Scratch (n.d.) [computer software]).	

While each type of play may have a specific developmental function, these five types of play can all contribute to holistic learning and development. This approach to categorising play distinguishes between pretend play, which refers to play where language is used to develop pretend scenarios or narratives and symbolic play which involves play with language itself (e.g., joke telling). Symbolic play also encompasses playful engagement with the uniquely human symbolic systems outlined in Table 1. The research in this area suggests that children are keenly motivated to play with the symbolic systems used to make and represent meaning (Whitebread 2012; Whitebread et al. 2017).

The broad range of practices which can be used to infuse playfulness across stages and subjects are summarised as involving the three overarching elements presented in Figure 6.

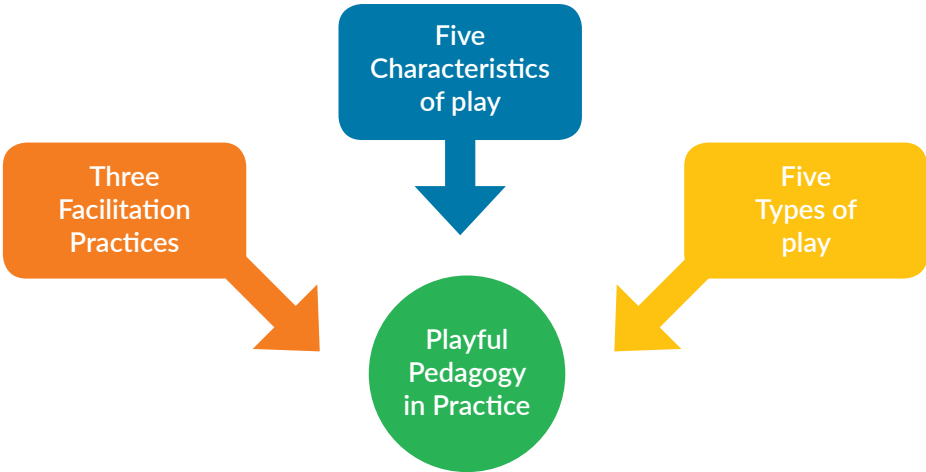


Figure 6. Playful Pedagogy in Practice (Adapted from Dowd and Thomsen 2021)

A playful pedagogy in practice therefore incorporates child-led, teacher-guided (where teacher and child share the play activity, developing the play together) and teacher-led practices to facilitate a playful pedagogy; is joyful, meaningful, actively engaging, iterative and socially interactive; and provides activities that incorporate physical, object, symbolic and pretend play in addition to games with rules.

Evidence of Playful Pedagogies Supporting Language (English and Gaelge)

Cremin et al. (2017) report on an evaluation of an 8-week training programme based on Vivian Gussin Paley’s Storytelling and Story Acting approach. This involved early years educators and teachers working with children in Preschool and Reception classes (3- to 5-year-olds). Findings from this study capture how, through a collaborative process, the storytelling participants (the taleteller, scribe, and onlookers) and the story-acting participants (the practitioner-narrator, story author, co-actors, and audience) all contributed to the co-construction of children’s narratives. This approach offers a multimodal mechanism for young children, supported by teachers, to combine play, talk, gaze, gesture, words, and interactions as they collaboratively construct narratives. *Pedagogy of Play at Project Zero, Harvard University* (2021) have developed a resource which focuses on using Storytelling and Story Acting with older learners and can be accessed [HERE](#).



Whitebread et al. (2015) investigated the influence of taught and playful conditions on 5- to 7-year-old children's subsequent problem solving and creativity in oral and written storytelling tasks. Having been read a story, children reproduced their own oral and written stories. In the 'play' condition, children experienced 10-minutes of self-directed play with Storysacks, in small groups. In the 'taught' group, the adult modelled other possible stories with the dolls and props but the children did not handle the materials. Finally, in the 'control' group children were simply shown photocopied sheets of story characters. The analysis of children's written stories found that the 'play' condition included more conflicts and resolutions than the 'control' group. The conflicts and resolutions in the written stories of the 'play' group were found to deviate more from the original story than those in the 'taught' and 'control' groups. Overall, these findings suggest that during more playful conditions, children demonstrated more confidence in completing tasks and were more likely to engage in problem-solving and creative behaviours.

The *Play, Learning and Narrative Skills* (PLaNS) Project investigated the influence of play on 5- to 10-year-olds' literacy skills (Pino-Pasternak et al. 2014). The project involved the use of LEGO® to support children's narrative and writing skills as they engaged in pretend and construction play. The intervention extended across an academic year and comprised of twelve writing activities designed and facilitated by class teachers. Children worked in mixed-ability groups of three to jointly develop story ideas through LEGO® construction, and they then individually produced their writing. Preliminary results suggest that playing with LEGO® provided children with opportunities to connect old (play) and newer (writing) ways of representing their ideas. In addition to supporting literacy, using LEGO® was found to increase children's engagement, collaboration and creativity (Pino-Pasternak et al. 2014). A PLaNS Handbook for Teachers, focusing on playful writing, can be accessed [HERE](#) (Basilio and Whitebread 2015).

Dalton and Devitt (2016) report on findings from an action research project which used a three-dimensional virtual environment (3DVE) as a platform for the task-based learning of Irish with a group of 25 children (9- to 10-year-olds,) in an English medium primary school. OpenSim was used as the virtual platform for this half-day pilot project (OpenSim n.d.). Children were assigned to cooperative mixed ability groups and took part in language learning activities (e.g., vocabulary treasure hunts). Participating children reported that the experience was fun and interesting. All but one of the 25 children reported that they would like to learn Irish this way more often. Children responded positively to the virtual world and the tasks they carried out. The authors concluded that "the very positive response from the children was encouraging and indicated that this combination of virtual world platform and task-based language learning may indeed hold potential in the ongoing challenge of finding meaningful and effective ways to teach Irish" (Dalton and Devitt 2016, p. 25). Following the action phase, a reflection phase included user consultations with a subset of 15 children, 5 months later. Findings from the consultation suggest that goal orientation shapes children's attitudes to 3DVEs and that these children demonstrated a preference for a more game-like environment with clearly defined tasks and goals (Dalton and Devitt 2016).

## Evidence of Playful Pedagogies Supporting Science, Technology, Engineering and Mathematics Education (STEM)

Thibodeau-Nielsen et al. (2025) explored how children in Kindergarten and First Grade classrooms (approx. 5- to 7-year-olds) naturally engaged in STEM thinking in the context of everyday play activities. Children's play with Map Mats: Playful Adventures in Math and Science was the context for this observational study (Maryville University 2025). Map Mats are large vinyl mats depicting environments such as the beach or the playground and when used with LEGO® DUPLO sets, children can design and construct on the mats.

Children participating in this study used and heard an average of 4.03 STEM related words (i.e., numbers, pattern, size, shape, spatial concepts) during each 2-minute observation episode. STEM language was most frequently observed in play that was collaborative and involved pretence. Overall, this research illustrates the value of social and imaginative play with resources such as the Map Mats which are specifically designed to elicit STEM thinking. Moreover, it provides evidence of extensive STEM talking and thinking in peer play with limited teacher intervention (Thibodeau-Nielsen et al. 2025).

In an intervention study conducted across two terms and involving twelve primary schools, Murtagh et al. (2022) investigated the influence of play-based learning on the mathematics achievement of Palestinian primary school children in grades 1 to 4 (approx. 6- to 10-year-olds). Teachers in the intervention group engaged in continuing professional learning, provided by the Right to Play organisation (Right to Play 2025), which focused on using play-based activities and games to teach the national numeracy curriculum. In the approach adopted, teachers enacted activities which were playful yet focused on specific curriculum learning outcomes. Results found that the intervention group attained higher test scores than the control group and that girls assigned to the intervention or play group achieved the highest test scores (Murtagh et al. 2022).

In a study with a Foundation class (5- and 6-year-olds), Sliogeris and Almeida (2017) sequenced teacher-guided and child-guided play to support science learning. The approach adopted involved scientific concepts and terminology being introduced through teacher-guided play with opportunities for children to then explore and apply these concepts in child-directed play. Findings suggest that teacher interactions, such as asking open-ended questions, during child-guided play were particularly important for encouraging children to connect their activity with focal scientific concepts. Citing the example of children making mini worm farms during child-directed play, the authors note how prior to teacher-guided science play, children were focused on physical and creative engagement with materials, potentially expanding everyday knowledge but not scientific knowledge. Following teacher-guided play, however, children became more concerned with making an appropriate habitat for the worms (Sliogeris and Almeida 2017). Overall, this approach afforded children the opportunity to engage with scientific concepts through a range of familiar and meaningful activities (Sliogeris and Almeida 2017).

## Evidence of Playful Approaches Supporting Arts Education (Drama, Art, and Music)

Employing case study methodology, Byrne et al. (2024) investigated six teachers' playful music pedagogy across a 6-week period. Two teachers were working in junior primary classrooms with the remaining four working in senior classes. Participating teachers attended an initial continuing professional learning workshop and subsequently engaged a Professional Learning Community (PLC) to support them exploring playful music in their classrooms. The findings, based on teacher report, illustrate how teachers can effectively embed the characteristics of playful learning in music education (Zosh et al. 2018). Across junior and senior classrooms, a playful approach increased children's enjoyment, participation, and perseverance, in music and motivated children considered less likely to engage in class. Findings also illustrate that in addition to incorporating various musical skills and elements, there were many opportunities for integration as connections were made with other subject areas. Involvement in the research instigated a shift from didactic formal teaching to a more child-centred approach to music education. Teachers had mixed views around this change in classroom climate which altered children's and teachers' agency, impacted on teacher confidence, and overall necessitated teachers moving "outside comfort zones" (Byrne et al. 2023, p. 1491). The authors conclude that while this playful pedagogical approach to music education clearly benefited learners, there was evidence to

suggest that teachers were more likely to provide teacher-scaffolded activities than to facilitate more child-directed play with music.

Hallam et al. (2011) examined how teachers working in two primary schools shaped children's creation of art in Reception, Year 1, 4, and 6 classrooms (4- to 11-year-olds). Participating teachers and children engaged in art lessons once weekly for 6 weeks. The analysis of multiple qualitative data, collected by a researcher, suggested that teachers adopted pedagogical approaches which could be described as 'traditional' or 'progressive' and which served to enable or limit children's creation of art. A case study used to illustrate a traditional approach exemplifies how teacher control and direction limited the child's joy and agency and resulted in the teacher over-influencing the construction of artwork. An alternative case study provides examples of how a more progressive pedagogy built on prior experiences and created space for child voice and agency, while also providing sensitive teacher-scaffolding.

## Evidence of Playful Approaches Supporting Social and Environmental Education (SEE)

Mylonas et al. (2023) report on a longitudinal study (2 school years) undertaken in primary and post-primary schools (10- to 18-year-olds) across three countries which investigated how the GAIA (Green Awareness in Action) Challenge, a playful online introduction to sustainability and energy saving, can be used in schools (European Commission 2016-2019). The challenge involved engagement with a range of online quests and real-life activities based on energy data from the children's schools. Gamification mechanics, collaborative tasks, and competition across groups, were used to motivate children. During the challenge, children were enabled to interrogate issues relating to their school's energy consumption. Findings suggest that the GAIA Challenge was a useful way to introduce sustainability and energy saving and to affect change in children's energy consumption behaviour. The playful intervention succeeded in engaging children and supported their learning around sustainability and energy awareness (Mylonas et al. 2023).

In a qualitative study, Stouraitis (2016), investigated how a storytelling digital game supported creativity in sixth grade (12-year-olds) history education in a single primary school. Participating teachers engaged in a professional learning course on fostering creativity through digital games. Focusing on the period when Greece was under the Ottoman Rule, teachers provided initial provocation i.e. "facing the economic and social constraints imposed on your region by the Ottomans, how will you live under them?" (Stouraitis 2016, p. 143). Children were asked to problematise how people would live under the social and economic constraints of the time. The 4scribes story-making game was used by small groups of children to collaboratively create stories (Eladhari et al. 2014). Each player developed their own personal ending, and the best ending was selected by an anonymous vote. Subsequently, teachers engaged children in Socratic Dialogues to understand how they worked collaboratively, how they understood the period, and how the story-telling activity extended their knowledge and understanding. Feedback from children suggested that the activity succeeded in making history learning more playful, creative, and collaborative in comparison to more teacher-instructed learning. Children did, however, report finding that the pre-determined cards limited their story-making. Findings suggest that while overall the 4scribes story-making game enhanced creativity, students did not closely follow the contexts and problem identified by the teacher at the beginning of the activity with stories being fiction rather than history orientated (Stouraitis 2016).

## Evidence of Playful Approaches Supporting Wellbeing (Physical Education (PE) and Social, Personal and Health Education (SPHE))

In a small-scale study involving four Norwegian Physical Education (PE) teachers, working in lower and upper secondary schools (for children aged approx. 13- to 19-years), Sæther et al. (2023), explored how these teachers used play in their teaching of the PE curriculum. Findings from observations of PE lessons and interviews with teachers indicated that while teachers provided opportunities for child-led play at the beginning of lessons, rule-based games dominated PE lessons. Findings suggest, however, that children did have flexibility to adapt teacher-set rules during PE lessons. Teachers participating in the study demonstrated a desire to shift from more traditional teacher-directed instruction and sporting activities but identified assessment as a barrier to incorporating more free play into PE. The authors conclude by suggesting the need for more knowledge on how playful pedagogies can be operationalised in a curriculum where learning outcomes are related to assessment (Sæther et al. 2023).

Adank et al. (2023) explored children's (10- to 12-year-olds) perspectives on teaching practices (TPs) that fostered their enjoyment in PE. Children reported 32 TPs that they felt positively contributed to their PE enjoyment. For the purposes of analysis, these 32 TPs were clustered into 10 dimensions of PE enjoyment: 1) exploratory learning, 2) tasks, 3) communication, 4) instructions, 5) rules and expectations, 6) physical activity time, 7) grouping, 8) learning processes, 9) learning together, and 10) limited performance comparison. Analysis of observational data found that while many of these TPs were regularly observed in primary PE teachers, some were rarely observed (i.e., learning process, learning together, and grouping dimensions).

Hassi et al. (2015), present findings from an action research project undertaken with teachers and students in two seventh-grade secondary school classes (aged approx. 13 years). The project focused on implementing a holistic and participatory model of human rights education, developed by the Finnish National Committee for UNICEF, through applying a process drama method to foster creativity and participation. Data from this mixed-method approach suggests that, compared with other instructional approaches, the process drama method has potential to support children's active collaboration and creativity, and supported learning about children's rights and how a rights-based approach can be fostered in school. The authors note that "playing fictional roles offered students a secure social context for exploring values and sensitive topics attached to human and child rights. High engagement and positive enthusiasm displayed by the drama class students seemed to reinforce their positive class experiences and increase interest in child rights" (Hassi et al. 2015, p. 304).

The *Stephanie Alexander Kitchen Garden* (SAKG) Program is a structured cooking and gardening initiative, delivered in primary schools in Australia for Grades 3 to 6 (Block et al., 2009; 2011). The programme provides "a seed to table experience, offering primary school children between the ages of 8 and 12 years, the opportunity to plant, nurture, harvest, prepare, and share fresh, nutritious, and seasonal food" (Block et al. 2011, p. 420). A mixed methods longitudinal evaluation of the programme involved a comparison of six schools receiving the programme and six control schools across two and a half years from 2007 to 2009. Data were collected through observations, surveys, interviews, and focus groups. Participants included children, parents, teachers, school leaders, and specialist garden and kitchen staff (Block et al. 2009; 2011). The findings from this evaluation suggest numerous benefits including increased engagement in learning, improved knowledge and confidence in relation to cooking and gardening, improved school social environment and improved school-community relationships. Importantly, findings indicate that the programme may be particularly impactful for students experiencing disadvantage, illustrating the equalising



potential of such initiatives. While not a programme goal, an additional benefit of the SAKG programme was the positive impact on children's behaviour at home (i.e., eating a wider range of foods such as vegetables and helping with cooking at home) (Block et al. 2009). The authors report that "the most common description of the SAKG Program given by children was that it was 'fun!' Cooking, measuring, cutting, eating, trying new things, new skills, cooking at home, working in teams, meeting new people, being and playing in the garden and "chooks" were all frequently nominated by children as the best things about the program" (Block et al., 2009, p. 20). While some teachers and parents were concerned around how engagement in the programme (weekly minimum of a 45-minute garden class and a 90-minute kitchen class) would impact on the curriculum, concerns were allayed as the programme was demonstrated to be a useful context for curriculum integration (Block et al. 2011).

## Evidence of Playful Approaches Supporting the Key Competencies of the Primary Curriculum Framework

There is a growing appreciation that in addition to content knowledge, today's children need to develop core "21st-century" skills including collaboration, communication, critical thinking, creative innovation, and confidence (Golinkoff and Hirsh-Pasek 2016). This appreciation is visible and acknowledged across the curriculum frameworks in Ireland. In preparing children to navigate a wide variety of contexts and situations from childhood through to adolescence and adulthood, the *Primary Curriculum Framework*, identifies seven inextricably linked key competencies (DES 2023a). The importance of essential knowledge, skills, concepts, dispositions, attitudes, and values is noted and presented through the seven competencies in Figure 7.

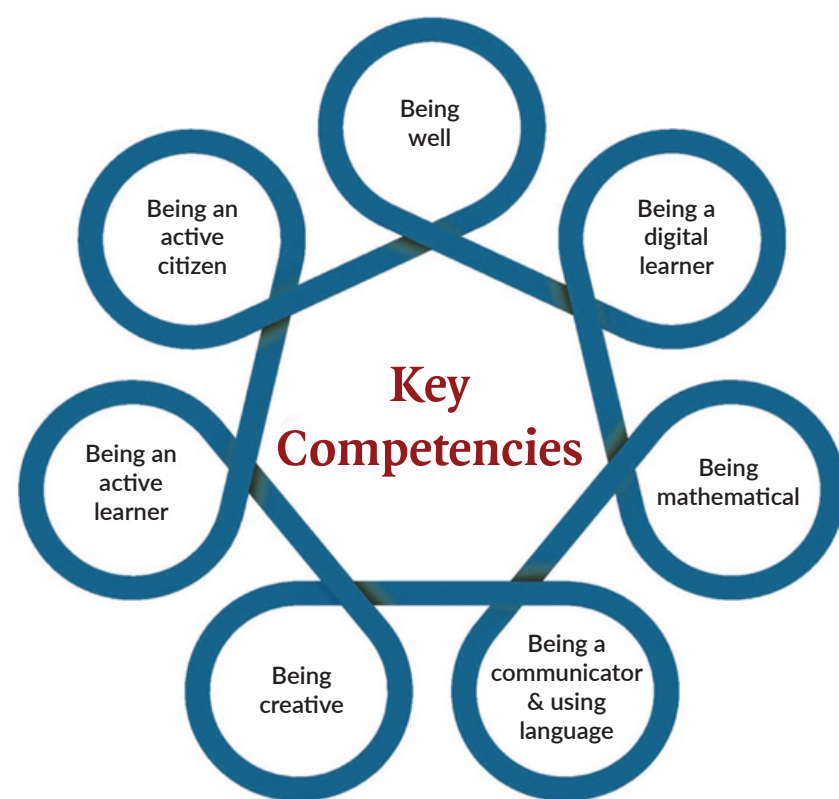


Figure 7. The Primary Curriculum Framework Key Competencies (DoE 2023a)

The competencies in Figure 7. above link closely with the four themes of Wellbeing; Identity and Belonging; Communicating; and Exploring and Thinking, articulated in *Aistear: the Early Childhood Curriculum Framework* (Gol 2024a; 2024b). These competencies are also aligned with the eight Key Skills of Communicating; Being Literate; Managing Myself; Staying Well; Managing Information and Thinking; Being Numerate; Being Creative; and Working with Others in the *Framework for Junior Cycle* (DES 2015). While acknowledging the need for further research, the authors suggest, based on the literature reviewed for this paper, that a playful pedagogical approach incorporating the dimensions in Figure 6. above, has the potential to support children across the continuum of their education journey to develop these key competences.

Vita-Barrull et al. (2024) assessed the impact of an intervention programme, using analog board games, on executive function, math and reading skills in a sample of primary school children from first to sixth grades (average age reported at 8.83). The intervention group engaged in 12 gaming sessions (1 hour duration) across a 6-week period. Games were collaborative (groups of 3 to 4 children) and were adapted to children's ages. The results suggest that children in the experimental group showed greater improvement in executive functions (working memory) and in cognitive skills (reading fluency, maths fluency, and calculus) compared to the control group. The authors conclude that board games are an effective tool for promoting cognitive development and learning, in the primary school context.

To explore the impact of the playful quality of activities on children's learning, Strasser et al. (2024) undertook a study which included children, teachers, and teacher aids across twelve pre-Kindergarten and Kindergarten classrooms serving children 4- and 5-years-old. Children engaged with high-playfulness activities which consisted of games designed by the research team. Low-playfulness activities included worksheets and whole-class lessons designed to be low in playfulness (i.e. limited self-direction and fantasy elements). Results showed that children were more on-task and more involved in the high-playfulness activities which has impact on overall learning. Moreover, the authors note that the games used in the study could be played by children at different developmental levels unlike worksheets and direct instruction which can be exclusionary given that they limit the ways in which children can engage (Strasser et al. 2024).

Research on the implementation of the play-based *Foundation Phase Curriculum*, in Wales, similarly suggests that playful activities can foster children's wellbeing and involvement in learning (Wainwright et al. 2019). Data were collected in two primary schools identified as high-quality through the formal inspection process. Research was conducted in two Year 1 classes of 5- to 6-year-olds (49 children in total). The *Leuven Involvement Scale for Young Children* (LIS-YC) was used to measure the level of involvement in learning during various tasks and activities. High levels of involvement were found in choice activities and activities perceived as play by the children. Findings indicated higher levels of involvement in tasks which were selected by children themselves. Involvement levels remained moderate to high, however, in teacher-directed tasks which the authors suggest may be due to the playful nature of teacher-led tasks in these classrooms. These findings imply that children's perceptions of tasks influence their involvement and overall learning. Consequently, teachers can work with the cues that children associate with play e.g., involving physical activity, occurring outdoors, and involving choice, to foster playfulness and involvement across the curriculum (Wainwright et al. 2019).

## Evidence for Playful Projects Supporting Curriculum Integration

Curriculum integration affords opportunities to meld play with learning in addition to forging connections across learning activities. It provides opportunities to explore similar content, hone important skills and dispositions, and extend knowledge and understanding, across a range of meaningful activities. Such an approach fosters the whole child and rather than narrowly focusing on academics, also nurtures children's social, emotional, and physical development (Diamond 2010). Moreover, it enables teachers to support learners to simultaneously achieve learning outcomes across curriculum areas (Turner-Bisset 2000).

Project style approaches are an efficient way of achieving curricular outcomes and they align well with a playful pedagogical approach given their capacity to meaningfully integrate learning across the spectrum of learning activities (Parker et al. 2022). This approach was initially conceptualised and operationalised in the United States by progressive educators including Dewey and Kilpatrick (Retter 2018; Avila et al. 2022). According to Katz (1994, p.1), a project involves "an in-depth investigation of a topic worth learning more about". Projects are underpinned by children's authentic interests and can accommodate child-led, teacher-guided, and teacher-led activities (Sargent 2011). A similar approach in the UK, *Enterprise Projects*, involves an in-depth investigation of an adult enterprise (i.e., a Bakery). *Enterprise projects* are based on the principles of learning through meaningful work; children being active learners and empowered to make their own decisions; opportunities for imaginative play; and integrating the worlds of school and community (Coltman et al. 2015).

Using a quasi-experimental design, Kaldi et al. (2011) investigated the impact of project-based learning (PB-L) on primary school children aged 9- and 10-years. Arising from children's interests, the topic being investigated was 'sea-animals'. The project was investigated for 8 to 12-weeks for 2 to 4 hours in each of the 6 participating classrooms. Findings suggest that active, meaningful, and experiential project activities had a positive impact on learning. Through the project, children were enabled to expand their knowledge and understanding of environmental studies, developed collaborative skills and positive attitudes towards peers, and displayed enhanced motivation to engage in learning. Overall, participating children viewed PB-L more favourably than traditional teaching (i.e., direct instruction, teacher talk, studying from textbooks). Findings also point to the importance of teacher support for this style of collaborative peer learning to be successful in the classroom (Kaldi et al. 2011).

Lai and Cheng (2023) report on an evaluation of the STEM x Play programme which was implemented across 5 schools with a sample of children aged 10- to 12-years. The STEM x Play programme is mapped to the Australian science and digital technologies curriculum and had indirect links to the mathematics curriculum. The programme, which is based on PBL, used an engineering design approach where children worked with mentors (with a STEM background) from a university and industry to solve real world problems which were meaningful to them. The programme was facilitated for 1.5 to 2 hours across an 8-week period. Data collected from children, teachers, and parents, following the programme, provided evidence of a positive impact on learning outcomes considered important for STEM such as a positive approach to failure, collaboration, critical thinking, and problem-solving skills (Lai and Cheng 2023).

Zhang and Ma (2023) conducted a meta-analysis (involving 66 experimental or quasi-experimental papers) on the impact of PB-L. Studies included in this meta-analysis involved interventions across primary, post-primary and higher education. Results showed that PB-L improved learning outcomes and contributed to core literacy and higher-order thinking skills, when compared to traditional teaching approaches. Findings suggest that the success of PB-L is influenced by factors including subject area, course type, academic period, group size, class size, and experiment period (Zhang and Ma 2023).

## Image and Role of the Early Years Educator and Teacher in Play and Playful Approaches to Learning and Teaching

*Two girls in today's Key Stage 2 group built a den in the wooded area of the site. When I asked them what they were doing, they said that they'd just escaped from a plane crash and had landed on a desert island. They told me that there were lots of plants near their den that you could eat on their pretend island. They told me they even had a pet dog and pointed to a log in their den. They said it was 'log' dog'.*

(Observation From Exploring Outdoors Age 3-11:  
A Guide for Schools,  
Bilton and Crook (2016: 84)

The image of the early years educator throughout the daily routine that flows between free-play, guided play and educator-led playful activities and provocations envisaged in *Aistear: the Early Childhood Curriculum Framework* (NCCA 2009; GoI 2024a) is presented as agentic, competent, confident and reflective. There is an acknowledgement that the early years educator has the freedom to use their knowledge and skills in interpreting Aistear to support babies', toddlers' and young children's learning and development. It is understood that the early years educator's pedagogical approach is informed by their relationship with the baby, toddler and young child, the family, their knowledge and experience and the relevant environment. Preparation of the environment and planning for a blend of free-play, guided play and educator-led playful activities and provocations that connect with experiences and interests and are suited to individual needs are identified as the responsibility of the early years educator.

Similarly in the three different ways play and playful approaches are envisaged in *Primary Curriculum Framework* in terms of child-led, teacher-guided (where teacher and child share the play activity, developing the play together) and teacher-led activity (DoE 2023a), the image of the teacher is presented as agentic and capable of making professional and informed decisions in response to each child's learning needs. A teacher's understanding of the child is recognised as stemming from the full range of informal and formal, planned and incidental, and social and cognitive teacher-child interactions. Teachers' role in preparing for play is concerned with providing extended blocks of time, appropriately adapting the learning environment and providing for a supportive atmosphere. The *Framework for Junior Cycle* (DES 2015) assigns the role of leader and facilitator of learning to the teacher and places an emphasis on the teacher-student relationship.

The Victorian Government (2023) has identified a series of roles for the early years educator/teacher in play-based learning, which resonate with the image and role of the early years educator/teacher in the Irish context. These roles, detailed at Table 2. below include Manager; Observer and Mediator; Facilitator and Explicit Teaching.

Table 2. Roles of the Early Years Educator and Teacher in Play and Playful Approaches to Learning and Teaching (adapted from Victorian Government (2023))

Manager	Observer and Mediator	Facilitator	Explicit Teaching
<b>Space:</b> Allocation; organisation and management of indoor and outdoor environments to support children's play and create opportunities for children to organise their own learning.	<b>Observer:</b> Tuning into children's dispositions, abilities strengths, needs, interests and individuality.	<b>Scaffolder:</b> Modelling, prompting verbally and/or gesturally to support children to engage in learning independently.	<b>Demonstrator:</b> Teacher/early years educator demonstrates and explains activity while providing opportunities for children to practice.
<b>Resources:</b> Identification of relevant resources in collaboration with children and families based on identified learning outcomes.	<b>Mediator:</b> Teacher/early years educator is positioned at the edge of play and intervening when necessary to resolve conflicts, promote equity and interpreting play cues for individual children when necessary.	<b>Co-constructor:</b> Teacher/early years educator and child are jointly involved in an activity to co-construct meaning together.	<b>Director:</b> Teacher/early years educator explicitly directs children's play, for example where children need to follow particular steps to achieve the relevant learning outcome.
<b>Time:</b> Allocation of time with reference to curriculum framework.		<b>Reflector and Evaluator:</b> Teacher/early years educator engages with children in reflecting and evaluating to support the development of meta-cognitive thinking.	

The agentic early years educator and teacher adopt these roles as required in particular contexts to support play and playful approaches. As indicated by the broken lines in the table above, these roles respond to particular contexts and multiple roles can be adopted during an activity to support children’s achievement of the related learning outcome.

Linking these roles with play as envisaged in *Aistear and the Primary Curriculum Framework* provides a useful support for early years educators and teachers to reflect on their role in locating play and playful approaches to learning and teaching in curriculum contexts.

# Children, Early Years Educators and Teachers as Co-Creators of Indoor and Outdoor Environments that Facilitate Play and Playful Learning

*“Being outside makes me feel happy and jolly and important. What I like about it is, it gives me a chance to learn about birds”*

(Child’s comment From Exploring Outdoors Age 3-11: A Guide for Schools, Bilton and Crook (2016: 31))

The concept of the environment as the ‘third teacher’ is a key principle of the pedagogical approach developed in Reggio Emilia in Northern Italy following World War II (Edwards et al. 2012). Rinaldi (2021, p.52) suggests that cultivating an understanding of architecture that goes beyond the assembling of spaces to “a philosophy; a way of thinking about education, learning, the teaching/learning relationship, the role of action and doing in the construction of knowledge” can potentially transform settings into places and spaces that foster a sense of belonging and communicate meaning. Children communicate and interact with the environment as the ‘third teacher’ and its physical organisation, together with its auditory, visual, olfactory and tactile stimuli, all have the potential to support or hinder learning (Daly et al. 2018; Ring et al. 2018; Sando and Sandester 2020; O’Sullivan and Ring 2025). Ultimately, the sensory qualities of the physical environment in education settings directly influence children’s participation, engagement, wellbeing, learning and development (National Council for Special Education (NCSE) (2021; 2024a; 2024b)).

A reciprocal relationship exists between the individual and the environment where both are active and transform each other (Rinaldi 2021). Encompassing both the environment and the individual, the theory of affordances captures the possibilities for action provided by the environment (Gibson 2014: Rietveld and Kiverstein 2014). An affordance is unique and relative as it is defined by the individual’s interaction with the environment and is therefore malleable, dynamic and fluid. As humans, the affordances we are drawn to act on are those that stimulate our interest at a particular time (Rietveld and Kiverstein 2014). The theory of affordances offers a useful lens through which to consider the immeasurable possibilities there are to create indoor and outdoor play environments that allow for children to interact with others, objects and representations during socially interactive activities that are, joyful, meaningful, engaging and iterative (Parker et al. 2022). A useful starting point in reflecting on the indoor and outdoor environment is to consider the benefits of applying a universal design (UD) approach. Universal design refers to the design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all people, regardless of their age, size or ability (Gol 2005). Ensuring an appropriate level of challenge in the environment to ensure each child’s needs and abilities are reflected and accommodated will provide opportunities for all children to thrive (Ring et al. 2019).

Co-designing the classroom and outdoor space represents a creative, pedagogical and architectural event focused on creating democratic education spaces that recognise the importance of children’s contribution to their learning and development (Rinaldi 2021; Murphy et al. 2022; O’Sullivan and Ring 2025). Studies have reported that outdoor spaces in schools can provide limited diversity in terms of facilitating play opportunities for children with diverse physical and/or sensory needs (Yantzi et al. 2010; Rocha et al. 2018; Brown et al.



2021). In the Irish context, while research on schoolyards is limited, concerns have been articulated in relation to hard surfaced yards; limited play equipment; lack of adequate space and lack of guidance for teachers (Devine et al. 2020; Bergin et al. 2023). Recent research exploring the individual preferences of 198 five-year old children regarding the design, affordances and aesthetics of the physical learning environment confirms that young children are capable of meaningfully expressing their views in this regard (Perry et al. 2023). A range of research further confirms that older children, when included, bring unique insights to the built environment and beneficially communicate the socioenvironmental affordances that matter to adolescents (Clark and Uzzel 2009; Smaniotto Costa et al. 2023).

## Conclusion: Implications of the Current Positions on Play in the Primary Curriculum Framework for Practice

*“2nd class is literally just doing the same thing over again as first class just a bit harder...you get barely any time to play or anything, just to do work, work, work, work”*

**Boy, Primary School (Ireland) (Devine et al. 2020: 28)**

Children’s right to play as citizens and the potential of play to support participation is captured by Grindheim’s recognition of play as “activities of major importance for child-citizens and as activities that constitute various ways of participating” (2017, p.264). More recently in its report on the International Summit of the Teaching Profession (ISTP), the OECD affirmed the unique opportunity play provides for children to build social connections; acquire negotiation skills; support language and communication abilities; foster imaginative, creative, cognitive and physical development (OECD 2025). Second class children in the national longitudinal study on children’s school lives (CSL) reported ‘play’ together with ‘friends’ as among the most valued aspects of school life (Devine et al. 2020). In consulting with children as part of the redevelopment of the *Primary School Curriculum*, children across primary and special school contexts variously affirmed the value they placed in play. This value is captured by an extract from the data for third and fourth class, where a child in referring to play in the classroom (via games), noted that “it is better because you can remember” (Kiely et al. 2024: p. 41). While children in fifth and sixth class reported experiencing less play, in responding to the question on how they would like to learn, there is clearly a link between their suggestions for project and active learning activities and the concepts of play and playfulness discussed in this paper (Ibid.)

The rhetoric therefore that ‘play’ and ‘learning’ represent dualistic concepts is clearly at odds with the research examined in this paper. Additionally, the understanding that play and playfulness are the preserve of younger children is not supported by research or children’s own voices. Threaded through the literature however is a tension in reconciling play as socially created by adults and children and embedding play and playfulness in the curriculum with a focus on learning and development. This review builds on the pivotal role of play and playful learning across curriculum frameworks through providing research evidence to support early years educators and teachers in developing playful pedagogy in practice. It is hoped therefore that this review will begin to address the challenges teachers continue to report in integrating playful pedagogies with the demands of the curriculum (O’Sullivan et al. 2025). Tracing the rejection of evolutionary explanations in

psychology for much of the twentieth century to our limited understanding of the evolutionary functions of play, Gray (2025), noting that our propensity for play does not end in childhood, welcomes the refocusing of research in this regard, which supported by neurobiological, evolutionary and comparative perspectives, suggests promising directions. Current curriculum frameworks in Ireland from early years through to post-primary provide a robust framework within which play and playful learning can be firmly located and contribute meaningfully and significantly to all children’s learning and development. While ongoing research is needed to establish the effectiveness of playful learning vis-à-vis other pedagogical approaches, the research examined in this paper confirms that harnessing play as an activity that is active, engaging, meaningful, iterative and joyful in education contexts potentially leads to deeper and more impactful learning.



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