A phenomenological study exploring how early childhood pedagogies enable the development of dispositions.

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A phenomenological study exploring how early childhood pedagogies enable the development of dispositions.

To what extent are children given opportunities, intrinsically and externally, to engage with dispositions through their experiences of learning in the Early Years?

How does this inform and direct children's early experiences of learning, challenging current approaches to early pedagogies?

Abstract

Concerned by children disengaging once they transition to the more formal approaches of the school classroom, this small-scale phenomenological study aimed to understand the intrinsic and external effects on engagement as once holistic experiences can become influenced by the attainment of prescribed learning goals. Aiming to understand the potential impact of prematurely formal pedagogies and learning outcomes, it captured children's evolving responses and wide-ranging potential, troubling their long-term effects.

Over two years, ten children aged between 38- and 48-months at the start of the study, were observed experiencing their final preschool year and their first year of formal schooling within an English Early Years setting and its feeder school. Pedagogical delivery, environmental permissions and social interactions were documented alongside children's intrinsic and external engagement with 16 dispositions during each of 640 naturalistic observations. Through comparative analysis, the evolving nature of children's responses emerged alongside the enduring impact of pedagogical delivery and permissions. The effects of environment, choice and peer involvement were illustrated, alongside the predispositions, motivations and inclinations embedding within the children.

Findings explored and presented within the Theory of Lifelong Development – in Childhood (ToLD-C) illustrate the foundational importance of early pedagogy, as well as the contextual and social limitations placed on learning experiences. As the impact of these learning experiences, and their developing impact on life trajectories are considered, this study calls for increased discourse to trouble the suitability of early formal approaches and to address the impact felt on life-long learning by many. In support of a dispositional approach that recognises children's wide-ranging abilities and need for engaged, motivated learning the Method of Improved Childhood Engagement (MICE) is presented. Utilising its unique insights and methods, supportive developmental views of children are offered along with practices to structure targeted interventions and reflective practice throughout the primary age phase.

Contents

1.1 Introducing the study

The importance of this study

In the UK, most children start school full-time in the September after they turn 4. Whilst not compulsory, this Reception Year, is for most children their first introduction to the school classroom. Having often come from an Early Years provision, be it a preschool, nursery or childminder setting, they will have experienced practice governed by the statutory framework of the Early Years Foundation Stage (EYFS) (DfE, 2018). A play-based curriculum, the EYFS sets standards for the learning, development and care of children from birth to 5 years old and must then be followed throughout their school-based reception class.

At the end of the Reception Year, children will undergo the EYFS profile. A summative, statutory evaluation, this profile is intended to "provide a reliable, valid and accurate assessment of each child's attainment at the end of the EYFS" (DfE, 2020; p6). Essentially an evaluation of children's attainment in relation to 17 early learning goal (ELG) descriptors, it is based on what the child is considered to know, understand and can do. Explicitly troubled within the literature review (Chapter 2.1), this lens that is used to observe children's development within the early years can then effectively skew opportunities, affordances and experiences through their universal and focused demands. Despite guidance suggesting that ELGs should not be used as a curriculum, when used to fuel government directives and Ofsted requirements and with the publication of schools' results, as well as forward thinking to the demands of Key Stage One, formal teaching styles within preschool and school classroom environments is a continuing reality for many children (Kagan & Kauerz, 2007; Hirsh-Pasek et al., 2009). This study looks to question classroom pedagogies that it suggests are reflecting practices that young children are not yet ready for.

Well-established research demonstrates that a preoccupation with teaching measurable, discrete skills to children before they are developmentally ready impacts their future understanding of the subject (Marcon, 2002). The impact of pedagogical, environmental and social decisions being made for children and the subsequent experiences of learning to result are also often troubled. Anderson in 2018 illustrated how the engagement and sustained effort of children increased when allowed to choose their own partners, questioning pro-social agendas within the classroom (Anderson, 2018), and more typical demands for 'carpet-based' learning. When children's need for multimodal learning is developed within culturally responsive pedagogy embracing visual images, oral language, gestures, numbers, words and activities, suggested Taylor et al. (2020), learning became more meaningful, with pronounced effect on those from multilingual and multicultural backgrounds. Alternatively, when pedagogical decisions are influenced by internal and external pressures, engagements with children have been shown to decline, along with their opportunity to have a voice (Shaw, 2019). Healey, when writing in 2019 noted how children's writing became affected by their writing environment and engagement with activities in the classroom, noting that as movements and emotions were restricted, so too was their writing (Healey, 2019). But perhaps more worrying was the effects this was shown to have on how children perceived, valued and felt about their writing as their motivation and predictions of writing attainment were also seen to change.

This effect is further illustrated in Chapter 2.3 when the effects of downward pressures on the development of underpinning dispositions are considered. Blair in 2002 highlighted how regulatory skills, emerging in the early years, provide the underlying mechanisms that support later cognitive and social behaviours (Blair, 2002), an area Daily et al. also developed in 2010 when writing of the need for socioemotional skills to develop language skills, and vice versa (Daily

et al., 2010). Whilst formal teaching practices have been shown to impact children's attitudes towards learning, this is occurring at a time when they are developing notions of themselves as a learner. Cohen et al. (2011) wrote of deeper layers of meaning that children need from their learning, expressing caution when the focus turns to the fulfilling of predetermined objectives. These concerns were echoed by Iruka et al., (2018) who suggested a more holistic approach is required, stressing the need for interrelated skills encompassing academic, cognitive and socioemotional competencies to be secure before an informed understanding of a child's potential can be gained. Having personally observed children becoming disenchanted, uncertain and anxious within practices preoccupied with linear teaching models and established objectives, the notion of a study exploring more holistic, foundational dispositions for learning has long been sought. This study seeks to raise awareness of these issues and invite further debate around the impact of formal teaching practices, repositioning focus within broader definitions of young children's demands of learning.

Aims and objectives of the study

Concerned that children's natural propensities for learning can become disengaged once overly academic objectives direct their experiences of learning, this study looked to capture children's responses to learning environments during their earliest introduction to school settings. Troubling its long-term effects, concern was felt that when intentions become overly focused on academic outcomes, children's wider potential can become constrained, negatively influencing their developing identity within the classroom. Underpinning the study with desk-based research in the fields of early childhood pedagogy and child development (Chapter 2.1), executive functioning (Chapter 2.2) and disposition development (Chapter 2.3), allowed for wider discourse, drawing attention away from current learning objectives and assessments to look to deeper life-skills and attributes of learning.

Framed through the following questions, the study looked to examine children's opportunities when natural approaches towards learning are replaced within the more formal approaches of the school classroom. Troubling common school-based pedagogies that often see opportunities for dispositional promotion met with reluctance and reticence by children still in their foundational years of learning (Shah et. al, 2018). By observing the impact this had on their engagement, and developing responses, the study intended to highlight the potential impact these practices have on developing life skills, the roots of which are deeply embedded within early experiences.

- To what extent are children given opportunities, intrinsically and externally, to engage with dispositions through their experiences of learning in the Early Years?
- How does this inform and direct children's early experiences of learning, challenging current approaches to early pedagogies?

Utilising methods, frameworks and coding systems designed for the study, the propensity for children to engage in dispositions was observed alongside the environments and practices offered. Through naturalistic observations of practice, the study aimed to capture the impact of pedagogical styles on children's experiences, noting both those that encourage dispositional engagement, and those that dissuade it. As a better understanding of the impact of pedagogy on children's experiences was sought, wider notions of effective practice was considered, embracing dispositional engagement, foundational development and wider definitions of children's potential.

The study aimed to capture multiple variables of environmental and practice-based pedagogies, noting how they were received and interpreted through the actions of children. To achieve this, new methods of documentation were written to simultaneously note, code and detail observational aspects, while allowing rich data to be compared. Through these methods understanding developed over the weeks and months, and through the various settings observed as this phenomenological study captured children's experience of early childhood pedagogies and the engagements they were permitting.

Having captured these experiences and children's responses to them, the study then sought to understand their potential influence; how permitted opportunities influenced children's engagement; how this informed their developing responses to future experience; and the impact environmental, social and pedagogical variables were having. In doing so, it sought to present a new way of considering early years pedagogies and the potential for long-term impact, generating tools to support reflective practice for practitioners, teachers and schools throughout the primary age phase.

As this data was analysed, the study then reflected on experiences conducive to children's dispositional engagement, informed by the reactions and behaviours observed. Through this unique approach, a deeper understanding of the importance of pedagogical decisions and their impact on successful outcomes was illustrated. Noting children's permitted experiences, their resulting engagements and the behaviours they prompted, a critically informed perspective of children's early learning experiences was offered. With their impact on children's propensity to grapple with and pursue complex ideas, to think, to be self-aware and grasp opportunities, the importance of free choice and socially supportive environments are defended, alongside children's need for and right to make decisions, to experience risk and to develop a sense of belonging.

Seeking to add a level of relevance and transparency to this timely and vital debate, focus was centred on the importance of permitted opportunities and the experiences offered to children. The resulting pedagogical recommendations this approach afforded was felt essential in generating new insight, greater understanding and deeper appreciation of the effect of pedagogical approaches within children's early experiences of learning. From these unique approaches this study achieved the following.

- To identify early years pedagogy that encourages children's engagement with dispositional learning, thereby facilitating their development over time.
- Identify dispositions children are at risk of being denied within current approaches to early years pedagogy.
- Develop innovative research techniques and holistic observational methods capable of capturing the detail required.
- Devise a framework with which to share its findings effectively and with purpose.
- Devise a supportive tool to evaluate and structure targeted interventions for children and cohorts within primary classrooms.

Ontology and Epistemology

In seeking to understand the phenomena of early learning and the effects of pedagogies on a child's opportunities to develop dispositions, this qualitative and interpretive study accepted a world view consisting of multi-layered realities (Cohen et al., 2017) within a phenomenological methodology.

Within its socially constructed theoretical framework it embraced the notion that to understand children's experience of learning, children must be observed whilst engaged in the social and cultural realities of learning. Within its inductive reasoning it took multiple perspectives of personal experience to offer generalised conclusions, acknowledging that these were intrinsically rooted in the situation, co-constructed by the individual and social environment (Bakewell, 2016).

Recognising that children cannot be preordained or programmed, and experience cannot be simply structured, this study abandoned deterministic conclusions as suggested by Cohen et al., (2017). Instead, it sought to "*understand, explain, and demystify social reality through the eyes of different participants*" (Cohen et al, 2007; p. 19), illuminated through a range of lenses, each offering a perspective to shine light on the findings. Acknowledging the multiple interpretations and combinations of variables possible within such studies, it recognised value within these multi-layered views and perspectives as deeper meaning was exposed. The probability of truths (Atkinson et al. 1996) was then offered through the emerging trends, strengthened by the range of methods and views gathered over a significant period of time and through the clearly defined processes of inductive reasoning and analysis utilised. This approach is reflected through the ontological and epistemological assumptions of interpretivist study as expressed by Mack (2010) shown in Figure 1.1.1 below and reflected upon in terms of this study in *purple*. Mindful of these assumptions, insight on the phenomena of early learning is offered throughout this study so that pedagogical impacts can, with tentative speculation, be better understood, legitimised and utilised.

Ontological Assumptions	Epistemological Assumptions
Reality is indirectly constructed based on individual interpretation and is subjective. *Analysis of observations offered tentative speculation, not pronounced truths.* People interpret and make their own meaning of events. *Detailed descriptions of observations were offered, and multiple reflective opinions sought.* Events are distinctive and cannot be generalized. *No claim for causality was suggested.* There are multiple perspectives on one incident. *Frames and coding were introduced to focus attention in consistent ways.* Causation in social sciences is determined by interpreted meaning and symbols. *All interpreted meaning was made clear, no causation was claimed.*	Knowledge is gained through a strategy that "respects the differences between people and the objects of natural sciences and therefore requires the social scientist to grasp the subjective meaning of social action" (Bryman as cited in Grix, 2004; p.64). *This was achieved through the range of variables and number of observations included to acknowledge and capture these differences.* Knowledge is gained inductively to create a theory. *Reflections from inductive reasoning generated from the observations were combined to generate a theory.* Knowledge arises from particular situations and is not reducible to simplistic interpretation. *Mindful of the situated nature of individual observations, many were used before any insight was suggested.* Knowledge is gained through personal experience. *This impact was transparently acknowledged through the frames and codes utilised.*

Figure 1.1.1: Interpretivist ontology and epistemology (Mack, 2010; p.8)

Positionality

Aware of its epistemology, the study sat within empirical roots, acknowledging that any insight offered, even when derived from the recollections of others, was influenced by personal experiences, opinion and reasoning as posited by Johnston and Christensen (2008). The impact of *"self"* on the qualitative nature of this study and the potential for bias, as further cautioned by Barbour (2008) was recognised, both in the methods and repetitions utilised within the fieldwork and the detailed processes of interpretation and analysis utilised. Whilst generating complex and extensive data sets,

these were necessary to adequately describe and interpret the experiences portrayed by the participants involved and a variety of presentation styles were utilised to retain clarity.

With a view to understanding the many *"selves"* brought to the study (Reinharz, 1997) and the fluid and evolving nature of them through the process (Lincoln and Guba, 2000), a personal statement was written before commencement (Appendix A1), reflective diaries (Roberts-Holmes, 2005) were kept throughout (appendix A2-4), and feedback loops were utilised within each phase of the research, validating any assumptions, interpretations and analysis that took place. These measures were further strengthened through the detail captured within observations, as advised by Mukherji *et al*. (2012), and the meticulous procedures developed through the analysis phase. It was then the intention that two-way reflexivity of the many variables involved within the complex realities of children's experiences of learning within the early years be considered within any generalised descriptions offered, allowing for meaningful interpretation within the given contexts of preschool and classroom environments.

Establishing a paradigm

In seeking to describe the paradigm or 'worldview' (Mackenzie & Knipe, 2006) of this research, various assumptions, concepts, values, and practices were grappled with. The perspectives, thoughts and shared beliefs that would both inform the meaning and interpretation of the research data (Kivunja et al., 2017) were then informed by the intentions of the study and prior experience within the profession. With many years' experience working with and observing young children one cannot be ignorant to the fact that their behaviours, reactions and attitudes vary alongside many factors, including their social grouping, interactions and environment. This idea of multi-layered environments, as is inhabited in the life of the child, is discussed by Cohen and colleagues (2017) when discussing studies utilising a post-positivist paradigm. What was once a radical departure from what Denzin and Lincoln (1998) termed a natural attitude of seeing the world as something stable and distinct from perception or interpretation, this pluralist view of multiple realities suggests a need to look beyond uncovering a grand narrative, a universal design, set of laws or patterns of behaviour that attempt to draw predictable conclusions from known sets of variables. Instead, they speak of qualitative studies embracing a world view that is seen as conjectural, falsifiable and changing, and that look to the richness that lies within.

This study sought to understand such richness, as realised within a child's experienced reality. Distinct from that assumed by the teachers, assessors or parents surrounding them, and separate from structured notions of curricula or lesson objectives, this notion of a qualitative, interpretive and naturalistic study lent itself. Rather than attempting to structure one universal reality through staged environments, consistent conditions or desired responses, focus centred on children's interpretations of and responses to the expectations on them. As multiple methods were embraced, the independent views of children were observed, reacting to and behaving within their natural environment.

Within qualitative research, Denscombe (2014) notes the potential for more than one explanation for any given observation, noting that the reality being captured would be that perceived by those experiencing it. Cautioning that this depends on the time, place and circumstance of it, multiple views of reality were offered, that were at once different yet equally valid. As potential methods remained mindful of these considerations, responses were captured acknowledging that they would not be the same for everyone, on every occasion, nor necessarily as was intended. Care was taken not to suggest any causal links and repeated observations were sought over a range of situations. Multiple children were

then required for the study, observed multiple times, throughout multiple occasions to depict the reality of their early learning experiences.

Concerned with how experiences hold meaning for the children, this study embraced opportunities for differing responses, recognising how this was dependent on the child receiving them and the circumstances surrounding them (the environment, adult interactions and expectations). Remaining mindful of this fluidity of perception, this was reflected in the studies use of methods to document a full range of variables over a two-year period as it observed a cohort of children experiencing their alternative realities over a range of times, days, circumstances and environments. Multifaceted observations allowed for deeper, holistic explanations to be offered for children's reactions and engagements with a range of dispositions, rather than one expected response, through the contrasting settings of a preschool and reception classroom.

Despite these measures, any acquired knowledge resulting from such observations did, as Denzin and Lincoln (1998) suggest, remain subjective rather than objective and did, as Cohen and colleagues (2011) suggest, require tentative speculation, mindful of the multiple perspectives and varied interpretations they may have been viewed through, dependent on the view taken and the multiple external realities available. Denscombe (2014) suggests that this limits the findings to processes of describing, where interpretation, rather than measuring is permissible, offering the potential for supportive interventions rather than structures going forward. This subjective view sat effectively within the study as one universal truth was neither expected nor sought and having seen first-hand the limitations of universal structures introduced to learning environments, this is a consideration that was happily heeded.

This qualitative and interpretive study then reflected an acceptance of the substantial variables involved within early childhood research. Rather than seeking to control, replicate or fully account for these variables, with its phenomenological methodology it sought to recognise and embrace the richness this offered, as it considered multiple interpretations of the phenomenon of early teaching and learning experiences. Recognising children as individuals within an ecological whole, rather than as passive recipients of information, it embraced influences of environment, pedagogy, social interactions and permissions as it sought an informed understanding of the complex nature of children's learning so that meaningful reflections on the pedagogies required to facilitate it could be offered.

Theoretical and Conceptual Frameworks

Explored fully in the literature review in Chapter 2, the framework illustrated below (Figure 1.1.2) looked to provide theoretical focus and organisation to the study, connecting the methodological decisions being taken to existing scholarship and the terms to be utilised. As defined by Lederman and Lederman (2015) when discussing theoretical frameworks, it introduced the questions being raised and illustrated the approaches being taken to consider them, offering structured support to underpin the theoretical grounding of the study. Drawing on findings from the literature review, the implications identified within the theoretical framework identified strengths and weaknesses of any proposed methods that might be considered and was used to inform the conceptual frame that follows in Figure 1.1.3. Before establishing the conceptual framework however, key considerations needed addressing.

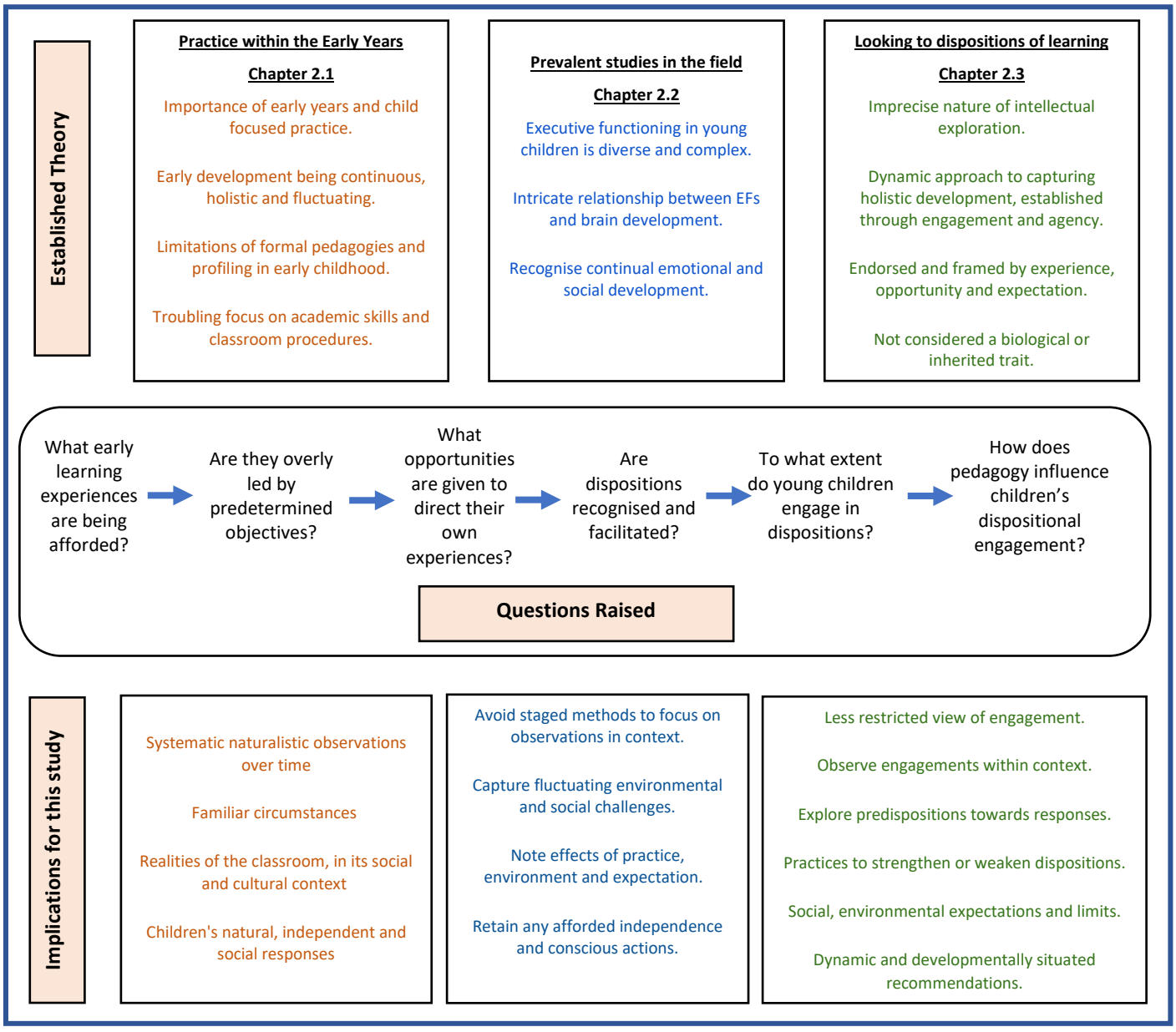


Figure 1.1.2: Theoretical Framework

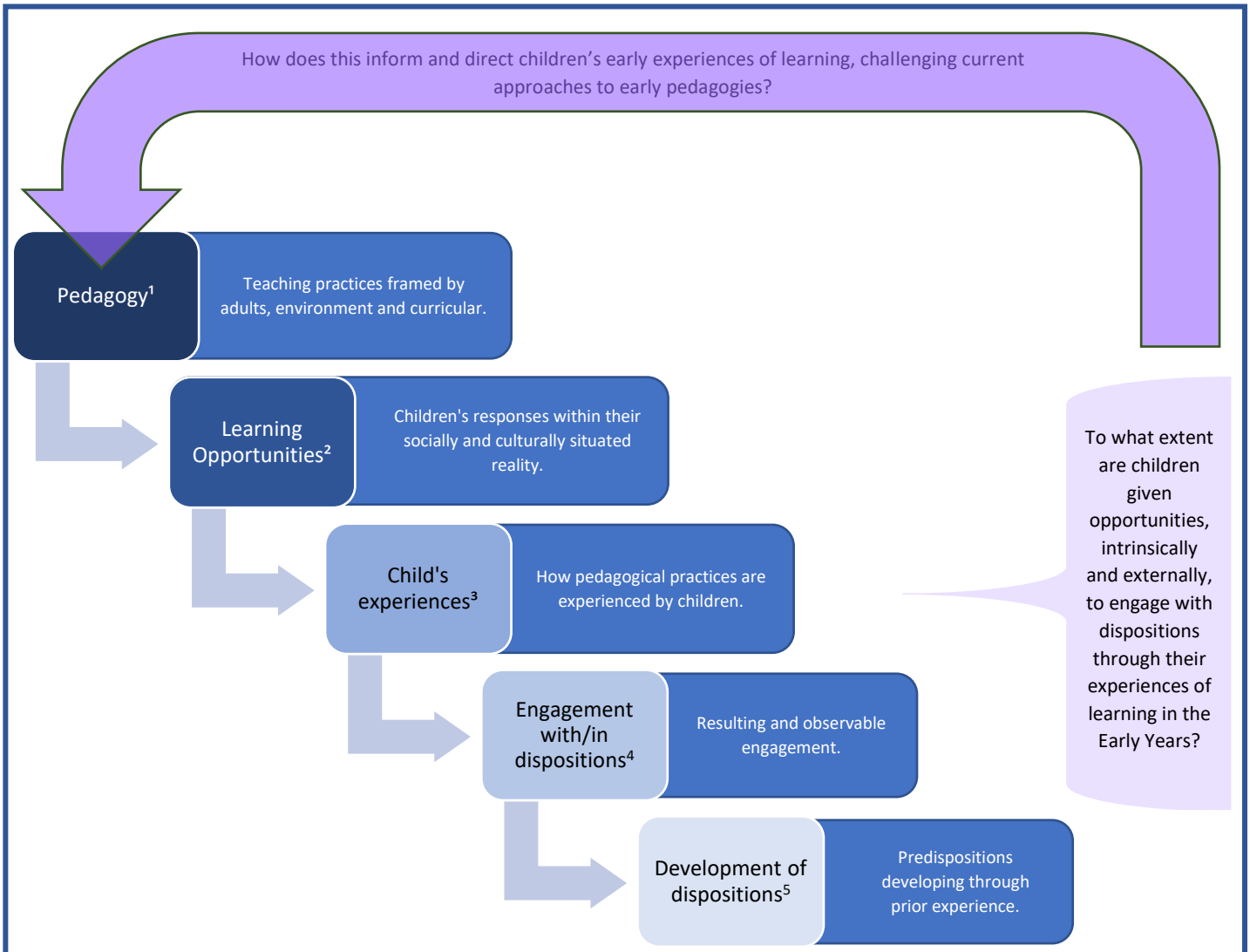
The multifaceted nature of learning acknowledged within this study recognised that any observations made were dependent on biographical location and social context. Such social implications on learning were recognised by Grusec who in 1992 wrote of learning as occurring through multi-faceted methods, including the decisions being made, the

actions of others, behaviours and environment (Grusec, 1992). This need for contextual understanding and concern for the temporal nature of demonstrations of knowledge is in contrast with downward pressures for didactic instruction as troubled by Nicolopoulou et al. (2015) and studies concerned with the optimal measuring and standardisation of young children's abilities (Blair et al. 2005; Howard et al., 2016). This was a key impetus for this study and is further debated in Chapter 2.1. This child-centred observation of children's experiences of early childhood pedagogy then concerned itself with a more holistic exploration of learning, mindful of the impact of context, environment, social interaction and permissions on cognitive processes of long term, motivated and sustained learning (Bandura, 1977; Vygotsky, 1978).

A social constructivist framework then informed the study that at once distanced itself from established executive functioning research methodologies, discussed in Chapter 2.2, and sought more naturalistic, socially and culturally situated methods. This is reflected the work of Denscombe (2014) when speaking of individual experiences of learning existing within the multiple realities of a socially constructed world. Whilst acknowledging that experiences may coincide once shared between groups, cultures or even societies, Denscombe echoes Cohen et al. (2011) when discussing their personal nature, recognising their dependence on how they are presented, interpreted and the meaning given by the individual. When attempting to make sense of meaning given by children, with the intention of interpreting phenomena, one must then be mindful of these meanings and interpretations, as was embraced within the naturalistic approach to this study.

The conceptual framework presented below (Figure 1.1.3) then illustrates the insight that was expected to emerge from the study. It defines the variables that were considered and illustrates how these relate to each other, grounded by the implications arising from the theoretical framework. Assuming a direct link between pedagogy, opportunities and experiences offered and the responses of children it suggests pedagogical influence on the development of dispositions. Opportunities for self-direction, social engagements and environmental freedoms, it suggests, will naturally influence responses towards and engagement with the learning taking place, as well as children's propensity to apply understanding and thinking for themselves.

However, within its socially constructed framework the study acknowledged that children do not simply respond to external stimuli but to their interpretation of those stimuli. Mindful of this, the children involved were not given tasks to be observed completing but were instead observed responding to their interpretation of typical tasks of the day. Embracing the social nature of language and interaction, children were not removed to a separate room, but captured within the natural interactions of the day. As the nature of groupings and discussions were noted, observations captured where experiences became a collaborative process, where the child engaged independently, under the guidance of teachers or in collaboration with peers. Children's reactions were noted as they actively responded to interactions with their environment. Interacting socially, they were seen to overcome natural limitations as they imposed culturally defined sense and meaning on their world, constructing their developing knowledge accordingly. These nuances were captured because children's experiences of learning and their responses to their reality were seen in their entirety, as potential development was captured at the point at which learning was taking place. Mindful of the need for this level of context, methods were written to capture the interactions, locations and permissions afforded and case studies were written to retain consistency with the individuals involved throughout the months of observation. These extensive measures were then able to inform reflections during the analysis stage.



Pedagogy[1]	Learning Opportunities[2]	Child's experiences[3]	Engagement with/in dispositions[4]	Development of dispositions[5]
The impact of environmental and action-based choice within pedagogical influences. Observed through holistic, playful environments and more traditional school-based settings. Observed over a prolonged period, allowing a full range of teaching styles to be captured and compared. Intentionally ignorant of discrete or adult led learning goals, teaching objectives or required data. No attempt to categorise, or split abilities. No assumptions made from other data sets. No understanding of children's abilities to be claimed. A more holistic framework required, through which children's foundational experiences were explored.	Importance of familiar environments and typical social demands. Children's realised opportunities documented through all permitted tasks, reflecting on social engagements, encouragements and distractions. Individual children and their diverse reactions in the moment recognised. Inferences informed through the typical variability encountered within the classroom. Unlimited by demands for required knowledge.	A child centred constructivist approach captured the child's experience. Agency, motivations and reflections noted alongside permissions for independent action. Social engagements, permissions to be verbal, to give ideas, to show initiative and pursue original ideas. Observed in the classroom, capturing naturalistic, wide ranging and unique experiences. No attempt to isolate experiences from typical distractions or demands. No requirements on the children for prior experience. Children's holistic experiences of learning sought.	Focused on children's engagements as they question and used imagination. Captured inclinations to think and act independently, adapting, applying reason and investigating. Methods designed to capture unpredictable responses within a variety of situations. Considered social and environmental factors alongside engagements and dispositions towards learning. Reactions captured as responses to developing inclinations, rather than acquired linear development. Focused on children's responses within an experience rather than artificial displays of knowledge. Children's individual and natural inclinations for learning embraced.	Diverse abilities valued and recognised. Pedagogical influence observed and commented on in the context of wide-ranging variables. Constraints of environment or permission recognised.

Figure 1.1.3: Conceptual framework illustrating pedagogical factors impacting opportunities, experiences, potential development and life skills.

The observed responses were recognised as the actions of children in the process of maturing, rather than being analysed in isolation. The capability for these responses to alter and mature, influenced through guidance and collaboration was reflected in the repetition and prolongment of the study and the interactions, discussions and groupings that it captured. Within its social constructivist framework learning was recognised as a social phenomenon. That said, an awareness of the extrinsic and intrinsic reinforcements motivating and driving children's responses was also retained. Both in the environmental and physical parameters placed on the child, as well as internally driven behaviours decided for themselves.

Methodology

When designing the study, various established methodologies were considered and deemed unsuitable. Reflected in the words of Higgins (2018), the educational imagination, interesting ideas and productive questions it sought to pose required something more than standardised research methodologies. Instead, it sought to highlight evolving and unpredictable elements, as advocated by Chesworth (2018) when contesting cautious research with young children. Arguing that an emphasis on implementing "methods" should give way to welcoming uncertainty and ethical responsiveness, embracing what might become possible.

Discussed more completely in chapter 3.3, a phenomenological methodology was then utilised to capture these experiences of learning, with its experiential focus on how processes of learning are perceived, acted upon, and made meaningful by those undergoing it (Denzin and Lincoln, 1998). This methodology allowed notable experiences to be explored, offering an insightful exploration of dispositions and their potential impact as young children's opportunities to develop dispositions were observed. As with Karademir, et al. (2020) and Coates, et al. (2019), phenomenology allowed for purposeful observations to offer insight on children's interpretations of experience through rigorous thematic analysis. As with these studies, effective pedagogy was then troubled. Within this descriptive and interpretive methodology, children's autonomy and motivations were noted within the complex and multi-layered facets of holistic teaching and learning. By utilising a phenomenological methodology within these two sequential settings, lasting meaning and impact of childhood experiences could be questioned, along with potential long-term impact and the experiences facilitating their engagement, hence questioning the validity of observed pedagogical practices.

Assumptions

Maykut & Morehouse (1994) suggest that studies utilising phenomenological methodologies require a set of overarching and interconnected assumptions which cannot be proved but must be stipulated, offering a worldview from which knowledge can be built. In looking to explore how access to experiences impacts potential engagement in dispositions within the multifaceted realities of a child's day, six key assumptions were made. Informed by the theoretical underpinnings of the study, these assumptions questioned the validity of established pedagogies, shone a light on potential alternatives and directed thoughts towards significant considerations for the study and the methods to be employed. This process of deducing specific requirements of the study from consideration of its assumptions was illustrated in Figure 1.1.4 together with the resulting impact on its study design.

Assumption One; Children are unique, developing at different rates within different life realities.
Rooted in an understanding of child development, this assumption, reflected in the principles of the Early Years Foundation Stage would appear to question the validity of uniform planning and assessment. Acknowledging the diversity of children's social and cultural realities it looked to alternative methods of capturing observations of children, understanding that any 'achievement' was both relative and situational. To that end, the study sought prolonged observations of a range of children through all permissible activities. This was then captured through 640 independent observations of 10 children over 2 years.

Assumption Two; A child's development is holistic, episodic and uneven.
This assumption recognised that child development is ongoing, occurring simultaneously within multiple areas through processes that are anything but linear. It then suggested that any snapshot observations of one area,

ability or moment would, in isolation, fail to represent developments that are fluctuating over time. As an alternative to this approach, it suggested that children would need to be observed formatively, building a dynamic and inclusive representation of their responses and tendencies. Open ended, fluid observations conducted over two years actively sought to build an emerging picture and avoided static judgements of future potential.

Assumption Three; Children have agency, their actions are influenced by their choices.

Assumption Three recognised that children's actions would be influenced by the choices they were offered. Any such choices or limitations of choice would need recording – both those influenced by the external environment and social demands, as well as internal influences of personal choice and engagement. Authentic, naturalistic observations were then written to acknowledge and document the degree of choice permitted and made, and the responses observed in the moment.

Assumption Four; To develop a disposition, children need opportunities to engage with them.

This assumption suggested that children's development of dispositions would be impacted by the opportunities they had to engage with them. For example, to become courageous within their pursuit of a goal, children need opportunities to experience being courageous. To this end, the permissions children were afforded needed to be considered, which naturally questioned pedagogies that were seen to remove dispositional engagement from children's day to day experience. The frequency and depth of their engagement with dispositions would then need documenting and the FOLLEP scale was devised to support this with clarity and consistency.

Assumption Five; Child development is impacted by environment and social engagements.

Assumption Five recognised that children's experiences, responses and ongoing development do not occur within a vacuum. Mindful that any captured observation would be situated within the moment and impacted through a multitude of variables unique to the child and the instant in which it was captured, it neither sought to account for all these variables, nor mitigate against them. Instead, it actively sought to avoid introducing unfamiliar conditions wherever possible and documented observable variables and influences, such as access to environments and resources, including time, location and social interactions need to be considered. Whilst at the same time it kept observations as natural for the children as possible, avoiding artificial agendas such as additional expectations, activities or agendas.

Assumption Six; External agendas can impact perception of valuable experience if driving desired results.

This assumption was mindful of the impact that an external agenda can have on experience. With children's opportunities throughout the day understandably driven and governed by the actions of the adults around them, the value of any permitted experience may become judged through its ability to meet this external agenda. If focused on the pursuit of a desired result, such as the meeting of a lesson objective, the demonstration of an attained skill or in preparation for predetermined testing, foundational experiences may be overlooked. Mindful of this, observations actively remained unaware of the external demands on the day to focus instead on the responses of children in the moment. Desired lesson outcomes and schemes of work were overlooked in favour of encapsulating a full range of influences, and no judgements were made on children's perceived abilities or the meeting of targets.

Figure 1.1.4: Assumptions made, their impact and resulting implications for the study.

Situating the approach used

The importance of learning dispositions has long been recognised in practices with young children, as reflected within Learning Stories used for assessment and pedagogical documentation throughout the world. Whilst these child-centred, non-standardised, holistic and socio-culturally embedded records of development recognise the importance of the individual child, the aims of the learning story concept are however, only partially achieved, as troubled by Knauf (2017). The form of the story, by virtue of its language, text or use of pictures, may not be fully accessible to children; the story itself may lack clarity regarding its subjective character; it is limited in its focus of only the learning dispositions underlying the concept of the story and any evaluation is performed through comparison with theoretically normal development (Knauf, 2017).

This study looked to retain a more direct focus on dispositional engagement. As is discussed explicitly within the literature review (Chapter 2.3), developed frameworks with which to investigate the development of dispositions and attitudes such as confidence and self-belief are not without precedent within the literature. Fox-Turnbull (2019) considered learning power theory within four aspects of learning and across five predetermined behaviours when looking to address barriers to learning. InCLASS is well utilised to observe and score children's competence within classroom interactions across ten dimensions of engagement, communication and conflict, rated on a seven-point scale using behaviour descriptors (Bohlmann et al., 2019). Bertram & Pascal (1999) used observations to understand engagement in the Accounting Early for Lifelong Learning (AcE) Project, when practitioner observations provided illuminative evidence of the quality of young children's learning experiences and defined early characteristics of life-long learners.

This two-year child case study, by design, incorporated observations of children in two different settings as it spanned their final preschool year and reception. Given that delivery of the EYFS is a legal requirement in the two UK settings observed, the themes of this statutory framework would be a consistent additional influence on the experiences of the children, adding a common focal point and facilitating comparisons within the pedagogical approaches utilised. The themes, as detailed in Figure 1.1.5, highlight the importance of a child's individuality, their relationships, environments they were placed in and the requirements of active learning. When considered within the conceptual framing of this study, this raised questions that focused considerations of pedagogy, opportunity and experience and directed attention towards observational variables and requirements of a suitable frame.

While it was important to capture the external (physical environment) motivations provided by the teaching styles, location, distractions and encouragements offered, the study also acknowledged that processes of learning were actively constructed by the learner, and as such depended to a significant extent on the child's internal drive to understand and promote the learning process. To this end, their internally driven responses to involvement and grouping, as well as the discussions engaged in and the choices being made needed acknowledging. To incorporate these behavioural and cognitive motivations, children were then observed through a second lens to capture internally driven (child focused) behaviours and motivations.

With its acknowledgement of the importance of social interactions and collaborative learning opportunities, the impact of individual learning as well as group size was of interest. To this end, engagement levels during periods of whole class teaching, small group, pair and individual learning were observed. Along with opportunities for discussion and peer interaction, both independent and mediated or structured by the teacher these were reflected on during the analysis stage, with recommendations emerging.

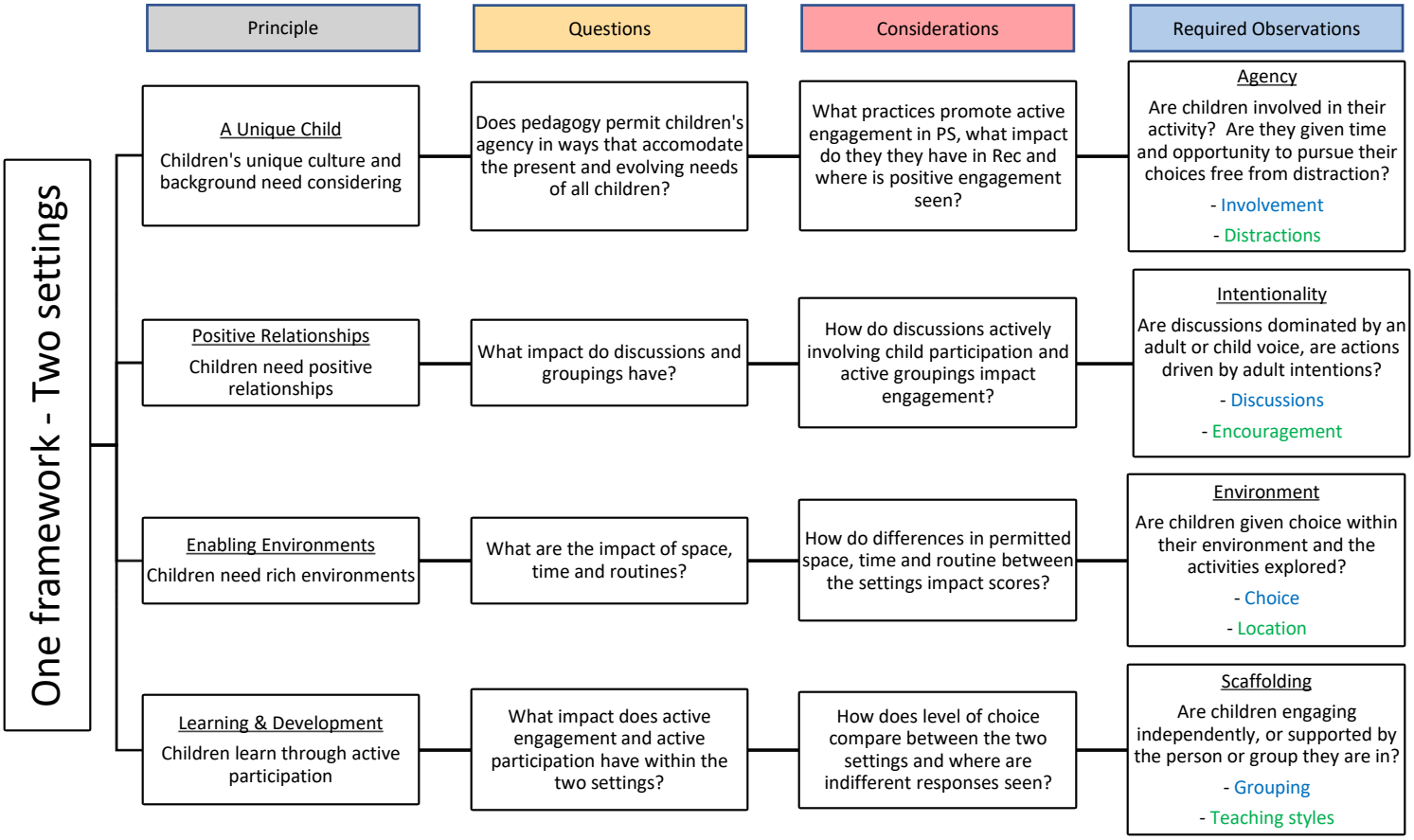


Figure 1.1.5: Implications of the curriculum themes across settings

Embracing these variables, along with the importance of opportunity and the potential impact of limitations placed on children, the following Internalised and Externalised Influences on the Experiences of Children framework (Figure 1.1.6) was written for the study. This comprehensive model incorporates internalised influences reflected through discussion, involvement, grouping and choice, alongside those impacted by the external, physical environment, namely teaching styles, imposed distractions, locations and the encouragement experienced. Utilising this IEIEC framework, observations documented a wide range of influences on children's learning experiences as they occurred in the real world.

Teaching - How pedagogical practices are framed by the adult	*Learning – How the pedagogical practices are experienced by the children*									
Internalised influences	Child Focused Tracking Observation Proforma									
Discussions	TC	TC - A	TC - C	TC - GC	A - TC	C - TC	GC - TC	A - GC	GC - A	
Involvement	1 – Floating, unengaged		2 – Settles briefly		3 – Engaged most of time		4 – Some intense engagement.		5 – Continual. intense engagement.	
Grouping	F - Flitting		WG – Whole grouping		SG – Small grouping		P – Pair		I – Individual	
Choice	1 – No choice		2 – Limited choice		3 – Some activities excluded.		4 - Only in/outdoors excluded.		5 – Freedom of choice	
Externalised influences	Physical Environment Observation Proforma									
Teaching styles	T1 – Adult led		T2 – Adult participation		T3 – Group activity		T4 – Adult support		T5 – Child autonomy	
Distractions	D1. Att. forcibly broken		D2. Encouraged elsewhere		D3. Offered alternatives		D4. Distracted		D5. Uninterrupted	
Location	L1. Enforced		L2. Encouraged		L3. Alternatives offered		L4. Most options available		L5. Free choice	
Encouragement	E1. Enforced		E2. Directed		E3. Encouraged		E4. Adult preference		E5. No adult influence	

Figure 1.1.6: The observational framework of Internalised and Externalised Influences on the Experiences of Children - The IEIEC Framework

The potential impact these variables could collectively have on children's opportunities and experiences were then considered, suggesting that opportunities offered impact the nature of children's experiences and their tendencies to behave in certain ways

such as volunteering ideas, having a go and trying for themselves. Engaging in these experiences, it then suggested, furthers development of dispositions such as self-motivation, courage and curiosity, which will have developmental impact on life skills. These considerations are reflected through the parameters of the conceptual frame (Figure 1.1.7).

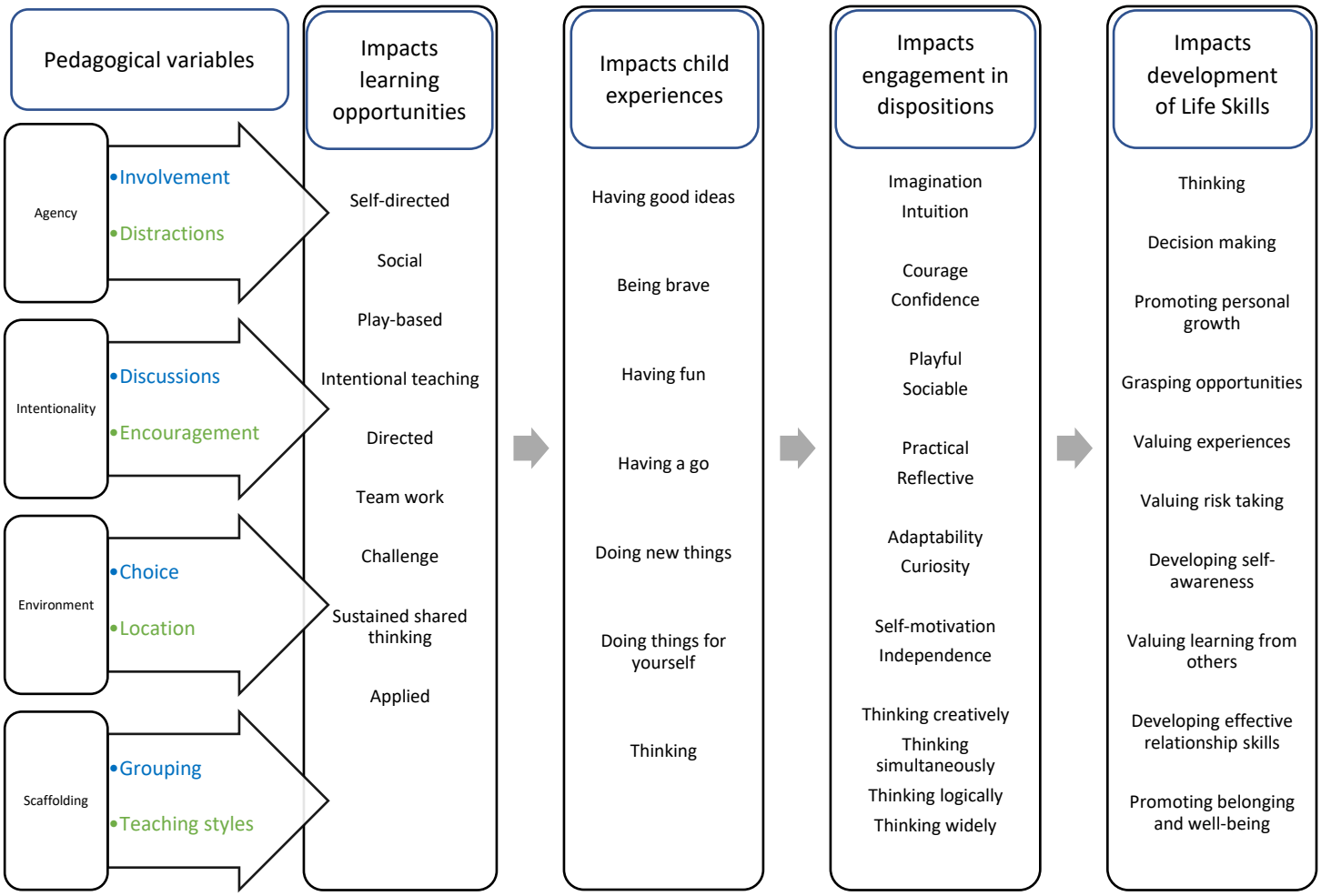


Figure 1.1.7: The effects of pedagogical variables reflected through the conceptual frame.

In seeking to explore these relationships, the study embraced a phenomenological methodology to observe children as they experienced early childhood pedagogies. Through a two-year observational case study, the engagements of ten children were documented as they naturally experienced preschool and primary school classroom pedagogies, contrasting the permissions offered and the engagements experienced by the children. Noting the opportunities, teaching styles and environments, children's engagements within the dispositions were documented, actively exploring children's opportunities for dispositional development.

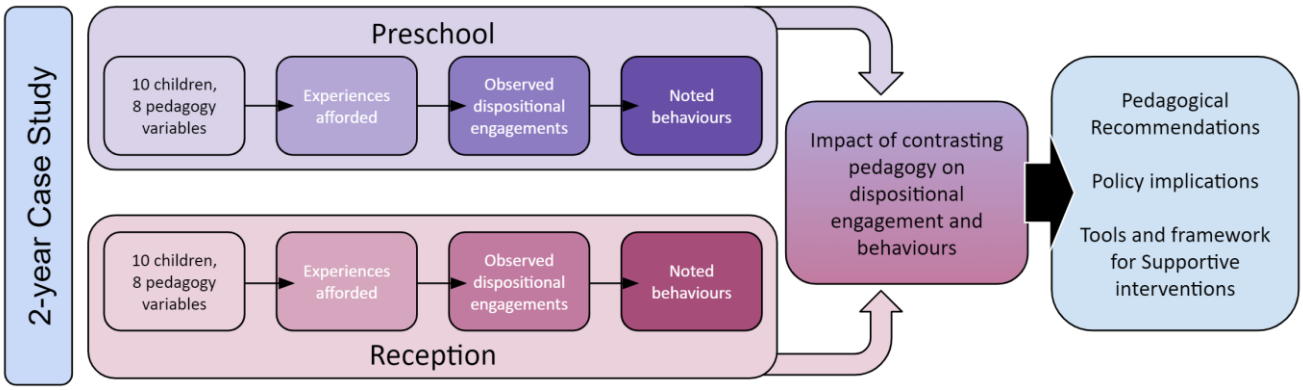


Figure 1.1.8: The 2-year case study combining to generate unique findings and recommendations.

To frame the research and offer a consistent link through its methods, the study utilised a conceptualised set of 16 dispositions previously identified and established by the author within the published work *Developing School Readiness: Creating Lifelong Learners* (Peckham, 2017b). These are depicted and defined in Chapter 3.1 along with the rating scale devised to further support this study.

Layout of the thesis

Chapter 2 considered the underpinning desk-based research. It looked to established practices within the early years, suggesting a need for a study to capture children's experiences within familiar environments, steeped in typical social demands (Chapter 2.1). The need for children to develop deeper, interrelated dispositions in the early years was also explored. Established within notions of executive functioning (Chapter 2.2) methodologies utilised within traditional executive functioning (EF) studies rooted in psychological testing were troubled and the need for further study rooted within a dispositional focus emerged (Chapter 2.3).

The methods designed for and utilised within the study were further discussed in chapter 3. These included specifically designed observation sheets utilising coded narrative to simultaneously document a range of pedagogical variables and dispositional engagement, together with rich data to add context and meaning to each observation. The consistency embraced when documenting children's experiences and depth of engagement throughout the study permitted deeper explorations of the effects of pedagogy as the nature of dispositions became better understood. These methods were trialled in the pilot study and presented in Chapter 3.3, allowing lessons to be learnt and adaptations to be made before commencement. Findings were presented through an individual child case study in Chapter 4. Drawn from the larger cohorts, this presentation of the raw findings allowed the methods and documentations used and duplicated across all participants to be illustrated as meaning was derived from the methods employed.

Combining the findings from all children, Chapter 5 then demonstrated the primary analysis of the findings. Through the example of one disposition, the depth of material available was managed, demonstrating the collective experiences of the children as they progressed from preschool to primary school. Supported through graphs to illustrate findings from 640 observations, these demonstrate the levels of engagement displayed by the children in each setting, comparing realised experiences with children's tendencies to engage.

Drawing the findings together, Chapter 6 explored the impact of pedagogies across all the dispositions, reflecting on their potential to affect children's opportunities as well as children's likelihood to engage in the opportunities offered. Mindful of the fact that the children were observed during their Early Years Foundation Stage, albeit in two different settings, the chapter roots

its considerations of pedagogy within the EYFS themes, re-situating the chapter within the studies conceptual frame. Using the example of the unique child, Chapter 6.1 considered pedagogy through a lens of agency, reflecting on children's permitted involvement across each of the dispositions, questioning the time and opportunity given for children to pursue their own choices free of distraction.

By considering the learning to emerge from this work, Chapter 7 then considered the potential for this study to make significant contributions to the field. Chapter 7.1 roots these deliberations in the intentions of the research and the learning originating from the desk-based reviews underpinning it. Through its considerations of the field work, the Theory of Lifelong Development in Childhood (ToLD-C) is then introduced. Reflecting on the findings of the study, this theory considered the impact of key experiences on children's propensity towards dispositional engagement. By considering opportunities, inclinations and expectations, it illustrates the cyclical effect this can have on dispositional engagement, developing attributes and consequential outcomes, to positive or negative effect. Impacted by the observed pedagogical variables, emerging attributes and tendencies towards realised outcomes were noted, establishing dispositional engagement as the linchpin to this cycle, established in childhood and continuing throughout life. These combined findings were then utilised to produce the Method of Improved Childhood Engagement (MICE). Combining recommendations, evaluation and supportive tools for use with individual children and cohorts it looks to maximise children's engagement and desire to learn by identifying and addressing potential barriers to it.

Chapter 7.2 then considered the unique strengths of the study, mindful of its limitations. It collectively presents the unique contributions made through its devised framework, coded scales and observation sheets, written to support the study. It then draws attention to the contributions emerging and the implications this may have on policy and practice. Chapter 7.2 then reflected on the personal development arising and considered where the work will go next.

2.0 Intentions of the literature review

This study draws attention to the experiences afforded young children in their early years and the opportunities these 'affordances' (Kernan, 2010) enable. When considering the experiences of a child and the sustained impact these may have on their habit-forming behaviours, responses and outcomes, there are of course many variables that could be considered. These include, but are not limited to, the socio-economic background, cultural environment, familial context, biology, health as well as physical and emotional capabilities and others. Whilst these differences within the lives of children are rooted in variables reaching far and wide, and beyond the scope of this study, it was important to remember and acknowledge that they are continual features informing children's interpretations of experience.

This study then focused its methodology specifically on capturing observable experiences within the classroom. Underpinned by the assumption that ongoing achievement requires opportunities for experiences, an understanding of foundational learning opportunities was required. In seeking to capture a realistic understanding of children's experiences during their earliest introduction to formal learning, the multi-layered, social realities of their learning experiences needed to be understood. Concerned that these experiences may impact future achievements, as well as children's perceptions of their own potential and perceived suitability within the role of the schoolchild, an understanding of early child development was required.

To understand how childhood pedagogies enable children's engagements, and to better understand the richness offered therein, the importance of opportunity and the potential impact of limitations placed on children needed exploring. Mindful of concerns that intentions focused on academic outcomes may constrain children's wider potential, methods of exploring and capturing the potential impact of practice needed to focus on the progressive and holistic nature of learning within an early years context, rather than objectives derived from a curriculum model. What follows is then a literature review exploring these issues under the headings of "Exploring practice within the Early Years", "Exploring prevalent studies in the field" and "Looking to dispositions of learning".

As a prelude to this exploration of early childhood pedagogies and their impact on the development of dispositions of lifelong importance, this literature review sought to explore early years practice. With a focus on understanding its foundational impact and ongoing influence, it looked to the importance of active experience within individual lives. Exploring the progressive nature of effective opportunities allowing for deep-rooted growth, it considered the importance of offering children opportunities, intrinsically and externally, to engage with dispositions as they actively grapple through opposing tendencies. From the literature reviewed, implications for the study emerged, with key points to inform and direct children's early experiences of learning, informing this study as it challenges current approaches to early pedagogies.

Exploring the motivations behind formal approaches within early years practice, Chapter 2.1 troubled the tendencies for Year One preparations to cascade into early years practice. It then explored studies that look to more holistic practices focusing on the development of the child, rather than a central objective and explored methods of facilitating this practice. As the repercussions of early practice were illustrated, with studies demonstrating implications felt throughout children's developing life skills, the need for a study looking at the impact of foundational experiences was highlighted. Informed by the research referenced, this study drew influence from the inclusive practices advocated. Incorporating children's engagements, their inclinations to think and act independently and the impact of environmental and action-based choice within pedagogical influences into its theoretical framework.

Mindful of the need for Early Years practice to recognise the foundational impact and long-term effects of early experiences highlighted in Chapter 2.1, Chapter 2.2 sought to explore prevalent studies within the field. Naturally drawn to executive functioning (EF) as a field of research concerned with the foundational development of children, this chapter sought to further explore young children's requirement for foundational experiences. Having established their lasting impact and the importance of their secure development across a wide skill range, attention was drawn to the methodologies used within EF research. Mindful of differences within the research reviewed and the intentions of this study, attention was drawn to the need for a well-defined framework within naturalistic approaches. With key concerns being raised throughout this chapter, a different approach was sought for this study.

Influenced by the literature discussed in Chapter 2.2, a more holistic framework was sought to explore children's foundational experiences. Acknowledging the realities of children's learning within the early years, whilst seeking a less restricted view of what success within education means, Chapter 2.3 explored a dispositional approach to a set of behaviours and reasoning strategies. Referencing studies showing dispositions establishing and embedding through children's engagement and agency, the importance of experience was quickly identified. Positing dispositions as something to be experienced and developed, rather than a biological or inherited trait, Chapter 2.3 highlighted the importance of children's early experiences, whilst remaining mindful of the extent to which these are managed by the adults around them. Advocating opportunities for children to employ dispositions through a wide range of social and environmental situations, studies noted the importance of allowing children to develop their thinking and actions beyond the demands of others.

2.1 Exploring practice within the Early Years

This chapter seeks to explore the impact of pedagogy on children's early experiences of learning. With influence on interactions, environments, freedoms of choice and motivation, pedagogical styles naturally have an influential impact on children's opportunities. This chapter explores the importance of considering these opportunities, drawing attention to how intentions can become led by external objectives and the importance of focusing experiences back on the holistic needs of the child.

The emergence of formal approaches within the Early Years

With ability profiles at three years shown to be highly predictive of profiles at school entry (Field, 2010), and warnings of the impact this can have on future success (Allen, 2011), formal preparations for learning can start early. Fuelled by media statements suggesting *"children as young as two can learn"* yet are failing to be made *"school ready"* (Telegraph, 2014), the notion of the "*school ready child*" has become commonplace. However, as children become judged as ill-prepared to learn (Fahey and Forman, 2012), many in the industry write to implore that "*schoolification*" practices are reconsidered (Tracey et al., 2014; Roberts-Holmes, 2015; Neaum, 2016).

Originally introduced as a performance indicator for Children's Centres (Ofsted, 2014), the term *"school ready"* speaks of a child's achievement of a *"Good Level of Development"* (GLD), demonstrated by the meeting of 69 Early Learning Goals as assessed within the Early Years Foundation Stage Profile (EYFSP), a nationally regulated summative assessment at the end of the Foundation Year (DfE, 2018). However, when utilised as a pedagogical driver, this raises questions such as those pondered in a previous publication (Figure 2.1.1).

- In what context are judgements being made, and by whom?
- Can all significant achievements be effectively judged within prescribed goals?
- Can any set criteria be meaningfully matched to all children?
- What impact could this have on practice and priorities?
- How can the dualistic achievement of GLD demonstrate the richness and depth of a child's abilities?

Figure 2.1.1: Questioning the EYFSP as a pedagogical driver, Peckham (2018c)

Believed to prepare children for later academic demands (Whitbread & Bingham, 2011), and with publication of EYFSP data, competency-based preparations can dominate the child focused, holistic practices intended within the play-based early years curriculum. This exposes fundamental flaws in a system that, once judged nationally, cautions Sylva et al., (2004), fuels misinformed, developmentally inappropriate and potentially damaging practices, a caution echoed by Roberts-Holmes (2015).

Questioning more formal approaches with young children

Children are born with a disposition to learn (Katz, 2010). Naturally playing, active learners (Samuelsson & Carlsson, 2008), they possess basic processes of early learning and reasoning from birth, developing independent thought and learning predilections during their early years (Howard et al., 2016). As demonstrated through developmental psychology and neuroscience research (Whitebread and Bingham, 2014), this period is particularly sensitive to brain development as foundational capacities of metacognition and self-regulation establish (Pascal et al., 2017). However, once children are placed in formal classroom environments, often with unfamiliar behavioural and language expectations, focus can centre on skills secure in only a minority of children at this age, cautions Fabian (2002). Within prevalent school culture, which for many implies learning to be school children; *"To take instructions and wait for their teacher to give a response"*, the unique needs of young children can go unchecked (Samuelsson & Carlsson, 2008; p637). Struggling to negotiate their understanding and habitual responses as

demands unmatched to their innate learning needs are made, this does little more than identify *"A child's weaknesses"*, cautions Doyle and colleagues (2012; p374).

With early classroom success requiring children to adapt their needs and wishes to the expectations of new adults and environments, attempts to modify their intelligence profile and skills can be seen damaging their motivation and the foundations of critical thinking cautions Kamii et al., (1994). Whilst they may display the necessary skills, echoes Whitbread & Bingham (2011), they may lose the dispositions to do them as they are observed waiting to be told what to think next. As opportunities to make decisions and self-direct are seen to further reduce as children progress through primary schooling, development of deeper, executive functioning diminishes, notes Broadhead (2001), further demotivating academic endeavours.

Whilst acknowledging a place for teacher-directed instruction, Nicolopoulou et al., (2015) warn that skill-based practice within the early years has become too one-sided, unbalanced and developmentally inappropriate. Also challenging formal pedagogy, Marcon (2002) notes that expecting children to acquire dis-embedded information without curiosity, initiative, independence, or effective choice before they are developmentally ready hampers their later progress, jeopardising intellectual dispositions and abilities for deeper understanding adds Kagan & Kauerz, (2007) and Hirsh-Pasek et al., (2009). Polarised pedagogy largely ignoring child-centred, play-based, and constructivist approaches is also troubled by Golbeck (2001) when advocating simultaneous *"child regulated"* and *"teacher guided"* educational practices, required she suggests, to promote learning and development while mobilising children's engagement, enthusiasm, and creativity.

Furthermore, formal pedagogic approaches not accommodating social and emotional capacities (Whitebread and Bingham, 2011) can see children distance themselves from the goals of schools as they retreat either mentally or physically from the pressures to achieve what Katz cautions are developmentally inappropriate outcomes when writing on the Too Much Too Soon website. With impact on their self-esteem, children can experience conflict, frustration or disappointment as they struggle to manage their behaviours and goals within seemingly inhibitive or counter-productive environments.

Formal practices largely disregarding children's diverse abilities, backgrounds (Howard et al., 2016) and cultural experiences (Evans, 2015), challenge claims of equity within a curriculum intended to address it. Where requirements for memorised correct answers become the focus, children's potential can become seriously underestimated as, intellectually unengaged, they assume passive, receptive roles (Katz, 2010). Becoming disenchanted, uncertain, anxious and despondent (Tracey et al., 2014; Roberts-Holmes, 2015; Neaum, 2016), these worrying yet significant effects on children's enjoyment of learning are also seen impacting long-term with effects seen in health and well-being (DfE & DfH, 2011). With resulting psychological and social problems (Suggate, 2007), difficulties being experienced are seen to obstruct children's learning as well as that of others (Allen, 2011). With ongoing academic propensities being established (Field, 2010; Sylva, 2014), these experiences affect future learning potential (Forget-Dubois, 2007), deeply impacting educational trajectories for years to come (Tickell, 2011).

<u>Advocating approaches that focus on the child, rather than an objective</u>

As statistics show England's school children among the unhappiest in the world (The Children's Society, 2019), many write of the need to re-focus pedagogies within the foundational stage of a cumulative educational system on longer-term goals (Winter and Kelley, 2008; Katz, 2010; Nicolopoulou et al., 2015). As writers question the limitations of assessment outcomes and profiling of the *"school ready child",* early years practice preoccupied with formal, prescribed pedagogies (Neaum, 2016) and the favouring of discrete, measurable and quantifiable skills is troubled (Pound and Miller 2011). Whilst research suggests benefits in teaching discrete building blocks of numeracy (Ginsburg, & Amit, 2008) and literacy (Koutsoftas et al., 2017), the importance of teaching

the whole child must not be lost, points out Fulignia et al. (2012), with the advancement of all skills requiring a complex coordination of cognitive, motoric and neuro-motor processes (Smits-Engelsman et al., 2001 in Dinehart, 2015). To do otherwise can see *"results [become] prioritised over processes, numbers over experiences, procedures over ideas and productivity over creativity"* cautions Ball (2013; p91), with little consideration for long-term benefits (Fulignia et al., 2012).

The National Child Development Study (UCL, 1958), the British Cohort Study (UCL, 1970) and the Millennium Cohort study (UCL) analyses of child outcomes associate long term attainment with investment in life skills such as conscientiousness, perseverance, motivation, sociability, attention, self-regulation and anger management, self-esteem, and the ability to defer gratification, the nurturing of which, it could be suggested, would effectively help close the attainment gap. These executive functions are promoted suggests (Jarvis, 2006) in holistic, playful pedagogies, where agency, identity, motivations, resistance, resilience, well-being and ethical relationships are addressed, alongside peer support, social relationships, rule negotiation, collaborative and symbolic interactions, mediation of rules and notions of fair play.

Within this model, Tickell (2011) suggests that enduring skills and attributes in young children need nurturing by well-trained, adaptable practitioners, empowered to offer experiences mindful of their long-term impact, whilst retaining sight of who it is for. This view is echoed by Sylva who has repeatedly stressed the need for individualised programmes integrating social and cognitive functioning needs, where holistic pedagogical approaches retain focus on individual children of all abilities, backgrounds and positionalities (Sylva et al., 2004; Sylva, 2014). The need for socio-emotional development within environments rich in language and experience is also advocated by Field (2010) and Allen (2011), retaining the focus on current developmental requirements of individual children and mindful of all types of learning present from birth, writes Chappell et al. (2008).

Neuroimaging shows that children function at a higher level when encountering new information and experiences, with decreasing activation over repeated exposures (Chein & Schneider, 2005). When purposefully reflecting on their knowledge and intentionally engaging with learning materials, children demonstrate improved measures of attention and executive function, but this requires levels of personal engagement not evident from accounts of psychometric testing cautions Blair et al, (2014).

For academic effort to become automated, smoothly combining many processes until novel or more difficult experiences are encountered requires deliberate, non-automatic practice so that more advanced goals can be attempted, as demonstrated within fluent reading. However, Cameron (2018) suggests that this requires experiential, hands-on activities to internalise and represent abstract concepts in concrete and tangible terms, exposure is not enough, and testing does not achieve it. Direction in their manipulation and time to practise skills regularly is required as children learn through their own activities, through autonomous goal-oriented problem solving, as well as through interactions with others, self-regulating their learning with intentional control over achievements.

Samuelsson & Carlsson (2008) suggest that experiences most equipped to strengthen children's intellectual dispositions come from those that offer real meaning to the child, where their experiences are viewed as the point of departure and remain central to the process. Meaning is then made from the experience, enhanced through verbal or physical contributions. Where learning activities are initiated by children, links are promoted between executive functions and metacognitive skills suggests Whitebread et al. (2007). Especially when working unsupervised in pairs or small groups, where children are free to collaborate, and talk is encouraged. Where child initiative and cooperation combine with teacher guidance and support, a pervasive emphasis is seen on the promotion of self-regulation (Nicolopoulou et al., 2015). Supporting children's abilities to learn and relate socially to

others, both in early years settings and after their transition to school (Hartas, 2011), this is recognised within the revised Ofsted framework (2019).

Facilitating holistic practice

Developmentally appropriate experiences require progressive school environments, suggest Whitbread & Bingham (2011), where the diverse skills and attributes of individual children are integrated within an open, socially constructed curriculum. Within such environment's children can become involved in the process of meaning-making-learning (Moreno et al., 2017), where they learn to engage with complex ideas, transforming knowledge beyond problems presented in familiar contexts (Samuelsson & Carlsson, 2008; Winter and Kelley, 2008; Howard et al., 2016). But this requires practices adaptable to children's individual needs, rather than a focus on who the child is expected to be.

Pramling Samuelsson & Asplund Carlsson (2003) speak of effective teaching as allowing children to communicate and interact as they create their own play themes and adapt metacognitive perspectives. Through this approach, it is argued, children develop a belief in themselves as being *"capable"* adds Tassoni (2013), experiencing repeated opportunities to make their own decisions and manage things for themselves. The need for interaction, thinking and reasoning and the voicing of ideas is also seen as important elements of an effective Early Years pedagogy by Whitbread & Bingham (2011), noting how vocabulary, pre-reading and pre-writing skills have been shown to follow strong foundations of communication. Where opportunities for thought and sophisticated reasoning are offered, cognitive, social and emotional foundations are acquired, Jarvis (2006) notes, supporting basic phonology, syntax, and vocabulary to directly impact later literacy development.

Offering subject matter in context sees EF processes more effectively utilised and learning enhanced suggests Clements et al. (2016). Koutsoftas and colleagues (2017) and Sylva and colleagues (2004) advocate incorporating a range of interactions, from traditional instruction to interactive play environments, where variation becomes central to the learning process adds Samuelsson (2004), combining teacher-initiated group work and freely chosen activities. Enhanced through flowing conversations responsive to children's interests and abilities (Samuelsson, 2004), deep immersion in language is seen when practice centres around experience and investigative approaches within opportunistic environments suggests Dinehart (2015), where autonomy is offered within challenging and responsive environments (Whitbread et al., 2012). *"Possibility Thinking"* (Chappell et al., 2008; p30), creativity and reciprocal relationships also flourish where questioning and imagination are permitted (Cremin et al., 2013), as children emotionally engage, developing cognitive skills that enable them to discriminate, encode or retrieve information (Bishop, 1997) through meaning-making-learning (Samuelsson & Carlsson, 2008).

Adding weight to the need for holistic pedagogies is the blended nature of language and behavioural and emotional difficulties (Hartas, 2011; Beitchman et al. 2001; Fujiki et al 2002). Despite children's *"unpreparedness"* for formal learning reportedly hinging on social skills, effective communication and resilience (State of Education, 2016), as well as self-regulation of behaviours (Ofsted, 2019), classroom practice continues to see children dissuaded from social interaction. Essentially establishing decontextualised learning environments, experienced by many as unmatched to the life experiences and values they live within (Evans, 2015). Denying opportunities for children to develop within these areas adds to the deficit position of failing children at age five cautions Tickell (2011), with ongoing impact on social development felt through the early years (Benasich et al., 1993), primary years (Lindsay et al., 2007) and beyond (Conti-Ramsden & Botting, 2004).

Implications for this study

Limitations within formal early childhood pedagogies and systems of child profiling are apparent, so too is the importance of the early years. What is less evident is clear, systematic observational accounts of the practices endorsed above, together with a questioning of potential impact on long term success. It is here that this study positions itself as it seeks to explore how early childhood pedagogies facilitate children's experiences within the early years and their impact on developing life skills.

Pascal and Bertram (2013) stress that when seeking to understand children's experiences, a full awareness of the systemic, structural and process factors of curriculum delivery is required. Focusing on programme characteristics alone however cannot capture the realities of the classroom, cautions Fulignia et al. (2012), and instead directs attention to children's abilities to adapt to expectations, rather than individual need (Miller, 2016). Mindful of symbolic interactionism, Woods (1979) suggested three postulates that should remain central to any judgements made of children.

1. *Children act towards things based on the meanings they have for them, both independently and as they become more social. This subjective meaning is more interesting than reflecting on assumptions about what is observed.*
2. *Assigning meaning is continuous and fluctuating as concepts are modified and adapted. Actions are not simply driven through ability, attitude, personality or social rule but changing as ideas are considered.*
3. *All of this is taking place within a social context, mirroring or being influenced by perceived responses.*

(Wood, 1979 in Cohen, et al., 2011; p20).

This would suggest that children's actions should be captured over time, observed within natural social settings, rather than deriving meaning from isolated instances or from their response to an action required of them. This is echoed by Roberts-Holmes (2015) who suggested that unfamiliar environments and unaccustomed social demands should be avoided, within which children would be unable to demonstrate their true capabilities and would instead be observed endeavouring to conform to predetermined, universal behaviours, which Arndt et al. (2008) also suggests overlooks their individual needs.

As preparations for year one assessments are seen in pedagogical styles cascading into reception and nursery classes (Roberts-Holmes, 2015), concern is felt for an Early Years focused on academic skills and classroom procedures (TACTYC, 2011, Whitebread and Bingham, 2014), effectively neutralising education to the production of predetermined outcomes of good data (Moss, 2007). Any understanding of children's knowledge and abilities must then be sought within familiar circumstances (Samuelsson & Carlsson, 2008; Katz, 2010; 2012) given the heavy dependence on biographical location and social context that exists (Cohen, et al., 2013).

Informed through the studies above, this study utilises a child centred constructivist approach to capture holistic practices focusing on the "whole child" (Chapter 1.1). Naturalistic observations were captured within early years environments with well trained and established staff, enabling the pedagogical styles endorsed above. Reflected in the study design and participant selections (Chapter 3.3), the importance of children's engagements, their inclinations to think and act independently and the impact of environmental and action-based choice within pedagogical influences were featured within the theoretical framework (Chapter 1.1). Observed within holistic, playful environments and more traditional school-based settings (Chapter 4.1), the study settings were observed over a prolonged period. Mindful of Burchinal, et al, (2014) questioning the reliability of research offering inferences of instructional practices from single judgements or single occasions, this allowed for a full range of teaching styles to be captured and compared.

The importance of familiar environments and typical social demands were reflected as children's realised opportunities were documented through all permitted tasks. Agency, motivations and reflections were noted alongside children's social engagements, encouragements and distractions. Permissions for children to make their own meaning, to transform and apply knowledge and to integrate and adapt their skills was sought within their experiences as the impact of pedagogical styles was captured. Social engagements, permissions to be verbal, to give ideas, to show initiative and pursue original ideas were noted alongside children's opportunities to adapt their thinking, apply reason and investigate. Children's questioning and imagination was reflected within wider attributes of teaching and learning, rather than any discrete or adult led learning goals, teaching objectives or produced data. And no attempt was made to categorise, or split abilities as individual children and their diverse reactions were recognised within the study.

2.2 Exploring prevalent studies in the field

Chapter 2.1 highlighted the need for Early Years practice to recognise the long-term impact of early development, beyond the limited capacities tested for within the EYFSP. With repercussions felt throughout children's developing life skills, holistic exploration of foundational experiences is required so that pedagogies suitable to early development and mindful of its holistic nature can be considered. When considering foundational development within the early years, studies of executive functioning (EF) are prevalent. This chapter suggests that whilst foundational experiences are key to development, EF methodologies and methods lack suitability for this study that sought to consider the effects of early pedagogies.

Young children's requirement for foundational experiences

With growing recognition of young children's need to gain foundational experiences in support of future cognitive and emotional capacities, executive functions (EF) and their development within early childhood is receiving increasing interest (Blair and Razza, 2007; Centre on the Developing Child, 2011). Related to the cognitive psychology and socio-emotional skills required to function within society, EF has been connected to outcomes in physical health, social-emotional well-being, and occupational attainment in adulthood (Moffitt et al., 2011). Playing a significant role within personal well-being, life satisfaction, active citizenship, and safer societies, suggested the Education and Social Progress (ESP) project at the OECD Centre for Educational Research and Innovation (CERI) in 2015, they have also been shown to have significant bearing on health, wealth, and criminality (Duncan et al., 2007; Moffitt et al., 2011). With early development retained into early adolescence (Altemeier, et al., 2006; Stipek et al., 2015), potentially affecting future academic achievement in ways more significant than socioeconomic status (Blair et al., 2014), their predictive and causal impacts are being noted (Best et al., 2011; Neuenschwander et al., 2012; McClelland et al., 2013; Fuhs et al., 2015), including their significant impact on the income-based achievement gap (Blair et al., 2014; Fitzpatrick et al., 2012).

However, as children transition into a formal classroom, established executive behaviours are expected, yet rarely given opportunity to develop (McClelland and Ponitz, 2012). Entering an environment where they are required to inhibit familiar practices and bypass habitual responses (Shaul and Schwartz, 2014), success hinges on children's ability to pay attention, to persist with challenging tasks, to remember new rules (Blair et al., 2007) and avoid distractions (Blair et al., 2015; McClelland et al., 2015). Children are expected to suppress extraneous movement, to sit still and be goal oriented in ways not experienced previously (Bassok, et al., 2016; Schmitt et al., 2017), a "*seismic shift in complexity of the learning tasks*", and it is in facing this that lies at the crux of school readiness suggests Moreno et al., (2017; p144).

A foundational skill set with links to manipulating, organising, and storing of new information (Stanton-Chapman, 2015) hold clear preparatory interest. Utilising combinations of higher-order reasoning strategies, growth is supported across many academic pursuits (Richland & Burchinal, 2013) including mathematical and literacy-based tasks (Neuenschwander et al., 2012; Fuhs, et al., 2014), vocabulary tasks (Becker et al, 2014) and scientific achievement (Nayfeld, et al., 2013). In contrast, tasks that test factual knowledge make fewer demands on reasoning and executive functioning (Schmitt et al., 2017).

Impacting children's emotional regulation, ineffectual development of EF has been linked to impulsive behaviours within the formal classroom (Jahromi and Stifter, 2008). Seen as a lack of concentration, impulsivity and physical aggression (Baptista et al., 2016), engagement within classroom activities is compromised (Raver, 2002). Manifesting as social problems and peer rejection (Blair & Razza, 2007), this has particular impact on social learning activities (Baptista et al., 2016) and interactions with teachers and peers suggest Shaul and Schwartz (2014), which ultimately affect academic outcome (Stanton-Chapman, 2015).

With research over recent years demonstrating the malleability of executive functioning within young children (Blair and Raver, 2014, Schmitt et al., 2018), and its correlation with behaviours directly relevant to learning, such as impulsivity, hyperactivity, and inattention (McClelland et al. 2000; 2006), facilitation of their development is of clear interest. As the significance of children's early experiences and their extended influence on development is recognised, interventions and academic programmes such as the Perry Preschool Program targeted on executive functions and behavioural regulation have unsurprising been sought as a mechanism to boost children's academic success (Blair et al., 2014; Schmitt et al., 2017).

Seeking to understand EF research methodologies

Despite the importance afforded to EF, there remains debate within the literature regarding clear definitions (Bailey and Jones, 2013, Bailey et al., 2015). On the surface, EF is often discussed within the three related, yet distinct, cognitive processes of working memory, inhibitory control and cognitive flexibility. However, definitions and nomenclature within them are rarely consistent and delineate further as they distinguish between the *"cool"* EFs of academic achievement (Finch et al., 2017) and *"hot"* EFs more directly correlated with behaviours (Kim et al., 2013; Willoughby et al., 2011), interpersonal skills (Duncan et al. 2007; Doctoroff et al. 2016) and the regulation of thoughts and actions (Koziol et al., 2012).

This framework, known as the unity and diversity construct of executive functioning (Miyake, et al., 2000) is however, just one aspect of a larger self-regulation system consisting of what Best, Miller, and Jones (2009) suggest make up approximately 15 components. There is some general agreement to suggest that they constitute a collection of interdependent, top-down, neurocognitive processes that, when established within childhood, allow for conscious higher-level, goal-directed control of impulses (Ahmed et al 2018). However, these range from generic to differentiated constructs (Skogan et al. 2015; van der Ven et al. 2013), arrayed along a continuum from effortful to automatic. In seeking to understand the available literature, this structure is displayed in the conceptual framework below (Figure2.2.1).

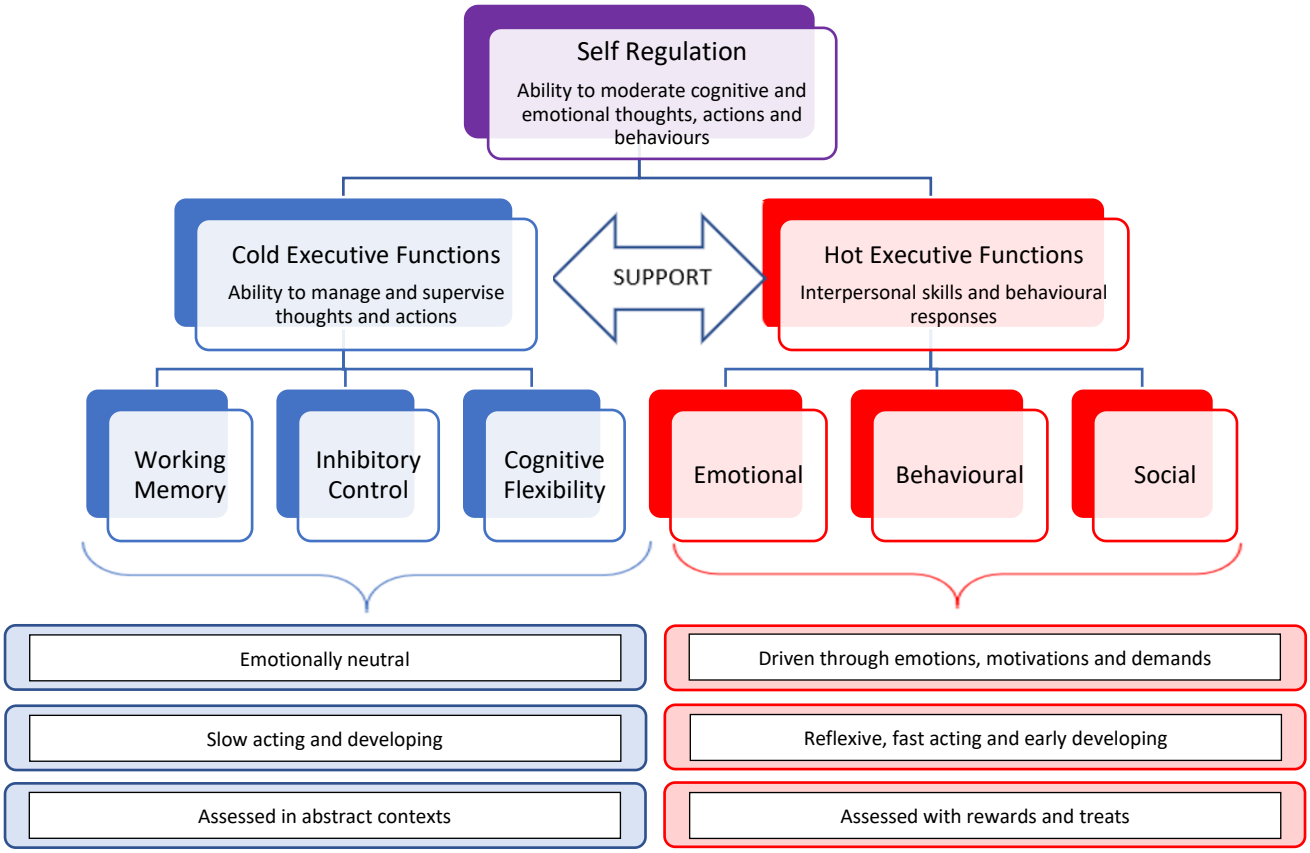


Figure 2.2.1: Educational and social-psychological conceptual framework of executive functioning

Connected to motor, social, emotional, language and cognitive functioning (Barral, et al., 2010; Welsh, et al., 2010), EFs are concerned with the ability to undertake voluntary, independent, self-organised actions toward a specific goal (Gazzaniga et al 2006; Malloy-Diniz et al 2008). As these are practices that are offered limited opportunity within the organisation of a typical classroom, their effective observation within practice is questioned.

Whilst EF processes are related to children's abilities to adapt to fluctuating environmental demands (Shonkoff et al., 2000), studies tend to be more concerned with children's performance within staged situations as they manage their emotions and actions rather than anything supportive of the learning process. Interested in the child's ability to conform within social contexts (Bierbman et al., 2008), they tend to focus on the role of EF in children paying attention, following rules, and concentrating on various cognitive and behavioural tasks (Anderson, 2002; Blair & Razza, 2007 and Samuels et al., 2016). Studies of EF then tend to be remarkably similar in their approach as they become primarily concerned with the control and coordination of information and the assistance of goal-oriented behaviours (Shaul and Schwartz, 2014). Typically assessed using performance-based tasks (Stanton-Chapman, 2015), *"cool"* executive function research will habitually employ goal-directed activities requiring children to complete a given task within abstract contexts, while testing for hot executive functions tends to involve rewards or treats (Finch et al., 2017). However, this discrete focus on tasks devoid of context causes concern, as affordance of greater learning opportunities (Duncan et al., (2017) and mechanisms of learning that EF support (Morrison et al., 2010) are overlooked.

Furthermore, the behavioural manifestation of executive functioning, referred to as one of the most complex aspects of cognition (Gazzaniga, et al, 2006; Malloy-Diniz, et al, 2008; Pazeto et al., 2014), differs from processes required for conscious control of thoughts and actions through its additional focus on emotional processes and regulation (Halle and Darling-Churchill, 2016). Differences within the results of EF studies highlight the likely contribution of largely overlooked contextual and socioeconomic factors, as well as emotional experiences affecting EF development (Finch et al., 2017). Adding to this are the individual developmental trajectories of children, influenced through personal characteristics and environmental contexts that are largely ignored (Blair and Raver, 2012).

<u>Concerns regarding EF methods for this study</u>

Rooted in psychoanalytic studies of the early 1940s (Collins, 2011) and developing through the 1960's with emerging fields of psychopathology (Eisenberg, 2002), EF studies have developed along experimental, laboratory-based methodollogies. Seeking to understand brain functioning, outwardly noticeable responses to experimental stimuli were noted in patients with mental retardation and brain lesions (Denckla, 1999) as behavioural neurologists and neuropsychologists attempted to understand how cognitive and neuropsychological systems and circuits of the brain came together (Bernstein and Waber, 2007). Examining EF as discrete modules, specific tests were then administered in isolation. However, Bernstein and Waber caution that whilst EF may consistently involve the same three specific regions of the prefrontal cortex, to ignore the diverse range of functions that fall under the umbrella of EF explains the inconsistencies found within studies of virtually any goal orientated behaviour or task involving some executive component.

Details of studies focusing on executive functioning in young children over the last five years, together with their area of focus can be found in Appendix B. These studies raise several concerns regarding their potential impact on early childhood practice and the conclusions claimed from them. A deeper explanation of the concerns set out below and rationale for the implications this had on the design of this study can be found in Appendix C.

The first thing to note is the overwhelming reliance on the use of tests in seeking to understand EF in children. Despite a lack of consensus in definition and measurement of EF, research tends to follow a recognised format; isolating the desired competency and examining proficiency by applying a narrow set of pre-designed experiments to test for its presence within artificial scenarios and parameters. However, in searching for a correlation between the focus of a study and the test selected there appears to be little consistency, suggesting that perhaps a more complex situation than a simple direct relation exists, or, as Halle and Darling-Churchill (2016) suggest, that there exists a weak consensus in the field regarding which constructs, and measurement approaches are required to capture children's EF development.

Despite this, EF studies consistently involve the systematic administering of a *"battery of tasks"*, selected for the normative data available. This range of targeted assessments assess how children perform to predetermined goals of specific EF skills, from which a composite score is created (Fuhs et al., 2015) and conclusions drawn regarding children's abilities (Riccio et al., 1994). Typically conducted in a quiet room (Cadima et al., 2016) or area of the building (Fuhs et al., 2015) where individual application of EF abilities would not be typical, this unfamiliar, controlled environment is devoid of the realities faced by children within the ecological context of a classroom. This approach conflicts with Finch et al., (2017) who stress the need for children to be in a natural situation if we are to see how they will function within it.

Questioning the suitability of an EF focus in the early years

Although children show signs of EF from birth through the egocentric biological and emotionally driven control systems of infancy, these are neither overly conscious nor effortful, not developing fully until early adulthood (Raver and Clancy, 2016). Establishing during the preschool years as a theory of mind, an infrastructure is developing for more intentional responses to come (Denckla, 1999). Moran and Gardner (2018) speak of these interrelated processes as the Hill (establishing a clear goal), Skill (identifying required abilities) and Will (perseverance until the goal is reached) of EF that require a child to know themselves, their preferences and interests. However, to develop a knowledge of self along with the necessary mental and behavioural flexibility required, children need to experience real-life decision-making within fluctuating and unpredictable environments. With a degree of freewill, self-chosen, meaningful goals become more conscious, informed through social interactions, past experiences, reflection and dispositions.

However, early experiences of formal education are typically governed by the expectations of others. Influenced by the goals deemed most valuable by society and culture children have little opportunity to demonstrate preference through their actions. Within unfluctuating, controlled environments devoid of choice, there is little need for flexibility or learning to cope with uncertainty. When activity is expected and compulsory, response inhibition to novel situations is replaced by learning to perform to the expectations and rules of others.

Cameron (2018) talks of children needing to experience learning in multiple modalities, utilising different instances in their mind to connect new information with prior knowledge and experiences as reflected in simultaneous thought and free play. To support this process, children need to take risks, moving beyond scaffolded expectations of behaviours, responses or understanding to push their limits, developing a greater understanding of themselves and the potential afforded within the environment. As discussed in chapter 2.1, this is supported where open-ended thinking is permitted, where ideas can be introduced through exploration rather than predetermined tasks, where managed confusion, frustration and anxiety can be seen as motivators for puzzlement allowing deeper levels of understanding and self-regulation to develop.

Where understanding and underlying assumptions are explored together, children learn to take responsibility for their own goal setting, suggest Moran and Gardner (2018), lessening the need for direct instructional interventions. Where the adult becomes

more mentor than instructor, educational moments can arise from the child's questions, suggests Clements et al., (2016), as they naturally shift attention, developing greater cognitive flexibility. By allowing children to think creatively, even after something has failed, inhibitory control and wider thinking strategies are naturally promoted as unproductive responses are suppressed and novel ideas suggested. Through cognitively demanding tasks that see children manipulate and manage demands, their working memory is facilitated as they employ simultaneous thought. All of which can be offered through meaningful endeavours rather than taught lessons, offering opportunities beyond the intake of information and test model (Clements et al., 2016).

With adult assumptions drawn from the actions observed, behaviours resulting from ineffectual practices can become misinterpreted; whilst correctly motivated children are seen as unproblematic and well-behaved, suggests Moran and Gardner (2018), children demonstrating a will unmatched to expectations are seen as disobedient, displaying traits that need managing out. Simply observing the completion of tasks, cautions Cameron (2018), risks masking an apparent lack of ability with a misalignment of their goals with the goals of the adults around them. This study sought to do otherwise.

Implications for this study

Whilst recognising the diverse and complex nature of executive functioning, this study was mindful of intricate relationships between EFs and brain development in young children, distancing itself from the pre-designed, staged methodologies of EF. Recognising that children within the early years are still developing emotionally and socially, it instead incorporated opportunities for wide ranging development. Capturing contextual moments, incorporating motor, social, emotional, language and cognitive skills in ways more complex than a simple test can illustrate. Aware of fluctuating environmental challenges and reactions of children, observations were conducted in the classroom, capturing the naturalistic, wide ranging and unique experiences of the children, complete with typical distractions and demands.

It sought to capture the richness of individual children's actions and reactions, acknowledging reciprocal partnerships of practice, and environmental and social influences. Through holistic practices, children's abilities to manipulate, organise, store and retrieve knowledge were observed. Independent, conscious, self-organised and goal driven actions naturally demonstrated mechanisms requiring sustained attention, response inhibition, attention-switching and the rejecting of distractions. Through techniques designed to capture unpredictable responses within a variety of situations, these aspects were embraced, rather than isolated through engineered methods with questionable universal suitability.

With varying and unpredictable economic and social factors affecting children as they begin school, this study recognised the diverse experiences of children, resisting any attempt to judge their capabilities through self-designed means. Instead, social and emotional factors were considered alongside their engagements and dispositions towards learning, mindful of studies that recognise these factors as offering the strongest predictor of children's learning (Duval et al, 2016). The analysis did not claim an understanding of children's abilities, dependent as they were on many factors. With no assumptions made from other data sets or requirements of prior experience, children were not disadvantaged, instead children's diverse abilities were valued without obscuring them under demands for conformity. Education-related inferences were informed through the typical variability encountered within classrooms, troubling distortion once reintroduced, and notes that causal links were far beyond the scope of the study.

2.3 Looking to dispositions of learning

Whilst acknowledging the need for foundational experiences within children's early experiences of learning, chapter 2.2 set out concerns with accepting the prevalent EF based studies in the field. Instead, this study advocates a more holistic approach that acknowledges realities of children's learning within the early years. This chapter explores a framework to examine these dispositions through so that pedagogies facilitating them can be explored.

The concept of dispositions

Gardner (2008) cautioned that in an ever-changing, technology rich society, with likely progression through multiple careers on a global scale, children need to be adaptable and capable of social engagement and initiative as they take responsibility for their own actions. Processes are required that allow academic effort to become automated, smoothly combining the many processes involved until novel or more difficult experiences are encountered. Once the expectations of others are no longer the primary focus, children can focus on more advanced formal goals, maintaining appropriate behaviours with less effort.

Learning aspirations have long been considered in debates regarding children's thinking and development, as well as by those seeking to question the purpose of education and optimal delivery styles. Within its nomenclature, the term *"disposition"* appears frequently (Ennis, 1987; Perkins et al., 1993; Katz, 1993a; Carr & Claxton, 2002), as does attitudes (Dewey, 1933), thinking dispositions (Stanovich, 1999), and character-based virtues (Baehr, 2011; Kwong, 2016). Orientations (Dweck, 1999), habits of mind (Costa, 2000), attributes (Claxton & Carr, 2004) and participation repertoires (Comber, 2000; Carr, 2001a) are also discussed. *"Inclinations"* are proposed by Cross & Marcus (1994; p424) who talk of children developing their identity as a learner, referring to the idea of a *"possible self"*, whilst Bronfenbrenner (1979; p202) spoke of *"educational competence"* as the disposition to think and persist in tasks, to give opinions, contribute ideas and to work collaboratively.

The term disposition is frequently used in the literature by those looking to the employment of deeper levels of intellectual behaviour (Bautista et al., 2018). Costa (2000) suggests that enabling children to produce knowledge, rather than simply reproducing it, requires knowledge of behaviours such as strategic reasoning, insightfulness, perseverance, creativity, and craftsmanship as complex problem solving within new environments is embraced. Distinguishable from constructs of thought processing, Katz considered dispositions as broad behaviours with stable characteristics, a *"habit of mind",* even when appearing *"spontaneous, habitual, or even unconscious*" (Katz, 1993a; p. 303). This notion of a character trait is echoed by Perkins who writes of dispositions as a *"proclivities that lead us in one direction rather than another"* (1995; p. 275), behaviour tendencies such as being bold or cautious, to think, to consider broad perspectives or seek evidence yet will *"Inevitably include reference to things that are genuinely hard to pin down: motivations, affect, sensitivities, values and the like"* (Perkins et al. 1993; p. 18).

This departure from a simple knowledge, skill or understanding is echoed by Carr (1995) when writing of their location within a social context. Guiding the interpretation and editing of experiences in characteristic ways, Carr speaks of a *"learning narrative"* co-constructed through cultural, social and historical influences (2001b; p47). Claxton (2018; p181) spoke of a real-life *"learning power"* that combines capabilities (skills, strategies and abilities) with the dispositions (being ready and willing) to use them, a *"learnacy"* (as a parallel to literacy and numeracy) incorporating curiosity, mindfulness, selectivity, resilience, experimentation, reflection, opportunism and conviviality. When writing together, Carr and Claxton developed the notion of an imprecise, human attribute situated somewhere between socio-cultural influences and decontextualised psychological notions such as *"ability"* or *"intelligence"* (Carr & Claxton, 2002; p11). Reflecting on the comments of Burgogne (1998) who spoke of an open-minded process of individual intellectual exploration, they speak of *"learning to learn"* (2002; p9) the knowledge, skills and understanding needed to function well in adult life.

Katz, in 1993(a; p18), voiced a notion of dispositions not as something *"acquired"*, but rather a change in the likelihood of responding in certain ways, suggesting children possess a disposition when consistent, conscious, and voluntarily demonstration is seen, echoing Buss who, in 1983, wrote of the frequency of behaviours being demonstrated. A child then establishes a package of inclinations, knowledge, and skills through their experiences, demonstrating a proclivity towards certain responses. Impacting upon behaviours towards goals, challenge, and agency and utilised throughout their education, establishing a notion of themselves as a learner (Carr et. al, 2002).

Implying environmental and experiential influences, Katz noted these intentional responses were situated within context and time (Katz, 1993a). Carr & Claxton (2004) also write of how a child's predisposition to act in certain ways, their depth of engagement and persistence within less familiar or auspicious circumstances varies. Building on the work of Resnick & Klopfer (1989) and Perkins et al., (1993) who spoke of the skill, inclination and sensitivity to occasion intrinsic within dispositions, this notion of being ready, willing and able to engage profitably with learning was further discussed by Claxton & Carr in 2004, noting that both capability and competence are required as well as the experience to know when it is appropriate to do so, thus, notions of context and permissions are becoming embedded.

Dispositions of importance

Whilst the term disposition is frequently used, definitions are rarely offered (Katz, 1993a), even within definitions offered by the Oxford Dictionary, meanings of frequently utilised terms are so similar as to be interchangeable; "*Disposition - a person's inherent qualities of mind and character"*, compared to "*Attribute - a quality or feature regarded as a characteristic or inherent part of someone or something"*. Given this interchangeability, the semantics or the pinning down of an exhaustive list can then be considered less important.

> *"Suppose that the idea of "the effective learner" can be unpacked into a number of learning attributes: tendencies towards "persisting", "questioning", "collaborating", and so on. For present purposes, it does not matter what these attributes are, nor whether they can be specified precisely or exhaustively. What is at stake here is how we can take a dynamic approach to such qualities: charting their potential or possible direction of growth, and therefore providing some guidance about what we do that strengthens or weakens them."*
>
> Carr & Claxton (2004; P88)

Noting no clear agreement regarding the key learning dispositions, Carr (1999) derives learning dispositions from the strands and outcomes of the Te Whariki framework, the New Zealand early years curriculum. This framework brings together academic and social-pedagogic outcomes as interdependent holistic constructs of *"learning dispositions"* and *"working theories"* such as courage, curiosity, playfulness, perseverance, confidence and responsibility (Te Whāriki, 2017; p23). Carr & Claxton explore this point further in 2002 claiming no definitive array of learning dispositions, suggesting any attempts at definition allude to different levels of generality, with some subordinate to or component parts of others, dynamically interwoven and hard to tease apart (Carr & Claxton, 2002). They also stress that such values are fundamentally culturally determined, a point previously made by Delpit (1995) who cautioned that any array of valued attributes will reflect a cultural perspective. This is a point Perkins et al. (1993) echo when reflecting on cultural intuitions embedded within terminology, and their respective desirability, Katz (2002) advises, with some dispositions, for example impulsivity considered more desirable than others. As such, Carr & Claxton (2002) suggest that any definitions offered need to be made explicitly, so they can be recognised and debated, for this study these can be found in Appendix D.

In devising a potential list of dispositions, Katz advised separating them from knowledge, skills and feelings (Katz, 1988), however, she acknowledged this did not address the motivations or intentions associated with the act (Katz, 1993a). Alternatively, Carr (1995) proposed that knowledge, skills and feelings were a part of the disposition to respond to experiences in certain ways, writing of dispositions as *"the peak of an iceberg"*, displaying behaviours that serve to demonstrate a complex fund of knowledge and skills affording sensitivity to occasion and proposed to include inclination (the tendency to want to do something), ability (the actual ability to do it) and sensitivity (alert to the appropriate occasion) (Carr 1995; p3). Others follow a similar line of thinking, with dispositions requiring the individual to be *"ready, willing, and able"* (Claxton et al. 2004; p87), or with *"will and skill"* (Sylva, 1994; p163). Carr & Claxton (2002) framed their list within dispositions of resilience (taking on challenges, persisting through confusion or frustration and recovering from setbacks, all influenced by previous successes and failures); playfulness (being ready, willing and able with mindfulness, imagination and experimentation, creative when facing problems) and reciprocity (the confidence and inclination to give opinions and contribute ideas).

Wakefield (1989) also wrote of motivation and intentionality, including curiosity, generosity, and stubbornness to the list of potential dispositions. Goleman (1996; p. 193) echoes these in a proposal of seven key ingredients for the capacity to know *"how to learn"*; confidence, curiosity, intentionality, self-control, relatedness, communication and cooperation. Following the work of Katz, Costa (2000) uses a frame of habits of behaviours, demonstrated with value (choosing patterns of behaviours over less productive ones), inclination (a tendency towards particular behaviours), sensitivity (perceiving appropriate opportunities), capability (having the basic skills and capacities) and commitment (constantly striving to reflect on and improve performance). Costa (2000) goes on to talk of the need for persistence, to manage impulsivity, listening to others with understanding and empathy, thinking flexibly, metacognition, striving for accuracy and precision, questioning and posing problems, applying past knowledge to new situations; thinking and communicating with clarity and precision, gathering data through all senses, creating, imagining, and innovating, responding with wonderment and awe, taking responsible risks, finding humour, thinking interdependently and learning continuously. However, even within these 16 it is stressed that this is not meant as a definitive, complete list, but offered as a starting point for further elaboration and description.

Viewing dispositions as a psychological element with three components, Perkins et al (1993; p13) looks to a more holistic definition that connects knowledge skills and feelings by adding ability and *"sensitivity to occasion"* to inclination with all three required as distinct constructs in explaining behaviour. They then put forward seven *"master"* dispositions or tendencies toward patterns of intellectual activity that condition and guide cognitive behaviours, *"grounded in belief systems, values and attitudes as much as in cognitive structure"* (1993; p.16). Whilst some are cognitive and affect thinking (e.g. to seek evidence), others are more general (e.g. perseverance). They suggest these provide a useful overarching framework, although they too acknowledge, proof of completeness is not possible. These are then; to be broad and adventurous, toward sustained intellectual curiosity, to clarify and seek understanding, to be planful and strategic, to be intellectually careful, to seek and evaluate reasons, to be metacognitive. These they arrange within a triad of inclination (tendency towards a behaviour); sensitivity (sensing when a behaviour is required); and abilities (knowing how to go about it), mirroring the work above as they stress simply including a disposition is not enough.

For the purpose of this study, ideas developed through previously published work (Peckham, 2017b; P36) where 16 dispositions, termed *"features of a lifelong learner",* were defined (Figure 2.3.1) will be utilised. These encompassed intrinsic qualities such as being self-motivated, confident and courageous; behavioural qualities that may be demonstrated through a child's intuitive, demonstrating curious or imaginative responses; social-pedagogic tendencies reflected through their playful, sociable or independent reactions as well as the thinking styles that they employ, be these logical, or creative. Full definitions can be found

in Appendix D. These were not considered an exhaustive or unique list, but a frame of reference to offer focus. Enabling packages of inclination, knowledge, and skill it suggests that dispositions, once established, enable children to construct learning opportunities, to seek solutions as their capability, sensitivity and inclinations towards them develop with the practices, skills and understanding needed to function well in adult life.

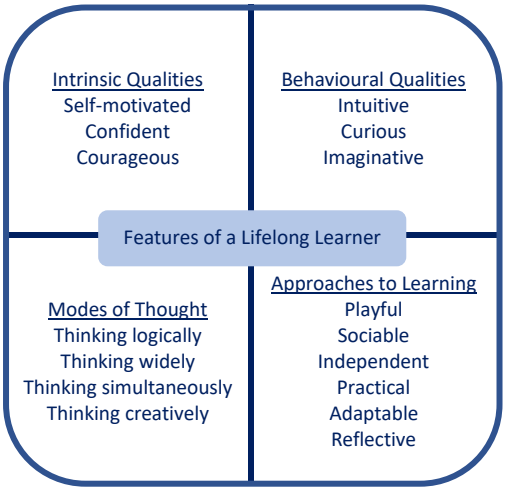


Figure 2.3.1: The "*Features of a lifelong learner"* as defined in Peckham (2017b, P36)

The importance of experience

Having introduced dispositions to debates regarding the education of young children in 1985 as *"relatively enduring habits of mind or characteristic ways of responding to experience across types of situations*" (cited in Katz, 1993a; p. 1) Katz clearly implies their dependence on experience. In 1993 she distinguished dispositions from skills, attitudes or mindless habits, suggesting practical implications, even in the absence of precision (Katz, 1993b). Claxton & Carr (2004) eloquently underline the need for effective experiences in the development of dispositions when they put forward the notion of reading "*disposition*" not as a noun, as a "*thing*", but as a verb with qualifying adverbs. Noting that one does not simply "*acquire a disposition",* instead one "*becomes more or less disposed*" to respond to situations in certain ways, influenced by prior experiences.

This builds on the work of Resnick who wrote in 1987 of dispositions as something that can be learnt, and therefore taught, rather than a biological or inherited trait. When discussing pedagogical practice in 1989 with Klopfer, they spoke of a setting's ability to shape dispositions through long-term participation (Resnick and Klopfer, 1989). This notion of dispositions becoming strengthened through specific kinds of experience is reemphasised by Hedges and Cooper in their 2014 paper when they talk of children being more likely to develop dispositions for learning where they have the ability to choose their own learning partners, activities and experiences. In her 2005 paper, Carr refers to Bourdieu's work on the development of identity, and Holland et al., (1998) as they speak of dispositions becoming available through experience, sensitively developed in classrooms and early childhood centres where *"There are general, dispositional motives and acts and ways of faring well and faring poorly"* (p.279).

Implications for this study

In its phenomenological exploration of early childhood learning, this study required a focus that embraced holistic actions and reactions of children during their formative years. With studies showing dispositions establishing and embedding through children's engagement and agency, endorsed by and framed in response to previous experiences and current opportunities and expectations, this dynamic approach seemed to offer this frame. Reflecting on children's opportunities, this study embraced dispositions as something to be experienced and developed, rather than a biological or inherited trait, as children develop established notions of themselves as an effective learner. This implies great opportunities but relies heavily on the permissions

of those aware of and advocating for dispositional motives. Observing children's engagements within the context of the social and environmental expectations and freedoms offered, their predispositions to act in certain ways were explored and guidance on practices that may strengthen or weaken these dispositions offered, mindful that dispositions are not always desirable as reluctance for as well as tendencies towards engagement are noted.

Acknowledging the imprecise nature of children's processes of intellectual exploration, a dispositional focus allowed a less restricted view of what success within education means. When compared to prescriptive methodologies and constructs of executive functioning research, this allowed children's reactions to be viewed as a response to developing inclinations, rather than an acquired skill indicative of advancement along a linear developmental trajectory. In this way, the capacity for pedagogical influence could be observed and commented on, in the context of the myriad of variables affecting children's responses and inclinations.

In a technological age where the *"quantity of what is known"*, it could be argued, has become devalued, children need to be comfortable within their abilities to engage in learning, solving complex problems within new environments as they access and produce knowledge rather than simply reproducing it. Different from a simple knowledge or skill, this dispositional focus seeks not what children can demonstrate they know, but to what they are inclined to do with what they know, capturing children's responses within a wide range of illustrated learning experiences.

Speaking strongly to this study, Claxton & Carr advocated looking towards dynamic and developmental features when considering any locally constructed, and therefore contentious learning curriculum, focusing instead on *"dispositions, orientations, habits of mind, or participation repertoires"* (2004; p88) as learning environments and teaching strategies are noted. Through such approaches, children's holistic experiences of learning were sought, unlimited by demands for required knowledge and unconstrained through environment or permission. By embracing children's individual yet natural inclinations for learning, this approach allowed for observations of children managing new problems within unexpected situations, encountering setbacks with motivation and perseverance and exploring alternative directions with courage and insight. By observing children's engagements with dispositions, and their tendencies towards them as they offered opinions, contributed ideas and worked collaboratively a unique and evolving insight into the pedagogical styles most suited to enabling them was sought.

3.1 Introducing the study

This chapter will consider the methodological approach and design of the study by considering its intentions, and the key questions it seeks to explore. It will illustrate gaps in current thinking, with links to the literature review in Chapter 2. It will then introduce the methods specifically designed to explore these questions, and the unique insights offered therein. The selection of settings and the children within the case studies will be discussed along with the ethical considerations and the measures taken to establish quality and trustworthiness within the study. This chapter will also consider the lessons learnt from the pilot, conducted before commencement.

Research Intentions

In seeking to explore the impact of early childhood pedagogies on children's learning experiences, the opportunities these offer to engage with dispositions and the foundational impact this can have within different styles of practice, a multi-faceted approach was required. Capable of capturing what is a complex and critical period of children's learning, the study had to remain mindful of children's holistic capabilities (Becker et al, 2014) whilst recognising that views are not absolute and depend on the experiences of those offering them.

Through two years of observations, the phenomena of learning as experienced by a cohort of ten children attending their final year in a preschool setting and their first year of formal schooling within a reception classroom were documented. Concerned with capturing children's experiences of learning and the opportunities these facilitated, rather than any assessed criteria, observational techniques allowing the documentation of pedagogical approaches and their impact were required. Observations designed to incorporate the established set of dispositions, a coded scale to note the children's depth of engagement within them, alongside a range of pedagogical variables and the opportunities these facilitated allowed the following question to be considered,

· *To what extent are children given opportunities, intrinsically and externally, to engage with dispositions through their experiences of learning in the Early Years?*

Framing the study

Alongside the framework introduced and depicted in Chapter 1.1, were the 16 dispositions discussed in Chapter 2.3 (Figure 3.1.1) and the Features of Lifelong Learning Engagement and Preference (FOLLEP) coded scale (Figure 3.1.2) which were both used consistently across the settings, allowing a uniformity of approach that would permit comparisons to be drawn.

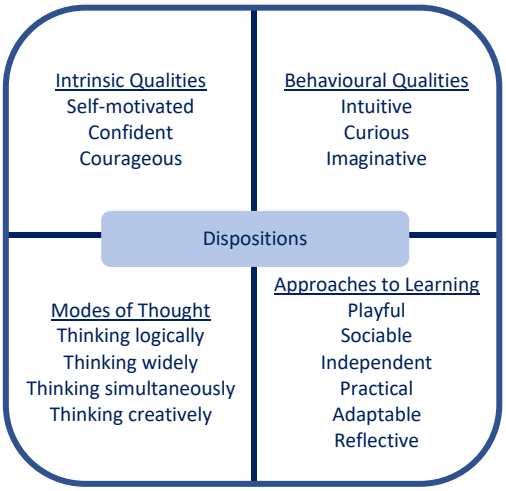


Figure 3.1.1: The dispositions of interest

Level	Engagement	Examples
-2	Strongly negative: Actively pulls away	Not present: When presented with opportunities, they will actively demonstrate a reluctance to engage in this feature. They do not volunteer positive evidence, verbally or physically.
-1	Negative: Shows reluctance	Limited presence: When given opportunity they will indicate this feature but are reluctant to do so, finding alternatives if possible.
0	Neutral: Either no opportunity, or is indifferent	Neutral: Shows indifference towards this feature or there has been no opportunity for it.
1	Positive: Some indication	Active presence: Keen to engage in this feature, indicating a comfort within it but will easily move on to another.
2	Strongly positive: Actively seeks out	Strong presence: This is a clear feature of choice, will actively seek it out and return to it. Shows clear enjoyment when engaged in this feature.

Figure 3.1.2: The FOLLEP Scale

The 16 dispositions used to frame this study were established within previous work published by the author, *Developing School Readiness: Creating Lifelong Learners* (Peckham, 2017b). For the writing of this professional book, an extensive literature review and open coding (Strauss and Corbin, 1990) were used, through which a conceptualised list was devised, and comparative methods utilised to challenge its robustness (Peckham, 2017b; chapters 1-3). These intuitive and intrinsic dispositions were then demonstrated and explored through the early stages of children's development (Peckham, 2017b; chapters 8, 9 and 10), establishing their importance within the development of the baby (0-2 years), the toddler (2-3 years) and the preschool child (4-5 years) as the development of positive academic tendencies are supported into the school classroom (Peckham, 2017b; chapter 11). Abbreviated definitions of the dispositions can be found in Appendix D.

To monitor the children's engagement with the dispositions, the Features of Lifelong Learning Engagement and Preference (FOLLEP) Scale discussed above was devised and utilised throughout the study. This scale, inspired by the work of Ferre Leavers and the Leuven Scale (Laevers, 1997) allowed for judgements regarding the children's depth of engagement to be quickly made through the simple descriptions included, recording these observations through an assigned code number.

Literature review to support the studies rationale

As was troubled when discussing the rationale for the study in Chapter 1.1, evidence suggesting children are born ready to learn, doing more so in the early years of life than at any other time, can become undermined by headlines reporting children arriving at school somehow unprepared for learning (Telegraph, 2014). This study sought to explore more innate learning methods of children with a focus on dispositional learning and the impact that common pedagogies can have on their engagement. To support this work, and depicted below (Figure 3.1.3), a literature review was conducted with the intention of exploring the natural learning abilities and instincts of children within wider approaches to pedagogy.

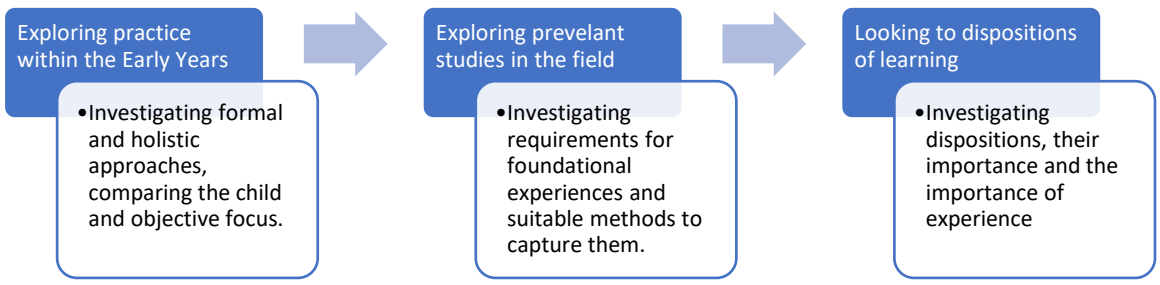
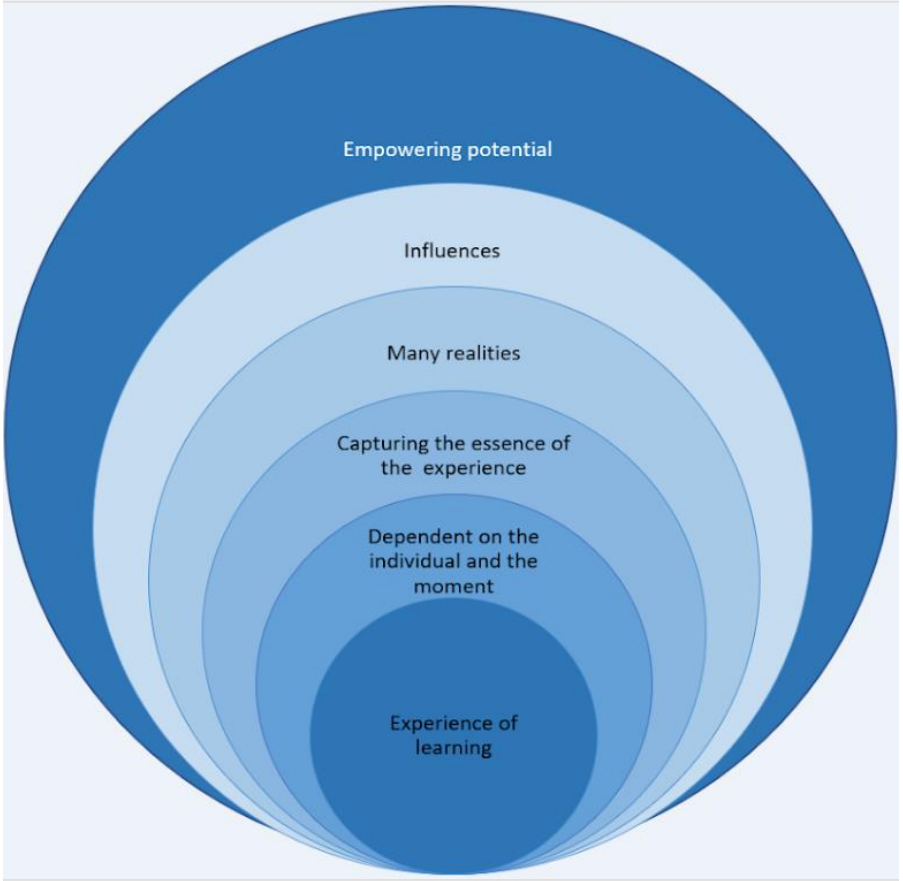


Figure 3.1.3: The area of focus and scope of the evolving literature review

To better understand children's requirements of their early experiences, this literature review provided an initial focus, allowing approaches within the early years to be explored. As formal and more child-focused approaches were studied, the development opportunities offered within each were considered (Chapter 2.1). This review led to studies concerned with executive functioning in young children and a broader literature review was conducted to better understand this field of research. This review highlighted inconsistencies within terminology and the established understanding discussed by those conducting the research, but more significantly, it revealed an overwhelming reliance on test-based research (Chapter 2.2). Whilst useful in directing areas of interest for this study, it did not offer any methodologies that sat well with it (Appendices B&C) and so a review of alternative methodologies was conducted with a focus on exploring significant traditions within naturalistic qualitative research. With phenomenology seeming to offer the most suitable approach to answer the research questions, a greater understanding of the methodology, the limitations and insights it offered was sought (Chapter 3.2). From this work, all aspects and considerations within a phenomenological study were considered and addressed (Figure 3.1.4).



Child Study
Empowering Potential
Capturing the impact of practice, environment and interactions on children's engagements, the potential to affect children's experiences of learning in the early years was explored. Through these influences children's empowerment is questioned.
Influences
Environments offered; Interactions experienced; Social groupings permitted; Expectations of adults
Many realities
Inside and outside; Days of the week; Times of the day; Age of child as study progresses; Preschool and reception classroom; Staff engaged with and intentions of the day.
Capturing the essence of the experience
Child, rather than lesson plans, objectives or agendas the focus. Naturalistic and holistic, with no isolating of disposition or child. Multiple methods capture the scope of child actions and engagements. Rich, authentic data faithfully document variables of the moment. Non-participatory, so subtleties of detail often assumed or overlooked can be captured.
Dependent on the individual and the moment
Cohort of 10 children observed weekly over two-years through their full range of early years settings and environments
Experience of the phenomena
Phenomena – Learning as a child in the early years

Figure 3.1.4: Addressing the key considerations of a phenomenological approach to this study

Further supporting this chosen methodology was the literature review conducted on the nature of dispositions, offering a way of exploring holistic learning and methodologies suitable to the project (Chapter 2.3). Given the knowledge gained from these literature reviews, the study was designed. Following a pilot study (Chapter 3.3), methods were adapted and data gathering commenced.

3.2 Methodological approach

The focus of this study was to reflect on young children's opportunities to develop dispositions within their experiences of learning in the Early Years. A methodology was then sought that would recognise complex processes of young children's learning, taking account of children's experiences and motivations, their autonomy and natural inclinations to learn and understand within a holistic view of the multi-layered early learning environment.

ethnography was initially considered, along with personal ethnography and its focus on changes within the complex and multi-layered facets of life (Denscombe, 2014). With links to cultural, social and historical contexts, this approach initially seemed to offer greater meaning to the impact of early childhood experiences. However, with its requirement for long-term immersion in the field to capture an in-depth portrait of life over time (Denscombe, 2014), this method involved complexities that would detract from the focus of the study. Alongside this, caution was also headed from the work of Marshall & Rossman (2011) when suggesting this lived experience could only truly be offered through an adult or organisational lens. More interested in how the experience of learning and practices used to facilitate it were perceived, acted upon and made meaningful by those undergoing it (Denzin and Lincoln, 1998), phenomenology with its experiential focus seemed to better suit the requirements of the study. Descriptive and interpretive in nature, it would offer an insight into the perceptions and meaning of learning (Denscombe, 2014) as construed by those experiencing it.

From its origins, phenomenology has allowed that which is taken for granted to be questioned, as discussed by Husserl in Curtis (1978). With its focus on naturalistic and qualitative methods, it seeks to remove extraneous technical detail to observe the underlying essence of things and would then sit well within the intentions of this study. By looking beyond what was intended (Bakewell, 2016) such as structures of pre-designed schemes, curriculums or learning objectives, a phenomenological methodology seeks to keep the phenomena, in this case the experience of learning in the early years, at its core (Denzin and Lincoln, 2018).

Embracing this approach, naturalistic observations would capture children experiencing ordinary facets of life as they appeared in the moment. The subtleties and complexities of social interactions and classroom realities would then be embraced, adding greater relevance to any findings offered and enabling practice to be more usefully informed, as advocated by Denzin and Lincoln (1998) when discussing these methods. Acknowledging location and social context would also avoid the passive "*actor merely responding"* model problematised by (Cohen, et al., 2011; p20) and helped mitigate against artificial realities and extrinsic conditions potentially introduced when methodologies overlook such sensitivities (Bernstein and Waber, 2007).

The methodology would then focus on the interests, unpredictability and varied engagements of the children, allowing hidden truths within the complex social realities observed to come to light, as illustrated in the Froebel Block Play Research Project (Gura, 1992). Situating observations of children's experiences within their own socially constructed world, a feature Denscombe (2014) proposes must be at the root of any authentic or active understanding of children, sat well within the theoretical framing of the study. Reflecting its interpretive paradigm and ecological validity (Fawcett, 1996; Tobin et al., 1989) observations located within children's own experience and understanding (Farrell, et al., 2002) also allowed the children to retain an emotional and contextual ease, as reflected within Dunn's (2005) work observing children within the familiar environments of their own homes.

Bernstein and Waber (2007) caution that methodologies relying on inferences following one snapshot occurrence are not adequate to provide comprehensive recommendations for developmental processes that are increasingly differentiating and

integrating over time. Requiring a broader developmental trajectory, this call for multi-faceted research is also echoed by Becker et al, (2014) when challenging studies seeking to separate pertinent features. Reflected within the paradigm of this study, testing methods typically utilised within executive functioning research were abandoned in the exploration of deeper attributes of learning. The use of externally described criteria or testing methods were avoided, as were practices of isolating individuals or their attributes and no attempt was made to draw conclusions from any one occasion. Although limited by the size and capabilities of the study, focusing on the child during observations allowed for a more complete representation of their experience. Ensuring no child was excluded or disadvantaged through predetermined or prescribed study designs, their proclivities within different styles of engagement, choice and location were captured. Abandoning tests that spoke to a desired outcome, multiple responses could be freely demonstrated. As observations naturally incorporated teacher led carpet time, group sessions and free play, the full and complete range of activities experienced by the children were captured within this methodology, allowing hidden truths to be exposed.

To capture children's reactions and responses to dispositional opportunity within the complex social realities of school life required rooting the observations in time, space and place. Acknowledging the importance of biographical location and social context on the importance of social learning within the everyday world, as advised by Cohen et al. (2007), findings could be classified and organised. Alongside logistical context, variables of teaching and learning were also documented as the extent to which engagements were embodied, nurtured and afforded were explored. The phenomena of early learning was then embraced, not as passive transmission of information, but as set within the complex realities of environment, encouragement, social groupings and realities of the moment.

Mindful that children may react differently to an experience, or that the same child may respond differently when faced with different opportunities meant that context and repetition of observations was key. To do otherwise may suggest contradictory behaviours or uncharacteristic reluctances within what is the dynamic nature of children's developing skills. To this end, multiple observations detailing a variety of variables were captured, including social grouping and environmental limitations. When interpreting meaning, the study recognised that findings were not unique to a set of staged or pre-designed variables but instead were informed through the social context of the moment.

By virtue of its methods, this phenomenological study recognises that any knowledge gained has been constructed by those involved. Accepting the methodologies lack of scientific rigour, it embraces methods Denzin and Lincoln (1998) consider as a radical departure from seeing the world as something stable and distinct from perception or interpretation. Its dispositional framing allowed the study to remain uncluttered by teaching theories, objectives or curriculum structure, as it remained focused on the child's experience. Unsuited to abstract theorising, the findings it offers are derived from authentic accounts of complex phenomena developed from its depth of descriptions over time (Denscombe, 2014).

3.3 Methods

In a future that may be very different to our own, placing demands on our children that we cannot yet know, this study proposes that the historic focus of education, with its emphasis on academic pursuits, may no longer be sufficient. Believing that within each generation, I believe that teaching methods need to actively respond to and reflect the changing needs of children as society, its people and practices evolve, refocusing learning outcomes in response to these needs. Research conducted by Davies et al. (2011) for the Phoenix Research Institute looking into future work skills identified six drivers of such change, including people living longer and the emergence of new technologies within a globally connected world. This, they suggested, implies a new range of desired skills, including social intelligence, novel and adaptive thinking, a design mindset and cognitive load management. Essentially, refocusing the "*need to know"*, to having the dispositions to be able to "*do something with what is known"*.

In 2015, the then Schools Minister Nick Gibb addressed the Education Reform Summit advocating education as the engine of the economy, the foundation of culture and an essential preparation for adult life. He suggested that alongside providing the groundwork for a fulfilling career was its role in creating informed citizens with a love of knowledge and culture, with the resilience and moral character to overcome challenges and succeed. This speech speaks of more than academic achievement and looks to the development of a deeper range of dispositions.

This phenomenological study then sought to capture lived experiences of children in the moment. It did this through two years of observations of children across two settings, with 16 dispositions and the FOLLEP scale (Figures 3.1.1 and 3.1.2) offering focus and consistency, and effective documentation supporting capture of the observations. By observing pedagogical influence within a range of circumstances, approaches to early pedagogies are challenged in an informed way. Offering a unique, alternative direction and focus to children's early experiences of learning.

Participant selection

To observe confident and well-established pedagogic practice, recognised as being in line with government policy, an *"outstanding"* (Ofsted, 2019; p8) preschool was sought. Document analysis, discussions with feeder schools and pre-study visits directed selection towards a setting that embraced an ethos of learning through play within open ended environments where it was thought children would have opportunities to engage in dispositions. A previous project had involved significant time spent in the chosen preschool setting, and others in the local area, so it was known to meet the criteria of this purposeful selection.

Registered over 50 years ago, the preschool was a committee run, sessional day care setting registered for 32 children aged between 2 and 4-years. It was led by a manager with Early Years Professional status and a deputy manager who has Qualified Teacher Status. At the time of the study the setting employed 10 members of childcare staff, all of whom held early years qualifications at level 2 and above. Children attended a range of morning and afternoon sessions, offered during term-time from Monday to Friday. Funded early education for two-, three- and four-year-old children was provided, and several children spoke English as an additional language. There were also children with special educational needs and/or disabilities attending. The premises were comprised of two rooms, a kitchen, washing and toilet facilities, a reception area and a garden requiring supervised transition. Images of the two rooms and the outdoor space can be seen in Appendix E.

Once the setting was selected, a purposeful, rather than representative sample of children was required for the study. To achieve this, the intended spread of characteristics was offered to the practitioners who were asked to select the cohort, avoiding any personal bias. This directive requested five girls and five boys due to start formal schooling in September 2018,

with no known plans to move away in the next two years. Beyond those provisos, the staff were asked to suggest a list of names that would minimise bias of ability, social background or dominant characteristics within the group. Whilst every attempt was made to avoid bias within the selection of the group, the study remains mindful that this small cohort located within a specific location in England cannot offer conclusions generalisable to the early years' population (Gilbert, 2008).

As discussed, when introducing the study, in the UK, most children start school full-time in the September after they turn 4. Whilst not compulsory, and much younger than in most countries, it is typical for children to attend this final year of their Early Years Foundation Stage within a school classroom, and it was the impact of this change in environment and the experienced pedagogies therein that this study sought to capture. The intention was then to observe a cohort of children during their last year of preschool, to stay with them as they transition into their Reception Year, and to continue to observe during this first year of school-based education. Given that school selection would be primarily decided through location, the feeder schools were expected to be within travelling distance. As it were, all children transitioned to the same school in the local area.

An average size infant school catering to Reception Year, Year One and Year Two, children transition from the school to attend Year Three from the September after they turn seven. All year groups were comprised of three classes, each averaging 26 children. Reception children joined the Early Years Foundation Stage (EYFS), located within a specific area of the school, comprising three interlocking classrooms and a large, dedicated and freely accessible outdoor space. The school was led by an experienced headteacher and a team of experienced early years teachers were based in the Reception Year. Throughout the school, most children were White British with a small number coming from a range of other minority ethnic backgrounds, including a few that are in the early stages of learning English. The proportion of pupils eligible for free school meals (a measure of family income) was low compared with most schools. The proportion of pupils with learning difficulties and/or disabilities (LDD) was below average, with main areas of need falling within speech and language. There were a small number of children with specific learning difficulties such as autism or physical disabilities such as visual impairment. The school had achieved various awards, including the Healthy Schools Award and the Activemark before converting to Academy status in 2011 and joining a Multi-Academy Trust in 2017. Images of the classrooms and the various outdoor spaces can be seen in Appendix E.

By observing children within a consistent geographical location, remaining within their familiar social grouping and curriculum, the effect of setting ethos, pedagogy and staff practice was considered to be more pronounced. By selecting a setting judged as outstanding in its most recent inspection, it was felt that practice would be confidently delivered as the setting intended it, without pronounced additional variables skewering the observations. Selecting a well-equipped setting permitting access to resources, facilities and environments inside and out, children's full range of engagement could be captured without external limitations affecting the impact of observed pedagogies. Through initial contact with the preschool and feeder schools the intentions of the study and their potential involvement in it was explained. Six months of preliminary visits and the pilot study ensured lots of opportunity for familiarisation as intentions, involvement and levels of commitment were discussed with children, teachers, practitioners and parents.

Over the two-year child case study, context rich observational methods were utilised to capture a range of pedagogical variables. Noting the intrinsic and external permissions being offered, the realised impact these had on children's diverse and individual responses were captured as they creatively interpreted events embedded within the pedagogical styles and culture of the setting. Their dispositional engagements were noted as their experiences and active participations were observed within the influences of opportunity, permissions, location and social engagements.

Noting the non-programmable nature of children, as discussed by Maykut and Morehouse (1994), the study embraced this richness rather than seeking to control, replicate or fully account for the substantial variables involved within early childhood research. The extent to which the dispositions were encouraged, afforded and nurtured within the preschool and classroom settings were then captured, allowing pedagogical influences on periods of engaged learning to be compared. Through its consistent recording methods, trialled in the pilot study (Chapter 3.3) and illustrated in Chapter 4.1, this wide range of detailed variables captured across a range of occasions allowed deeper reflections over the long-term, as the benefits of repetition and comparison were incorporated.

The process

Utilising naturalistic observations this study observed influences of pedagogy as exacted on environment, social interactions and permissions. Recognising children not as passive recipients of information but as individuals within a socially constructed and ecological whole, purposely designed observation sheets captured their differentiated and integrated reactions within the contrasting settings of a preschool and school. Faithfully describing authentic moments, the impact of permitted locations, styles of practice, interactions and environmental structures on children's experiences were recognised through methods that ensured no child was excluded or disadvantaged through a predetermined or prescribed study design. Taking this holistic approach, rather than trying to split elements out or engineer variables away, allowed children's responses to pedagogy to be observed, as discussed by Marshall and Rossman (2011) noting its impact on the phenomenon of experiencing learning in the early years.

That said, any insights gained were recognised as a human, social construct (Cohen et al., 2013) and as such were not considered absolute, rather indicative of multiple realities and interpretations within a complex environment. As noted by Denscombe (2014), the social world is not ordered or entirely coherent, so the study was designed to capture the complex, multi-layered facets of life whilst remaining prepared for children's actions to, at times, appear contradictory, irrational or surprising (Denscombe, 2014). Repeated observations over a prolonged period was then necessary, incorporating benefits of repetition, comparison and a range of occasions.

Weekly observational visits were conducted ten times during each of the six terms, as detailed in the schedule below (Figure 3.3.1). To observe children's natural experiences, the focus of each observation remained flexible to the child and the events of the day, as in the Froebel Block play Research Project (Gura, 1992) allowing detail which may otherwise go unnoticed to be exposed and captured. Recording variables of teaching and learning within these naturalistic environments and repeating the observations over a prolonged period, a more realistic picture of the practices and environments enabling children's tendencies to engage with and demonstrate the dispositions was afforded. These observations were informed by interviews with parents, key workers and the cohort children as a deeper understanding of the children developed and relationships built. The intentions of each stage of the process was detailed below with an example case study given in Chapter 4.1.

Preliminary visits, meetings with children, parents and key workers

Mindful of studies (Chapter 2.1) suggesting children's behaviours are rooted in their temperament and effortful control, an established knowledge of each child was sought. Through 6 months of familiarisation visits and meetings with parents and key workers, contextual information was gathered, and relationships developed so that typical emotional responses could be considered when fluctuating expectations and permissions to behave in certain ways were encountered. These relationships

continued to be invested in throughout the duration of the study, the impact of which can be seen in Chapter 7.1; Informed through ongoing discussions with practitioners and teachers.

To initiate triangulation and crystallisation of messages within the study, document analysis of internal setting literature and Ofsted publications, as well as visual images (Denscombe, 2014) such as photographs of the children engaged in previous activities were viewed, whilst remaining mindful of the potential vested interests and objectives of those sharing them as cautioned by Mukherji, et al. (2014). Semi-structured interviews (Appendix H) with the parents and practitioners were conducted during this time to better understand their interpretation of dispositions and to see how they saw these represented within the cohort. Feedback loops and electronic recording were utilised to share and validate these findings as advised by Fielding and Thomas (2008) which then offered an interesting contrast between these influential adults.

Initiated during the preliminary visits, group discussions as advised by Johnson and Christensen (2008) were held with the children and continued throughout the study. Heading caution regarding research that sees the child as passive and powerless (Westcott and Littleton, 2005; Alderson, 2005; Woodhead and Faulkner, 2008), the child remained an inclusive, active participant, capable of independently forming and expressing an opinion (Taylor, 2000) regarding their experiences. The group structure allowed for every voice to be heard whilst ensuring no one dominated or derailed conversation (Mukherji, et al., 2014) as children explored their experiences and recommended potential areas of interest as their unique perspectives were shared (Greene and Hill, 2005) and assent remained informed. Inspired by the use of children's photography as in projects conducted by Cook and Hess (2007) and storytelling as in the work of Paley (1991), discussions were provoked on occasion with photographic images relevant to the children.

Schedule

Following six months of familiarisation visits and pilot studies, 60 weekly visits were scheduled over 6 terms, three terms in the preschool, followed by three terms in the school, structured to encompass the different days and times available throughout the week. During terms 1, 3, 4 and 6 rotating observations (detailed in Figure 3.3.2) focused on four of the ten cohort children during each visit (depicted in blue and green in Figure 3.3.1 below). During terms 2 and 5 focused observations (illustrated in Figure 3.3.8) were used (depicted in tan) so that each child received full attention for one visit during each of these terms. This equated to over fifteen hours focused observation on each of the ten cohort children during the two-year study as experiences were explored in complementary ways.

Preschool 2017 – 2018															
Term 1					Term 2					Term 3					
4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed	Child 1 observed	Child 2 observed	Child 3 observed	Child 4 observed	Child 5 observed	4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed
4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed	Child 6 observed	Child 7 observed	Child 8 observed	Child 9 observed	Child 10 observed	4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed
Reception 2018 – 2019															
Term 4					Term 5					Term 6					
4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed	Child 1 observed	Child 2 observed	Child 3 observed	Child 4 observed	Child 5 observed	4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed
4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed	Child 6 observed	Child 7 observed	Child 8 observed	Child 9 observed	Child 10 observed	4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed	4 of the 10 children observed

Figure 3.3.1: Schedule of rotating and focused observations over the two years of the study

Rotating observations - Terms 1, 3, 4 and 6

During Terms 1 and 3 (preschool) and 4 and 6 (reception), rotating observations were utilised, during which four of the ten target children were observed. This meant each child was selected in four of the ten weeks of the term, with selection monitored to ensure balanced and equal observational coverage by the end of the study. During each of these rotating observations, each of the four children were observed independently for 8 minutes, in whatever they were doing. Once all four had been observed (32 minutes), observation would cycle back to the first child until the cycle had been completed four times (128 minutes of observation) as depicted in Figure 3.3.2 below. The timings, whilst keeping the observations on track as advised by Mukherji, et al., (2014), maximised understanding of what was being seen and allowed for the observations to be recorded and completed within a visit.

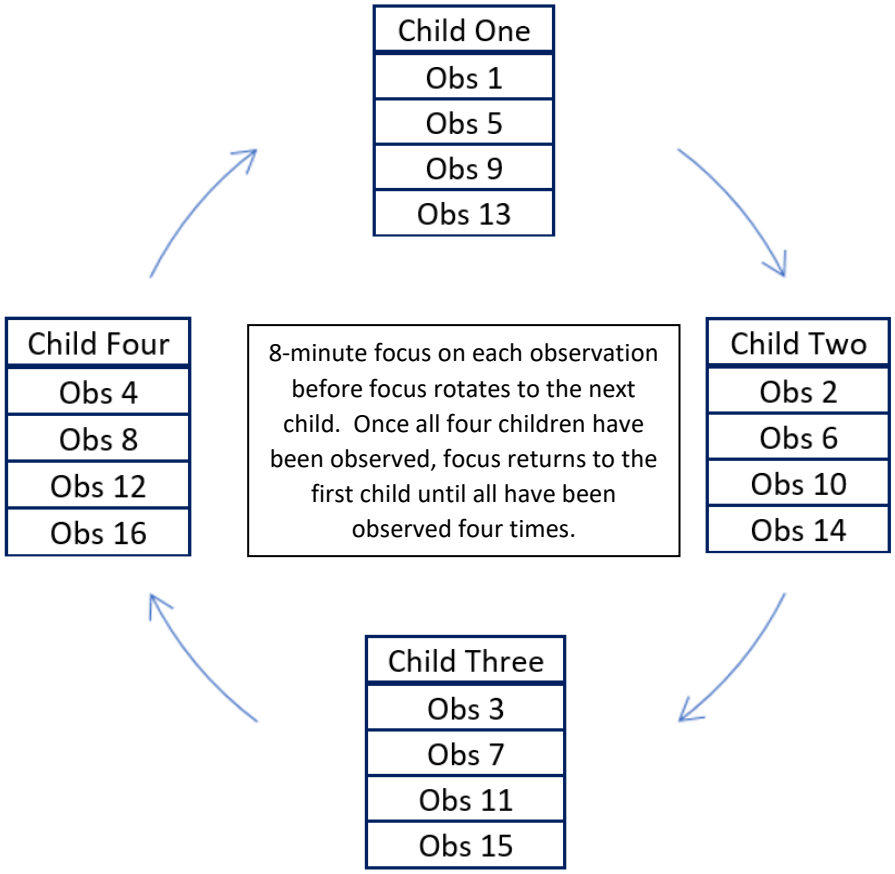


Figure 3.3.2: Diagram depicting rotational observations of four cohort children as conducted during weekly visits

During these observations, the comprehensive framework written for the study sought to embrace internalised influences of interactions, engagements, groupings and involvement as well as external stimuli influenced by the activities offered, freedoms of access, teaching styles and encouragements. This is depicted in the IEIEC observational framework included in Chapter 1.1 (Figure 1.1.6). To rapidly capture these diversities within a moment, as well as offering the methodical rigour advocated by Veale (2005), contextual information was coded using techniques similar to those within the EPPE project (Sylvia, et al., 2003) and the Effective Early Learning Programme (Bertram and Pascal, 2004).

To take full account of the impact of these wide-ranging influences on children's learning experiences two observational sheets were written: the Child Focused Observation and the Physical Environment Observation. These differed in the set of coded variables documented (Figures 3.3.3 and 3.3.4). Used on alternate visits throughout the study, they are represented in blue and green in Figure 3.3.4 above. Following the pilot trials, these observation sheets were designed to independently document each

child's experience, rather than each cycle of observation, allowing the child's individual experience to remain the focus whilst simultaneously capturing wide-ranging experiences so that behaviours were not pre-empted, or the field of vision limited.

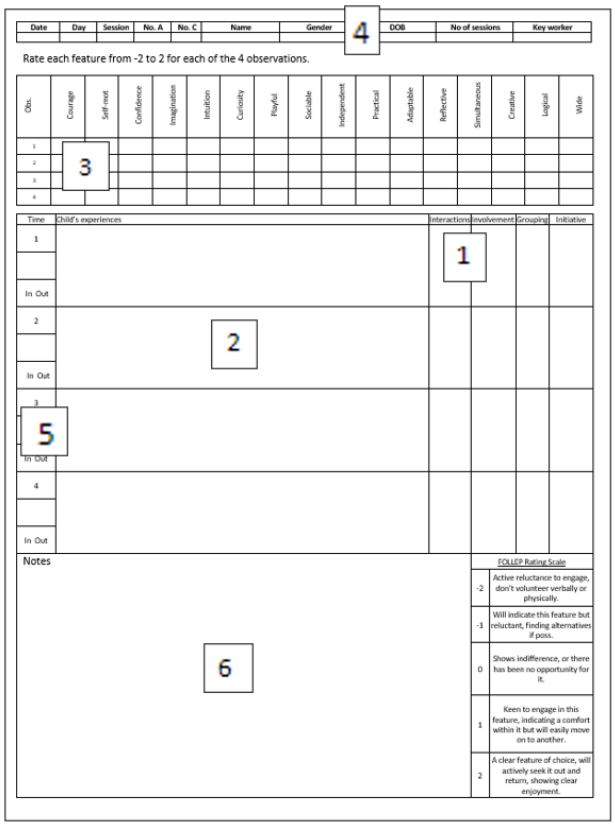
Internalised influences	Child Focused Tracking Observation Proforma									
Discussions	TC	TC - A	TC - C	TC - GC	A - TC	C - TC	GC - TC	A - GC	GC - A	
Involvement	1 – Floating, unengaged		2 – Settles briefly		3 – Engaged most of time		4 – Some intense engagement.		5 – Continual. intense engagement.	
Grouping	F - Flitting		WG – Whole grouping		SG – Small grouping		P – Pair		I – Individual	
Choice	1 – No choice		2 – Limited choice		3 – Some activities excluded.		4 - Only in/outdoors excluded.		5 – Freedom of choice	

Figure 3.3.3: Coded variables utilised within a Child Focused Observation

Externalised influences	Physical Environment Observation Proforma				
Teaching styles	T1 – Adult led	T2 – Adult participation	T3 – Group activity	T4 – Adult support	T5 – Child autonomy
Distractions	D1. Att. forcibly broken	D2. Encouraged elsewhere	D3. Offered alternatives	D4. Distracted	D5. Uninterrupted
Location	L1. Enforced	L2. Encouraged	L3. Alternatives offered	L4. Most options available	L5. Free choice
Encouragement	E1. Enforced	E2. Directed	E3. Encouraged	E4. Adult preference	E5. No adult influence

Figure 3.3.4: Coded variables utilised within a Physical Environment Observation

Alongside the coded variables (featured in Figure 3.3.5 as note 1), each observation documented the actions and responses of the children through rich narrative descriptions, rooting observations in a time and place for the reader (note 2). The child's engagement with each disposition was also recorded within each rotation (note 3), as their ease within and preference towards each was noted utilising the descriptions offered in the FOLLEP scale (Figure 3.1.2). Following the pilot study where their use was trialled and developed, these sheets captured a range of conditions whilst retaining background information such as specific details of the child and day (note 4), location and timings (note 5). This detail allowed for comparisons to be drawn and links to be identified rather than trying to split the elements out or engineering variables away, as previous studies have been criticised for when ineffective consideration has led to inconsistent results, notes Burchinal et al., (2014). The observations were then completed by adding reflections and noteworthy comments once complete (note 6).



1. Coded variables of the environment
2. Rich data to add context
3. Engagement within each disposition, rated according to the FOLLEP scale
4. Child and day specific variables
5. Timings and location
6. Overall impressions and noteworthy comment

Figure 3.3.5: One child's observation sheet for one visit, showing the four rotations

Definitions of the dispositions and details of the FOLLEP scale were printed on the sheet and carried on a card to minimise personal impact through reliance on beliefs, expectations or predispositions (Figure 3.3.6). Completed for each child during the four focused rotations of the observation, copies of these observation sheets can be found in Appendices I and J and their use is illustrated within the example case study in Chapter 4.1.

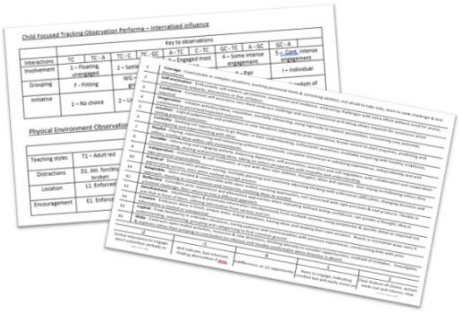


Figure 3.3.6: Prompt card held throughout, detailing definitions of the dispositions and the variables being noted

During the observations, a complete observer role (as defined by Johnson and Christensen, 2008) was assumed to enable depth of recording and free movement. The role termed *"stranger"* by Schutz (1962 in Denscombe 2014; p99), was also assumed in that a level of naivety was purposely retained, remaining uncluttered by the expectations of the day and open to that which may otherwise be hidden, too normal or obvious to be noticed. Open to capturing the richness of the observations, speculation and extraneous clutter was removed so that the phenomena as received by the child was observed. For example, when viewing a phonics session, it was done without knowing the lesson objectives or teaching theories utilised so that a preoccupation with how these were being delivered and met was avoided. Personal beliefs, bias and expectations of the observations were

managed through the use of pre-established coded comment supporting the rich data. By allowing these illuminative observations to capture the realities of learning as experienced by the children, rather than the intentions or expectations of learning objectives or intended goals of adults, the phenomenological methodology of the study is reflected.

To capture experiences through the eyes of the child, observations revolved around the children, rather than systems or timetables. Determined on the day through the actions of the cohort child, observations tracked typical experiences and behaviours that children would otherwise be unable to communicate (Rolfe, 2001). Following their interests, unpredictability and varied engagements, the actions, ideas and decisions of the children drove the logistical and physical direction and focus of observations. The studies interpretive paradigm was further reflected through the naturalistic environments offering social and ecological validity (Fawcett, 1996; Tobin et al., 1989) and retaining an emotional and contextual ease for the children within their own social experience and understanding (Farrell et al., 2002).

Focused observations – Terms 2 and 5

The rotating observations described above generated a great deal of relevant data. However, in order to retain the child's voice, the depth of understanding developing since commencing the study and to invest further in the relationships being built, a one-to-one approach was devised and utilised during the middle terms of the two years (depicted in tan in Figure 3.3.1 above). During each of the ten weekly observations of terms 2 (preschool) and 5 (reception), one child from the cohort was observed for the duration of the visit.

Utilising a multi-faceted card activity and language easily understood by the children, the focused observations considered the impact of pedagogy on children's dispositional experiences through; Having good ideas (Imagination and Intuition), Being brave (Courage and Confidence), Having fun (Playful and Sociable), Having a go (Practical and Reflective), Doing new things (Adaptability and Curiosity), Doing things for yourself (Self-motivation and Independence) and Thinking (Creatively, Simultaneously, Logically and Widely). Beginning with a discussion, the child was invited to place cards in locations that most enabled the experiences depicted (Figure 3.3.7). For the duration of the visit, observations that spoke to these elements were documented accordingly (Figure 3.3.8). Along with the benefits detailed above, the focused observations embedded the analysis in a more informed understanding of the experiences had by the children and their developing attitudes towards the nature of pedagogies.

Figure 3.3.7: Example of the cards used to generate conversation and reflection

Child	C8	Date	22/01/18	Day	Monday	Session	Pm
Brave			Courage & Confidence		Card activity –		
Doing things for yourself			Self-motivation & Independence		Card activity –		
Having good ideas			Imagination & Intuition		Card activity –		
Having fun (with friends?)			Playful & Sociable		Card activity –		
Doing new things			Adaptability & Curiosity		Card activity –		
Having a go			Practical		Card activity –		
Additional notes							

Figure 3.3.8: Focused Observation Sheet

Unlike video or audio recordings, the sheets used throughout the study did not enable future review of the events observed as utilised be Tobin et al., (1989), but did offer a freedom of recording in ways more suited to the nature of the study (Mukherji, et al., 2014) given the noise and freedom of movement intrinsic to the natural environments involved. Informed by the pilot study, recordings initially utilising pre-prepared 'paper and pen' observation sheets were transferred to a tablet for speed and accuracy of recording. To mitigate limitations within these methods, documentation of key moments was supplemented through photography and field notes, child centred journals and visit focused reflections completed immediately following each visit as children's experiences were faithfully described.

The Pilot Study

As the design of the study took shape a pilot study was required to trial the considered methods and approaches. The intention of the pilot was to trial the validity and suitability of the methods designed, as well as using the process to introduce myself to the nursery and children and familiarise myself with the setting. Concerns were centred around the documenting of observations and the logistics of the methods proposed. These were ambitious, requiring rapid capture of multi-faceted detail and these needed trialling, challenging and adapting. Through repeated visits methods evolved as experience with them grew, along with a greater sense of confidence and perceived credibility within the eventual findings. This process also offered children, staff and parents' opportunities to observe and ask questions as relationships formed and they became less wary of my presence and actions.

What follows are the considerations of the methods employed, along with details of these first experiences conducting them within the pilot study. Lessons learnt through each stage, are explored, illustrating the revisions considered and applied as the study evolved. These are discussed within this chapter along with deliberations of a focused observation, subsequently introduced to the 2nd and 5th terms of the child study.

Multifaceted observations sheets combining a variety of techniques were initially designed with the intention of allowing unexpected findings and deeper levels of understanding to emerge. However, the pilot began with what were proved to be overly ambitious intentions. With reference to the following questions proposed to focus the pilot, this process enabled multiple revisions to the processes, timings and documentation until a workable model was found.

- Do the observation sheets capture sufficient information for meaningful analysis?
- Are the observation sheets manageable in terms of tracking the children in practice?
- What is the best way to record the information to balance detail and manageability?
- Are the timings appropriate?
- Following an observation, how can the data be best coded and recorded?

Observations

The pilot sought to test the ability of its methods to explore the study questions. Informed by a conceptual framework designed by Bertram et al. (2002) for the Early Excellence Centre Pilot Programme, a framework was devised to examine dimensions of institutional quality through the flow of Context -> Process -> Outcome which considered the effects of learning experiences, teaching strategies, environments and relational interactions on the permissible engagements and involvements, and therefore resulting dispositions to learning.

The first realisation was noting a distinction between the two areas of focus; External influences - What experiences were being offered to the children (activities, access, freedom of choice, timings, teaching styles) and Internal influences - How they were being experienced (interactions, engagements, groupings, involvements – staff and other) and so two complementing styles of observations were designed. Looking to elicit the internal (child focused) and external (physical environment) influences on the experiences and resulting actions of the children, their virtues were considered in terms of how well the child focused (CF) proforma could evaluate the internalised decisions and drivers of the child and the degree to which the physical environment (PE) proforma could record the external features, that is the impact that the things happening to and around the child had on them. Various designs were then considered (Figure 3.3.9).

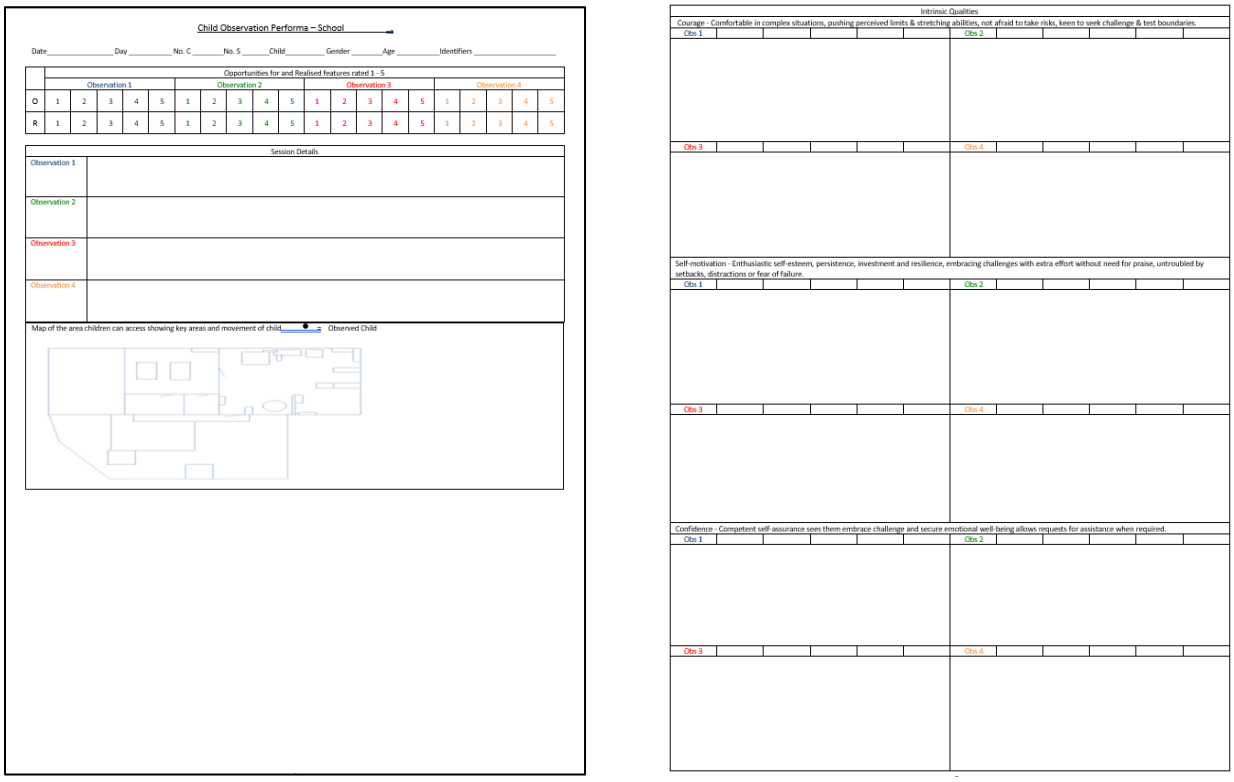


Figure 3.3.9: Early designs trialling inclusion of map and various layouts to document four children and rotating observations

Focus soon became drawn to finding a workable method of cross referencing the internal and external details above with the dispositions. This began with considering the *"Dominant feature displayed"* as in the Bertram et al. (2002) work above, however when tested for this study a large degree of interesting detail was felt to be lost. A numbering system was also considered where the four observations (numbered 1-4 in purple in Figure 3.3.13) would record a level of engagement for each of the features within the FOLLEP scale.

Confidence	-2	-1	0	1	2
Observation			1 2	4	3

Figure 3.3.10: Early designs to capture FOLLEP scores for each disposition

Those scoring high/low could then be cross-referenced with details of what was going on at that time (level of engagement, style of pairing etc.) whose detail was also being recorded. This retention of detail worked well but necessitated another revision of the recording sheet and Through this process the design of both the Child Focused and Physical Environment proformas evolved (Figure 3.3.11).

Child Focused Tracking Observation Performa – Internalised influence - First Stage Analysis

Olney Preschool | No of Adults – 6 | No of Children - 29

Date: 08/06/2017 Day: Thursday Child 1: Ruby Child 2: Max Child 3: Magnus Child 4:

	Features rated 1 – 5 within FOLLEP Scale																			
	Child 1					Child 2					Child 3					Child 4				
1	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2
2	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2
3	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2
4	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2
5	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2
6	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2
7	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2
8	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2
9	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2
10	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2
11	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2
12	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2
13	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2
14	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2
15	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2
16	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2	-2	-1	0	1	2

Key to observations

Interactions	TC <-> A	TC <-> C	TC -> A	TC -> C	TC -> GC	A -> TC	C -> TC	-> TC <-	TC	GC -> TC	A -> GC	A <-> GC
Involvement	L1. No activity		L2. Interrupted activity		L3. Almost continuous		L4. With intense moments			L5. Continuously intense		
Grouping	WG – Whole grouping			SG – Small grouping			P – Pair			I – Individual		
Initiative	Zone 1 – No choice			Z2 – Limited choice			Z3 – Some activities excluded			Z4 – Freedom of choice		

1	**Courage** - Comfortable in complex situations, pushing perceived limits & stretching abilities, not afraid to take risks, keen to seek challenge & test boundaries.
2	**Self-motivation** - Enthusiastic self-esteem, persistence, investment and resilience, embracing challenges with extra effort without need for praise, untroubled by setbacks, distractions or fear of failure.
3	**Confidence** - Competent self-assurance sees them embrace challenge and secure emotional well-being allows requests for assistance when required
4	**Imagination** - Initiates activities/ideas, inquisitive, mentally rehearsing, using ingenuity to explore possibilities, uncovering new potential, untethered to perceived/expected outcomes.
5	**Intuition** - Logical judgements and predictions in new situations informed by prior experience, knows where to start enquiries, predicting and testing potential outcomes.
6	**Curiosity** - Seeking out opportunities to go deeper in their understanding, enthusiastic questions, insatiably enquiring with healthy scepticism, investigating and experimenting with ideas.
7	**Playful** - Playing, experimenting and rehearsing without commitment, complete immersion in satisfying experiences, independently and with others, trialling ideas within safe environments.
8	**Sociable** - Interacting and engaging actively, balancing diplomacy, self-promotion, assertion and self-regulation, with collaboration and cooperation. Communicating, sharing and promoting ideas, taking on others perspectives with empathy and understanding.
9	**Independent** - Autonomous & self-motivated, at ease with their own abilities, thoughts, ideas and opinions. Not relying on following others, they take personal responsibility.
10	**Practical** - Demonstrates problem solving, mentally planning and reactively adjusting thinking with unforeseen difficulties, changing direction and appreciating success, even when evolved through process.
11	**Adaptable** - Open minded & comfortable with open-ended, evolving approaches, not concerned with rigid precision & end products. Flexible in approach, reacting to circumstances and resources, evolving ideas as needed.
12	**Reflective** - Considers prior experience and alternative approaches when repeating without losing confidence, can ponder a thought, idea or unsolved challenge, then return to trial a different approach.
13	**Simultaneous** - Intuitively gains & processes information simultaneously from multiple sources, using peripheries & specific detail as required not just that in front of them, utilising information from various sources.
14	**Creative** - Embraces ideas in fresh, unique ways, asking questions, having ideas and seeking their own answers. Reacts in innovative ways even if information is limited or unexpected.
15	**Logical** - Finds familiarity in unknown situations, seeing patterns and commonalities with previous experiences, constructing links with prior understanding, sequencing, grouping and categorising to find common ground.
16	**Wide** - Embraces open-ended activities, resources & new directions, thinking laterally to consider opportunities, unafraid of mistakes. Investigates & explores rather than jumping to conclusions (or obvious end results) comfortable when direction is absent.

Field notes

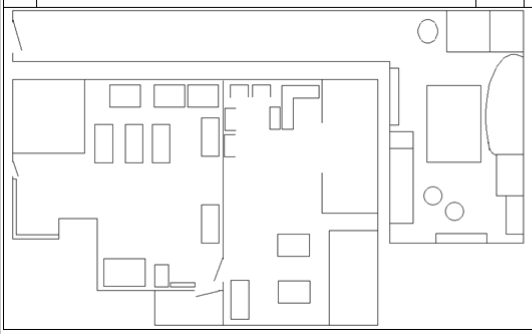
- These observations were done with a two-minute rotation – this was not long enough to understand the nature of the play and there was too much time wasted finding the next child and 'moving on'. Try next time with a five-minute rotation.
- The number of children and number of adults' present needs a place for recording.
- Inside / outside needs specifying on each observation – as well as detailing on the map.
- Some changes are needed to the layout of the map.
- The order of features needs changing to read down (rather than across).
- The key to observations worked well with most. Interactions demonstrated the need for some amendments, for example when an interaction is obscured through a child being deep within their own headspace.
- The way the 'average' has been recorded for how the features have been rated in this pilot does not work. The FOLLEP rating works well, but in averaging the results a lot of this detail becomes lost. Have tried 'summing' the results – this works better but I'm not sure how beneficial this will be. Will gather some more data but think all needs capturing within a spreadsheet.

Name Age Sex Session am/pm

Record a 1, 2, 3 and 4 for each feature, rating the 4 observations in each respect.

Courage	-2	-1	0	1	2	Self-mot	-2	-1	0	1	2
Confidence	-2	-1	0	1	2	Imagination	-2	-1	0	1	2
Intuition	-2	-1	0	1	2	Curiosity	-2	-1	0	1	2
Playful	-2	-1	0	1	2	Sociable	-2	-1	0	1	2
Independent	-2	-1	0	1	2	Practical	-2	-1	0	1	2
Adaptable	-2	-1	0	1	2	Reflective	-2	-1	0	1	2
Simultaneous	-2	-1	0	1	2	Creative	-2	-1	0	1	2
Logical	-2	-1	0	1	2	Wide	-2	-1	0	1	2

Time	Child's experiences	Interactions	Involvement	Grouping	Initiative
Obs 1					
Obs 2					
Obs 3					
Obs 4					

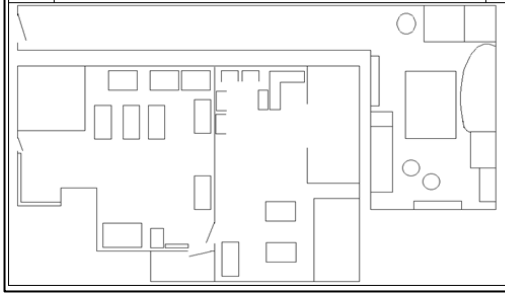


Name: Age: Sex: Male Female Session: am pm

Rate each feature from -2 to 2 for each of the 4 observations.

Obs.	Courage	Self-mot	Confidence	Imagination	Intuition	Curiosity	Playful	Sociable	Independent	Practical	Adaptable	Reflective	Simultaneous	Creative	Logical	Wide
1																
2																
3																
4																

Time	Child's experiences	Interactions	Involvement	Grouping	Initiative
1		TC TC	1	F	1
		A A	2	WG	2
In Out		C C	3	SG	3
		GC GC	4	P	4
2		TC TC	5	I	5
		A A	1	F	1
In Out		C C	2	WG	2
		GC GC	3	SG	3
3		TC TC	4	P	4
		A A	5	I	5
In Out		C C	1	F	1
		GC GC	2	WG	2
4		TC TC	3	SG	3
		A A	4	P	4
In Out		C C	5	I	5
		GC GC	1	F	1
			2	WG	2
			3	SG	3
			4	P	4
			5	I	5



FOLLEP Rating Scale

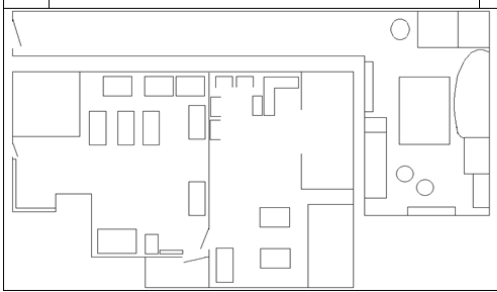
-2	Active reluctance to engage, don't volunteer verbally or physically.
-1	Will indicate this feature but reluctant, finding alternatives if poss.
0	Shows indifference, or there has been no opportunity for it.
1	Keen to engage in this feature, indicating a comfort within it but will easily move on to another.
2	A clear feature of choice, will actively seek it out and return, showing clear enjoyment.

Date	Day	Session	No. A	No. C	Name	Gender	DOB	No of sessions	Key worker
02/10/17	Mon	Am	5	29	Ruby	Female			

Rate each feature from -2 to 2 for each of the 4 observations.

Obs.	Courage	Self-mot	Confidence	Imagination	Intuition	Curiosity	Playful	Sociable	Independent	Practical	Adaptable	Reflective	Simultaneous	Creative	Logical	Wide
1	-1	0	-1	0	0	-1	-1	0	0	0	0	1	1	0	1	1
2	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1
3	0	0	1	0	1	0	0	0	1	1	0	0	0	0	1	0
4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0

Time	Child's experiences	Interactions	Involvement	Grouping	Initiative
1	Bell has gone for tidy up time. Comes in from toilet to sit on carpet. Looking around at others to see what they are up to. She's frowning looking unsure but starts joining in with the welcome song. She's. Anxiously looking around and intermittently joining in. Joining in at points with actions in song but still looking so anxious.	TC	2	WG	1
9.35					
In					
2	Stood with a friend at the door to the office space – there talking in hushed whispers, looking on, knowing they're not to enter. They observe others and things going on but stay fixed at their post very 'conspiritually'. She has now been enticed over to play with the play dough, investigating the various tools and resources offered. She runs off but treads on raw pasta – hearing the crack she keeps going back to investigate some more.	TC - C	4	P	4
10.07					
In					
3	Finishing her snack she independently puts her cup in the tray and is told to lineup to go outside. She finds her own coat and puts it on herself. She's asked if she's ok and carries on independently. She looks around for her friend and joins the line. She's looking around, taking in all that's going on, finger in mouth. Moves outside and lines up against the wall. Makes way into garden.	TC	2	WG	1
10.39					
Out					
4	Coming in from the garden she takes her coat off and helps another child with theirs. She's called into the kitchen for some medicine where she waits for a staff member to come and administer. She waits patiently looking up. She accepts it without problem. Told she can go off and play now she quickly rejoins her friend and they roam the room. She clearly needs a toilet break but doesn't ask.	A - TC	2	I	1
11.11					
In					



FOLLEP Rating Scale

-2	Active reluctance to engage, don't volunteer verbally or physically.
-1	Will indicate this feature but reluctant, finding alternatives if poss.
0	Shows indifference, or there has been no opportunity for it.
1	Keen to engage in this feature, indicating a comfort within it but will easily move on to another.
2	A clear feature of choice, will actively seek it out and return, showing clear enjoyment.

Figure 3.3.11: Trialling various approaches to capture the detail in a workable format

The arrangement depicted in Figure 3.3.12 was settled on, allowing each disposition to be rated according to the FOLLEP scale for each observation and formed part of the evolving observation sheet seen in Figure 3.3.5.

Obs.	Courage	Self-mot	Confidence	Imagination	Intuition	Curiosity	Playful	Sociable	Independent	Practical	Adaptable	Reflective	Simultaneous	Creative	Logical	Wide
1																
2																
3																
4																

Figure 3.3.12: Method used to capture the FOLLEP score of each disposition within every observation

Tracking the precise movements of the children was found to be too ambitious and the inclusion of the map was removed in favour of recording whether the child was in or out of doors, which together with the rich detail would sufficiently indicate location of play. Child specific information (age/gender) were removed as this information was recorded elsewhere and additional sections were added to record the number of children and number of adults' present. The timings of the observations were also revised from a two-minute rotation. This was not long enough to understand the nature of the play and too much time was wasted finding the next child and moving on. Revised to a five-minute rotation, this was later extended to eight minutes with a three-minute coding section built into the process to aid immediate capture of detail. Whilst the key to observations worked well with most, these also needed amending to capture missing elements such as when interactions were obscured through a child being absorbed within their own thoughts.

Child involvement

Keen to consistently involve the children in the project and ensure their voice was both heard and represented, various techniques were trialled through the piloting stage. Children were met with in small groups, where the intentions of the study were shared, and their involvement invited. Picture cards were prepared for them to actively select if they wished to be involved (Figure 3.3.13), the idea being that during every return visit they could find and give me their picture, indicating their ongoing consent.

Figure 3.3.13: Child selecting their picture card to indicate their wish to be involved

When watching the footage of these exchanges after the event it became clear that the children were more interested in the images on the cards than connecting any meaning to what selecting one meant. Additional time was then built into each visit so that permissions to talk, watch and play could be asked, and adjustments could be made if a child appeared unwilling to be observed on a given day.

Using picture cards to depict dispositions and language the children could understand, they were invited to show their favourite or most interesting areas and those that represented the dispositions of interest, placing the cards within the environment they felt this was most realised. These conversations were discussed afterwards as their approval of my understanding was confirmed. However, given the novelty of my presence and the keenness they had purely for adult engagement, these activities

did not often yield anything genuinely useful beyond further establishing the open relationship that was forming with the group and its weekly inclusion was removed. This was later revisited in a more established format in terms two and five.

Benefits

The most evident benefit of the pilot was in the attitudes and reception of the children, staff and parents. Despite multiple conversations with the nursery manager and continued reassurances regarding the intentions of the study, a wariness was detected during initial visits, as an understandable nervousness was felt regarding the studies focus. The pilot allowed for its intentions to be shared directly with them, demonstrating clearly that it was the experiences of the children and the opportunities they were embracing that was of interest. Through repeated engagements with the children, they quickly relaxed and became happy to treat me like any other member of staff.

The observations allowed for trials of the planned approaches and paperwork, quickly realising where ambitions were too high, or where further detail was required. As documentation and methods were repeatedly revised, with elements added, removed and reconsidered, a more streamlined and confident process emerged to facilitate the study and offer the potential for more effective analysis.

Analysis

Several preliminary analysis techniques were trialled and utilised to ensure the findings were meaningful and appropriate. Due to its holistic intentions, a lot of information was being captured and any analysis had to ensure that the richness was not lost. During this process techniques found to be too complex were streamlined, and those that seemed to lose the essence of the messages coming through were adapted. The layout of the observation sheets was adjusted as different ways to record, code and manage this information were considered.

As the pilot observations were used to explore preliminary analysis techniques, the importance of how the information was recorded became more apparent. Utilising the FOLLEP scale to represent the depth of engagement the children had with the features worked well to capture their experiences, however, initial analysis that saw most common engagements highlighted through an averaging or summing of this data meant a lot of the recorded detail was lost, detracting from the qualitative benefits of the study. A spreadsheet was designed to capture and retain all the recorded detail so that it could be viewed and considered in a variety of illustrative ways.

Lessons Learnt

An ongoing awareness of the nature of genuine consent was troubled during these early visits, but as the children became more familiar, forming a clear bond, they were able to indicate when, and what they were happy to be observed doing. Development of the rotational observations also allowed for a great degree of fluidity, enabling a reactionary respect for each child's frame of mind and mood. Whilst mindful that this cohort could not speak for all children their role as competent co-constructors of understanding was sought through their included voice within the findings. However, it became apparent that the children were a little young (or perhaps insufficiently established within our relationship) to effectively understand the nature or extent of what consent to the project meant in real terms and expectations were revised.

Moving forward

The amended design of the study allowed for the informed consent and assent of the children as their unique perspectives and shared views of their experiences were incorporated in more balanced ways. Begun through repeated familiarisation visits to the nursery, the pilot enhanced familiarity with those involved and with the processes as relationships with children, staff and parents became well established. The involvement of these key individuals became invaluable throughout the study, allowing for added depth and crystallisation of understanding as well as a shared power structure through a sense of involvement.

Initially utilised paper and pen recording methods were re-designed for electronic recording, allowing simultaneous use of word, timer and a photographic apps, techniques became quicker, more genuine, accurate and secure. True and honest diary entries following every nursery visit were introduced, proving useful documentation of the decisions taken and reasoning behind them. This allowed ongoing reflections on limitations and emerging theories as well as offering a clear audit trail. The observation sheets evolved repeatedly throughout the process, resulting in documentation that confidently struck a balance between degree of accuracy, consistency, potential for analysis and logistic possibility. Moving to electronic recording methods supported this with more efficient and streamlined processes.

Focused Observations

After the first term of observations the information gathered was reviewed and evaluated. The methods were generating a large volume of illuminating data that clearly spoke to the focus of the study, however, the benefit of repeating this consistently throughout each of the six terms of the child study was worthy of reflection. The information being gathered was instrumental in gaining an understanding of the children at the beginning of the study, and would again be interesting in the third term, however, during this middle term the exploration of a complementary series of observations (rather than *"more of the same"*) was considered and trialled.

With a view to understanding the child experience, opportunities to engage with the children in meaningful and consensual ways had always been desired. Despite repeated conversations and visits to their homes, two-way relationships that went deeper than the *"researcher with the tablet"* were desired so that their reactions and displayed engagements within the rotating observations were better understood. For the middle term trial, a different style of observation was then utilised focusing on one child during a visit. Cards were devised to use with the children to engage conversation and offer areas to ponder, together with discussion points designed to examine the dispositions as they explored areas they enjoyed, experiences and perceptions. To continue engaging with the parents and key workers and to allow the children the comfort of familiarity these conversations with children were also conducted by the keyworkers and parents in their own homes.

As opportunities were afforded to become more attuned to the child's developing engagements and reactions, conversations illuminating the study were naturally permitted. As they continued to direct play and the area of focus, deeper connections with each child was permitted as a complementary representation of the child's experiences was attained, which for most of the session took place without the tablet.

Lessons Learnt

During this pilot, the cards were again found to be problematic, directing children's responses rather than allowing for their own views to be represented as placements quickly followed those utilised previously. However, the in-depth nature of *"being"* with the children allowed relationships, connections and understanding to flourish. This focus on connecting with the children in the absence of the tablet saw a reliance on memory and brief handwritten memory aids. Whilst many photo opportunities were missed, it did allow for a depth of understanding and rich conversations that were not afforded previously.

Moving forward

These methods allowed for a greater understanding of the child, their motivations, temperament and typical reactions. This offered complementary insights into the experiences of the children during the various sessions, but also proved invaluable as observations continued and judgements were made on children's engagements from their outward displays of behaviour. This approach was also used to enhance the school-based observations in its middle term.

Analysis

Whilst evidence indicates that diverse components within children's learning and functioning develop independently (Fischer and Daley, 2006), studies often focus on one attribute, such as the direct assessment of behavioural self-regulation (Cameron et al., 2012) or observer-rated executive functioning (Grissmer et al., 2010). Cautious of these studies that go on to suggest direct relationships between an observed pattern of behaviour and an underlying processes or function development, this study recognises the complex phenomena of learning experiences within the early years. In doing so, a pragmatic combination of methods has been embraced to comprehend the phenomenon and to do justice to its many facets, as Cohen and colleagues (2017) discuss when advocating a mixed methods approach. To do otherwise would risk these complexities becoming overlooked within its findings, which, when used to inform educational practice, can lead to critical misunderstandings.

Mindful of inconsistencies that can make comparisons within findings difficult within many studies (Fuhs et al., 2015) this study introduced structure and consistency throughout its methods and cohorts, as advised by Mukherji, et al. (2014). The defined dispositions and coding systems, including the FOLLEP scale and structured recording systems anchored the process and added clarity within what would otherwise be highly subjective methods. The depth of rich data produced alongside this systematic style of observational capture allowed for an illuminative view of the experiences documented, in all permutations of conditions. The observations went beyond asking how things were taught, to asking how experiences of learning were perceived and experienced through the actions and reactions of the child (Bakewell, 2016). An example of this can be found in the accounts and images presented in the case study in Chapter 4.1. Remaining faithful to the original, these observations are presented as close as possible to the way the child experienced them, using defined coding to limit interpretation, analysis or repackaging, with added descriptions to portray how the social norms of preschool and school were experienced (Denscombe, 2014). By demonstrating how the phenomenon of learning is being internalised and represented as children are engaging and actively grappling with dispositions (Erikson, 1994), a vivid picture of their reality within these moments emerges.

Explored within contrasting settings, styles of practice, methods of interaction and environmental structures could be questioned. As pedagogical affordance of opportunities to experience, engage with and therefore develop dispositions were noted, the pedagogical debate was offered greater focus. The disposition *Imagination* is used to demonstrate this in Chapter 5.1, along with the impact of observed practices as seen through the conceptual framework guided by the early years' curriculum. Viewing the impact of pedagogy across the EYFS themes (as seen in Chapter 6) focuses the strength of argument for dispositional accountability and allows consistent and clear messages to emerge. Reflecting on rich data from 640 individual observations, the experiences, dispositional opportunities, developing attributes and observed outcomes are presented within the Theory of Lifelong Development - in Childhood (ToLD-C). Developed and discussed in Chapter 7.1, this theory considers the impact of experience on children's realised development and outcomes. Through these multifaceted methods pedagogical styles that afford dispositional experience and development within early and continued experiences are strongly endorsed. Having demonstrated the potential for negative effects where these have not been effectively supported, the Method of Improved Childhood Engagement (MICE) presents these findings within recommendations, evaluation and supportive tools. Designed to inform and extend practice with a view to more fully engaging children's potential with a clear, long term focus.

3.4 Ethics

To ensure this study was conducted with the highest standards of scholarship and research practice the EECERA Ethical Code for Early Childhood Researchers (2015) and the British Educational Research Association (BERA, 2018) were consulted and the study was approved by the Birmingham City University Ethics Committee. Used to inform research design and considerations, this process directed the study in ensuring the well-being of all involved were safeguarded, especially its young and vulnerable participants.

To this end, as indicated by the guidance, all participants were viewed as subjects, with every measure taken to demonstrate respect for their rights, as detailed below. This included remaining mindful of all participants' welfare and finding ways to ensure the voice of the child was heard (paying due regard to Articles 3 and 12 of The UN Convention on the Rights of the Child). Participant selection actively sought a balance of gender, race, ethnicity, class and socioeconomic status wherever this was permitted within the studies focus. Additionally, to ensure individuals and settings were treated fairly, with sensitivity and dignity and without prejudice all contact was conducted with professional courtesy, time was allocated equally, and the same procedures were followed for all participants.

The study was established to explore the actions, reactions and attitudes of others, and these were recorded faithfully and without bias, with feedback loops to capture any inadvertent misrepresentation. Paperwork given to every participant and (where more relevant) their guardian detailed every aspect of the study in language amended to ensure its suitability for each audience (Appendices F&G). Supplemented with ongoing discussions, this provided transparency to the study. The analysis of the gathered data as presented through Chapters 4-7, illustrates every sequential step ready for external scrutiny and critical review. With methods documented fully, and communicated in a clear straightforward fashion, this incorporated all data gathered to ensure fair representation.

Whilst not attempting to neutralise or silence personal presence, bias or history, their potential was acknowledged through a positionality statement and personal reflections throughout the study (Wasserfall, 1997) (Appendix A). The familiarisation visits, journal reflections and feedback loops utilised within all phases sought to actively manage the potential for research to be affected by the researcher (Coffey, 1999; Reinharz, 1997; Scheurich, 1997). This also served to strengthen ethical relationships and to aid the authenticity of the study as participants' understanding of its purpose became better informed, clarifying perceptions and resonance.

Informed consent

Informed consent began with the adult gatekeepers to the children. The nursery manager and headteacher were approached via email and then met in person. The intentions of the study and the involvement of their setting, the staff, parents and children were discussed before leaving Participant Information Forms (Appendix F1) and Consent Forms (Appendix G1) detailing everything they were agreeing to and contact details for more information. Time was then spent in the nursery and school, building relationships with the staff and children where open discussions were encouraged.

Once the child cohort had been identified, a parent of each child was personally met with and the particulars of the study discussed before giving them the parental Participant Information Forms (Appendix F2) and Consent Forms (Appendix G2). They were then given time to consider their involvement and my ongoing presence to ask any questions. Once consent had been given, each family was met in their homes where additional opportunity to discuss the study was given. Ongoing assent was achieved through regular discussions when seeing them in the setting.

In seeking consent and ongoing assent of the children, care was taken to develop methods suitable for this *"competent yet vulnerable"* (Lahman, 2008; p285) cohort. Before commencing the study, six months had been spent in the nursery where relationships had built with all the children. My presence had been introduced and discussed during Circle Time when I asked all the children if I could come and watch them play. Once the cohort had been identified, I met with them in small groups to chat about what I would be doing. I asked the children if they would be happy for me to watch them play, and to talk to me about the things they liked to do. These were then presented in a consent form using personalised pictures and smiley faces (Appendix G3).

Mindful that consent for such young participants is given moment by moment (Mukherji, et al., 2014), measures of assent were built into every observational visit enabling children to register their on-going willingness to participate. The children were asked to select an image from a set of picture cards (Figure 3.4.1). I explained that when I came in, I would lay out the ten picture cards chosen by the children, if they did not want me to watch them on that day, they could put theirs away. In addition to these measures, every visit remained mindful of children's outward displays of assent and, given the freedoms within the scheduling of focused children, those that wished to be avoided could be.

Figure 3.4.1: Cohort children selecting their picture cards

The children were also safeguarded through the informed consent of their parents/carers and a key person acting as a gatekeeper to the continuation of any observation or discussion. Opportunities were given for children to express their views regarding all actions within the study (*United Nations Convention on the Rights of the Child;* Article 12), and through discussions, feedback loops and responses to questions asked. For example, photography was used to support documentation using the tablet recording the observations, a familiar practice for the children. Where a child wished to share something, verbal permission for photography was sought and any photographs taken were shown to the child before keeping in the previously described ways.

Confidentiality and anonymity

All data gathering methods, recording sheets and details of storage were shared with their parents/carers and key workers via the Participant Information Leaflet. However, they were also informed that whilst anonymity would always be observed, any disclosures requiring information to be shared with external authorities (Ofsted, Social Services) would be observed to ensure the welfare of any individual, and confidentiality could not be observed in these circumstances (Mukherji, et al., 2014). Participants within the study, and those acting on their behalf, had access to data collected on them (parent/key worker interviews) or their child on request.

Once identified, the participants within each cohort were assigned an ID to retain their anonymity and it was this ID that appeared on all documentation and analysis. Given the close-knit community of the settings, additional care was taken not to inadvertently reveal identities. Given the focus of the research, avoiding specific detail was not a problem. In accordance with the Data Protection Act (1998), all electronic data, including recordings made and the resulting analysis, was kept on an encrypted memory stick before being transferred to a password protected home computer and university systems. All

handwritten notes and paperwork were stored in a lockable cupboard in a secure home office where, in accordance with university policy, it would be kept for a minimum of five years following the studies completion, at which point the encrypted USB stick would be reformatted and all paperwork shredded. There was also a registration in place with the Information Commissioner's Office (ico.org.uk/registered) to safeguard the holding of information. Supervisors at Birmingham City University and the Centre for Research in Early Childhood had access to shared data for purposes relating to the supervision of the study and participants had access to data collected on them at their request.

Potential risks to participants

In accordance with the United Nations Convention on the Rights of the Child, the study ensured that all actions were undertaken with the best interests of the child as its primary consideration (Article 3). This began with time spent at the nursery prior to the study so that a familiarity with practitioners and children was established. Mindful of the potential impact of power imbalance the *"least adult role"* was taken, not assuming expert knowledge or exerting power through directing movement or conversation (Buchbinder et al., 2006; p60). Children were not put in difficult positions such as asking questions they felt coerced or unable to answer (Alderson, 2005) and were always free to move away. Care was also taken regarding the potential for social or emotional harm, ensuring processes remained unthreatening and enjoyable, mindful of the influence and inclusion of others within the group (Robson, 2002).

Adverse risks from the observations and discussions with child participants were minimised by following typical daily activities and practices within familiar environments, however a constant awareness of any discomfort being experienced was retained and an unobtrusive position was taken as far as possible, ensuring actions did not affect experience. If detected, observations would have ceased and the assistance of familiar key workers, who were always present, would have been sought. Measures were also taken to ensure this was a positive experience for the settings through offers of time (school trips and Governor role) and resources (publications). External support details of the Local Authority were also offered through the Early Years Team at EYEnquiries@Milton-keynes.gov.uk, 01908 254509, should they be required.

Potential personal risk

Inspection of risk assessments within the nursery and school settings alerted any potential for environmental risk which were then managed. The potential for illness was a significant risk given the proximity to unfamiliar young children, however this was not an issue.

Social benefit

When considering the social contribution of the study, an awareness of the communities in which it was situated was important. To that end, the settings were visited frequently, parents' evenings were attended, and a School Governor role was taken on. Through these avenues, and additional conversations with all involved, findings from the research was disseminated. Knowledge gleaned from the observations were shared, for example a reluctant child seen mark making, recommendations for practice including articles of interest, and ongoing support such as a project to evaluate transition procedures within the school and accompanying the children on school trips.

Within a wider context, the research is designed to inform and influence ongoing practice, both through its enhanced knowledge of early childhood pedagogy and the wider research community through the methods it has developed. It aims to acknowledge the multifaceted learning potential of all children, rather than limiting their achievements to within narrow academic boundaries, viewing early education as the foundational basis developing children for their life roles.

Diversity and equality

All phases of the research and its analysis remained mindful of issues relating to diversity and equality, ensuring that selection choice of participation and involvement in the study reflected a range of ages, gender and backgrounds in so far as the study allowed given its focused approach.

Potential risks to the study

Through the Participant Information Leaflet and multiple methods of contact, every attempt was made to keep participants fully informed of the intentions, process and commitments of the study as well as indicating the beneficence of their involvement in it. In this way they were as informed as possible of their commitment and the nature of the study. However, the study acknowledged the potential for participants to withdraw from the study, unwilling or unable to continue. Should this have happened, discussions would have taken place to establish whether anything could be done to retain their involvement, if not, the decision taken would have been fully respected. Designed with this possibility in mind, additional participants were recruited from the outset. Data collected on each participant was individually stored and analysed so that their involvement could be isolated and removed, minimising any disruption this would have caused.

However, the study has always been at greatest risk due to its continued access to the children, with their involvement in the project required for two years. Had either of the settings decided to withdraw, the children under observation could not be replaced once the study was underway. To mitigate this risk, a larger cohort of children was selected to begin the process and every effort has been made to establish relationships with the children and the adults around them and bonds with the settings. Should the school have withdrawn, the possibility of understanding the children's ongoing experiences through discussions with parents and children outside school hours would have been considered.

Ethics involved in presenting the study

This original piece of research aims to extend knowledge of understanding in the early years by casting a new light on its pedagogies through the perspectives of children, and those who once were children. To ensure participants' rights within this process, the utmost respect was acknowledged for their contributions, ensuring they were depicted faithfully and in their entirety whilst carefully retaining their anonymity. When this involved children, attention was paid to ensuring their voice remained authentic through the methods detailed above, safeguarding their interests. This is in line with Articles 3 and 12 of the UN Convention on the Rights of the Child. The highest ethical standards were then employed throughout each method and stage of analysis, ensuring an academic and professional rigour is displayed through the study's transparent and comprehensive presentation.

Whilst embracing its philosophy, methodology and methods, the study acknowledges those that have come before it. Considering a wide range of alternatives, whose merits were honestly discussed, choices were made regarding the approaches and methods to be used, and justified reasons are given. Informed by previous work, the study was also able to develop and adapt its techniques, ensuring their robust and ethical execution. Through the literature reviews, complementary disciplines were explored, with the insights gained used to both inform and enrich this study. In keeping with ethics guidance, referenced work was selected through wide ranging search terms, allowing for the focus of the study to be rigorously served through an informed choice of authors. This is demonstrated in the wide range of material cited and the meticulous methods detailed. These methods directed attention towards many theories and concepts, some of which informed the direction of the

study through their positive contribution, others challenged thinking in uncomfortable ways. In each case, contributions were critically considered, acknowledged and debated as the study became better informed through the process.

Reporting its findings through sequential chapters allowed complex detail to be presented in ways sufficiently complete to be understood, interpreted and critically appraised by a wide audience. Inferences and generalisations were supported with primary evidence, including participant's comments and imagery. Methods of analysis were supported through each stage with detailed description, explanation and diagram. Through these methods, the findings can be considered reliable and credible, honest and trustworthy and the messages derived from them as valid.

I believe that this research is highly relevant and pertinent to the lives of children within this rapidly changing world. Its purpose in establishing the dispositions children require throughout their lives has meaning and value to every individual, on a personal level as well as through the impact this ultimately has on wider communities and societies, as shown throughout the study as reflections are cast from multiple perspectives. The original knowledge it generates through the unique views it offers makes a potentially impactful contribution to the field with the capability of challenging and innovating current practice. Mindful of its challenge to existing orthodoxies and assumptions, both now and in future publications, the presentation of the study has sought a respectful stance, allowing the detail within its data capture, methods and clear analysis to critically consider existing knowledge and practices. Through its unambiguous and accessible style, it seeks to reach, and impact a wide audience, providing convincing yet respectful comment throughout.

Ethics as the study concluded

During the research process, every effort was made to ensure no harm came to its participants. Feedback was offered to them throughout significant stages of the research process, whether this was in the moment, at the end of a session or at the conclusion of the research. This was an ongoing process with the children whose sentimentalities could change minute by minute, but also involved careful consideration with the culmination of the field work. During the two years of child observations, relationships understandably formed. To avoid sudden withdrawal, these have continued with regular visits to the school, an active School Governor role and attendance at key events, for example nativity plays and school outings. Offers have also been made to present the findings to the school and nursery and they will continue to be advised of any publications.

Given the potential impact of this work to advance scholarly knowledge and make significant contribution to the enhancement of early childhood practice, it is the intention of this study to widely disseminate its findings through publication, personal conferencing and technological strategies. Mindful of its professional responsibility, it will seek to address a wide range of communities, both professional and public with clarity and accuracy whilst remaining mindful of each individual audience. Communication styles will be adopted with the intended audience in mind, ensuring accessible language and depth of detail is appropriate to ensuring its validity is conveyed.

3.5 Establishing Trustworthiness

Within conventional quantitative and statistical research, demands for rigor are met through processes of internal validity, generalisability, replicability and objectivity. To address similar concerns for rigor within qualitative studies, Lincoln and Guba (1985) developed the trustworthiness criteria of credibility, transferability, dependability and confirmability (Figure 3.5.1) together with strategies for addressing them (Figure 3.5.2). Employing trustworthiness criteria analogous to "*scientific*" understandings of foundational convention, Lincoln (2007) suggests that these criteria are foundational to qualitative research.

Credibility	A degree of confidence placed in the truth of the research findings. Establishes whether the research findings are plausible given the original data.
Transferability	Illustrated through sufficient contextual detail, this suggests whether findings can be suitably transferred to other contexts, settings or people.
Dependability	Supported through the detail given, this suggests the degree to which similar outcomes would be expected if the study were repeated in similar conditions.
Confirmability	The degree of confidence that the findings emerge from its subjects and data, rather than predisposed biases, motivations or perspectives of the researcher.
Reflexivity	The process of critical self-reflection about oneself as researcher (own biases, preferences, preconceptions), and the research relationship (relationship to the respondent, and how the relationship affects participant's answers to questions).

Figure 3.5.1: Trustworthiness: definitions of quality criteria in qualitative research based on the work of Lincoln and Guba (1985)

Criterion	Strategy	Definition
Credibility	Prolonged engagement	Lengthy and intensive contact with the phenomena (or respondents) in the field to assess possible sources of distortion and especially to identify saliencies in the situation
	Persistent observation	In-depth pursuit of those elements found to be especially salient through prolonged engagement
	Triangulation	Cross-checking of data using different sources, methods or investigators. • Peer debriefing—exposing oneself to a disinterested professional peer to "keep the inquirer honest," assist in developing working hypotheses, develop and test the emerging design, and obtain emotional catharsis • Negative case analysis—the active search for negative instances relating to developing insights and adjusting the latter continuously until no further negative instances are found; assumes an assiduous search
	Member check	• Member checks—the process of continuous, informal testing of information by soliciting reactions of respondents to the investigator's reconstruction of what he or she has been told or otherwise found out and to the constructions offered by other respondents or sources, and a terminal, formal testing of the final case report with a representative sample of stakeholders.
Transferability	Thick description	Narrative developed around the context so that judgments about the degree of fit or similarity may be made by others who may wish to apply all or part of the findings elsewhere.
Dependability and confirmability	Audit trail	Requiring both the establishment of an audit trail and the carrying out of an audit by a competent external, disinterested auditor. The part of the audit that examines the process results in a dependability judgment, while that part concerned with the product (data and reconstructions) results in a confirmability judgment.

Figure 3.5.2: Definition of strategies to ensure trustworthiness in qualitative research. Based on Lincoln and Guba (1985)

However, by 2007 Lincoln and Guba advise caution in suggesting that criteria developed simply by extrapolating parallels from those rooted in positivism may less than serve the paradigms involved in the *"real-world"* conditions of school-based research (2007; p15). In response to this they offer a socially constructed authenticity criteria of fairness, ontological authenticity, educative authenticity, and catalytic authenticity (Figure 3.5.3). Whilst by no means complete, nor offering distinct techniques

to test adherence to it, they suggest this forms the next part of an "*inductive, grounded, and creative process"* (p24) that is now more rooted in naturalistic ontology, epistemology, and methodology. In doing so, they go on, it serves to address the ethical and ideological problems concerning social research and the schooling process within these complementary frameworks (Schwandt, 2007).

Fairness	Requiring collaboration between all stakeholders, it offers a balanced view presenting different values and belief systems and negotiation of any recommendations following the research.
Ontological authenticity	An awareness of changes within one's conscious experiencing of the world. Reconstructed through experience, interactions and consequences of actions and beliefs, to arrive at more sophisticated realisations.
Educative authenticity	An increased appreciation of the beliefs and value systems of others. Through an increased understanding of others persuasions (values and constructions), an appreciation of how different opinions, judgments, and actions are evoked, developing professionally and personally through more sophisticated and complex understandings of the groups they represent.
Catalytic authenticity	To facilitate and stimulate action, empowering stakeholders through their inputs, demonstrating decision-making power and collaboration to give a voice.

Figure 3.5.3: Authenticity criteria in qualitative research based on the work of Lincoln and Guba (2007)

Whilst the criteria discussed above offered some focus, there were key areas of concern that still felt exposed when questioning the trustworthiness and credibility of the approaches and findings of this study, even with the addition of the authenticity criteria. Shenton (2004) suggests that Lincoln and Guba's approaches to how credibility and truthfulness may be interpreted are reflective of our interpretations in everyday life, within shorthand expressions to benefit our ways of thinking of social scientific practices. Mindful of the real-world methodology of this study and its paradigm rooting its focus in experience, it was concerned about creating transparency within its interpretations of shared reflections and the practices observed as it sought to draw impactful meaning from them. A framework more reflective of this recognised reality was then sought and found in the work of Tracey (2010) and her eight *"Big-tent"* criteria for excellent qualitative research (Figure 3.5.4).

Aware of controversy and politics surrounding the funding and decisions made regarding qualitative analysis, where established criteria may be less than a natural fit, Tracy (2010) speaks of giving qualitative researchers a unified voice. Simultaneously celebrating the complex differences within the field, Tracey offers a unifying criteria that seeks to address some of the difficulties qualitative methodologists have *"making their ideas stick"* (Seale, 1999; p. 467), criteria that she suggests serves to guide best practice within a pedagogical framework suitable across a variety of interpretive disciplines.

Acknowledging the controversial notion of a universal criteria for qualitative quality, Tracey (2010) recommends freeing thinking from epistemology or ontology to agree on several common end goals of good qualitative research. This conceptualised set of eight common markers are designed to be approached via a variety of paths and crafts. Unbound from research methodologies, they transcend paradigm to embrace the variety of scope available, indicating goodness across a range of paradigmatic practices and crafts, the combination of which depends on the specific researcher, context, theoretical affiliation, and project (Tracey, 2010). This was considered to offer a framework more in keeping with the essence of this study and will be discussed below.

Criteria for quality The end goal	***Various means, practices, and methods through which to achieve***
Worthy topic	*Consider the topics relevance, timeliness, significance and whether it is interesting*
Rich rigor	*The study uses sufficient, abundant, appropriate, and complex theoretical constructs, data and time in the field, samples, contexts and data collection and analysis processes*
Sincerity	*The study is characterised by self-reflexivity about subjective values, biases, and inclinations of the researcher and its transparency about the methods and challenges*
Credibility	*The research is marked by its thick description, concrete detail, explication of tacit (non-textual) knowledge and its presentation style that shows rather than tells. It may offer triangulation or crystallisation, multivocality or member reflections*
Resonance	*The research influences, affects, or moves particular readers or a variety of audiences through its aesthetic, evocative representation, its naturalistic generalisations or transferable findings*
Significant contribution	*A significant contribution is provided conceptually/theoretically, practically, morally, methodologically or heuristically*
Ethical	*The research considers procedural ethics, situational and culturally specific ethics, relational ethics and exiting ethics as it leaves the scene and shares the research*
Meaningful coherence	*The study achieves what it purports to be about using methods and procedures that fit its stated goals. It meaningfully interconnects literature, research questions/foci, findings, and interpretations with each other*

Figure 3.5.4: Eight "*Big-Tent*" Criteria for Excellent Qualitative Research, Tracey (2010)

Worthy topic

As established within the rationale of the study (Chapter 1.1) and further elaborated within the literature review (Chapter 2.1), current demands within the Early Years can see practice skewed to delivering formal teaching styles long before children are developmentally ready. Set within a current political climate that sees practitioners troubled by these demands and a personal significance established through experience practicing and leading within the industry, this study was undertaken to look beyond pre-established goals and linear objectives to understand the impact pedagogy has on children's early experiences.

Troubled by observations of vibrant, enthusiastic children becoming disengaged from learning once their natural dispositional instincts to learn were removed, this study sought to capture children's experiences and shine light on this deeply interesting phenomenon. With its personal significance reflected in its devotion, as Miles & Huberman (1994) supposed, every effort has been made in exploring this worthy topic. Novel methods were designed and developed along with the necessary time spent collecting and interpreting the data to offer a unique insight into the impact of pedagogy on children's experiences. Through these rigorous processes, exciting reflections challenge assumed pedagogies and classroom formats as it recognises that more than academic outcomes are threatened. Through its methods, compelling evidence is offered to further the debate, presented in ways ready to be utilised by change makers and the profession through its resulting theories and recommendations.

Rigor

Mindful that rigor within the multifaceted nature of qualitative research cannot be demonstrated through precise or consistent results more familiar to quantitative study, rigor within this study is offered through the meticulous design and application of its methods. The presentation of the findings and analysis is steeped in detail, offering descriptions and explanations throughout its theoretical constructs, intricate data, contexts and samples (Weick, 2007), the reliability of which was secured through on-going self and participant reflection.

During the fieldwork, multi-faceted experiences of children were captured every week for two years. Whilst it is beyond the scope of this study to capture every experience of learning within the early years, the methods of naturalistic observation sought to unobtrusively capture the widest representation possible (Saracho, 2017). Completed in the moment, with personal reflections added in the hours following (Shenton, 2004), these methods combined rich descriptions and coding to minimise the limitations of each (Clough and Nutbrown, 2007). Observation criteria was stipulated using theoretical constructs that embraced the curriculum themes (Chapter 1, Figures 1.2.2, 1.2.3 and 1.2.4), reflecting the demands of an EYFS setting, whilst its methods captured the pedagogies utilised (Chapter 3). With no additional demands introduced by the study, pedagogical impact on engagement could be observed. Mindful that observations and coding were subjective, frameworks were written to guide (Figure 3.1.2 and 3.1.3) and observations repeated many times, with each child's experiences documented for over 15 hours.

These methods and the rigorous analysis procedures are illustrated through sequential chapters, beginning with the raw data of a child case study (Chapter 4), before bringing all the children together (Chapter 5) and reflecting on the messages offered as the phenomenon is viewed through a variety of lenses (Chapter 6). The extensive time in the field, the complementing methods used within the phases and the consistent application of purposely designed methods allowed a crystallising of the meaningful and significant claims to emerge. These are then used to address the research questions and discussions within Chapter 7, supporting the theories and recommendations that emerge.

Sincerity

The study began with a personal statement (Appendix A), as suggested by Robson (2002). By considering personal strengths and vulnerabilities, potential bias and motivations before commencement, this honest and transparent account rooted the study in authentic and genuine sincerity. To retain this authentic sincerity, the methodological procedures and emerging findings of the study were regularly shared, inviting questions and reactions (Lincoln and Guba 1985) to challenge any unguarded bias. As the study has encouraged challenge, informally through peer groups and presentations (Shenton, 2004), formally with supervisors and when presenting at research conferences, this level of sincerity retained within its thinking and logic has allowed emerging interpretations to be clarified, challenged, confirmed and expanded, guiding the development of the study.

The potential for impartiality, whilst not neutralised or silenced (Coffey, 1999), was tempered through the depth and range of data gathered and the transparency and self-reflection processes incorporated into the study design and weaved throughout the research report. Beginning with the framework chapters of 1.1 and 1.2 the approach of the study was detailed, with clear accounts of its methods provided in Chapter 3. Reactions and reflexive considerations can be found in the pilot study and candid field notes (Chapter 4), displaying subjective reflections (Mauthner & Doucet, 2003) and honest accounts of the on-going process (Seale, 1999). Journal entries completed after every contact identified significant events and evaluated the strengths and weaknesses of the experience (Mukherji et al. 2014), documenting the evolving study and decisions taken (Appendices A, K and L). Utilised as a *"vehicle for reflection"* (Moon, 2006; p1) and a valuable feature within the analysis (DeVault, 1997) journals also documented emerging thoughts and feelings (Mukherji et al. 2014) as understanding and experiences grew, allowing for reflection on methods and possible improvements, theoretical ideas and underlying themes within the data (Saldaña 2013).

To ensure transparency throughout the research report, the data is presented from first principles (Chapter 4) with original case studies, complete with authentic anecdotes and imagery. Chapters 5 and 6 demonstrate every step of the analysis procedure through well documented, sequential stages before discussing its meaning in regard to the research questions in Chapter 7 where the joys and mistakes, challenges and particularities were discussed (Stake, 2000) and its theories evolved. Corroborated

with further examples and supporting documentation found throughout the Appendices, detail is provided of every contact made.

Concern for findings to be swayed by potential preconceptions were mitigated with the aid of feedback loops and regular conversations with practitioners and teachers in both settings, offering opportunity for all participants to clarify and add to evolving meaning. This also served to strengthen ethical relationships and aid the authenticity of the study as participants' understanding of purpose became better informed and assumptions, interpretations and analysis were more effectively validated. The impact of personal presence was recognised and eased through preliminary familiarisation visits. Time was also spent in the family home talking to the parents and discussions were had with their keyworker. Before attempting to judge children's engagement through their observed reactions, this prolonged six-month introduction period allowed authentic relationships to build so that children could behave more naturally. Negotiating access and trust in these ways allowed insights otherwise shielded or hidden to be readily shared. The subjective nature of the observations was further diminished through the number of observations documented before any trends were suggested.

By exploring the questions posed by the study through a variety of contexts and methods, an evolving strength and depth was added to its findings. The research evidence was gathered in such a way as to make it authentic and accessible to subsequent critical assessment, with rich descriptions supporting the coding systems applied. Formal audit trails are presented throughout the report as clear documentation of all research decisions and activities are offered (Creswell & Miller, 2000). Ongoing analysis remained aware of biases and potential goals, ensuring all data collection and auditing was consistent, structured and well documented.

Credibility

This research looks at the impact of pedagogy on children's inclinations to act in certain ways, making assumptions from the actions of the children observed. Given that any insight offered is dependent on an array of complex variables, clear transparency of its methods was required, and offered, to achieve its degree of credibility. To support this process, the multiple observations and interviews utilised a range of applied methods, allowing the phenomena to be explored across a range of participants, environments and contexts as comparisons were drawn and underlying truths emerged. As sole researcher, uniformity of data collection (Stake, 2000) and homogenising of techniques (Coffey, 1999) was not an issue beyond personal consistency which was managed through the clear documenting methods. These are presented along with thick descriptions and detailed procedures to explicate the steps taken and the findings suggested.

The abundant detail contained within the observation sheets allowed for a consistent approach (Appendices I to M). These sheets illustrated the specific circumstances of the data (Tracey, 2010), explicating culturally situated meanings and securing the tacit detail relied on to make assumptions regarding the children's actions, and were used to inform the analysis stages.

Within its interpretive paradigm, this study recognises that one universal truth can neither be expected nor sought (Guba and Lincoln, 2005). Within each setting, multiple incorporated data types, viewpoints, theoretical frames and methods allowed processes of crystallisation to reinforce the messages suggested, exposing different facets of interpretation (Ellingson, 2008) as more complex and detailed levels of understanding were reached. These well-established research techniques offered a crystallising view of the phenomena through a variety of contexts, which, through its strongly established audit trail and clear presentation, allows readers to consider their own conclusions as the theories and recommendations are presented.

Resonance

This research speaks of the consequence adults' actions can have on the opportunities and ongoing development of young children. This, in itself, is evocative, so care was taken to balance the integrity of the report whilst allowing its aesthetic to give credit to the strength of its message. This it does by delivering the evolving messages through direct testimony and rich descriptions with accessible writing and images, encouraging the reader to think, feel and respond (Richardson, 2000). Despite its complex narratives, it seeks to resonate with the experiences of the reader, promoting an empathy with its participants and identification with the practices it describes as a vivid and engaging story is constructed (Bochner, 2000).

Tracey (2010) advises that to inspire improvements in practice, a feeling of personal knowing is required, despite not having direct knowledge of the experiences discussed. When writing provides a vicarious familiarity, she suggests, impactful choices can be made based on intuitive understanding, rather than being told what to do. Care has then been taken to present the significant content of this study with clarity, encouraging a wide readership to identify with the material. By finding comprehension and value across a variety of contexts and situations, beyond the time and place in which this research is set, it is hoped that this study will resonate across settings, populations and circumstances, placing its insights within a larger frame.

Significant contribution

As proposed by Tracey (2010), this study seeks to contribute to an understanding of social life, in this case through its significant insights into early years teaching and its discussions of ongoing impact. By capturing children's reactions to the typical demands and practices of the classroom, it demonstrates how pedagogy affects children's engagements and responses to learning opportunities. This significant contribution is presented through the Theory of Lifelong Development - in Childhood (ToLD-C) as it specifically considers how this pertains to childhood. These findings are then offered application through the Method of Improved Childhood Engagement (MICE).

Through its creative and insightful methodologies honed for the purpose, I believe the study presents novel approaches to capturing and analysing data, presenting its unique findings in ways capable of influencing practitioners, teachers, policy makers and the public. Problematising current assumptions of academic teaching with compelling evidence in the form of recommendations as it encourages readers to probe more deeply, asking questions of current practice so that a wider understanding of children's potential may be realised. By addressing social issues of practical significance, it seeks to empower change, carefully discussing what are impassioned agendas (Tracey, 2010) in the hope of inspiring further, heuristic significance through the interest and curiosity it develops.

Ethical

Procedural and situational ethics were followed as recommended by EECERA and detailed in full in Chapter 3.4. The measures taken to manage these (as discussed in Chapter 3.4) were critiqued and questioned through the systems of checks detailed, including reflective journaling and peer and supervisor discussions. Relational ethics were also considered through the personal reflective accounts and journals written throughout the process. Through these measures, self-conscious reflections considered the choices and decisions made, acting to ensure these came from a place of mutual respect, dignity, and connectedness, as Tracey (2010) advocates. Having taken the time to form relationships with those involved with the study, an awareness of the ramifications of being present were known, as well as the impact of withdrawal. To this end, visits and support continued after the study, continuing the reciprocity of the relationship.

Meaningful coherence

The study aimed to eloquently address complex questions impacted by many variables. It does this through its multiple methods and procedures, adapting these for the purpose where required. Informed by the theoretical framework and research questions (Shenton, 2004), the methods of data collection and analyses were carefully selected and adapted to serve the phenomenological methodology and purpose of the study. Involving two settings, care was taken to ensure the complexity of the study design did not confuse or detract from its meaning. It does this through its continual signposting, diagrams and the interconnecting of research design elements, data collection, and analysis. These are clearly situated within the theoretical frameworks and goals established in the foundational chapters (Chapter 1).

Questioning and observation criteria, intentions and environments were carefully considered, researched, defined and adhered to, with consistent and linked methods employed. Clear audit trails throughout the coding and analysis process demonstrated how the coded and detailed observation summary sheets evolved from raw data to codes, categories, and then themes, as in the 2015 study by Peck and colleagues. With the intentional links allowing one to be informed by the other.

When presenting the study, care has also been taken to meaningfully interconnect the literature that supports it. The literature review situates the study, from which the research data and reflections develop an exploration of the key concepts of the study material. As the research findings and analysis are interwoven and combined with further supporting literature to address the proposed questions, this allows for a comprehensible and meaningful report. The conclusions and resulting recommendations of the study are shown to persuasively interconnect as the controversies cited within the studies proposal are addressed along with the questions it posed.

4.0 Introducing the field work

The study followed ten children over two years as they attended their last year of preschool and their first year of formal schooling. Visited on a weekly basis, each child was the focus of over fifteen hours of dedicated observations demonstrating their experiences of the phenomenon of learning through their actions and reactions. Examples of the process and findings from one child is included (Chapter 4.1) to illustrate the methods used and the insights they generated. This focus on one child offers a realism to the study as genuine experiences are portrayed, offering detail which can too often become lost in the analysis of data. These findings were then combined with those from the other nine children for the primary analysis stage (Chapter 5).

4.1 Child study - Example case study - Child 2

To demonstrate the process and findings of the field work, one case study is presented through examples of completed observation sheets, selections of supporting images and comment. To demonstrate the emerging findings at this stage, the experiences of this child are demonstrated through multiple means as an insight is offered into the experiences captured for each child in the study. Supplementing visits with regular meetings with key workers, teachers and parents along with conversations with the child allowed an understanding of each child to establish over the years, offering further credibility to the comments made.

Preliminary visits, meetings with children, parents and key workers

A summer baby born in July, C2 is the youngest of three boys, his brothers 7 and 9 years his senior. When observations began, C2 attended three full days, Tuesdays, Wednesdays and Thursdays. By the beginning of the third term he was attending full time in readiness for starting school in September 2018 aged 4 years and 1 month.

Introduced to me as having a winning smile to match his cheeky personality, C2 was shy at first but soon warmed to my presence, often at my side to ask questions he was visibly interested in seeking the answers to. From my first visit he appeared to be consistently on the move, even when eating he would be physically moving, banging his feet in a stomping motion. Always busy with much to see and do, he would often forget to slow down around others and consequently, was happiest outside with more freedom of space and opportunity where his physical nature would not place him at a disadvantage.

Although he would often play independently, he appeared confident and very vocal, using continual dialogue within his play, and to attract adult attention. Occasionally dipping into parallel and associative play, he was rarely observed in cooperative play and would engage with adults in equal measure to the children, although the children responded very positively to him. He would freely access and manipulate multiple resources, deeply engaging in various mark-making and problem-solving opportunities, as can be seen below as he attempts to remove pen from various surfaces with a whiteboard eraser (Figure 4.1.1) before playing at taking the register during my first visit (Figure 4.1.2).

Figure 4.1.1: C2 mark making and problem-solving

Figure 4.1.2: C2 playing at taking the register

Meeting with mum in the home, we discussed his tendencies towards the dispositions. She described him as having a love for outdoor, physical and practical play such as woodwork, although she suggested he would rather be on his own as he finds sharing difficult. Preferring active play, she told me he struggles to settle to sedate activities, but is very self-motivated and curious, provided he has an interest. Happy to socialise in unfamiliar situations, she also spoke of his empathy, being quick to use humour when detecting unhappiness.

She spoke of his courage and confidence, independently running for items when shopping and selecting his own outfits. Happy to go with the flow, he was described as adaptable, reflecting on issues and problem solving his own solutions, for example when in trouble he may retreat for a time, coming back to say *"I've been sat on the naughty step so you don't need to smack my bum!"* Aware of everything going on around him he can be highly creative in his play, with a great imagination he is a good storyteller and loves to share books with his dad, role playing reading and writing. His brother has an ADHD diagnosis and with extreme dyslexia in the family, mum spoke of hating school and expressed concerns for her child. At the time of interview, the child was 39 months old.

At the time of speaking to the key worker she had known the child in this role for 7 months. Described as "*Unstoppable!"* she suggested he is happy to try most things, provided he is engaged, otherwise he quickly loses interest, which she reflected on as a lack of motivation. She also spoke of a lack of confidence, noted as he moves away from new things when adult led, yet freely able to demonstrate required skills when fuelled by his own interests. She had noticed little imagination, describing him as "*Charging around a lot because he doesn't have that deeper concentration… [imaginative play] wouldn't occur to him."* She suggested he would never verbalise his play or demonstrate an intuitive or curious reaction, playing "*Very fleetingly… always flying around rather than settling to play*" focusing only when it is something he really likes.

She did describe him as adaptable and sociable, happy to talk to anyone, but tends to "*Whip [children] up with his actions*" rather than engage, a physical "*whirlwind*" but with no aggression. Happy to do things for himself she suggested he was not practical or reflective, being too busy to settle down and think, he was less interested in settling with a book, preferring to quickly move on, frustrated when things do not work immediately. She spoke of active reluctance towards any style of thinking, with any interest needing to come from him independently and lost if an adult engages with him. A very easy-going child, loved by the other children she suggested he is rarely upset and quick to apologise, which she suggested was a learned response rather than any show of empathy, although he will come and tell you if someone is hurt or crying.

The differing views of these key adults were also noted in the FOLLEP scores given by them as seen in Figure 4.1.3. As illustrated within this graph, these differing views were substantial, questioning perhaps any predisposition these key adults may have when viewing the actions of the child, their expectations of him and potentially the experiences he might be afforded. It may also call into question the perception the adults had of these dispositions, and therefore the time opportunity and recognition given them. For example, for a parent to recognise highly imaginative responses from their child may suggest imagination is valued within the home, or that particular opportunities are offered so that the child may embrace this side of their character. For the key worker to not recognise imagination as a particular aspect of the child's personality might suggest that any imaginative capabilities are underestimated or that their efforts are being overlooked. Whilst not the focus of this study, these discrepancies of view offered an interesting reflection worthy of further study, especially when considering assessment process that rely on the full extent of a child's capabilities being noted by the adults around them.

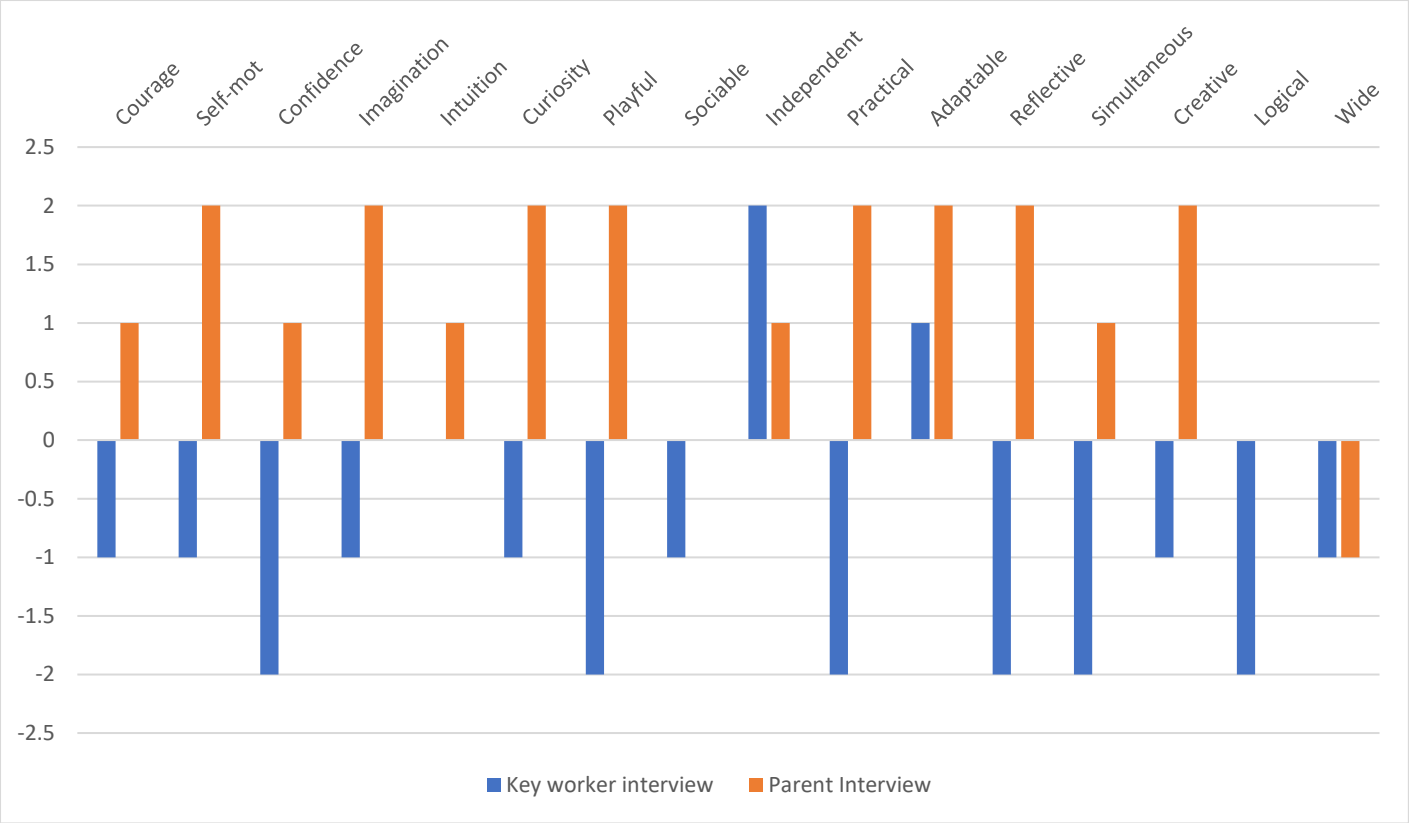


Figure 4.1.3: Differing FOLLEP scores awarded by the parent and key worker

Rotating observations

As with all ten children in the cohort, C2 was observed four times during terms 1, 3, 4 and 6 (16 times in total) alternating between the sheets below that focused on environmental variables of Teaching styles, Distractions, Location and Encouragements (Figure 4.1.4) and child centred variables of Interactions, Involvement, Grouping and Initiative, (Figure 4.1.5). With each visit rotating through four focused observations, a detailed picture of the child's experience was gathered, complete with rich description (1), coded variables (2) and levels of engagement within all 16 dispositions expressed through the FOLLEP scale (3). This was completed with additional notes regarding the child (4) and supplemented with a visit journal. These observations allowed for a detailed insight into the child's experiences to develop over the weeks and are encapsulated here with examples taken from each term (Figure 4.1.6 - 4.1.15).

Date	Day	Session	No. A	No. C	Name	Gender	DOB	No of sessions	Key worker
06 06 18	Wed	pm	**6**	**23**	C2	Male	24 07 14	10/10	KW1

Rate each feature from -2 to 2 for each of the 4 observations.

Obs.	Courage	Self-mot	Confidence	Imagination	Intuition	Curiosity	Playful	Sociable	Independent	Practical	Adaptable	Reflective	Simultaneous	Creative	Logical	Wide
1	2	2	2	2	2	2	2	2	1	2	1	2	2	2	2	2
2	2	2	2	1	1	1	2	2	2	0	1	0	1	0	1	0
3	2	2	2	2	2	2	2	2	2	2	1	1	1	2	1	1
4	-1	0	0	-1	1	-1	1	1	1	2	1	1	1	0	0	0

Time	Child's experiences	T. styles	Distractions	Location	Enc'ment
1	He is down in the front door region with C9 where strictly speaking they are not permitted. They have not been noticed and are busy measuring the radiator with the large tape. They come running back into the room and find a drill which they run back with. Another child becomes interested and they secretly move to a more hidden corner of the area, whispering together. They have been noticed and all come out, bringing the tools with them.	T 1 - 5	D 1 - 5	L 1 - 5	E 1 - 5
13.08		T5	D5	L4	E5
In					
2	Playing on the climbing frame he is briefly interested in the KW trimming the bush that pokes through, them jumps off the fireman pole where on landing he notices a game of "What's the time Mr Wolf?" Which he readily joins in with. He giggles emphatically as he begins chasing the children. He then notices the protective cover on a pole and tries to climb up it. Running around again he trips over a child sat on the floor, while she starts crying, he jumps up from the heavy fall all smiles and runs to explore the step ladder.	T 1 - 5	D 1 - 5	L 1 - 5	E 1 - 5
13.40		T5	D5	L5	E5
Out					
3	He has become interested in the outdoor mud kitchen. He is helped into an apron and begins mixing mud, sand and water in a pot, using various tools and containers, pouring water into the various vessels. He comes back to tell C9 that he has poured the water. She comments that it's disgusting, that it looks like poo, this makes him laugh but he happily carries on, really carefully carrying the liquid and pouring from very full cups without spilling. C9 spills a big pot of water on the floor and there is great problem solving in their discussions and actions how they are going to get across the water. 1	T 1 - 5	D 1 - 5	L 1 - 5	E 1 - 5
14.12		T5	D5	L5	E5
Out					
4	He is in the playhouse where a child is upset about something not going her way. He looks on, seeming to not comprehend the issue, or why she reacts like this. She complains she can't get out and he moves so far away as to be behind the furniture. He moves out and explores something else. Coming back (once the girl has moved on) he is back making everyone laugh again and is clearly much happier. Despite the hustle and bustle he is back in his element.	T 1 - 5	D 1 - 5	L 1 - 5	E 1 - 5
14.44		T5	D5	L5	2
In					

Notes

C2 has been his usual cheeky self today, exploring in ways that stretch the limits of that permitted, but in doing so has managed to engage in some deep discussions, to trial different hypothesis and explore in some uniquely fulfilling ways. He manages to achieve this whist always remaining out of trouble because as soon as he is noticed, he happily adapts his behaviours in ways preferred. He has explored his physical play a lot today too – climbing and jumping from height being a continual intermission to the running play. This does settle into some deeply concentrated moments.

FOLLEP Rating Scale	
-2	Active reluctance to engage, don't volunteer verbally or physically.
-1	Will indicate this feature but reluctant, finding alternatives if poss.
0	Shows indifference, or there has been no opportunity for it.
1	Keen to engage in this feature, indicating a comfort within it but will easily move on to another.
2	A clear feature of choice, will actively seek it out and return, showing clear enjoyment.

Figure 4.1.4: Physical environment focused observation sheet (examples are included in Appendix K)

Date	Day	Session	No. A	No. C	Name	Gender	DOB	No of sessions	Key worker
25 04 18	Wed	Pm	6	23	C2	Male	24 07 14	10/10	KW1

Rate each feature from -2 to 2 for each of the 4 observations.

Obs.	Courage	Self-mot	Confidence	Imagination	Intuition	Curiosity	Playful 3	Sociable	Independent	Practical	Adaptable	Reflective	Simultaneous	Creative	Logical	Wide
1	1	2	2	2	1	1	1	0	1	2	1	1	1	1	0	1
2	1	2	2	2	2	2	1	1	1	2	1	1	0	2	1	1
3	1	1	1	0	0	1	1	1	1	0	1	0	1	0	0	1
4	0	0	0	1	1	1	-1	-1	-1	0	1	1	1	1	0	1

Time	Child's experiences	Interactions	Involvement	Grouping	Initiative
1 13.44 Out	It is pouring with rain, but this does not impact his play – they are playing chase up and down the garden and path, excitedly chasing each other. His play then moves into the sandpit where he plays with another, working together to fill a bucket with sand. He then moves over to the kitchen, searching for something? Then starts to 'do the dishes'. He sees a child drawing "Excuse me – do you need this? A conversation starts which he manages well, then goes back to the sink, filling one cup with water then pouring into another, then into a jug, then into another. Stirring with a spoon he tells everyone what he is making.	TC	4	I	4
2 14.16 In	There is a table with a dark cloth that he has been playing under with the torches, investigating when the torches stop working. As he sees me watching "Excuse me – would you play with me, in the sand?" I go with him and he asks me to help shovel sand into a bottle through a funnel. We keep going till it is almost full – he continues then becomes confused when the sand stops flowing – we investigate and find that the bottle is full. We pour it onto our arms investigating its feel "It tickles… it sticks on my arm".	TC - A	4	I	4
3 14.48 In	He has come over to a table where a key worker is working 1:1 with another child. He joins in the drawing activity, asking questions and becoming involved in the play. Another child comes over and shows his belly – C2 is quick to show his belly button, announcing the fact to the group while giggling, then encouraging the others to do the same. He then settles back down to the drawing activity. He hears a noise and becomes distracted, moving off to find a different activity.	TC - A	2	I	4
4 13.20 In	They are starting quiet carpet time at the end of the session. The groups are being split between the rooms and he is full of questions regarding what is going on. As the book is introduced and questions asked, he is quick to respond and is congratulated on his contributions. He is very keen to hear the story and actively listening, ignoring the distractions of others and asking questions about the characters. 4	TC - A	3	WG	1

Notes

As is often the case, C2's play alternates happily between enjoying his own company and that of others. Where he used to struggle when coming together with others, he does this with ease now, although he does not need it. Happily moving independently around the space, he happily finds entertainment with many things, combining resources as he explores. When asking for my involvement in his play he happily engages with investigations, trying to understand why certain things are occurring. He also enjoys repeating things for himself for greater understanding. He is happy to please the adults around him, but if not requested to, is just as happy to explore independently, taking advantage of everything on offer.

FOLLEP Rating Scale

-2	Active reluctance to engage, don't volunteer verbally or physically.
-1	Will indicate this feature but reluctant, finding alternatives if poss.
0	Shows indifference, or there has been no opportunity for it.
1	Keen to engage in this feature, indicating a comfort within it but will easily move on to another.
2	A clear feature of choice, will actively seek it out and return, showing clear enjoyment.

Figure 4.1.5: Child focused observation sheet (examples are included in Appendix L)

Term 1 – Preschool

Obs.	Courage	Self-mot	Confidence	Imagination	Intuition	Curiosity	Playful	Sociable	Independent	Practical	Adaptable	Reflective	Simultaneous	Creative	Logical	Wide
1	1	2	1	2	1	1	2	2	2	2	1	1	1	1	1	1
2	1	2	1	2	1	1	2	2	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1	1
4	2	2	2	2	2	2	2	2	2	2	2	1	2	1	1	2

Time	Child's experiences	T. styles	Distractions	Location	Enc'ment
1	Sat on KW table as children are coming in, he is playing with playdough, making tracks with the wheels of his truck. His actions and vocal attempts are making the children laugh repeatedly. They are now copying the track making for themselves and he is responding to their encouragements. He is asking to go in the home corner and is being told he can later. He asks me what I am doing and is keen to show me his tracks, I ask if I can take a photo and he's keen for me to do so. KW offers a rolling pin, and he smooths the track then experiments with different pressures.	T 1 - 5	D 1 - 5	L 1 - 5	E 1 - 5
9.20		T4	D5	L2	E4
In					
2	He is playing with another child. Wearing his fireman's hat, he is carrying a large stack of cones through the room. "There is a dinosaur and a fire!" They find a secluded area near the front door which they cordon off with the cones warning the other children that there is a dinosaur and a fire, and they cannot come through. A staff member sees where they are playing and moves them away (they cannot play near the front door). "Ooooooow… but there's a dinosaur and a fire!" They move the play up into the room but soon lose interest. He rotates through a few areas- sand, water. He has a pen in his hand which he comes and shows me. There are shells in the water, and he tells me he can hear the sea putting it up to his ear.	T 1 - 5	D 1 - 5	L 1 - 5	E 1 - 5
9.51		T5	D2	L3	E4
In					
3	Playing in the sand he is asked to keep the sand in the sandpit… at the same time as his truck dumps its load onto the playground. He looks up for guidance/reassurance?? The KW suggests he uses his digger to scoop up the sand and take it back to the pit. This engages him, and he is quick to do so, fully motivated until the bell for tidy up time goes. He then runs off to find his friend in the 'secluded corner'.	T 1 - 5	D 1 - 5	L 1 - 5	E 1 - 5
10.23		T4	D2	L2	E3
Out					
4	He is now playing in a group of four. They are playing that it is Halloween, and they are scaring people. Running through the rooms together C2 is always in the lead, "This way". They are asked to walk but with huge smiles they are deeply engaged. They have laid blocks as a train which they sit on briefly, but he quickly announces that they need to get to the fire station. He is using various resources within his play, a bunch of keys, cups. They go to see the manager who suggests they find the door the key opens, and they run off again excitedly.	T 1 - 5	D 1 - 5	L 1 - 5	E 1 - 5
10.55		T5	D5	L4	E5
In					

Figure 4.1.6: Physical environment focused observation, Term 1 - Preschool - 16/11/17

This session saw consistently high levels of engagement throughout the dispositions (Figure 4.1.7), especially during the fourth observation where high levels of autonomy were afforded. C2 was seen embracing his imagination and independence within

> C2 was really engaging today – both with me and with other staff and children. Often lost in his own world, today he was inviting me in, coming to me to show me things and ask for his photo to be taken. He played closely with another child throughout the session, utilising resources from many areas to progress imaginative and evolving play – even when environmental boundaries were put in place the play was able to find outlets. He was very confident in his environment today and often led the play with various others keen to follow.

the freedoms offered, quickly attracting sociable and playful engagements where his self-motivation and practical tendencies shined Figure (4.1.8).

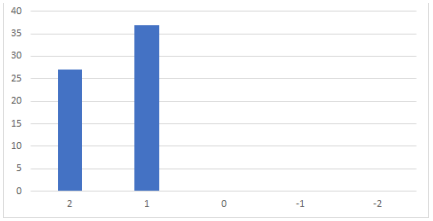


Figure 4.1.7: Instances of FOLLEP scores across the dispositions

Figure 4.1.8: C2 Making tracks with wheels, safeguarding children from the fire and problem solving a spillage

Obs.	Courage	Self-mot	Confidence	Imagination	Intuition	Curiosity	Playful	Sociable	Independent	Practical	Adaptable	Reflective	Simultaneous	Creative	Logical	Wide
1	2	2	2	1	1	1	1	0	0	1	1	1	1	1	1	1
2	0	0	1	1	1	2	1	0	1	1	1	1	1	0	1	1
3	0	2	1	2	2	2	1	1	1	2	1	1	1	1	1	1
4	2	2	2	2	1	2	1	0	2	2	2	2	1	1	1	1

Time	Child's experiences	Interactions	Involvement	Grouping	Initiative
	Running out into the garden he goes straight into the playhouse where he knows there is a new kitchen. He				
13.32 Out	the bricks lost he runs back to the playhouse. A new child is on a tour, he passes a cursory glance but not overly interested. On the other side of the fence a drain is being unblocked and he watches with interest as poles are added, asking questions and concerned about where his mum's car will go. He briefly goes to play with music but comes running back when told more polls are being added. It's then time to go in - on the way back he spots a mud patch and is fascinated by it. He's repeatedly asked to "Go around the mud patch, not in!" unable to leave it he puts a toe in the edge.	TC	4	I	4
3 14.04 In	Inside he is 'speaking' on a phone to his dad, the conversation is long and involved, drawing others in. A KW speaks to him briefly and he moves on, going to explore the foam play. A child has dabbed foam on her face, "I will go and get a towel", in the excitement foam is down my arm and he cleans this off for me before saying, "I will go and wash my hands". He comes back and makes tracks with a car, reapplying foam directly to the wheels, deeply interested in the pattern. He's asked to clean a blob of foam off the floor and he does so happily then returns back to his play. Asked about snack, "No thanks".	TC	4	I	4
4 14.36 In	Very keen to climb he goes as high on the building blocks as he can get away with before being asked down. Interested in the blocks he starts exploring, very excited to have found keys in with them. He then tries stacking blocks up high on a lorry, they are hollow and will only go one way but he pursuits until he is stopped. He's aware of others "xx is watching me…" and noticing a child pulling on a string, "You mustn't pull on that". He is also interested in what others are told. He becomes fascinated by the effect of putting handfuls of the sand and stone mix from a tray into the garage and watching it trickle down. The sand remains at the top while the larger stones move down through. When told to tidy up he happily starts sweeping up the spilt sand.	TC	4	I	4

All observations today saw C2 playing independently with high freedom of choice, this attracted some intense engagement from him. Despite not seeing C2 for a couple of weeks (Easter) he was immediately happy to see me and quick to engage me in his activities. His speech and confidence continue to develop well. His investigations were again very noticeable today – constantly keen to explore what things can do (are doing) he manipulates the resources and his environment accordingly. Being told to stop will see him do so without fuss or argument, but within minutes he has found something else to investigate.

Figure 4.1.9: Child focused observation, Term 3 - Preschool - 12/04/18

Positive engagements with the dispositions were recorded through most of the observations (Figure 4.1.10). Where indifference was shown, for example in courageous tendencies, this was balanced with high engagement elsewhere. Curiosity, self-motivation, imagination, confidence and practical tendencies all scored particularly high during this session as is reflected in Figure 4.1.11.

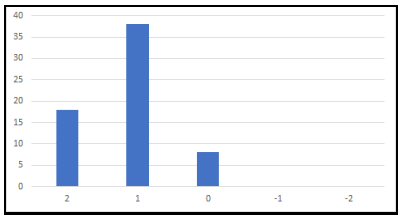


Figure 4.1.10: Instances of FOLLEP scores across the dispositions

Figure 4.1.11: Interested in unblocking drains, speaking to dad, investigating wheels, mark making and exploring different actions of sand and stones

Obs.	Courage	Self-mot	Confidence	Imagination	Intuition	Curiosity	Playful	Sociable	Independent	Practical	Adaptable	Reflective	Simultaneous	Creative	Logical	Wide
1	1	1	1	0	1	0	0	1	0	0	1	1	1	0	1	0
2	1	2	1	2	1	2	2	2	1	1	2	1	1	1	1	1
3	2	2	2	2	2	2	2	0	2	2	2	2	1	2	2	2
4	-1	-1	0	-1	0	0	-1	-1	0	-2	-1	1	0	-1	0	0

Time	Child's experiences	Interactions	Involvement	Grouping	Initiative
1 9.11 In	C2 has been sat on the carpet for ten minutes but is still happy to join in. Time to stand for wake and shake and he does so with many giggles, turning around to see how others are doing. Clearly enjoying the physicality and music of the session he is joining in with the activity as much as he can, given the novelty of the words and movements, although most of the activity is done with his hands in his pockets. Sitting back down he is quick to settle again.	A - GC	4	WG	1
2 9.50 Out	His group have now come outside. They are expected to stand still and be told where they can go – he is told off for talking… as soon as directed, he runs to the shed, keen to find a resource. He takes some time to emerge and is having involved conversations with the other children in there. This has slowed him enough to notice some less physical resources and has a "wow!" moment over some cameras which he packs into his trailer and cycles off with. Handing equipment out to the other children. He uses lovely rich language – "I'm in front, you need to be behind…"	TC - C	4	P	4
3 10.18 Out	He has found several planks and has carried an armful out into the larger space. Independently he is trying to join them together, thinking they may be magnetic he perseveres at trying to get them to join. He tells me he is trying to make a barrier so that the children do not go under the covered area (this has been excluded for today). He cannot get them to join, making his 'wall' idea problematic, so tells me he is now leaning them against the wall to indicate the direction the children should be going in.	TC	4	I	4
4 10.52 In	Having finished watching a TV programme they are now on the carpet doing physical action rhymes – all from a seated position. He is inclined to sit with his legs out and leaning back on his arms, limiting the ways he can use his arms during action rhymes. The story starts but he is becoming physically agitated and getting told off for it. Trying to keep his body still he is scrunching his face and blinking rapidly trying to get his movements out in that way. He offers comments during the story ("My lizard died" when a lizard appears in the story) but is ignored.	A - GC	2	WG	1

Figure 4.1.12: Child focused observation, Term 4 - Reception - 27/09/18

C2 has been deeply involved in his outdoor activities today. He has really struggled with his time on the carpet. As the session was coming to an end he was clearly struggling, clearly physically very uncomfortable and trying to conform but this was evidently causing him a great deal of trouble. This has meant he has been told off repeatedly for his behaviour while others are getting praised. Others are becoming verbally disruptive and he looks on.

Whilst there were several highly positive engagements during the session (Figure 4.1.13), these predominantly occurred in observations 2 and 3, both of which were outside. The fourth observation, an adult led delivery to the whole class, was particularly unengaging for him as C2 continues to be spoken to about his behaviour while trying to physically conform (Figure 4.1.14).

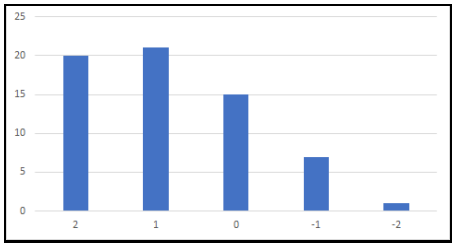


Figure 4.1.13: Instances of FOLLEP scores across the dispositions

Figure 4.1.14: Problem solving a self-determined task (overall FOLLEP score of 29), and class delivery while trying to sit still (overall FOLLEP score of -8)

Obs.	Courage	Self-mot	Confidence	Imagination	Intuition	Curiosity	Playful	Sociable	Independent	Practical	Adaptable	Reflective	Simultaneous	Creative	Logical	Wide
1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
3	1	1	-1	1	1	1	1	1	1	1	1	1	1	1	0	0
4	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0

	Child's experiences	T. styles	Distractions	Location	Enc'ment
1	Having come in from break time C2 joins the rest of the class on the carpet to hear the afternoons agenda. They are told that playtime might be removed this afternoon, but this doesn't seem to upset anyone. He listens for his name in the register and responds appropriately. As the register continues some children are responding in various languages and Princess XXX (in keeping with the medieval theme), with the others he is finding this very funny and responds with laughter as 'Elephant XXX' is suggested (they will be going into Elephants class next year). Boards are passed out for numeracy, as numbers seem limited C2 is quick to offer to not have one!	T 1 - 5	D 1 - 5	L 1 - 5	E 1 - 5
1.15		T1	D1	L1	E1
In					
2	The class are sat as a group on the carpet, but some are being asked to tidy equipment away. C2 is quick to take a lead in this. The teacher goes through who is to be inside and who is outside for the day's Challenge Time activity session. Some children respond with disappointment when they are told they are going to be inside, but when C2 is told, he quickly acknowledges this with ease. As other children are managed into tabards, C2 sits patiently waiting on the carpet.	T 1 - 5	D 1 - 5	L 1 - 5	E 1 - 5
1.39		T1	D1	L1	E2
In					
3	Still inside for Challenge Time C2 is now playing with the school themed small world, where photographs of all the children have been used to make the characters. He plays with another child as they look at the pieces, talking about who they are and engaging with enthusiasm in their play. They negotiate their actions and use the various connected resources (number hopscotch stuck to the building) in imaginative ways. As his friend becomes upset about something, C2 immediately looks to the TA to see if she has reacted, then uses his words to quickly smooth the situation. The two then go to another group who are playing schools with the whiteboard and class resources and try to join in but notice that this will mean there are too many there, C2 starts counting to confirm.	T 1 - 5	D 1 - 5	L 1 - 5	E 1 - 5
2.03		T5	D5	L3	E4
In					
4	The class have come back together indoors for the last session before home time. As such they have retrieved their bags and are sat on the carpet. The teacher asks the group what they have learnt about their new class today, C2 does not volunteer any news but listens as others do. He quickly becomes interested in something on his fingers. Talk begins about the new group structures in Year One, this sees reactions from others but C2 is not overly interested.	T 1 - 5	D 1 - 5	L 1 - 5	E 1 - 5
2.27		T1	D2	L1	E3
In					

Figure 4.1.15: Physical environment focused observation, Term 6 - Reception - 05/06/19

C2 has effectively responded to and got on with anything that has been asked of him today. His place on the carpet has been moved again to immediately in front of the teacher and he continues to show physical discomfort when being expected to sit still for prolonged periods of time. He will sit first on one leg, then the other, trying to get comfortable, but with expressions of discomfort and frustration all over his face. He did not have opportunity to go outside today, but engaged well with the resources on offer inside, playing with several children in imaginative and clearly enjoyable ways. The freedom to move themselves around the offered activities seemed to help with this. When social difficulties arose, he was quick to use his words to resolve, but always with an initial, cautionary glance to the adult in the room.

Although there are positive engagements observed during this session, mainly in observation 3 where high levels of autonomy and uninterrupted independence were permitted, the high level of indifference or lack of opportunity (a FOLLEP score of zero) is clear (Figure 4.1.16). Affecting demonstrations of active thinking, this also impacted levels of confidence.

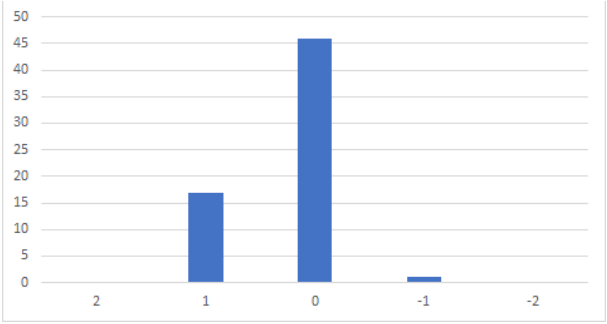


Figure 4.1.16: Instances of FOLLEP scores across the dispositions

Focused observations – terms 2 and 5

During terms 2 and 5, observations of C2 were solely focused on him during the visit, capturing his experiences as he engaged in the dispositions through longer periods. As can be seen in the Figures 4.1.17 and 4.1.18 below (and examples included in Appendix M), this offered an additional lens through which to view experiences through and allowed for deeper engagements with the children.

Child	C2	Date	22/01/18	Day	Monday	Session	Pm

Brave	Courage & Confidence
He is keen to embrace the 'scary' insects in the shredded paper. There is a stack of Community Play blocks set up, he climbs to the top of the stack and calls to staff to watch him jump off. He piles onto the multi-player seesaw with the other children with no apparent fear. His confidence and courage see him pursue with tasks – told a considerably larger trailer is not designed for use with the much smaller tractor, he has confidence that he will make it work – and does.	
Doing things for yourself	Self-motivation & Independence
He settles briefly for a story, but it does not hold his interest, preferring to do things on his own. When struggling to move furniture around the space he does not bother to ask for help, huffing and puffing he struggles with great persistence. To progress his play, he needs to move resources from the shed, continuously going backwards and forwards. He wants to play in the mud – despite being warned it is almost time to go in, he preserves in finding his wellies, struggling he independently manages to put them on (delayed gratification). Filling the trailer with soil takes 30+ shovels but he continues until it is full – all self-initiated and motivated. Once he has filled his trailer, he tows it around the garden – it keeps falling off (too big for the tractor pulling it) but he keeps putting it back on and persisting. He accesses resources from all around the space, combining various pieces to achieve his goals. At one point he calls on a staff member – they do not hear, and his play just continues, unfazed. He lines all the trucks up – another child comes over offering to help but he is adamant, he is fine on his own and does not need the help.	
Having good ideas	Imagination & Intuition
He investigates toys for their properties, adopting and trialling as he moves from one to the next. He 'flies' a plane around the room – stopping only when a child asks for it – he thinks for several seconds before handing it over…. "Yeah!" He 'drives' a truck around the room, retrieving bricks on its back, transporting them to fuel his play. He repeatedly has ideas during his play – "I need to dig here… where's the trailer for this…" he is happy to manipulate and utilise the environment to explore… "I'm so busy" … "All done!" Coming in from the garden he sees the PC keyboard on the floor (from roleplay), he is quick to investigate, tapping away while keeping a rich dialogue – he runs to the phone in the home corner and continues a conversation. He combines dialogue, investigation, manipulation and an independent access of the resources he needs to engage in prolonged investigative play. He presses a button on a playhouse, but the noise is not as he would expect- he tells a member of staff about the problem and suggests they may like to get some batteries. Outside he has been joining in with the others on the bikes, racing up and down the path. Puffed out at the end he tells me "That was a whole day racing!"	
Having fun (with friends?)	Playful & Sociable
Initially (last term) very reluctant to engage, he is now keen to encourage me to play, tapping on my arm, calling me over. "Can you come and play with me?" as he takes me to the kitchen outside, showing me all the utensils. He is also keener to play with peers, utilising the multi-player see-saw. When he is allowed to remain in the garden when his group goes in (very keen to play in the mud and has just struggled into his wellies) he is very keen to talk to me about all the things he is doing, returning to me with dialogue, keeping me engaged in his play. When others come to join his play (when he is deeply engaged) he will use his body to ease, then push them away, blocking their inclusion, preferring to follow his own path. He organises a friend to sit on the other end of a multi-player seesaw. Keen to sit with a staff member in the shed he listens to an impromptu story. Seeing others leaping off a stack of blocks he is quick to go and have a go.	
Doing new things	Adaptability & Curiosity
Interested in new experiences he is keen to explore all that is on offer. Attracted to the shredded paper he shows me the different colours and the things hiding in it. Outside he notices something unusual in the cement mixer and is keen to go over and investigate. Making it spin… "It's going faster!" He is not always keen on others joining him, so when this happens, he is quick to adapt his play and moves to the hanging metal pots and pans. Hitting them he has a great effect, but then starts taking them down, balancing a milk urn upside down on the floor he explores the different effects on the noise generated. When in the digging area he investigates the soil, sand, mud and clay on offer. He finds a box of vehicles and moves through them to find the various pieces of diggers that he needs to assemble one similar to the one he was using in the garden. Having found all the pieces, he is excited to show his achievement to a member of staff.	
Having a go	Practical
Using the cement mixer handle he explores its effect on the items inside. He struggles with the bulk of a chair but knows where he wants it moved and needs to do it. He wants to play in the mud so finds his wellies and sits for some time changing into them. He engages in very physical play in the digging area, utilising a long-handled shovel, moving wet sand between the different levels, loading a trailer with soil and utilising a few different long-handled tools correctly – including a hoe. He has found fishing rods (belonging to a game), and becomes fascinated, investigating the effect of spinning the weighted ends around his head.	
Additional notes Child was permitted the opportunity to persevere with his investigations today, despite it really being time for him to go in. This allowed him to complete a number of different tasks requiring multiple trips, utilising various tools and manipulating the functionality of resources encountered. By enabling these investigations to reach their natural end he found easier ways of doing things - on returning his trailer full of soil he starts shovelling the soil back, but quickly realises that when he is down to a certain level, he can pick it up and tip the soil – and a rich, depth to his play was permitted with a sense of fulfilment and achievement rather than frustration.	

Figure 4.1.17: Term 2 focused observation sheet

Child	C2	Date	14/01/19	Day	Monday	Session	Am

Brave	Courage & Confidence	Card activity –
He comes into the classroom all smiles, even when corrected by the teacher his spirit is not dented. When expected to stop playing and tidy, he continues to play while keeping an eye on the teacher. When moving to another classroom he does so without issue, settling quickly into the new environment.		
Doing things for yourself	Self-motivation & Independence	Card activity –
On entering the classroom, he puts his own bag away, finds his star group and begins to manipulate the toys. Later, as the teacher reads the blurb of three potential stories for the children to vote on, he sits staring to the mid-distance and does not vote for any. As the story is read, he looks down to the floor, occasionally stretching and yawning. When asked to get his coat for playtime he independently puts it on but does not do it up, receiving help. He hasn't been motivated by any of the offered activities this morning, doing what he needs to not get noticed, but doesn't participate in any way.		
Having good ideas	Imagination & Intuition	Card activity –
In his Star Group play he supplies a lot of the initiative, leading the direction of play and giving the others lots of ideas for their play. At the end of the physical WG time, the characters 'high-five' and he turn to a friend saying, "Shall we do that too?" And raises a high five. During the story that is full of questions and invited thoughts from the children, he sits looking away, scowling, not joining in. He becomes more animated only when they walk 'quiet as mice' back to the classroom – being a little mouse as he begins walking. He has initiated ideas when away from teacher led activity, moving from place to place or when in a small group. Otherwise he has opted out of conforming and sits removed from the activity.		
Having fun (with friends?)	Playful & Sociable	Card activity –
He is quick to chat with the others in the Star Group, supplying voices and characters to the toys they play with, stopping briefly to ask myself and the teacher whether we like his new haircut. During physical WG time he turns to another child to say, "Do you know, I've got a big bedroom now!" Easily distracted he often looks out the window or talks about his bedroom "It's because I'm big now". He knows that teacher led time is not for being playful or sociable, so is not, but as a result withdraws from everything, even when his ideas and interactions are invited.		
Doing new things	Adaptability & Curiosity	Card activity –
He has been asked to stop flying a plane around the room, so begins pushing a boat around the carpet (again leaving the area he is repeatedly being told to stay in). This does not put him off as he keeps looking round to observe the teacher's reaction. As the register is taken, he becomes interested in a cut on his finger and the carpet, constantly active. When the children are moved to another classroom his attention is drawn by every poster on the way. When sat on a chair at the back he is not interested in the story or song the group are participating in, appearing to withdraw any curiosity from the directed activity he switches off.		
Having a go	Practical	Card activity –
With a tendency to explore physically he flies his helicopter around the room despite being asked repeatedly to sit with the toys. He has been praised for sitting in the correct way on the carpet – still a struggle he keeps returning to it and quick to get to his feet for 'Shake your sillies out!' where he is initially very animated. He appears very reluctant to join in with the learning of a new song, looking at his feet instead. Rather than singing, he repeatedly shakes his head, moving as much as he can on his chair. Staring into the mid-distance he does not join in until they are on their feet shaking their bodies. When they all sing together standing, unseen at the back, he does not sing, but dances briefly and scowls, looking again to the mid-distance. During the interactive story he does not participate – even when invited to respond physically ("All have a scratch"), reluctant to join in with any of the directed activities.		
Additional notes The regular teacher is away on sudden long-term sick, so the class is being taken by a Year 2 teacher. C2 responds well to her and a clear understanding of C2 is displayed. C2 has been recognised in the Celebration Assembly that was held last week. On joining the other class (all three Reception classes have been brought together) he is sat on a chair at the back of the group. He sits well on the chair and watches the screen to learn a new song. This comes after the screen used for physical activity in his own class. Throughout the session he has appeared to withdraw from everything being offered. He conforms enough to not get noticed but is completely disengaged. This is not noticed by any teaching staff, but he is praised when he sits correctly.		

Figure 4.1.18: Term 5 focused observation sheet

Throughout the more focused observations afforded within terms 2 and 5, C2 repeatedly demonstrated how much more interested he was in an activity once a physical element was introduced, whether this be reciting a catchy phrase, or actively using his own white board. Sitting still and being expected to listen was something he struggled with. When expected to concentrate on something of the adults choosing, he could become distracted quickly, but when refocused, or offered opportunities to progress his own challenges with autonomy or freedom of expression, his engagement was high.

After two years of visits, the full range of pedagogical variables had been observed, although not in equal quantity. To begin understanding the experiences of the children, what follows are graphical depictions of all the noted pedagogical conditions experienced by C2 in preschool and reception.

Findings for C2

As would be expected, the pedagogies experienced by this child in the two settings did differ, but the contrast in permitted freedoms, opportunities and styles were considerable given that both years observed were set within the Early Years Foundation Stage. These can be seen throughout the physical environment variables (Figure 4.1.19) and the child focused variables (Figure 4.1.20)

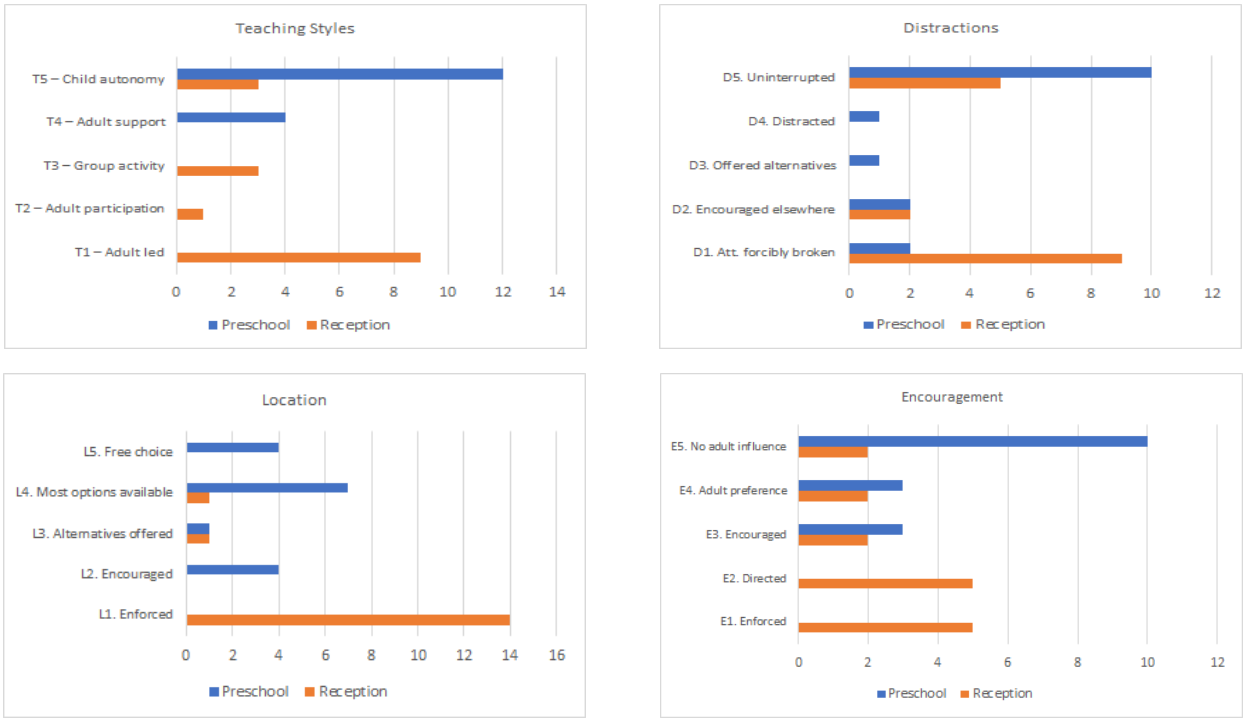


Figure 4.1.19: Differing physical environment pedagogies experienced by C2 throughout the preschool (blue) and reception (orange) environments

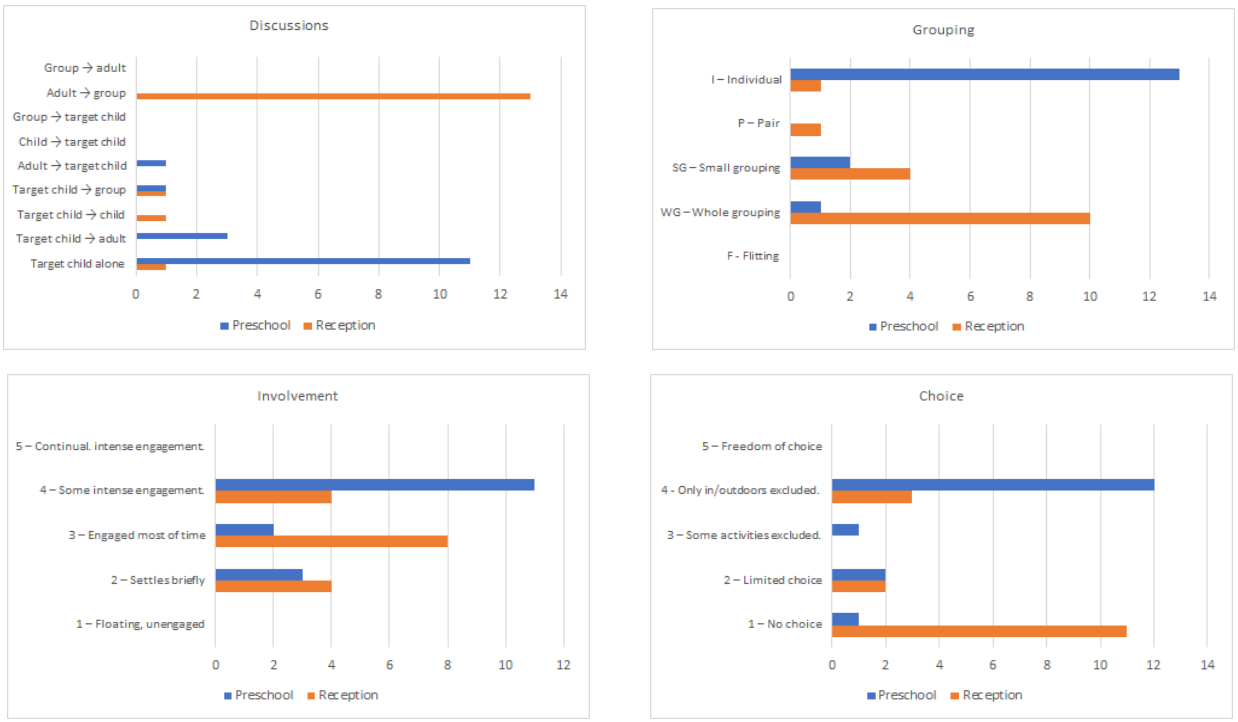


Figure 4.1.20: Differing child focused pedagogies experienced by C2 throughout the preschool (blue) and reception (orange) environments

C2 particularly struggled with the prolonged periods of time he experienced sat on the carpet in the school classroom, as reflected in the typical images captured in Figures 4.1.21 and 4.1.22. This highly physical learner was observed having difficulty concentrating and paying attention to the lesson being taught when efforts became centred around managing his physical

discomfort. Denied his natural proclivity to move and to follow inclinations of thought these impulses were met with chastisement and his levels of engagement were seen to decline significantly when comparing engagement levels within the two settings (Figure 4.1.23), with significantly higher instances of indifference (or no opportunity), reflected by a FOLLEP score of 0 recorded throughout the reception year.

Figure 4.1.21: C2 in preschool

Figure 4.1.22: C2 in reception

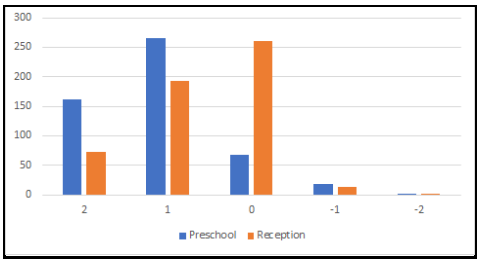


Figure 4.1.23: Total number of observations recording each FOLLEP score within the two settings

Whilst the move to the classroom was expected to impact opportunities for playful or practical endeavours, the evidence reveals an impact across all dispositions (Figure 4.1.24), particularly in his tendencies and opportunities to be imaginative, independent, self-motivated and curious, evident once ordered by declining engagement (Figure 4.1.25).

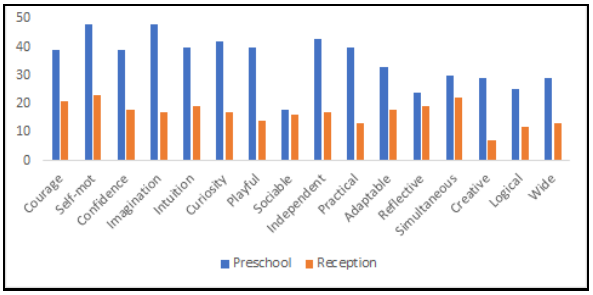


Figure 4.1.24: Comparing engagements in each setting across each disposition

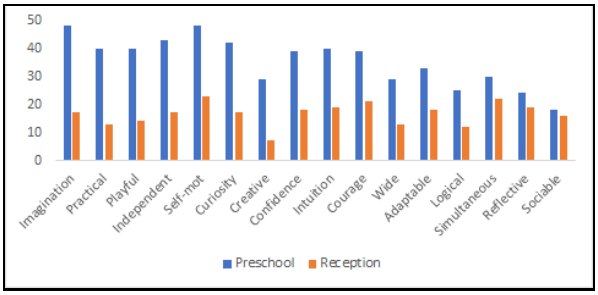


Figure 4.1.25: Ordering dispositions by decline in engagement

Whilst the findings for C2 paint a vivid picture of a child impacted by the pedagogical confines of the formal school classroom, it was important to consider these findings across the cohort. Alongside this is the need to reflect on the potential impact these influences could be having given the progressive changes seen between the two years captured. This now follows through the primary analysis stage as all findings from each cohort were brought together.

5.0 Method of primary analysis

Having independently considered the findings from each child participant, this chapter sees the findings from the cohort brought together so that the combined experiences of the children can then be considered. To illustrate the depth of material generated, without clouding the findings with its complexity, an example disposition (imagination) was used with further examples (sociability, confidence and thinking logically) contained in the Appendices (N1, N2 and N3). To situate these reflections and offer further resonance, a selection of images collected through the two years of the study were included in Appendix E.

5.1 Combining insights deduced from the child study

The complexities offered within this study were viewed initially through the example of one disposition as it considered the experiences of the children from the observational findings. As a preliminary sense of children's opportunities were sought, the observational records were viewed in a variety of ways. To understand how the intrinsic and extrinsic opportunities offered translated into dispositional engagement, the circumstances that appeared to promote engagement were considered alongside the rich data surrounding the most, and least engaged responses as the study looked to explore the question,

- *To what extent are children given opportunities, intrinsically and externally, to engage with dispositions through their experiences of learning in the Early Years?*

To offer greater pertinence to the findings the IEIEC theoretical frame (Figure 1.1.6) had been written, informed through the themes of the EYFS. The chapter then illustrated these initial findings through this thematic lens as it contrasted findings within the preschool and reception settings.

Dispositional engagement across the terms

During every child observation, each disposition was considered through the FOLLEP scale, assigning a numbered code to reflect the child's current displayed engagement within it. These could, and naturally did, fluctuate across the dispositions within an observation, differ between children and were dependent on the circumstances of the observation. To extrapolate any level of insight from these appointed codes, clear and consistent guidance was required and supplied through the card carried during every observation, detailing definitions of the codes and dispositions (Figure 3.3.6). Cautious of assuming meaning from isolated incidents, repetition was also required and realised through the 640 individual child observations conducted over the two years. To begin deducing insights, the number of observations that had attracted each of the available FOLLEP Scores were considered, and trends noted as the children progressed through the terms.

As demonstrated in Figure 5.1.1 below, positive engagements demonstrated by the cohort children within all dispositions declined once they began school. But so too did their tendency to actively retreat from a disposition (Figure 5.1.2), suggesting a decline in the variance being experienced. Viewed within each of the progressive terms, positive engagement displayed by the children rose alongside the children's age and development as they progressed from term 1 (autumn of their preschool year and shown in blue below) to term 3 (the summer term of preschool, shown in orange) across all dispositions. However, this was shown to sharply decline through term 4 (autumn term in reception, shown in grey below), and potentially more worryingly, through term 6 (the summer term of their Reception year, shown in yellow) when the children were observed at their eldest and arguably most settled in the school environment, indicating a potentially developing trend. As negative engagements fell throughout the dispositions once in school, negative responses for some dispositions were not captured again once the children

had transitioned. This was a worrying trend when considering children's developmental need to act freely, trialling various wide-ranging responses as their tendencies towards them develop (Chapter 2). This concern that questioned children's independence of thought and action was further challenged when noting the significant rise in FOLLEP scores of zero across the cohort, indicating an indifference toward the disposition, or no opportunity for it (Figure 5.1.3).

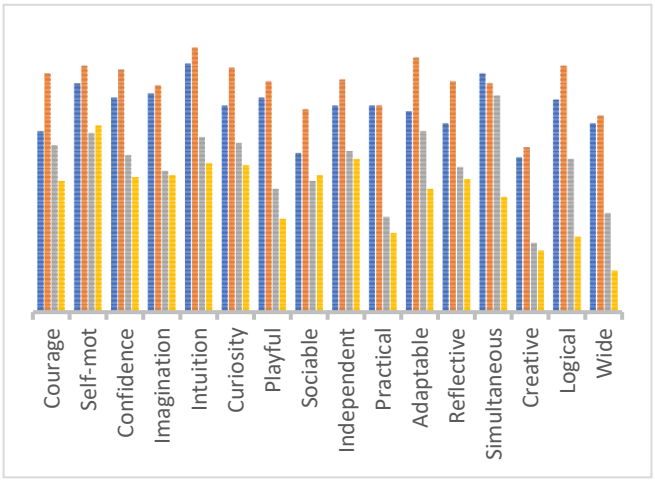


Figure 5.1.1: Occurrences of a positive engagement recorded across the cohort, as observed each term

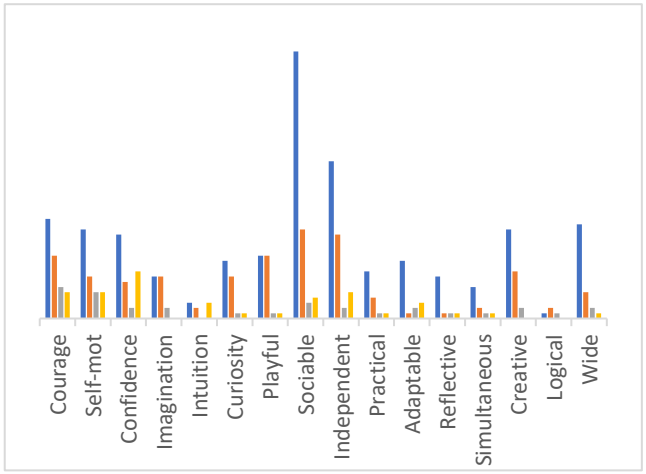


Figure 5.1.2: Occurrences of a negative engagement recorded across the cohort, as observed each term

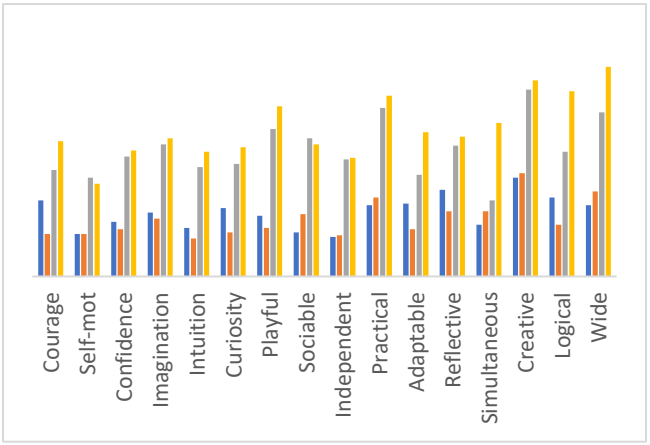


Figure 5.1.3: Occurrences of zero engagement recorded across the cohort, as observed each term

Key to graphs – indicating observations captured in terms 1, 3, 4 and 6

Whilst the engagement levels of every disposition were seen to decline during the reception year, this was most pronounced within children's inclinations towards practical and playful pursuits. As this would be expected following a transition from the more free-flowing environments of the preschool, the disposition with the third greatest decline, imagination, was then used to illustrate the primary child analysis. However, experiences and progressive engagements of the children throughout all dispositions were explored, a sample of which can be found in Appendix N1-3.

As well as considering children's engagement levels within each disposition, the pedagogical conditions of each observation were also noted, along with rich data to illustrate the experience. This allowed for a detailed representation of the children's experiences, as well as illustrating the impact of each pedagogical variable in isolation, in both the preschool and reception environment. The findings from these observations are now discussed.

Where did children experience being imaginative?

Through the 640 rotating observations captured of the ten children over the two years, varying levels of imagination were noted as illustrated in Figure 5.1.4. Whilst little active reluctance was seen in either setting (represented through a negative FOLLEP rating), an indifference, or no opportunity for an imaginative response (indicated through an assigned FOLLEP rating of zero) was noted in twice as many school-based observations than those recorded in the preschool. Whilst the number of observations showing a somewhat active interest (FOLLEP rating of 1) were similar in each setting, a strong preference for an imaginative response (a FOLLEP rating of 2) was seen in nearly six times as many preschool observations compared to those captured in school.

	Preschool	Reception
-2	0	0
-1	16	2
0	80	178
1	114	121
2	110	19
Average	0.99	0.49

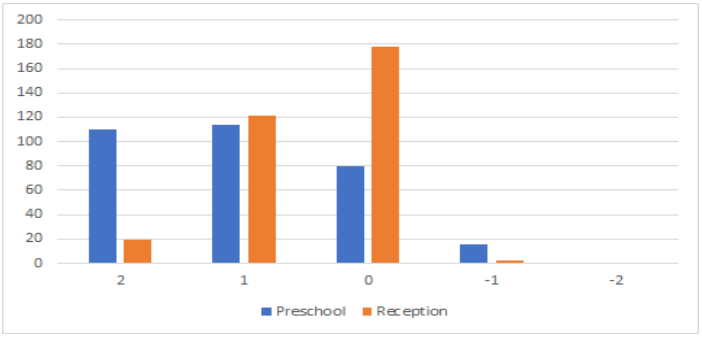


Figure 5.1.4: Occurrences of each FOLLEP score recorded for imagination across the child cohort

To begin to understand these experiences, NVivo word clouds were produced from the written observations of the children, firstly those showing an active reluctance, and then when displaying imagination as a clear feature of choice (Figures 5.1.5 and 5.1.6). In the second word cloud, the word *play* appears most prominently. This was the case for similar word clouds produced for all dispositions, a sample of these can be seen in Appendices O and P, with original content of observations showing high engagement with imagination in Appendix Q.

Figure 5.1.5: Descriptions of all observations where children were actively reluctant towards imaginative responses

Figure 5.1.6 Descriptions of all observations where children were actively imaginative

The impact of observed practices on children's propensity for imagination

Once this initial sense had been established, a more specific consideration of the children's experiences across the two years was required as the impact of various pedagogical styles were observed. Again, using imagination as an example (other dispositions can be seen in Appendix N), the level of imaginative engagements displayed by the children across the cohort was observed within each pedagogical style.

As the requirements of the EYFS had been considered when designing the intrinsic (child focused) and external (physical environment) observations, the impact of various pedagogical styles could now be reflected through the IEIEC frame with its EYFS thematic lenses. The questioning process that arrived at these observational variables were illustrated in Figure 1.1.5 and reproduced below for easy reference with the intrinsic and external variables shown in blue and green. The theme of the unique child was explored through children's *Agency*: their opportunity for individualised involvement, free of deterministic distractions. Positive relationships were explored through children's *Intentionality:* their opportunities to have a voice, to become involved in discussions and engage with others. The theme of enabled environments was documented through the degree of choice children had within their *Environment*: both within the choices they could make and the locations available to them. Active participation within their learning and development was considered through their *Scaffolding:* reflected in the grouping and teaching styles experienced.

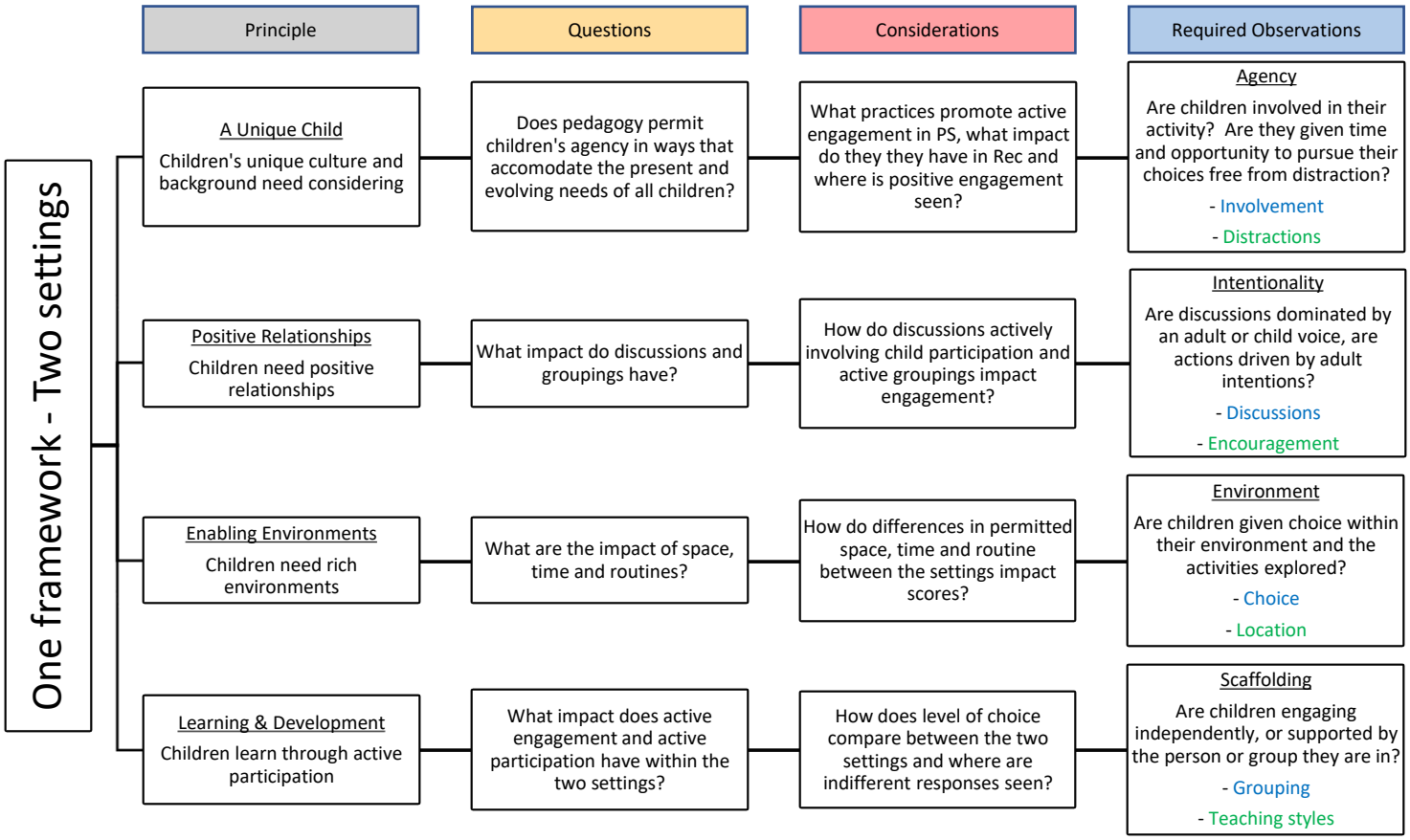


Figure 1.1.5: Implications of the curriculum themes across settings

Illustrated over the following pages, engagement levels recorded through the FOLLEP scale were compared within each of these pedagogical styles, both within the preschool and reception settings. As coding was used to represent detailed descriptions of engagement across 640 observations, this detail was best represented visually through the aid of graphs. This was not intended to offer any statistical analysis, rather a robust and systematic illustration of the captured data in readiness for further analytical consideration. Alongside this, detailed descriptions of the observations being considered within each set of conditions were collectively reviewed, offering a deeper level of insight into children's experiences during these moments. An illuminative view of the impact of pedagogical styles on children's responses is then offered, whilst retaining distance from any claims of predictability or causality.

Involvement - Do children show evidence of engagement in an activity or do they only settle briefly before moving on?

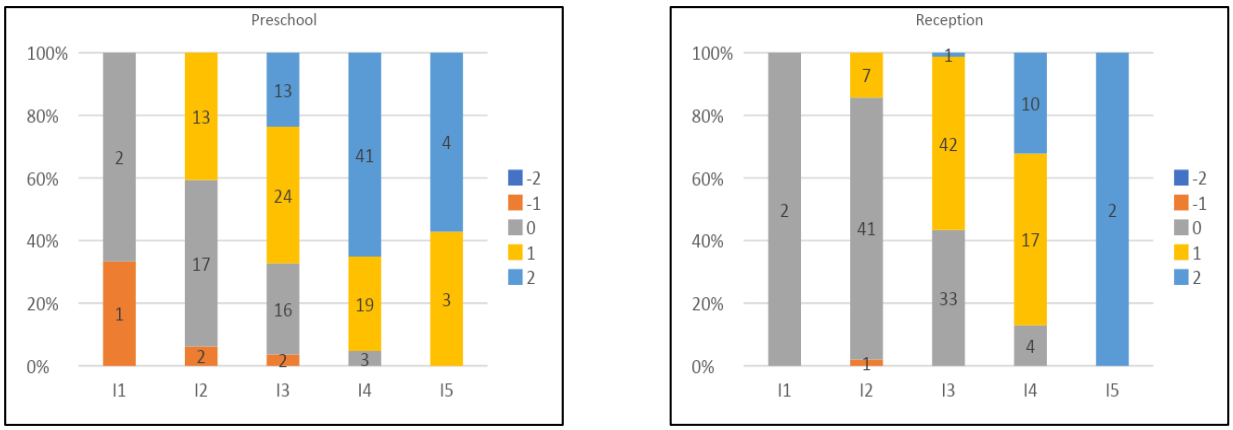


Figure 5.1.7: Spread of FOLLEP scores recorded for imagination under each classification of involvement within preschool and reception

As deeper involvement was observed within the actions of the children, the propensity for a deeper, more imaginative response was noted. Illustrated within the findings above, indifferent responses were also seen where involvement was shallower. Learning theory would suggest that when experiences are offered that are best suited to a child's ability and potential, a deeper engagement within their pursuits is permitted as they mentally rehearse their innovations, seeing them realised and reinventing when things become difficult. This was certainly reflected within the observations. The graphs above illustrate how more frequently observations of less involvement (I1, I2) were recorded within the reception year and the resulting lack of imaginative responses that were recorded.

Distractions - Are children permitted the time and opportunity to pursue their choices free from distraction?

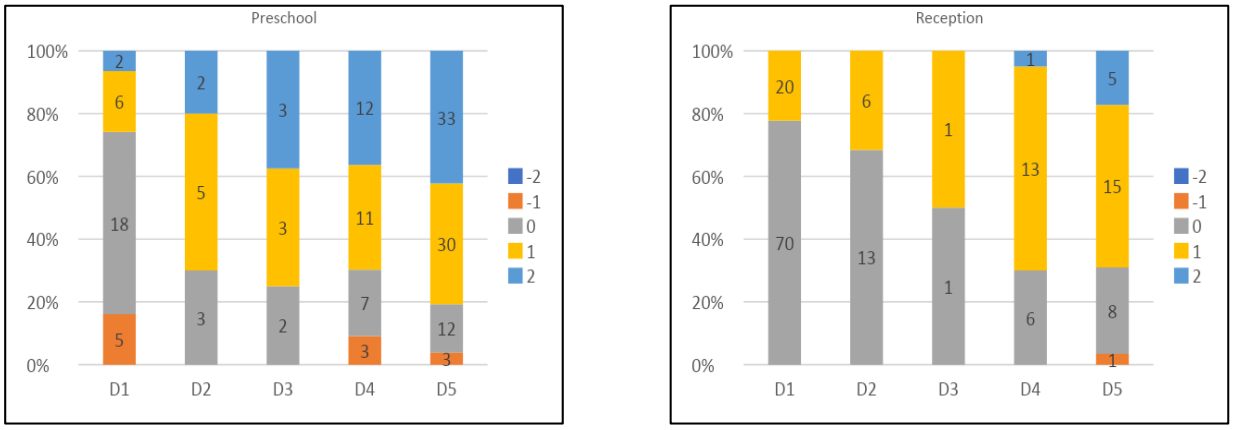


Figure 5.1.8: Spread of FOLLEP scores recorded for imagination under each classification of distraction within preschool and reception

The engagements recorded alongside children's level of distractions suggested that imagination was better embraced where distractions were limited, with proportions of higher ratings increasing as the coding moves from D1 – D5. Uninterrupted periods of time to trial and explore for themselves was seen to allow the children opportunity to discover diverse ideas, to refresh their understanding and bring various solutions together as they generated and assimilated new knowledge. Also reflected in the observations was the high propensity for indifference when distractions were frequent, something that happened with high frequency in the school setting.

Discussions - Are discussions dominated by the adult or the child voice?

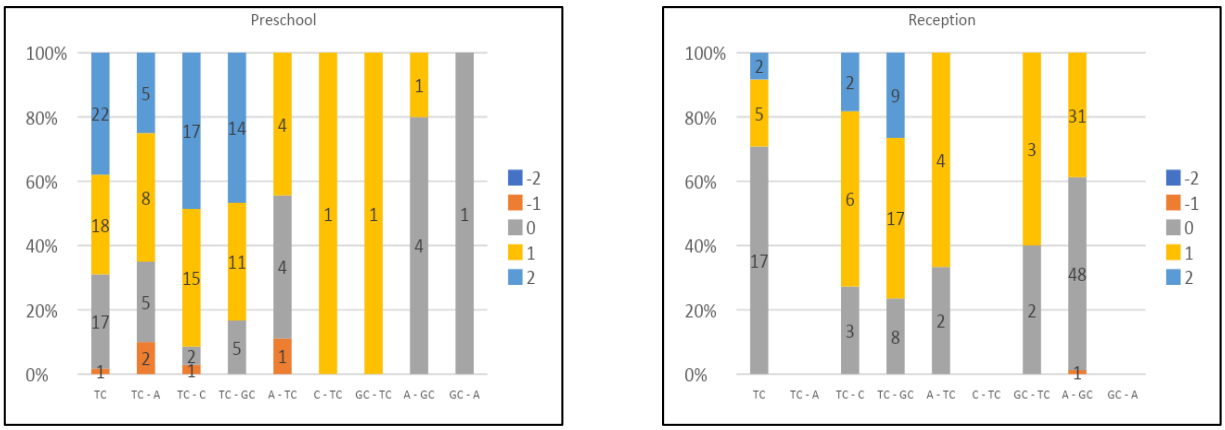


Figure 5.1.9: Spread of FOLLEP scores recorded for imagination under each classification of discussion within preschool and reception

High imaginative scores were recorded throughout discussions initiated by the observed child. Captured predominantly in preschool, the comments and actions of others were seen to ignite children's imagination. This was more pronounced when followed by opportunities to act on any imaginative responses these discussions inspired. Adult led discussions, predominantly in reception, saw a higher indifference toward imaginative responses. Interestingly, these observations illustrate discussion style alone was insufficient to elicit imaginative responses. Relative scores seen in the absence of external discussions with the observed child, TC, differed widely, suggesting that the preschool child was more inclined to react imaginatively when left alone, compared to the child in school who would tend to imaginatively act indifferently.

Encouragement - Are actions driven by the intentions of the adult or the child?

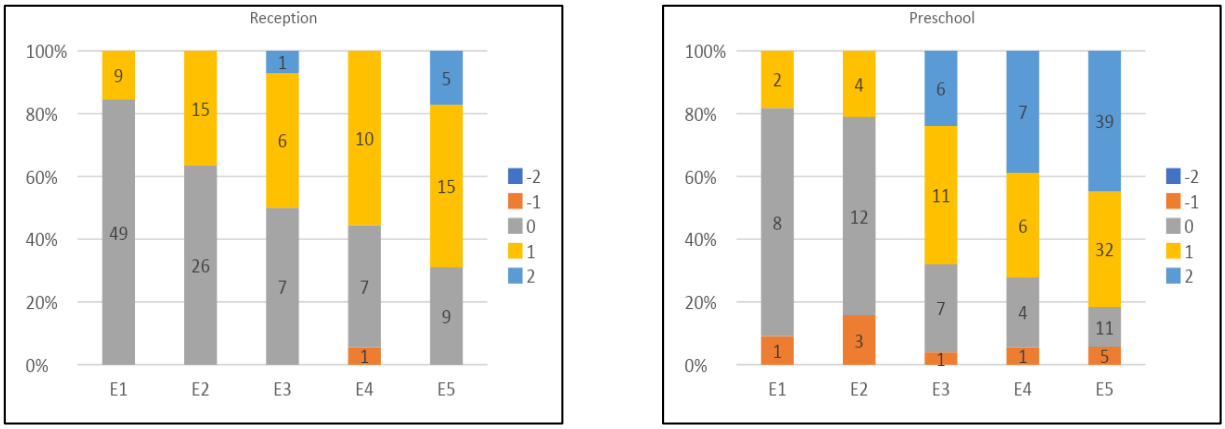


Figure 5.1.10: Spread of FOLLEP scores recorded for imagination under each classification of encouragement within preschool and reception

When children were observed within experiences where their actions were not enforced or directed and where they were able to determine their own path (E4, E5), higher levels of imaginative engagement were captured. When given the opportunity to pursue an area of personal interest, rather than following a prescribed activity or seeking a readymade solution, imaginative responses were seen to develop. Skills were tested and applied in innovative ways, as new outcomes and potential solutions were visualised and new insight generated. When actions were enforced (E2), a greater indifference toward imagination was recorded. The responses shown above also suggest reflect how children in preschool required little or no encouragement to demonstrate positively imaginative responses, whereas they did require encouragement once in the school setting.

Environment – Choice and Location

Choice - Are children given choice within the activities they select?

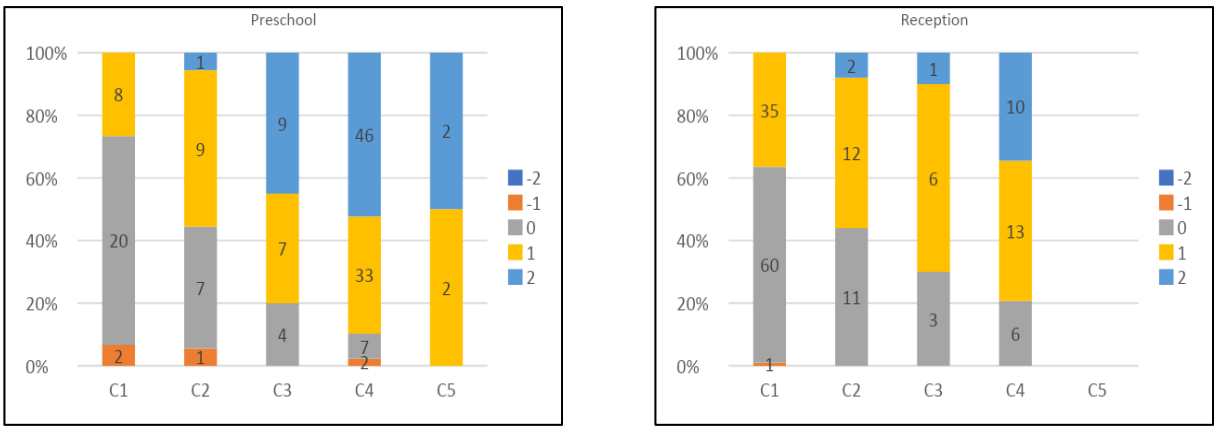


Figure 5.1.11: Spread of FOLLEP scores recorded for imagination under each classification of choice within preschool and reception

Within environments offering a freer choice of activity, children were seen exploring their own goals, stretching possibilities and horizons as they pursued new and diverse experiences. Less constrained by expectations, where choice of activity became more independent, unique ideas were seen being explored. As individual opinions and pursuits were imagined and trialled, higher imaginative scores were detected. This was seen in the data illustrated above as observations recorded in both the preschool and school environment showed higher imaginative engagement as the level of choice given to the child increased. Where choice become more dictated (C2), an indifferent response was more likely to be seen. This was seen in much higher proportions in the school setting.

Location - Are children given choice within the environments they occupy?

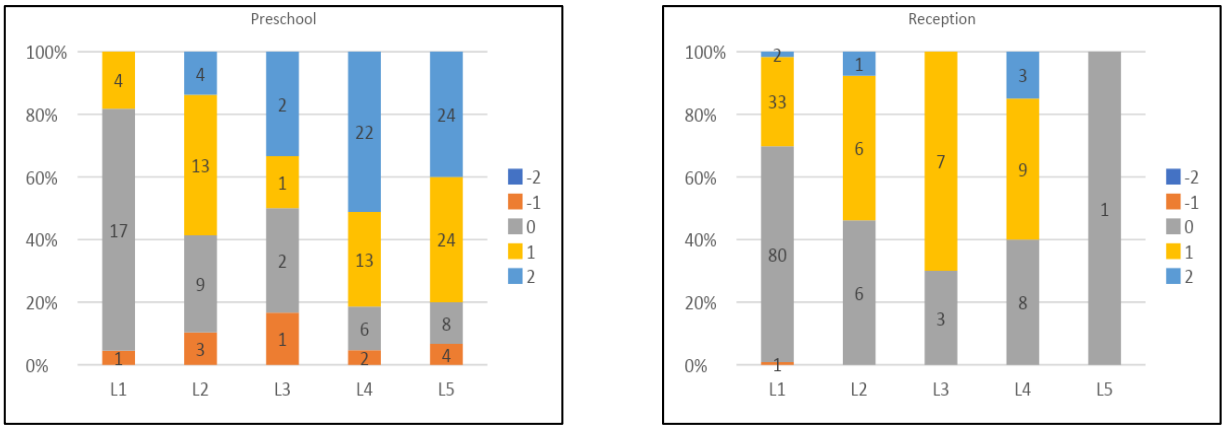


Figure 5.1.12: Spread of FOLLEP scores recorded for imagination under each classification of location within preschool and reception

Within both sets of observations, higher levels of imaginative responses were recorded when some freedom within the location was offered (L4). The data also demonstrated a high propensity for no imagination (a FOLLEP score of zero, indicated in grey) where the location was enforced (L1). This occurred within significantly more of the school-based observations. When children were offered opportunities to explore and be inquisitive, they were seen reinventing that which had become expected. With freedom to directly apply their ideas, trialling their thoughts and processes in diverse ways, they were seen approaching problems from new directions. This required the greater freedoms of choice offered in the preschool environment. The data also indicated that on the occasions when greater freedoms were offered in the school classroom, children were less likely to respond imaginatively than they had been in preschool.

Grouping - Are children engaging independently, or supported by their peers?

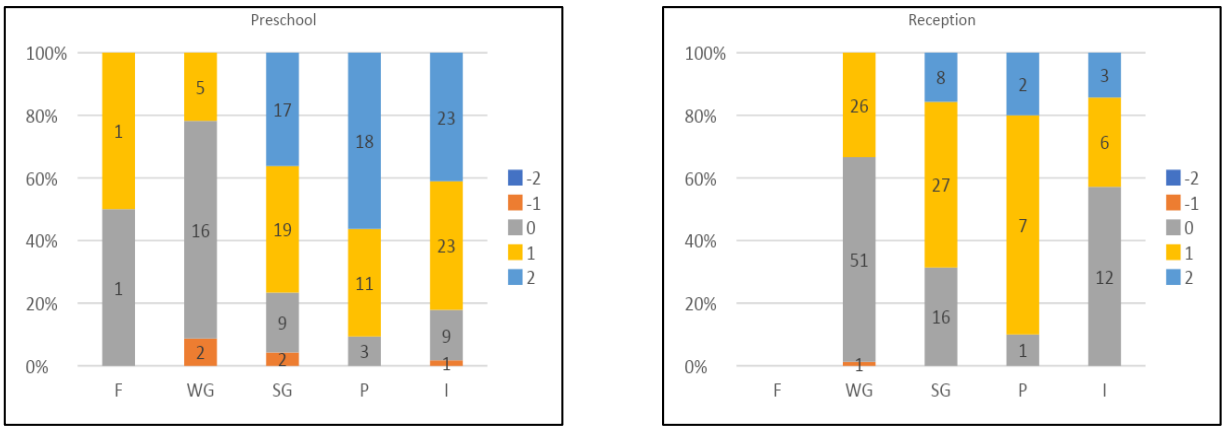


Figure 5.1.13: Spread of FOLLEP scores recorded for imagination under each classification of grouping within preschool and reception

In the preschool, the observations noted a greater propensity for imagination where smaller grouping was recorded, whether this was in small groups (SG), pairs (P) or individually (I). The numbers of observations recorded within these codes indicated children's increased opportunity to act independently in this setting and higher engagement levels for imagination were observed. In reception, where opportunities for independence were less common (78 of the 160 observations saw children gathered as a 'Whole group'), the children were more likely to be recorded responding with indifference. Imaginative inclinations did increase when offered opportunity for small group, or pair work. However, imaginative inclinations declined when being recorded alone, attracting only marginally more imagination than when in the more frequent whole group situation. To elicit an imaginative response within the school setting, the children benefitted from being with other children, either in pairs or in small groups. While opportunities to stand alone permitted diverse interpretations in the preschool, allowing the children to show imaginative responses and actions to more of what interested them, there was less opportunity, or interest recorded in the school classroom. While it could be suggested that opportunities to express one's imagination enables unique abilities and talents to be recognised and to form – and hear – one's own opinions, imaginative responses declined from 117/160 in preschool to 79/160 in the reception year.

Teaching Styles - Are children engaging independently, or led by the adults around them?

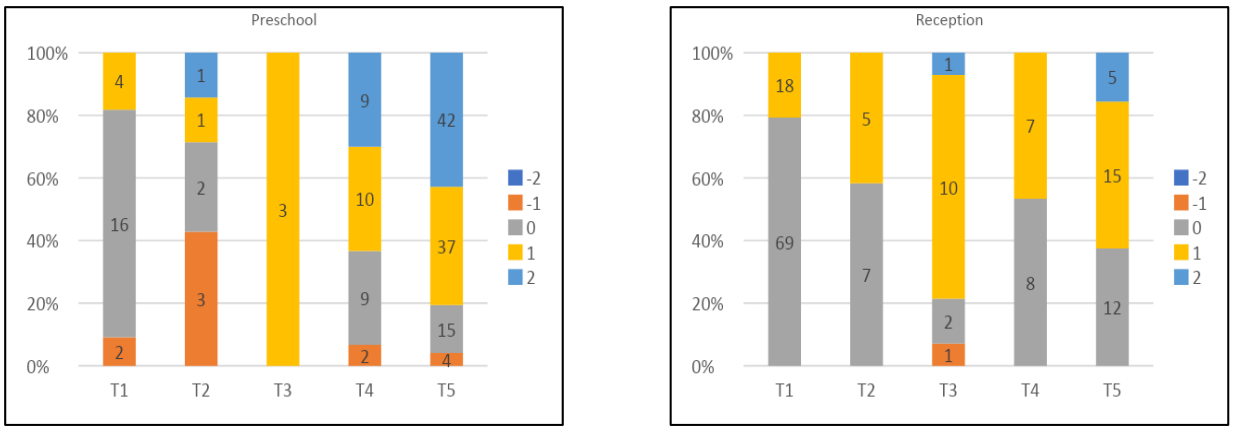


Figure 5.1.14: Spread of FOLLEP scores recorded for imagination under each classification of teaching style within preschool and reception

Adult led teaching styles (T1), which occurred in higher frequency in the school observations, demonstrated a high indifference to imagination regardless of the setting. Child autonomy (T5) allowed for highly imaginative responses, whereas the adult participation (T2) observations in preschool would often prompt an active reluctance. Cognitive theories of learning that speak

of children's need to assimilate and accommodate new knowledge would suggest that children benefit from active enquiry. That given opportunities to actively pursue their learning while being reminded of previous insights gained, would see their learning and active engagement increase. This was reflected within the observations with higher propensity for imaginative engagement recorded as group activities (T3), and autonomy within their learning (T5) was offered. When adult support (T4), rather than participation (T2) was offered in preschool, children were given opportunity to talk through their own ideas, demonstrating an imaginative response. This distinction appeared to have little impact in the relatively few times teacher interactions were recorded in reception.

Viewing the pedagogical influences across the themes allowed their impact to be succinctly demonstrated. Whilst noting the differing affordance of the variables in each setting, viewing the engagements demonstrated by the children graphically in adjacent presentations offered a compelling visual account of the differences experienced. Adding rich contextual data from the detailed observations added further insight to the developing pictures forming. This approach was then employed across all dispositions as children's engagements were considered alongside the pedagogical variables that they were noted within and detailed accounts of the observations that captured them. The insights this permitted were considered and used to reflect on potential opportunities to be offered, effectively addressing the second question posed by the study,

- *To what extent are children given opportunities, intrinsically and externally, to engage with dispositions through their experiences of learning in the Early Years?*

Augmented by the reflections and suggested insights offered above, Chapter 6 will now consider how various aspects of pedagogical delivery appeared to impact children's dispositional engagements as attention is drawn to the second question,

- *How does this inform and direct children's early experiences of learning, challenging current approaches to early pedagogies?*

6.0 Method of advanced analysis

Throughout this study it has been the intention to explore the impact of early pedagogy on children's experiences, reflecting on how it affects potential engagement by considering a range of dispositions. As a definitive list of dispositions has been considered less important than acknowledging the role they play in children's foundational development, this study has focused on a list of 16. Dispositional experiences have then been viewed through children's realities of early learning, demonstrably indicating pedagogical influences on engagement across every disposition considered (Chapter 5.1; Question 1). Through these 16 lenses, the study has demonstrated how dispositional engagement is impacted by the environments, social engagements and expectations that are internally and externally imposed on children through the pedagogical styles that surround them.

Chapter 6 will now draw together the findings from all the considered dispositions as it illustrates the opportunities the children were observed receiving, together with the levels of engagement they were observed to demonstrate. In doing so it draws on the reflections offered above as it considers experiences that have appeared to facilitate each disposition and considers the impact they might be expected to have on children's engagements (Chapter 6.1).

From this collective view, the impact of pedagogical approaches was interrogated through the conceptual frame (Figure 1.1.7). By illustrating how agency, intentionality, environment and scaffolding impact children's learning opportunities, it considers children's experiences of learning through their displayed engagement, reflecting on their ultimate development of dispositions and life skills (Chapter 6.2). Through these reflections, key commonalities were identified within the emerging findings as the observed impact of pedagogical variables on children's experiences and their resulting engagements with dispositions were identified (Chapter 6.3) as attention is now drawn to Question 2,

- *How does this inform and direct children's early experiences of learning, challenging current approaches to early pedagogies?*

6.1 Retrospective insights on impactful experiences

In Chapter 5.1 the impact of foundational dispositions on development and achievement were explored. Through the example of imagination reflections were offered and key experiences were noted as children's realities of early learning were compared to theoretical discussions regarding children's learning and the development of dispositions. Within this exploration, the impact of pedagogical influence on dispositional engagement was clear. To offer a greater sense of how permitted experiences impact children's engagements, all dispositions were then brought together. As dispositional findings were combined, the impact of experience was considered through a thematic lens as the study reflected on how emerging findings were informing a pedagogical account of children's early experiences of learning.

Findings from the primary analysis

Once the primary analysis for all dispositions were complete, 16 sets of the following had been generated, one for each disposition as the first question of the study was effectively answered,

- Opportunities afforded to children over 640 observations,
- Observed levels of engagement within each pedagogical variable,
- Rich data to compare observations through,
- Findings represented within both the preschool and reception settings,
- Suggested insights into the experiences and opportunities that would facilitate dispositional development.

As attention turned to the second question, these findings were viewed in ways to begin reflecting on the importance of experience. As discussed in Chapter 5, to offer greater pertinence to the findings the study was written within its IEIEC frame, informed through the themes of the EYFS (Figure 1.1.6 and 1.1.7). As this chapter drew together the combined findings from all 16 dispositions, it did so through this thematic lens.

Illustrating experiential impact on dispositional engagement

As within earlier chapters, this next stage of analysis was considered through an example, allowing the depth of the findings to emerge whilst avoiding confusion through its complexity. To illustrate the initial stage of advanced analysis, the findings from all dispositions was viewed under the theme of agency (Figure 6.1.1), both through the intrinsic factor of involvement and the extrinsic factor of distraction. Similar statements for intentionality, environment and scaffolding were written with a sample included in Appendix R.

Reflecting on established learning theory, professional experience, academic writing and existing literature, figure 6.1.1 considered experiences that may be regarded as important in facilitating each disposition, under the theme of agency. Supporting these reflections were the insights gained through a previous study conducted by the author into dispositional development through life experience. Presented for peer-review at academic and research conferences including EECERA (Peckham, 2018b, 2019a), BECERA (Peckham, 2017a, 2019b) and the UKCGE Seminar Event (Peckham, 2018a), this study added to these reflections that were shown in red.

Reflecting on these statements, certain inferences were drawn on the impact this might be expected to have on children's engagements, these were shown in purple. When this was contrasted with the actual observations of the children, clear indications of the impact various experiences were having on children's engagement levels emerged. Reflecting on what was observed, given the aforementioned comments, the impact of pedagogical variables on children's opportunities to engage were considered (Question One), this is shown in pink.

For example, constructivist learning theory would suggest that imagination flourishes where children have experience to become deeply engaged within the pursuits that are offered, where innovations are mentally rehearsed and realised, and where a child's inquiry-based learning offers opportunity to reinvent when things become difficult. This would suggest that where deeper involvement was noted, the propensity for deeper, more imaginative responses may also be seen. Reflecting on the FOLLEP Scores recorded (Chapter 5), this was the case, along with more indifferent responses where involvement was lower. When comparing the two settings, there were more observations noting little involvement within the reception year and this corresponded with a lack of imaginative responses overall. Given the additional benefit of tracking the children through two contrasting settings, the impact of the range of pedagogical approaches observed could be interrogated, allowing informed recommendations to be made (Question Two).

Agency – Involvement and Distractions *The importance of opportunities to become involved within an activity, permitted the time and opportunity to pursue choices free from distraction*	
Involvement	Distractions
Imagination	
When children are offered experiences that are suited to their ability and potential, learning theory would suggest that deeper, more meaningful learning is permitted. It may be expected that children will become more deeply engaged within their pursuits as they mentally and imaginatively rehearse their innovations, seeing them realised and reinventing when things become difficult. This would suggest that as deeper involvement is noted, so too is the propensity for a deeper, more imaginative response. This is illustrated within the children's observed actions, along with the more indifferent responses that were noted where involvement was less intense. Lower levels of involvement were noted more frequently within the reception year, along with a lack of imaginative responses.	It could be suggested that when given uninterrupted periods of time to trial and explore for themselves, children are better able to discover diverse and imaginative ideas for themselves. If given opportunities to consider their understanding, various solutions can be brought together as new knowledge is generated and assimilated. This would suggest that imagination would be better embraced where distractions are limited. This was reflected in the observations, with higher FOLLEP ratings recorded as the coding moved from D1 → D5. Also reflected, was the high propensity for indifference when distractions were frequent, something that happened with higher frequency in the school setting.
Intuition	
To develop intuition, to be able to apply previous knowledge and learn from it, children need opportunities to become involved in their experiences. They need opportunities to develop an intuitive sense for what may happen next, predicting potential outcomes and validating their ideas. As their intuition develops, disadvantageous situations can be recognised as children learn to manage overly enthusiastic or impulsive reactions, fine-tuning their intuitive response to the situation. This would suggest a need for children to become deeply involved in an experience, suggesting levels of engagement would rise where deep involvement is permitted. Highly positive ratings were recorded where deep involvement was permitted. In moments of more detachment, children were more likely to show indifference, an effect more frequently recorded in school.	When children are not overly unrestricted by established pathways, they may develop an intuition for what is personally desired. When offered together with opportunities to freely explore without distraction, this developing intuition can be followed and explored, and the outcomes of it realised. This would suggest that, where children are not being encouraged down alternative routes, their evolving drives can be reacted to, leaps of faith can be taken, and adaptations made. Certainly, within the observations the most indifference was recorded where children's attention was forcibly broken, this was seen in over half the school-based observations. When in preschool, if attention had been forcibly broken, this was more likely to evoke a negative response to intuition.
Courage	
If children are to gain an understanding of their abilities, they need to experience personal challenge. Where this challenge has personal interest, a greater perseverance is often more likely to be seen, along with the courage to persist through difficult, testing times. As resilience develops, children's courage to proceed can be expected to strengthen, despite confrontation or challenging requests, and the benefits of resisting the urge to avoid situations can be realised. When mistakes are made, these can be learnt from, difficult situations can be managed and children's resulting length and depth of engagement can be expected to increase. This would suggest that observations of a more deeply involved child would reflect such perseverance and a greater propensity for courage would be reflected.	To develop a courageous disposition, it could be suggested that opportunities are required to experience one's personal boundaries – both present and perceived. When given opportunities to experience and push beyond expectations, a personal sense of limitation can be gained and challenged, as belief in oneself develops. Through such opportunities, where personal decisions can be taken and progress only stopped according to an inner agenda, a sense of inner courage can develop. This would suggest that periods of uninterrupted exploration are required to explore a courageous response. Where this was permitted within either setting, a higher percentage of courageous responses were seen. Most observations in preschool did permit this with positively courageous engagements documented. Most reception

Higher engagement was recorded as involvement became more intense, however, the difference in settings was clear. Preschool observations where the child was seen flitting noted active reluctance towards a courageous response. This became indifference when they were seen to only settle briefly. The school-based observations recorded much lower levels of involvement, and higher displays of indifference when these were compared. On the occasions where continual, high levels of involvement were seen, courageous responses were seen to be actively positive.	observations saw children's free explorations forcibly interrupted and an indifferent score was more frequently recorded.
Confidence	
When risk and challenge are safely experienced, children can learn not to fear them. Through these experiences a sense of confidence can develop, along with feelings of well-being and a greater sense of security. Reflected in periods of increasingly focused efforts, self-doubt is combated, and setbacks and obstacles are more readily persisted through. Distractions are less readily welcomed and can be avoided as next steps are embraced rather than feared and engagement becomes more intense in the active pursuit of a goal. This would suggest that high propensity for confidence would then coincide with some (I4) or continually (I5) intense involvement. This was clearly reflected in the observations with I4 and I5 recordings almost unanimously attracting positive FOLLEP scores. Indifference and negative scores were seen where choice was limited or not present.	By recognising one's own abilities, confidence within oneself and one's capabilities are supported. Developed both through successes and setbacks, opportunities are needed to experience both. It is through adversities and permission to fail, that strength and resilience can develop, inspiring a determination to come back stronger. Whilst fuelling ambition and driving future efforts, this also offers an invaluable sense of humility. This would suggest a need to offer children uninterrupted time, free of distractions, to gain a sense of their own abilities. This was reflected in the child study. Where the child's attention was forcibly broken (D1) or where they were encouraged elsewhere (D2), indifference to a confident response was repeatedly recorded.
Playful	
Play offers opportunities to mentally rehearse and trial ideas without commitment. Through these opportunities, the limits of that which has been achieved before can be challenged, rather than abandoned for a safer route. Where opportunities are given to play with ideas, to combine, to test and problem solve in diverse ways, especially when supported with practical activities and real resources, a greater commitment and motivation to persist can be felt and the boundaries of success can be extended. This connection between playful engagement and experiencing complete immersion in satisfying experiences would suggest that positive indications of play would coincide with periods of intense engagement by the children. This was reflected within the study with positively playful scores directly correlating with the degree of involvement shown. Where an indifference to play was seen, the child was noted as only settling briefly.	When play is given the affordance of time, its worth is recognised. When seen by adult gatekeepers as being more than a non-productive break from constructive achievement, children's minds and potential can be set free. This would suggest that if children are given opportunities to experience prolonged periods of independent play, gaining distance from traditional work and structured responsibilities, its importance can be realised. Within the study, children demonstrated their greatest propensity towards play when left uninterrupted (D5). When their attentions were forcibly broken (D1) or they were encouraged elsewhere (D2) they were more likely to demonstrate an indifference or reluctance towards playful exploration. This was also seen where their attentions were distracted (D4), adding to suggestions that it is the prolonged periods of uninterrupted play that children need to become positively engaged in play.
Sociable	
To develop tendencies to respond in sociably acceptable ways, children need to experience sociable engagements within nurturing and supportive environments. Benefiting from the experience of loving foundations, children learn that they can rely on others, and to experience the reliability they themselves can bring. It could be suggested that when sociable opportunities are matched to children's developing needs, this would be demonstrated through prolonged periods of content involvement as a general sense of well-being develops. Within the school setting, high occurrences of indifference were seen. Whether the child was observed settling only briefly (I2), or when being engaged most of the time, indifference to opportunities for social connections around them were recorded. Within the preschool setting, where children were permitted more freedoms, there were more incidents of active reluctance rather than indifference. This was seen over a range of depths of involvement.	When developing social dispositions, children need to acquire personal skills that support their ability to engage with others, to develop and sustain healthy relationships and to deal with difficult issues without causing offence. They need opportunities to experience these developing skills, learning how to remain fair, approachable, amicable, and engaging, yet on occasion remaining strong when an opinion is challenged. These are difficult concepts to master when learning how to make relationships and require opportunities to be experienced. It could be suggested that the degree of emotional intelligence and maturity that this requires comes through experiences, of remaining responsive and sympathetic while establishing who you want to mix with along with identifying who your real friends are. This takes lots of practice, and on occasion, guidance and support. Within the greater freedoms permitted in preschool there were more demonstrations of active reluctance to engage as the child moved away from social encounters, especially when not being otherwise distracted. In the school setting, a significantly higher number of indifferent observations were recorded. By the nature of the opportunities offered to children within this setting, these usually occurred while the child's attention was being forcibly broken, limiting opportunities to develop their social skills. When undistracted (D4) or uninterrupted (D5) significantly higher sociability was recorded, more so than that recorded in preschool, perhaps by virtue of the child's advanced age.

Practical	
Practical self-development requires experience of hands-on projects, as one's abilities can be seen to evolve through the process and growing capabilities are realised. Confidence can be realised through the resulting practical achievements and application, and unforeseen difficulties adapted to as new skills develop. This would suggest a need for children to have opportunities to experience and become deeply involved with such opportunities, with deep involvement allowing their practical tendencies to be demonstrated. Certainly, within the child study, the deeper the involvement, the deeper the practical expressions. The more disengaged the child was, the higher the likelihood for practical indifference. This was seen throughout most of the school-based observations.	It might be suggested that the motivation to develop a practical disposition is increased when opportunities are given to take an idea and consider whether it would work in practice. Especially when the problems being faced are applied to relatable situations and where those solutions are personally desired. Whilst alternative suggestions and additional knowledge can be offered, it is uninterrupted opportunities to follow one's own path that allows personal engagement to follow. Rather than completing pre-established tasks, experiences become focused on understanding the journey, not just the outcome. This would suggest that as children are given opportunities to think on their feet, developing the tools and techniques required just in time rather than just in case they would see their progress evolve. Free to make mistakes as practical adaptations to the approaches tried are considered, different ways of achieving a favourable outcome can be reached and their tendencies towards practical applications would be expected to flourish. This was certainly seen within the observations, with practical tendencies increasing as distractions were limited. Where their attentions were forcibly broken (D1), this invariably resulted in indifference towards the practical nature of the task and was seen to be the case in most of the school-based observations.
Reflective	
It could be argued that a reflective disposition is an integral part of problem solving, allowing deeper meanings that may initially be hidden to be revealed. Whilst offering a voice of caution against introspection, a continual, often subconscious process of thinking things through serves to support onward progression. Capable of identifying alternatives, reminding one of previous success or offering a degree of confidence in times of doubt, reflection should be valued and not mistaken for unfocused disengagement. This would suggest that opportunities for self-driven problem solving might demonstrate reflective practices and be shown in a child's depth of engagement. Reflection within the child study was seen to increase with the depth of the child's involvement within an activity. Both settings showed a high rate of engagement through the observations with most registering at least a degree of engagement most of the time (I3). Whilst propensity for reflection was higher in preschool, this was almost matched in the school setting when intense engagement was seen (I4).	Opportunities to become lost in thought allows for a deeper contemplation of a problem and for realising the complexities of a situation, even when this process is subconscious. Opportunity for reflection can then be seen as an integral part of the process of understanding the demanding world one finds themselves in. This would then suggest that freedom from distraction would enable children to engage in this process. Supported when uninterrupted time is permitted by adults who understand the importance of periods of reflection, and who offer the space and commitment it requires. Within the preschool observations there was a high consistency of reflective contemplation noted, until children's attention was forcibly broken, at which point they would disengage. Most observations saw children uninterrupted, with a high propensity for reflection. Most school-based observations recorded children's attention being forcibly broken (D1), almost 70% of which resulted in disengagement. Where the children were observed uninterrupted, or with minor distraction, a similar level of reflection was seen as that in preschool.
Adaptable	
Being able to adapt to unexpected experiences allows one to become more accepting of change. By becoming resilient to unforeseen circumstances, new options can be seen as opportunities, problems and difficult situations can be smoothly moved on from as setbacks or difficulties are proactively managed with flexibility. This might suggest that children who are developing adaptive tendencies are better able to become engaged in an activity, being quick to settle down. Within the child study, the children demonstrated a high degree of adaptability across all categories of involvement. Once in the school classroom this was less pronounced, with higher levels of indifference shown and a significantly higher frequency of observations showing only brief settling to a task (I2).	Once an adaptive approach is embraced, it could be suggested that change no longer needs approaching with rigid or adversarial tendencies. Instead, wide-ranging experiences can be adapted to rather than seen as something to shy away from. Having experienced deviation from an established, linear path whilst in a secure, nurturing environment it can be argued that children realise this is nothing to fear and begin to experience the benefits of adaptability. This would suggest that being encouraged elsewhere (D3) or being offered alternatives (D4) might encourage adaptive tendencies within the children. Adaptive tendencies were demonstrated more frequently within the preschool-based observations than when in the school classroom where practices tended to focus more on enforced distraction (D1).
Curious	
A curious interest in what things mean and where they come from encourages a motivating drive to find things out, supporting a joy of discovery that motivates achievements beyond a *"that will do"* approach. However, should opportunities for deeper understanding be denied, this can result in deeply felt frustrations.	To experience the potential and enjoyment of a curious mind one needs to be permitted the time and experiences required to foster it. This is supported through opportunities to ask and to consider one's own questions. This would suggest that a curious nature is promoted within environments balancing adult influence with the autonomy to explore on one's own.

It could be suggested that where curiosity is encouraged and supported, children will be expected to engage, often for prolonged periods. Within the preschool environment the children were seen to be engaged most of the time (I3) with a high frequency of intense engagement (I4). During these periods, children's positive curiosity was frequently noted, with significant numbers of highly curious behaviours being noted. Within the school classroom children's curiosity did decline, where it was seen, this most commonly occurred alongside periods of intense engagement (I4).	The preschool environment offered a high number of opportunities for observations of child autonomy (D5), and these did demonstrate a highly curious nature, as did observations where an adult offered alternative ideas (D3) or distracted with an additional suggestion (D4). Where the child's attention was forcibly broken (D1), curiosity was far less likely to be demonstrated. Within the classroom, most observations saw the child's attention being forcibly broken (D1), and curiosity again was far less likely to be demonstrated. Where additional suggestions (D4) or child autonomy (D5) were permitted, there was a higher chance of curiosity, but this did show a decline from when the children were in preschool.
Self-motivated	
To achieve long-term goals, one arguably requires self-motivation. In establishing a belief in one's ability to achieve, a recognised sense of resilience may develop, fuelling and supporting a determination to succeed. Established, it could be suggested, by facing obstacles and learning to overcome them, of persisting despite disappointments and setbacks and of continuing in the absence of another's direction, validation or support, resilience within oneself can be recognised. Once this is established, distractions or a fear of failure need no longer unsettle or disrupt progress. This would then suggest that periods of prolonged involvement are required for self-motivation to be recognised within oneself and for a self-motivating work ethic to develop. As opportunities to become deeply engaged supports the level of effort required to persist through setbacks and demonstrate the results possible, higher levels of engagement may be expected where deep involvement is promoted. Within the child study self-motivated behaviours were seen to increase in line with the depth of involvement that was noted. Whilst both settings demonstrated children engaged most of the time, when opportunities to become intensely engaged within their activity were permitted, very highly motivated behaviours were seen. Both settings displayed this strong correlation, however preschool offered this potential in twice as many observations than the classroom observations. Where only brief engagement was noted, the child was more likely to show indifference.	The development of self-motivated tendencies is arguably promoted within periods of uninterrupted explorations rooted in one's own enquiry. When combined with timely offers of support as needed, the self-motivating satisfaction of experiencing one's own successful outcomes can allow for a deeply rooted sense of achievement to develop. This would suggest a need for periods of uninterrupted time (D5), interspersed with offers of alternative suggestions when needed. In preschool, large numbers of observations recorded children being permitted uninterrupted time, many of which have attracted a very high propensity for self-motivation. Where freedoms were afforded in the school classroom this also corresponded to high levels of self-motivation being indicated, although not as highly as within the preschool environment. When attention was forcibly broken, self-motivation would disengage, this was seen in most of the school-based observations.
Independent	
It could be argued that a sense of personal independence develops when one begins to identify and follow their own motivations and desires. Whilst developing an understanding of and commitment to the time and effort this may require, some initial flitting is to be expected as wishes are identified. This would suggest that higher levels of independence may be expected following some brief periods of settling within a task as enquiries of other options are considered and interspersed. Within both settings, the propensity for independent behaviours rose as involvement developed from settling briefly (I2) to being engaged most of the time (I3) to some intense engagement. Very high levels of independence were noted in the observations that noted continual intense engagement but there were very few of these. Observations where the child settled only briefly were far more frequent in the classroom setting compared to the preschool environment, but independent behaviours were not demonstrated in most of them.	The importance of having the time, space and freedoms to identify and strive towards personal goals should not be overlooked. Opportunities to try things out at a pace that suits the individual, to find areas of interest to match individual abilities, where attentions are not forcibly drawn elsewhere or when finding themselves pushed down a predetermined path are important inclusions within the child's day. As an independent understanding of one's own abilities evolve, a personal commitment to persist for as long as required and desired is arguably promoted. Furthermore, this process allows for a capacity for independent thought to combine with established ways of working with others as children learn to move away from a dependency dictated through a need to conform. This would suggest that when children are offered an environment allowing for uninterrupted discovery, their independence will be seen to flourish. Certainly within the preschool, most observations captured children experiencing uninterrupted time, during which, a high degree of independence was noted. In the school classroom, most observations saw the child's attention forcibly broken with limited opportunity for independence. When given opportunity to pursue their own interests, independence did increase, but not to the levels seen when they were in preschool.
Thinking creatively	
Developing a creative mindset arguably requires opportunities to become engaged in creative pursuits. Seeing a creative response not as overly complicated or risky, but as opening new avenues of inquiry, opens new avenues of enquiry where fresh ideas may be explored. Whilst outcomes may not always be considered as favourable, this does not necessarily detract from the depth of engagement that can be enjoyed.	Within the modern world there is arguably a need for creative thinking within fast moving and highly complex scenarios. To develop these abilities, children need opportunities to experience complex and evolving demands within environments where creativity is valued and realised. This would suggest a need for children to engage with a creative approach, free to react quickly to their ideas (D5), whilst seeing their efforts valued, and where required, supported and guided (D3).

This would suggest a benefit to allowing children to experience prolonged engagement within creative pursuits. This was seen mainly within the preschool, but within both settings, creative tendencies were seen predominantly alongside periods of intense engagement.	It was within these categories of distractions that creativity was seen most predominantly within the child study, with the typical classroom practice of forcibly breaking children's divergent attention (D1) resulting in removal of opportunity.
Thinking simultaneously	
Developing a simultaneous mindset, where multiple issues, demands and agendas can be simultaneously kept in mind and manipulated requires a diverse skill set. To become conscious of a wider range of information and to then pull these together in ways that can then be processed and acted upon, requires opportunities to become deeply engaged with a situation. Whilst an initial assessment of a situation may occur rapidly, to combine several sources of information requires deeper involvement. Once permitted, initial scepticism, reluctance or apathy may be surpassed and deeper engagement, including physical and mental engagement, could be expected to follow. In the child study deeper involvement was seen in the preschool setting, as was more displays of simultaneous combinations of actions and thoughts. The high volumes of indifference seen in the school classroom tended to be observed where the child only settled briefly (I2).	Within multi-faceted environments, where information is received from a range of sources, simultaneous thought must be relied upon. In these situations, this ability is highly valued, but to realise its potential requires experience of multi-tasking. This would suggest a need for children to experience opportunities of independently processing information from a range of sources with the expectation of incorporating them for themselves. This involves giving children sufficient time to process what is a complex demand, free of distractions (D5). Where this was offered, the children demonstrated a high tendency towards simultaneous thinking, in both settings, albeit, slightly diminished in the school classroom. Where the children's attention became forcibly distracted (D1) as was commonplace in the school classroom, or they were encouraged towards an alternative activity (D2), opportunities were removed.
Thinking logically	
To develop logical thinking processes requires opportunities to assimilate information, to experience making connections and to draw conclusions. As further experiences are had, evidence-based logic helps to develop a clarity of thinking, which adds structure to one's thoughts and planning as hidden truths are uncovered and problems are solved. As these experiences may come from a variety of sources, it can be argued that children need opportunities to independently access the experiences they currently need. When this is effective, one can expect this to be reflected through the greater depths of involvement demonstrated by the child. Intense engagement (I4 and I5) was seen twice as often within the preschool observations and logical thinking featured highly within them. There were almost twice as many observations showing the child settling only briefly (I2) in the school classroom compared to when in preschool, the majority of these observed no evidence of logical thinking occurring.	Children need an ability for logical thought to manage within the fast-paced environments and interactions that they encounter daily. Logical plans and strategic directions help to navigate the multifaceted realities of the day, and offer direction when problems are encountered. But these initially need implementing and modelling by those more experienced around them. Once familiarity is embedded, fact-based, logical assumptions and paths are more likely to be followed, especially when rooted in information verified through experience. This would suggest a need for children to gain a wide range of independent, first-hand experiences, supported through the modelling observed around them. Within the school classroom, children experienced significantly higher incidents of having their attention forcibly broken, this typically resulted in the absence of any observed logical thought. When fewer distractions were experienced and the child could pursue their own direction, they were still less likely to follow a logical path than when they had been in preschool.
Thinking widely	
It may be suggested that opportunities to think widely allows for the development of a depth and range of interests. As each new experience is encountered, it brings with it new directions and possibilities. When realised within open environments and through resources enabling wider explorations, opportunities are given to think outside the box as new techniques may be developed. It could be suggested that as deeper, more prolonged involvement is noted in the children, a depth and range of interests are being developed and this may be observed through evidence of wider thinking by the children. In both settings the likelihood of a positive response increased as the child was seen to be more involved. There was a stark contrast between the two settings however, with a far higher number of indifferent responses recorded in the school observations, regardless of the depth of involvement indicated by the actions of the children.	By taking a wider view of a situation, it could be argued that one is better able to visualise alternative solutions and to discover means of making something a reality. This would suggest that when broader approaches are permitted, thinking may move beyond an immediate response. In doing so, lateral approaches to problems can be considered, alternative paths may be offered, as unique solutions and new opportunities present themselves. Whilst this at times would require the support and encouragement of others, it could be suggested that children would benefit from opportunities to embrace their own ideas, uninterrupted by the imposed suggestions or encouragements of others. During their time at preschool, there was lots of opportunity for uninterrupted time (D5), this was seen in half of the observations. During most of these observations, evidence of thinking widely was documented, often at a high level. This positive response was also documented where some minor external influence or support was offered (D4), although it sharply dropped off where the child's attention became forcibly broken (D1). In the school setting, most observations noted the child's attention being forcibly broken (D1), and far fewer indications of thinking widely were documented. Where these were seen it was when the child was offered uninterrupted time (D5), or where some minor external influence or support was offered (D4), however, this did not elicit the response to thinking widely that had been seen in the preschool.

Figure 6.1.1: Reflections on established learning theory, suggested impact and actual observations as viewed through the variable of agency

When comparing the opportunities the children were offered (Question One), and the effect this had on their experiences, the impact this had on their realised engagements with the dispositions was evident. However, to use these findings to inform and direct children's early experiences of learning (Question Two), the impact of experience needed combining and viewing through each of the pedagogical lenses.

Considering pedagogical impact on experiences of early learning

Figure 6.1.1 illustrated how reflections from established learning theory could be used to consider the observations of the child cohort. It did so in this chapter through the example of agency. Once similar statements had been made for intentionality, environment and scaffolding (Appendix S), powerful reflections were afforded. Chapter 6.2 drew these reflections together as it explored pedagogical impact across the dispositions through its conceptual and theoretical frames.

6.2 Pedagogical impact on experience

As this chapter continued to explore the second question, considering how insights gained from the study can be used to inform and direct children's early experiences of learning, it built on the insights discussed in Chapter 6. Having reflected on observed engagements under the theme of agency, the findings from similar reflections on intentionality, environment and scaffolding were combined. To view these findings cohesively, allowing useful insight into the second question, they were grounded through graphical representations of engagement representing coded data gathered from 640 observations and anecdotal representations of the child experience, various examples of these are included in Appendix S. Bringing together engagement across 16 dispositions, alongside rich data to illustrate children's experiences in the moment, trends were seen to emerge, offering powerful recommendations to be considered.

Situating the chapter within the studies conceptual frame

Utilising Figure 1.1.7 to explore the effects of pedagogical variables reflected through the conceptual frame (reproduced here for reference), allowed the impact of pedagogical approaches to be interrogated through to its consideration of long-term impact.

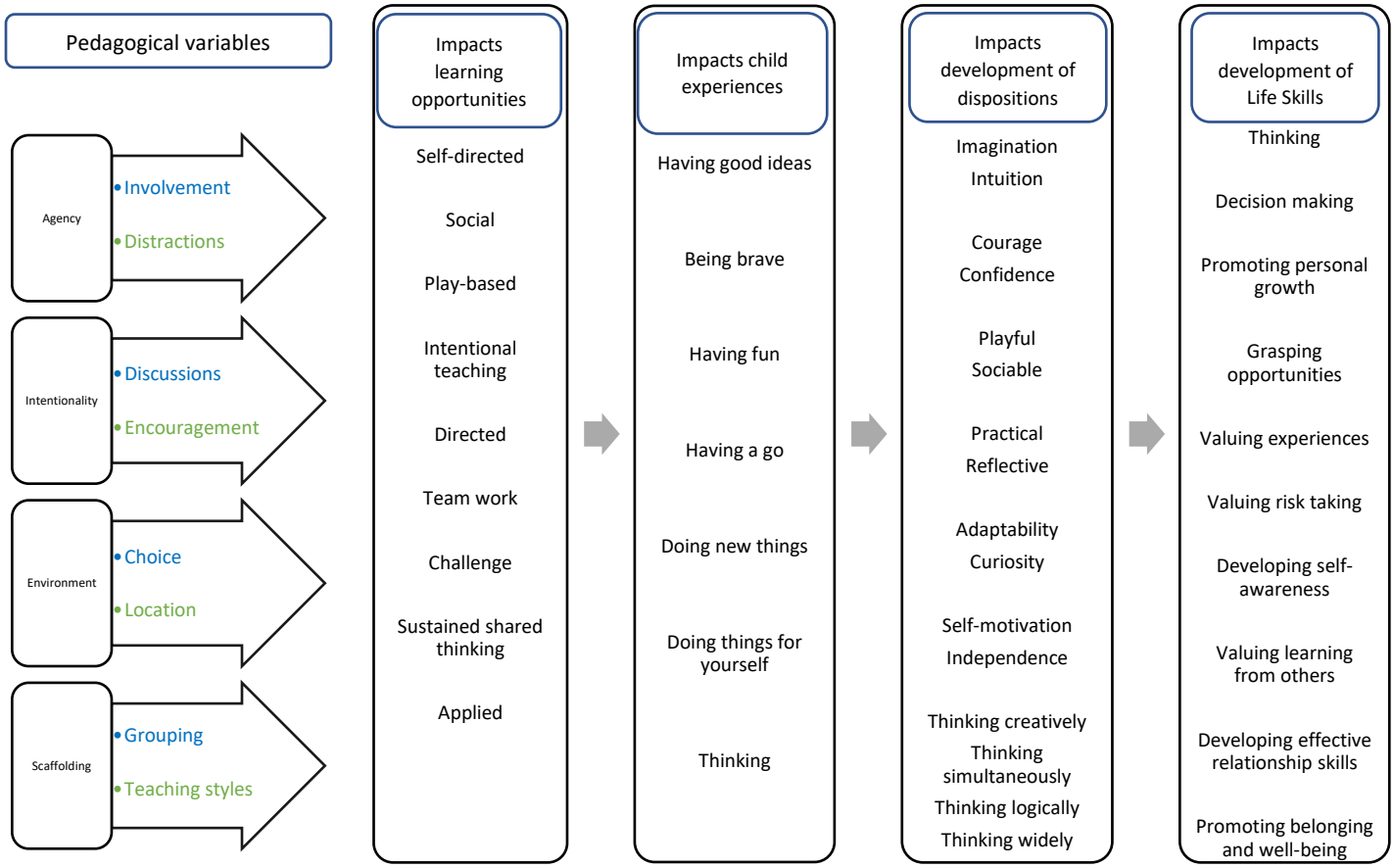


Figure 1.1.7: The effects of pedagogical variables reflected through the conceptual frame.

The conceptual frame posits that the agency, intentionality, environment and scaffolding offered to a child impacts learning opportunities. Considered throughout the study through intrinsic factors; the degree of involvement and discussion entered into, the choices selected, and social groupings engaged in, and extrinsic factors; the distractions and encouragements that have been offered, the imposed locations and teaching styles. Going on to suggest that by affecting children's experiences, opportunities impact upon children's engagements, and ultimately their development of dispositions and life skills. Following an independent study by the author that established the importance of dispositions through a recognition of the underpinning

elements they represent and noted their impact on experience as it extracted retrospective reflections key to their development, what follows is an exploration of pedagogical impact that combines findings from all the dispositions considered.

Viewing the impact of pedagogical variables on dispositional engagement

Due to the conscientious consistency applied to the observation schedules and methods employed throughout the study, the dispositional engagement of the children could be compared and considered within all the variables used. With equal numbers of observations conducted in the preschool and reception settings, of equal duration and under similar conditions, direct comparisons of children's opportunities to engage could be made (Question One). As engagement in each disposition was coded alongside the pedagogic conditions of each observation, these too can be directly compared. Efforts to minimise bias were reflected in the number of observations these reflections were based upon, the collective cohort they represented, and the consistencies offered within the coding, frames and methods used.

This chapter brought together the findings from 640 observations to consider engagement under the themes of agency, intentionality, environment and scaffolding. With reference to the IEIEC theoretical frame it considered involvement and distractions under the theme of agency whilst discussions and encouragement were considered under intentionality. Environment was viewed through choice and location whilst scaffolding observed the impact of grouping and teaching styles. The impact on learning opportunities was viewed by comparing the pedagogical variables experienced by the children in the two settings as set out in the frame and utilised throughout the observations as specified below (Figure 6.2.1).

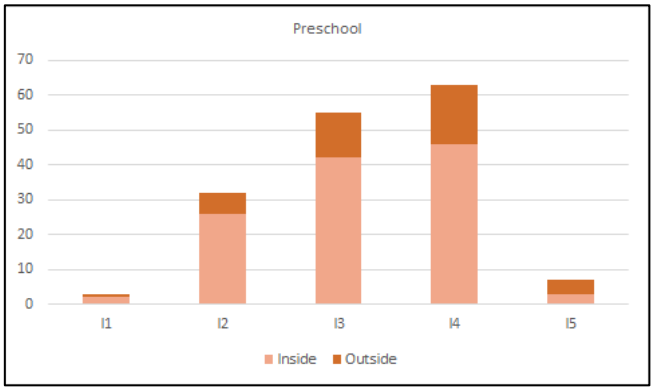
Child Focused Tracking Observation Proforma - *Internalised influences*									
Discussions	TC	TC - A	TC - C	TC - GC	A - TC	C - TC	GC - TC	A - GC	GC - A
Involvement	1 – Floating, unengaged		2 – Settles briefly		3 – Engaged most of time	4 – Some intense engagement.		5 – Continual. intense engagement.	
Grouping	F - Flitting		WG – Whole grouping		SG – Small grouping	P – Pair		I – Individual	
Choice	1 – No choice		2 – Limited choice		3 – Some activities excluded.	4 - Only in/outdoors excluded.		5 – Freedom of choice	
Physical Environment Observation Proforma - *Externalised influences*									
Teaching styles	T1 – Adult led		T2 – Adult participation		T3 – Group activity	T4 – Adult support		T5 – Child autonomy	
Distractions	D1. Att. forcibly broken		D2. Encouraged elsewhere		D3. Offered alternatives	D4. Distracted		D5. Uninterrupted	
Location	L1. Enforced		L2. Encouraged		L3. Alternatives offered	L4. Most options available		L5. Free choice	
Encouragement	E1. Enforced		E2. Directed		E3. Encouraged	E4. Adult preference		E5. No adult influence	

Figure 6.2.1: Pedagogical variables documented throughout the child study

Similar graphical illustrations were seen for one child in Chapter 4.1 (Figures 4.1.19 and 4.1.20) but will now demonstrate the collective experiences of the cohort with the added contextual detail of showing whether this was recorded inside or outside (Figures 6.2.2, .4, .7, .9, .12, .14, .17, and .19). The impact of these pedagogies on children's experiences was then explored as each one was illustrated to show the level of engagement displayed by the children when experiencing it, again seen throughout the preschool and reception year (Figures 6.2.3, .6, .8, .11, .13, .16, .18 and .20). As these observations spoke to the impact this had on the dispositions, the potential impact on development was explored. From these reflections, trends were seen to emerge, exposing links between the affordances offered to children and the levels of engagement observed. These trends were noted at the bottom of each thematic section (Figures 6.2.5, 10, 15 and 20) and used to directly inform the recommendations made in Chapter 6.3 as it addresses Question Two.

Do children show evidence of engagement or do they only settle briefly before moving on?

Impacts learning opportunities



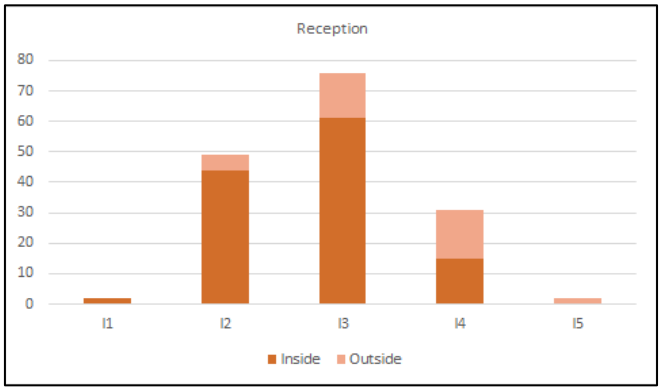
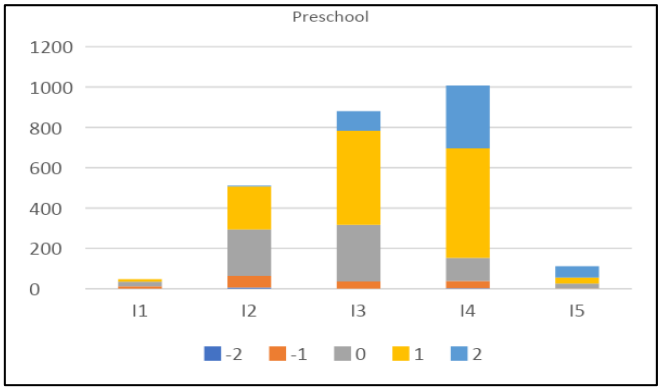


Figure 6.2.2: Number of times the children experienced pedagogical variables of involvement inside and outside, within each setting

Impacts child's experiences



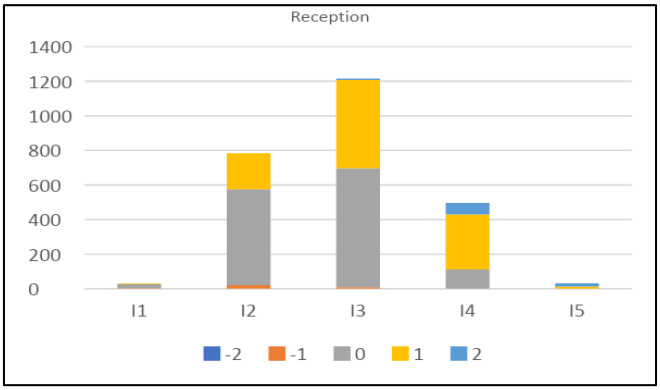


Figure 6.2.3: Child engagement as recorded using the FOLLEP scale within each category of involvement in preschool and reception

Potential to impact development of dispositions

There were very few examples within the observations of children flitting (I1), however when this was seen, the difference between the two settings was clear. In preschool this tended to correspond with an active reluctance, for example to courage, in the school classroom, disengagement and indifference, reflected in a FOLLEP score of zero, were more likely to be seen.

Observations of the child settling only briefly (I2) indicated little involvement compared to other categories and, especially in the school classroom where they were recorded almost twice as frequently, were strongly correlated with moments of indifference and detachment. Consequently, the dampening effect of little involvement was more pronounced here and particularly reflected children's lack of displays of imagination and intuition, playful or sociable responses, or with practical, adaptable or independent actions. Indifference towards thinking creatively and thinking widely was also more likely to be seen in the school classroom with little evidence of logical thought processes where only brief settling was seen.

As involvement deepened and the child was seen to be engaged most of the time (I3), positive responses were seen to increase, particularly in children's displays of courage and confidence, self-motivation and independence. Although there was still a stark contrast in the number of indifferent responses recorded in the school. The children tended to remain indifferent to social and playful encounters in school until some intense engagement was observed, whereas in preschool these dispositions saw high

participation and active reluctance within the settings permitted freedoms. In preschool, children's curiosity, intuition and practical engagements were also seen to become positively and highly active when children were engaged most of the time yet declined once in the school classroom. Where these were seen in the school classroom it was more commonly associated with intense engagement.

With some intense engagement (I4), higher displays of engagement were seen across the dispositions, however, not only were observations reflecting this higher intensity of involvement recorded twice as often in preschool, but the higher levels of engagement it permitted were also considerably more pronounced. This was particularly pronounced in social and self-motivated behaviours, once highly motivated in preschool, they became significantly less observed in reception. Alongside more practical and social endeavours, opportunities for more intense levels of involvement in school had a significant impact on children's courage and confidence. As children became more deeply involved in experiences, higher positive ratings were recorded where they had not been seen before, although there were few of these.

Agency → Distractions

Are children permitted time and opportunity to pursue choices free from distraction?

Impacts learning opportunities

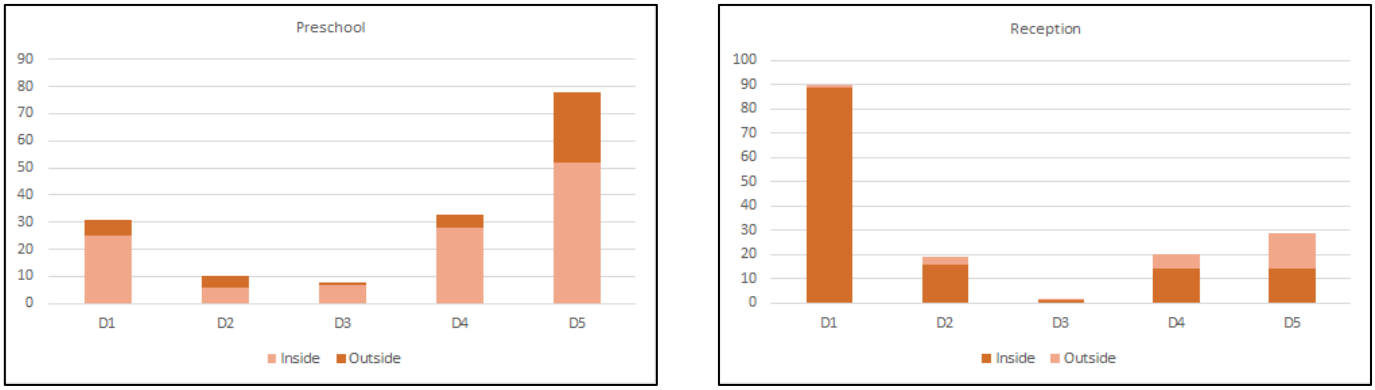


Figure 6.2.4: Number of times the children experienced pedagogical variables of distraction inside and outside, within each setting

Impacts child's experiences

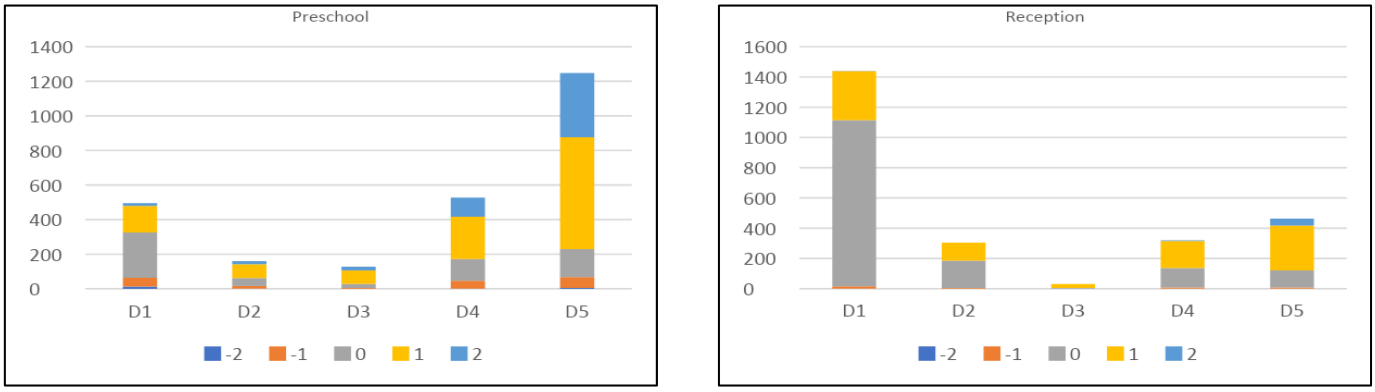


Figure 6.2.5: Child engagement as recorded using the FOLLEP scale within each category of distraction in preschool and reception

Potential to impact development of dispositions

The variance seen in children's responses when in preschool was largely replaced by indifference when the observations moved to the school classroom, especially where the children's attention was more governed by the adult in the room as was seen in most of the school observations, almost 70% of which resulted in disengagement. With forced distractions (D1) invariably eliciting little evidence of engaging with a disposition, the high propensity for this practice within the school classroom had a clear impact on the children as higher levels of indifference were recorded. Noted as having their attention forcibly broken in over half the school-based observations, the direct impact this had on the experiences of the children and the level of engagement observed once the children began school was seen across all the dispositions.

Where children were actively demonstrating intuition, courage and confidence in preschool, these were seen to significantly decline once in school, where they were engaging in practical explorations, adaptive practices and reflection, curiosity, self-motivation and independence, their enforced attention saw disinterest or little opportunity in the school classroom. Their opportunities for active thinking were also seen to demonstratively decline when freedoms of exploration were removed, whilst this was seen in both settings, it was seen in much greater frequency, and to greater detriment once in the school classroom.

As the direction offered by the adult became less forced, and instead offered alternative ideas (D3) or additional suggestions (D4), engagements were seen to rise. This was particularly seen through children's curiosity and methods of creative thinking where the offering of alternative ideas supported and guided the children, a practice more common in preschool.

Where children were less distracted by others, sociable engagements and independence were recorded with more variance. Free to move away from social encounters, children were observed being actively reluctant to engage, especially in preschool where this level of freedom was more common. Practical tendencies were also seen to increase as children experienced less distractions in both settings, as did their curiosity, self-motivation and independence, however even with the greater freedoms, the levels observed in preschool were not seen in the school setting. Thinking logically appeared to benefit from being able to pursue their own direction, although this was less likely to follow a logical path once in school. Whilst thinking widely saw positive responses in preschool where some minor external influence or support (D4) was offered, benefits were also seen in school with uninterrupted time (D5), although not to the levels elicited in preschool.

In both settings, uninterrupted explorations saw a higher percentage of courageous, confident and reflective responses. In preschool, where opportunities were significantly higher, children were seen particularly engaging in curious, self-motivated and independent pursuits during these prolonged periods of uninterrupted time which also offered opportunities for thinking widely, often at a high level. Positive scores were also recorded for thinking simultaneously in both settings when the children had uninterrupted time, although this did decrease once the children were in school. Unsurprisingly, periods of uninterrupted time saw the greatest propensity towards play, a positive response by the children that even slight distractions (D4) would see turn to indifference or reluctance.

Agency – Trends noted through the level of agency offered to the children in preschool and reception	
Involvement	**Distractions**
Child settling only briefly recorded almost twice as frequently in school and indicated little involvement. Moments of indifference and detachment (reflected in a FOLLEP score of zero) strongly correlated with less involvement. The same conditions elicited different reactions from the children once they moved settings. Variance within preschool became indifference in school. Positive engagements with dispositions required deeper levels of involvement once in school. Children showed deeper involvement in preschool, this correlated with deeper engagements with the dispositions.	Most observations in preschool were uninterrupted and consistently saw positive engagements, many of them high. Attention in most school observations were governed by an adult and invariably elicited little evidence of engagement. Positive engagements increased as distractions and interruptions removed but levels declined once in school. In school even slight distractions (D4) would see positive responses turn to indifference or reluctance. Sociable engagements and independence saw great variance, especially in preschool when less distracted and free to move away. Variance in preschool was largely replaced by indifference in school.

Figure 6.2.6: Trends noted through the level of agency offered to the children in preschool and reception

Intentionality → Discussions

Are discussions dominated by the adult or the child voice?

Impacts learning opportunities

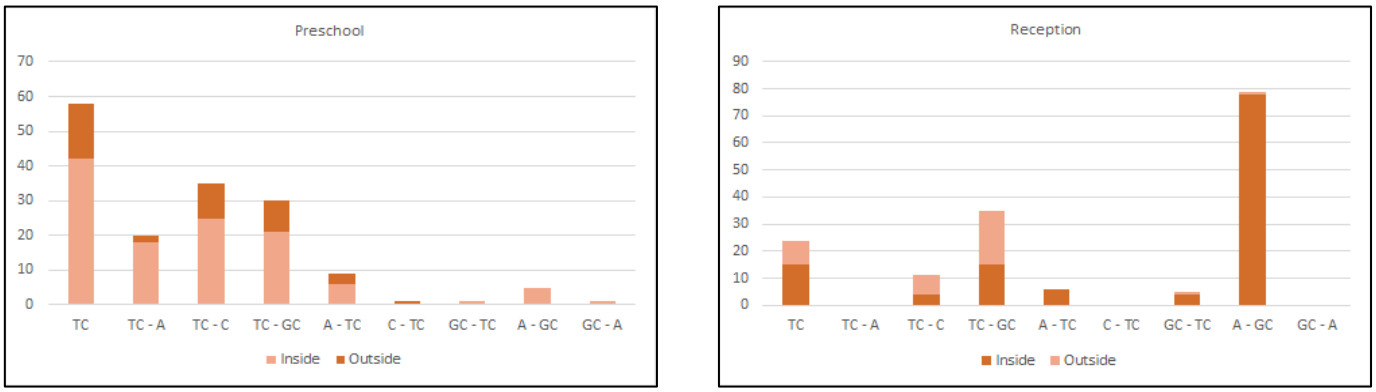


Figure 6.2.7: Number of times the children experienced pedagogical variables of discussion inside and outside, within each setting

Impacts child's experiences

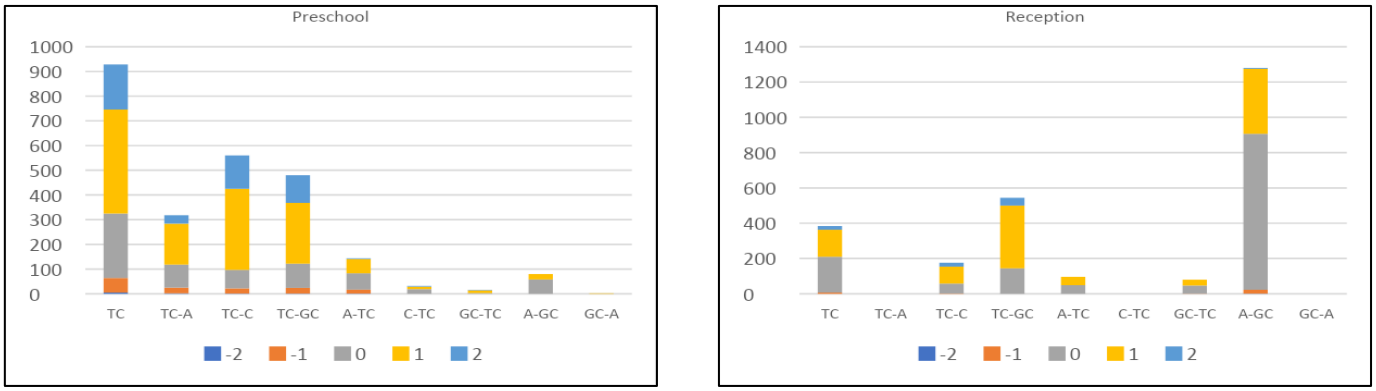


Figure 6.2.8: Child engagement as recorded using the FOLLEP scale within each category of discussion in preschool and reception

Potential to impact development of dispositions

Within the preschool observations, all styles of discussion were noted, most common however were those instigated by the child. In the school observations these were largely replaced by adult led communications to the class as a whole group. Consequently, within the preschool, greater variance was seen in the children's engagements with the dispositions through a range of discussion styles, particularly within children's propensity to engage socially, through their reflective tendencies and within their adaptability.

Observations capturing the children neither engaging with others nor being spoken to (TC) were considerably more likely in preschool. The effect this had on children's imagination differed widely between the sittings, what had once been positive inclinations in preschool became indifferent once in school, and highly sociable and practical behaviours were also seen to decline. TC had seen high incidences of highly positive reactions towards confidence, independence and play when in preschool, however these too declined once in school.

In observations where the child was observed instigating discussions, whether to an adult, an individual child or group of children their propensity towards many of the dispositions rose. Children's courage, curiosity, confidence and sociability increased where opportunities were given to voice an opinion and engage in conversation. Direct child involvement saw a higher propensity for a practical response, and on the occasions where the child approached the adult for support, a higher tendency

for wider thinking was noted, although this was only seen in preschool. Self-motivated behaviours were also seen to score highly during child-initiated exchanges, however opportunities for such exchanges were significantly higher in preschool and the resulting impact on demonstrations of the dispositions was clear.

Where the observed child initiated an exchange with another child higher indications of imagination, intuition and playful responses were seen. With greater opportunity in preschool, the number of indications of these dispositions were far higher here. When given opportunities to engage in discussions with other children, reflections in school were seen to rise to that previously seen in preschool, and, although not as high as preschool, adaptable behaviours were also seen to rise. Creative and simultaneous thinking was seen throughout child led interactions, however, in the school, most observations were adult led and creativity much more unlikely. When addressing another child or group, evidence of wider thinking tended to be more positive, perhaps indicating the greater relatability offered by a peer. Again, due to its lack of opportunity, positive scores in this category significantly declined once in school.

During observations where the adult led the exchange either to an individual child or to a group, as was seen in most of the school observations, higher levels of indifference or lack of opportunity were noted. Creativity within adult led discussions in the school was extremely unlikely and little opportunity was given for simultaneous thought or logical exchanges of ideas in most instances. As most discussions in school were adult led and focused on the group, opportunity for independence reduced in the classroom, as did indications of courage and confidence and fewer playful or sociable encounters were noted. Compared to what the children had demonstrated in preschool, very few positively practical or reflective responses were seen in the school observations, curiosity and self-motivation were seen to sharply decline and independent actions were seen to be actively resisted when an adult was involved.

Intentionality → Encouragement

Are actions driven by the intentions of the adult or the child?

Impacts learning opportunities

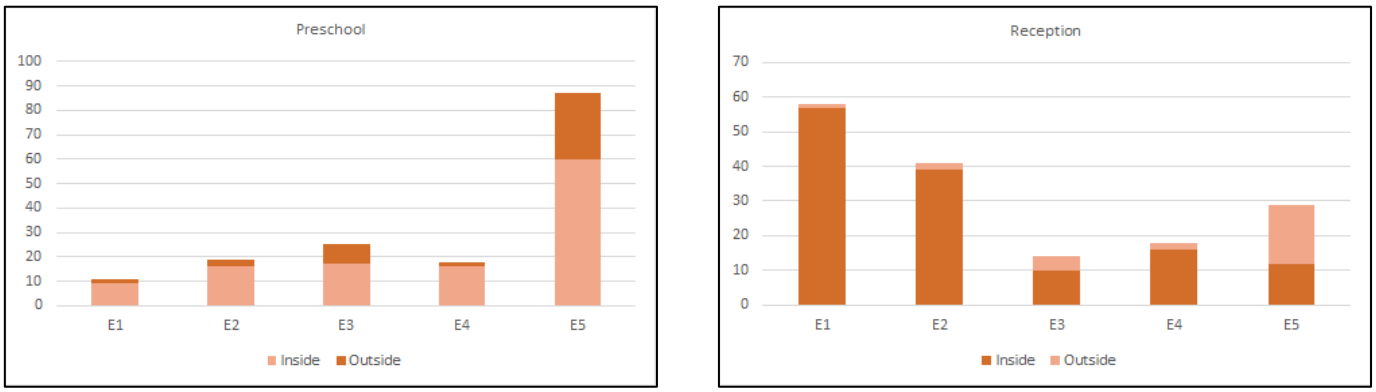


Figure 6.2.9: Number of times the children experienced pedagogical variables of encouragement inside and outside, within each setting

Impacts child's experiences

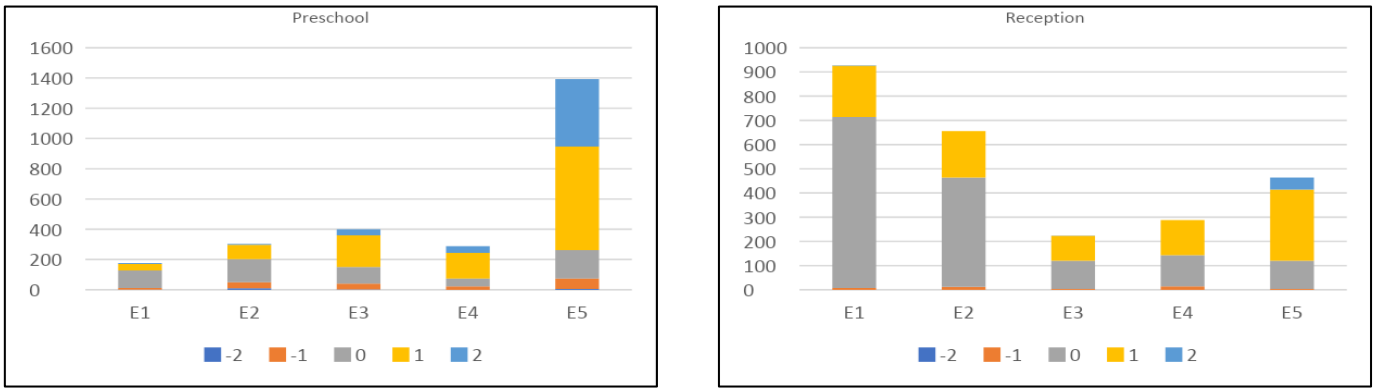


Figure 6.2.10: Child engagement as recorded using the FOLLEP scale within each category of encouragement in preschool and reception

Potential to impact development of dispositions

When actions were enforced (E1), indifference was invariably noted towards most dispositions, including imagination and intuition as well as the more active social, playful and practical dispositions and those offering new opportunities. As this occurred in most of the school observations, high levels of indifference were frequently noted within the school setting, often a considerable decline from that seen in preschool. Lack of opportunity for social, playful or reflective responses was significantly more pronounced in school and opportunities to demonstrate thinking styles were all but removed during these heavily enforced experiences, especially within creative responses, and logical responses were seen to sharply decline from more positive responses seen in preschool.

As encouragement within an activity became directed (E2), rather than enforced (E1), children were slightly more inclined to engage with some of the dispositions, for example within the logical responses noted in preschool, however, with other dispositions, such as intuition in preschool, or courage in school this direction saw children become less engaged. In preschool, a reduction of governance to the level of encouragement (E3) was needed before the children actively began engaging in many of the dispositions, when this was offered, positive responses were seen most of the time. However, similar levels of engagement tended to need complete freedom from adult influence once the children were in school. As the level of adult influence became a preference (E4), and then offered children freedom (E5), this decreased adult influence saw more positive reactions towards imagination and intuition, reflection, curiosity, self-motivation and thinking widely as more opportunities

were given to children to try things for themselves along with opportunities for children to demonstrate their confidence, practical applications and opportunities to actively engage in and retreat from social encounters free of the influence of the teacher.

With freedoms (E5) offered twice as often in preschool, this had a marked difference on the number of occasions where positive engagements with the dispositions were noted. The highest propensity for intuition and courage were seen when there was no adult influence, indications of playful behaviours rose as encouragement and enforcement decreased, becoming highly positive when free from adult influence. Self-motivation and reflection were at their highest in school when there was no adult influence, but with significantly less opportunities for child autonomy, these higher levels were seen less frequently than that seen in preschool, as potential development of these dispositions declined. With most observations in preschool being free from adult influence, children's independence was consistently seen, frequently at high levels. Nearly all creative, simultaneous and wider thinking was seen within E3, E4 and predominantly E5, with these opportunities more noted in preschool, positive scores were seen twice as often.

Intentionality – Trends noted through the level of intentionality offered to the children in preschool and reception	
Discussions	**Encouragement**
TC observations were considerably more likely in preschool and saw high levels of engagement. In school, adult-led communication to the whole group was most common and saw the highest levels of indifference or lack of opportunity. Greater variance seen across the full range of discussion styles within the preschool. Child instigated discussions saw the highest engagement with the dispositions, including thinking. Opportunities for child instigated discussions significantly declined once in school. Positive engagements in preschool became indifferent once in school. Approaching an adult for support saw high displays of thinking but was only seen in preschool.	When actions were enforced (E1), indifference towards the dispositions was invariably noted. Most of the school observations recorded enforced encouragement and noted high levels of indifference. Adult encouragement was required in school for some dispositions that were freely demonstrated in preschool. Decreased adult influence (E3) and (E4) were more frequent in preschool and saw more positive reactions. Observations noting freedom from adult influence (E5) recorded significantly high levels of positive engagements. Freedom from adult influence (E5) offered twice as often in preschool. A considerable decline in levels of engagement were seen between the preschool and school observations.

Figure 6.2.11: Trends noted through the level of intentionality offered to the children in preschool and reception

Environment → Choice

Are children given choice within the activities they select?

Impacts learning opportunities

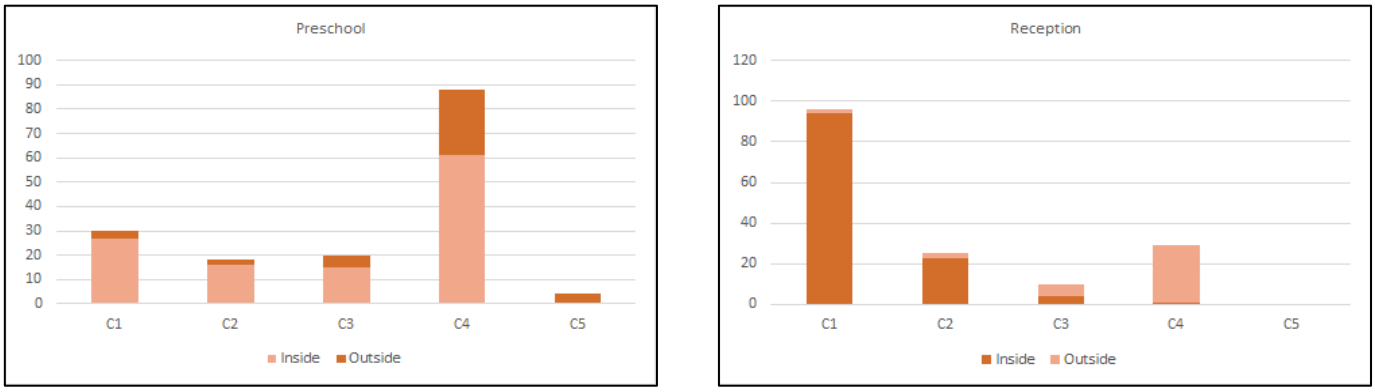


Figure 6.2.12: Number of times the children experienced pedagogical variables of choice inside and outside, within each setting

Impacts child's experiences

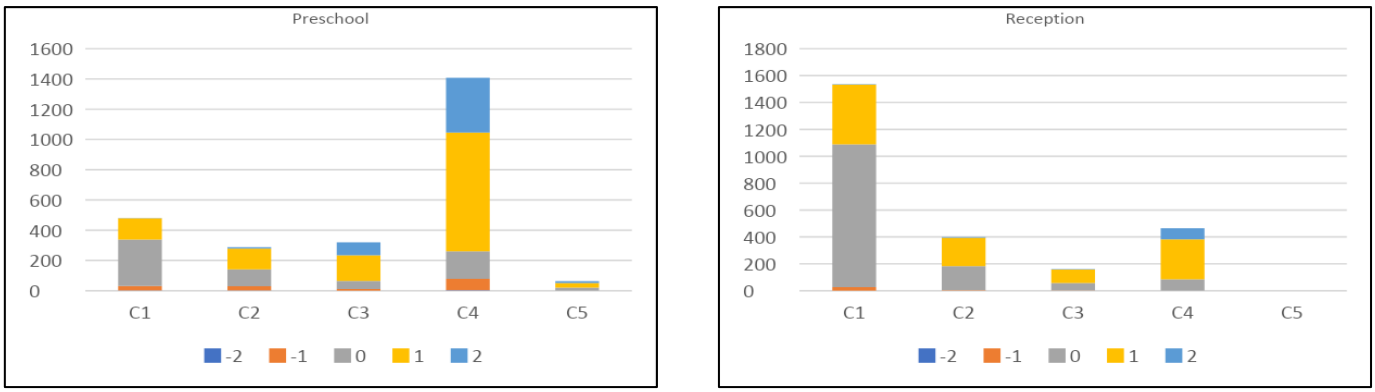


Figure 6.2.13: Child engagement as recorded using the FOLLEP scale within each category of choice in preschool and reception

Potential to impact development of dispositions

Where children had no opportunity for choice, they were most likely to act indifferent towards the dispositions, or there would be no opportunity for it. This absence of choice had detrimental effects across the dispositions but was most pronounced in children's lack of sociable, playful and practical opportunities and their independence and self-motivation was reduced substantially. Evidence of children's confidence, courage and imagination were rarely observed when choice was totally removed, however, these dispositions were most affected in preschool where this absence of choice was experienced less often. Evidence of wider or creative responses were all but absent in the observations offering no choice and variance also declined in the school observations, indicating that a tendency to trial in preschool was replaced by indifference within the heavily structured classroom. This absence of choice was recorded in nearly two thirds of the school-based observations.

In both settings, positive indications of the dispositions increased when greater freedoms were offered. While responses towards sociable, playful and practical opportunities would be expected to rise, along with indications of their independence, so too did children's self-motivation and confidence. Children's courage, their likelihood of adaptive behaviours and their demonstrations of intuition were also influenced, although in preschool reflection would require removal of only some activities (C3) before it was seen. In preschool, additional freedoms saw the children's thinking more clearly demonstrated as creative and

wider approaches were more readily embraced, however this free choice was rarely observed in school and indications of the thinking dispositions sharply declined.

When children were offered a high degree of freedom, limited only by the opportunity to transition inside or outside, significantly higher scores were recorded across the dispositions. This effect was seen in both settings however, this level of freedom was recorded in three times as many preschool observations and was seen to greatly impact the children's engagements. The higher degrees of freedom permitted in preschool elicited more playful responses and opportunities for variance within social encounters as children were more likely to remove themselves from socially difficult encounters than when in school where behaviours became more conformist. Greater variance was also seen in children's reactions towards adaptability, self-motivation and independence within the freedoms offered. Children were almost consistently curious and imaginative when offered this level of freedom and self-motivation was seen to be consistently high. All styles of thinking were seen to be considerably more evident within the higher choice band, although the likelihood of a positive reaction did decline once in the school setting.

Environment → Location

Are children given choice within the environments they occupy?

Impacts learning opportunities

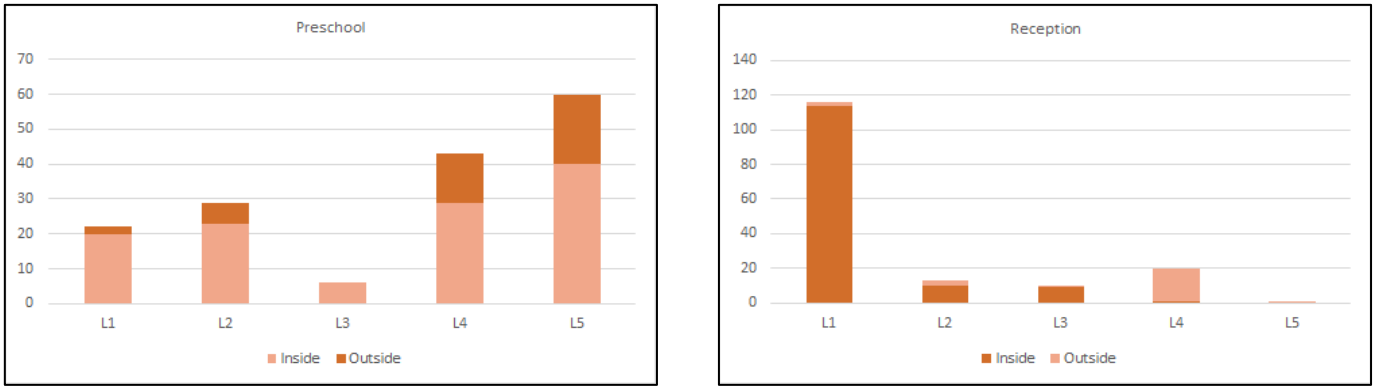


Figure 6.2.14: Number of times the children experienced pedagogical variables of location inside and outside, within each setting

Impacts child's experiences

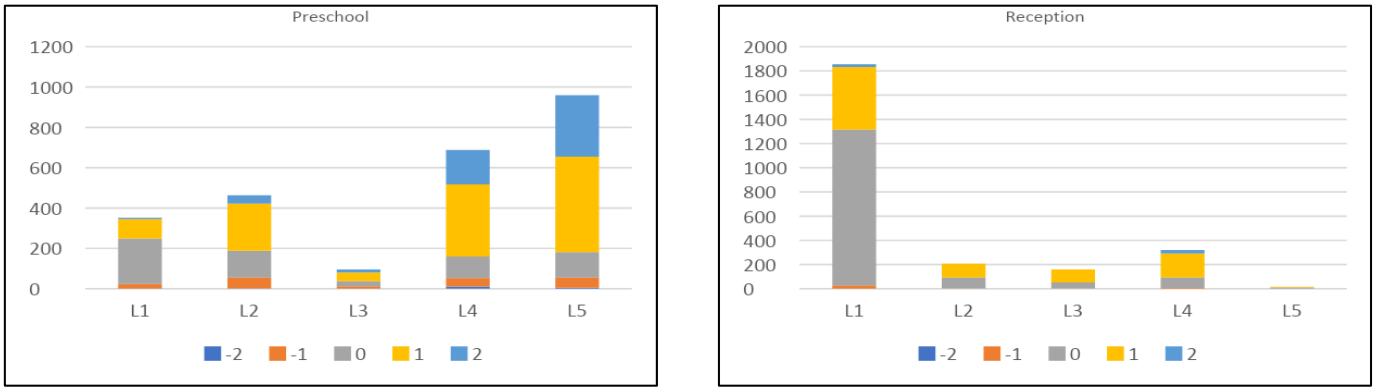


Figure 6.2.15: Child engagement as recorded using the FOLLEP scale within each category of location in preschool and reception

Potential to impact development of dispositions

The degree of choice offered to children by way of their location showed a marked difference between the preschool and school-based settings. In more than half of the preschool observation's children had free access to most options (L4 and L5), this was seen in just an eighth of the school-based observations where location was enforced (L1) during 73% of the observations. In school, scores increased as greater freedoms were offered to children, but this was rarely seen, and a high frequency of observations recorded no tendency towards the disposition observed. For example, self-motivation that had been frequently observed in preschool, and with high scores across L2, L4 and L5 were still observed in school, but not when location was enforced, in around 45% of the observations.

This lack of freedom also correlated with a significant change in children's intuition and courage, confidence and curiosity as most of the enforced, school-based observations saw no evidence. There was little opportunity for playful or sociable encounters and practicality and adaptability, whilst shown elsewhere, was notably absent when location was enforced. Creativity was rare in school, and evidence of simultaneous thinking declined once in the classroom setting, logical thinking was seen within the structures of the school, but logical thought and actions were not seen as often as they had been in preschool and children's propensity for wider thoughts and actions dropped to a third of that seen in the preschool.

Whilst a small increase in choice of location saw children's independence and self-motivation rise significantly in the school classroom, the same was not seen in their adaptability or curiosity, both of which requiring higher levels of freedoms. Once these were offered (L3-L5), the impact this had on children's propensity for positive engagement was almost universal across both settings. However, the likelihood that a child would show many of the dispositions, for example imagination, courage, confidence and self-motivation diminished significantly once in school.

In preschool, where freedom of location and alternatives were offered a higher variance was seen within levels of engagement, particularly within playful and sociable engagements but also in children's tendencies towards independence, intuition and courage. Independent choices within both settings increased the likelihood of children reacting practically and reflectively, although not at the frequencies seen in preschool, and adaptability that had been strong throughout the free choice offered in preschool was seen to diminish once in school, even when children were offered the same conditions. More freedom also saw children's demonstrations of active thinking rise, however once in school children's demonstrations of their thinking greatly diminished, this was especially pronounced in their displays of creativity, even when free locations were offered. Wider approaches to thinking were also seen to decrease as thinking in the school classroom became more linear, but not more logical.

Environment – Trends noted through the environments offered to the children in preschool and reception	
Choice	**Location**
An absence of children's choices corresponded with an absence of positive engagements being observed. Absence of choice recorded in nearly two thirds of school-based observations. Positive engagements with dispositions increased with the level of freedoms offered. Free choice recorded in three times as many preschool observations. Significantly higher frequency of positive engagements recorded in preschool, sharply declining once in school. Opportunities for variance increased in preschool with opportunities to retreat, whilst school required children to conform. Variance demonstrating children's attempts in preschool were replaced by indifference or lack of opportunity in school.	Free access to the environment seen in more than half of the preschool observations compared to one eighth in school. 73% of school observations saw location enforced, 69% of these recorded no engagement. Engagements with dispositions increased as greater freedoms were offered. Dispositions frequently observed within the freedoms of preschool were rarely seen in school. Independent choice of location increased the likelihood of engagement, with small increases in choice seeing significant impact. Likelihood of engagement declined in school, due in part to enforced locations, but also seen when greater freedoms were offered. The same conditions elicited different reactions from the children in the two settings.

Figure 6.2.16: Trends noted through the environments offered to the children in preschool and reception

Scaffolding → Grouping

Are children engaging independently, or supported by their peers?

Impacts learning opportunities

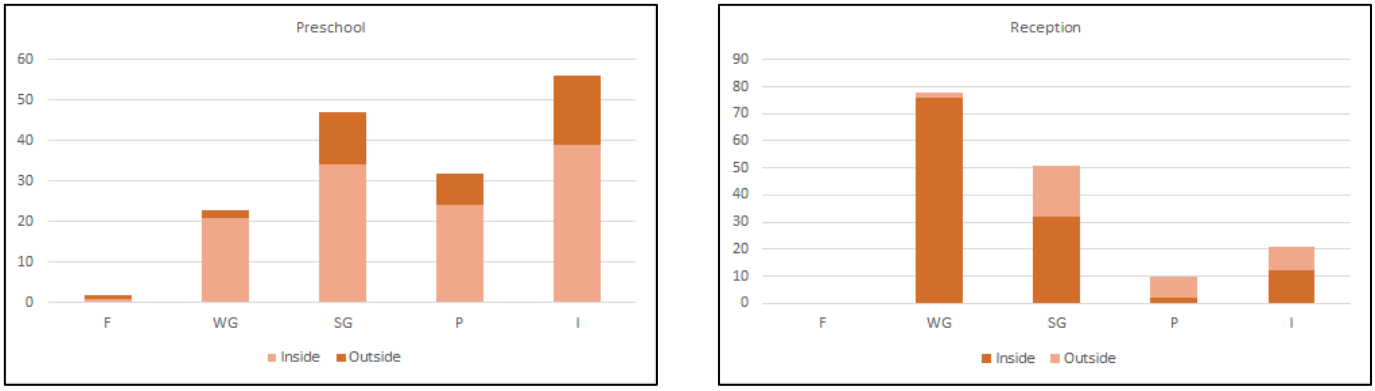


Figure 6.2.17: Number of times the children experienced pedagogical variables of grouping inside and outside, within each setting

Impacts child's experiences

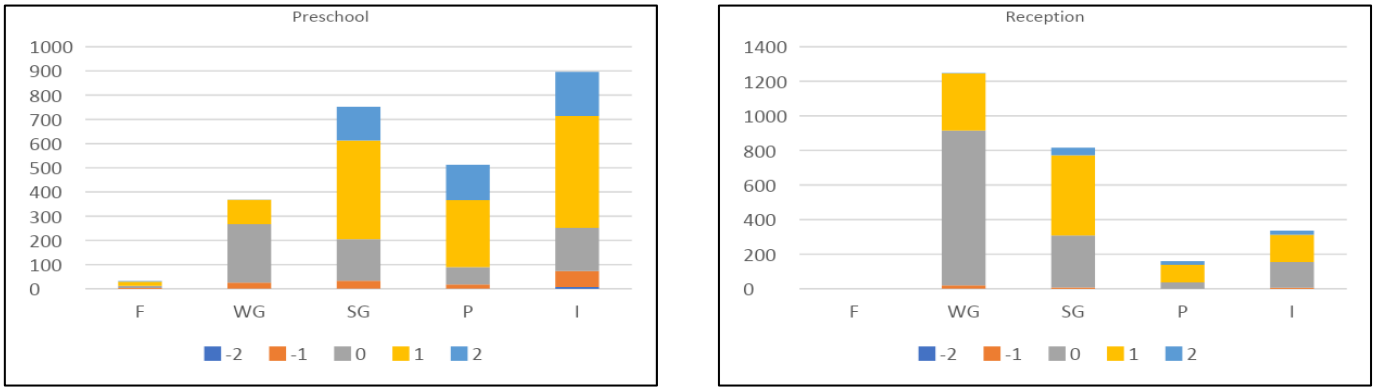


Figure 6.2.18: Child engagement as recorded using the FOLLEP scale within each category of grouping in preschool and reception

Potential to impact development of dispositions

The practice of addressing the children as a whole group (WG) was seen in three times as many school observations than those conducted in preschool. Within these classroom-based observations, it was common to see children disengage from a disposition, either through a lack of interest or possibility. Within nearly three quarters of the school-based, whole group observations, the children showed no indication towards the observed disposition, with courage, confidence and imagination particularly affected. There was little opportunity for a playful or sociable response and an overwhelming indifference was seen to practical and reflective responses. Being adaptable or curious, dispositions that were highly positive in other styles of grouping were seen to sharply decline and children had far fewer opportunities for independence or self-motivation, a lack of which was seen three times as often when the child found themselves in the whole group, this accounted for a quarter of the classroom observations. Opportunities to develop their thinking were also seen to drop significantly. Creativity, seen evenly across small group, pair and individual groupings, was seen to be all but ruled out when sat together in a whole group. Thinking widely also declined dramatically within the whole group with no opportunity offered in over 90% of the observations where whole group approaches were utilised. This dampening effect was noted in both settings, however with significantly less reliance on whole group approaches in preschool, its impact was less keenly felt, and faster recovered from.

A child's tendency to demonstrate a disposition increased consistently as the potential engagement of other children was introduced, for example, extending personal responsibility even as far as that offered in a small group saw opportunities for independence to rise significantly. This effect was seen in both settings as positive inclinations became more readily demonstrated across the dispositions when children were observed in more social groupings, however, the more infrequent opportunities in school dampened this effect. Whilst the children were observed in small groups on roughly the same number of occasions within both settings, the children's inclination towards the dispositions differed within them. In the school classroom, children often needed additional freedoms before responses rose to that seen previously as their inclination towards many of the dispositions were seen to sharply decline from that observed in preschool. This was seen in their opportunities to become practical within the activity or show a reflective or intuitive response.

Apart from independence, pair groupings saw the highest tendencies towards all the dispositions. Whilst positive engagement was seen in small groups and when children were independent, these tendencies became more pronounced when working in a pair in both settings. Pair groupings were over twice as likely in the preschool.

In preschool children had significantly more opportunity to act independently, being seen nearly three times as often as when they started school. This lack of opportunity in the classroom saw a significant drop in imagination, play, sociability, self-motivation and methods of thinking compared to that the children had demonstrated a year earlier. This dampening effect also extended to times when the children were permitted time to act independently, with tendencies towards an imaginative or independent response more likely to now show indifference. With independence being offered in around 35% of the preschool observations, the full range of responses was seen within dispositions such as sociability and self-motivation. These highly positive scores and degree of variance indicated the opportunities offered to children to develop at their own pace alongside the support, and potential lead of their peers.

Scaffolding → Teaching styles → Are children engaging independently, or led by the adults around them?

Impacts learning opportunities

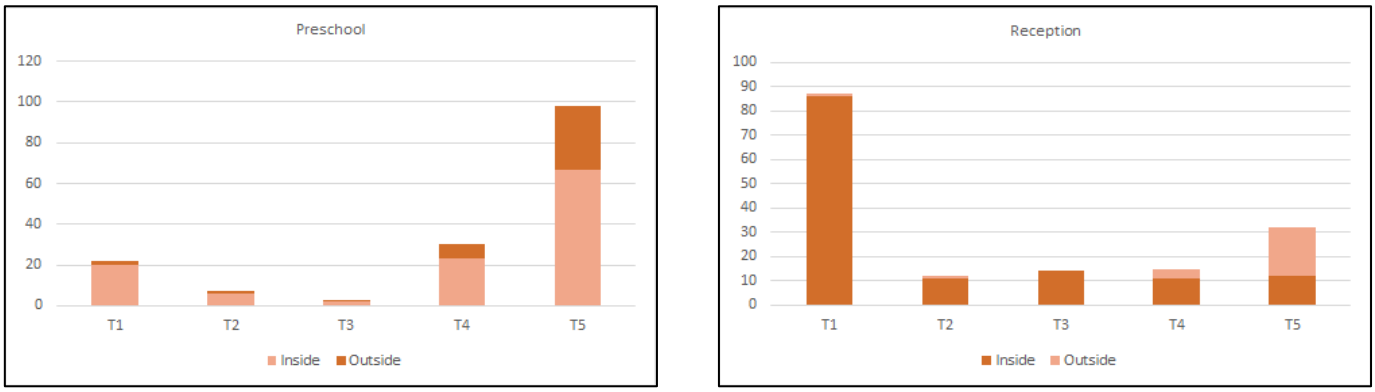


Figure 6.2.19: Number of times the children experienced pedagogical variables of teaching style inside and outside, within each setting

Impacts child's experiences

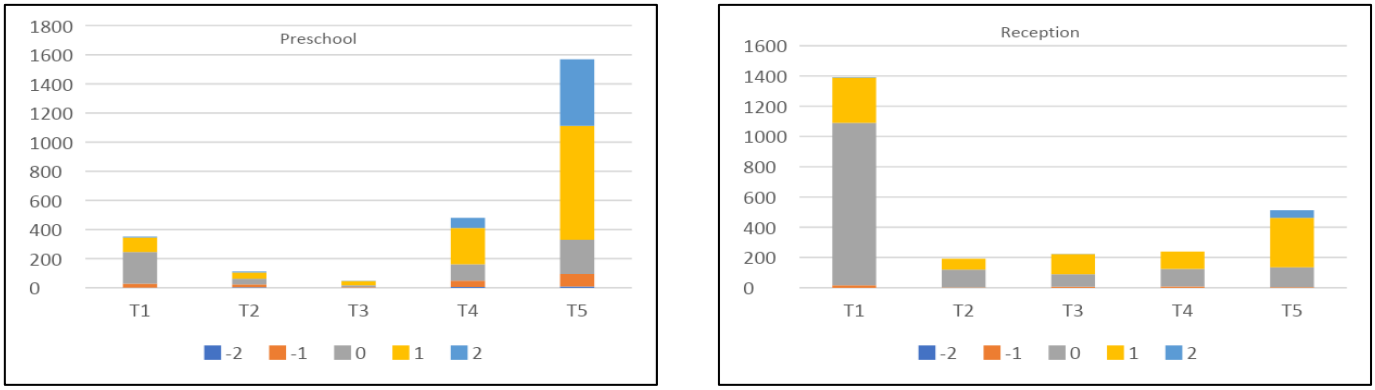


Figure 6.2.20: Child engagement as recorded using the FOLLEP scale within each category of teaching style in preschool and reception

Potential to impact development of dispositions

The most common response within the adult led (T1) teaching styles was indifference or lack of opportunity across all the dispositions, apart from logical responses within preschool which saw a slightly higher positive reaction. With adult led teaching styles observed in four times as many school-based observations than those recorded in preschool, this had a significant effect on children's experiences within the classroom and their engagements within all the dispositions were seen to decline. Indifferent responses to imagination, intuition, courage, and confidence were typical, the less autonomy this teaching style offered the children saw very high levels of indifference towards playful and sociable responses and practicality was also seen to sharply decline within adult led observations in the school, although greater variance was seen across the categories in preschool. Being adult led removed creativity almost entirely and offered little opportunity for children to apply wider approaches to their thinking, although this occurred in both settings, being adult led occurred in less than 15% of preschool observations where more chance was offered for children to think for themselves.

Once adult led (T1) became adult participation (T2), greater variance was seen across most dispositions in preschool, this was expected within practical pursuits, imagination and sociability where the child could react more independently, but was also seen extending to courage and confidence, self-motivation and curiosity. In school, once the adult participated, rather than led,

a socially positive response was significantly more typical, children also had more opportunities to apply thought for themselves, creativity in preschool for example showed a marked level of increased engagement, however more independence was required for significant thought to be observed. As dispositions frequently required greater freedoms for significant engagement, these diminished greatly once in the more governed school classroom.

Although less commonly utilised, group activities (T3) saw positive demonstrations of dispositions, especially in preschool, for example of imagination and independence. Whilst children's adaptability responded to group activities in preschool, self-motivation was better recognised in the groups observed in reception. Thinking simultaneously and logically were also demonstrated positively when group work was permitted, although creativity and wider approaches to thinking tended to respond to greater freedoms.

Reducing the level of hands-on teaching to some adult support (T4) particularly encouraged children's confidence and self-motivation. Although, where adult support enhanced courage as well as intuition and curiosity in preschool, it was more commonly met with indifference in school. Reflection was seen to react positively to some adult support, although this rose higher when child autonomy was permitted.

Opportunity for child autonomy was seen in three times as many preschool observations as when observing in the school classroom, and with it came higher demonstrations of positive engagement across the dispositions. As a result, opportunities to see these dispositions reduced dramatically once the children transitioned into school and less opportunities were given. When children did have the opportunity to socialise, they did so with more variance in preschool, whilst this was seen in more uniformly positive ways in school. Practical skills also saw more variance and higher frequencies of positive and highly positive responses when in preschool. The higher opportunities for independence also promoted children's expression of curiosity, self-motivation and independence. Opportunities to be autonomous in their learning allowed children the freedoms required to approach experiences when ready, allowing for greater variance in the creative responses of children in preschool. Simultaneous, logical and wide thinking was also more visibly demonstrated in both settings when given this additional freedom. With more opportunities to apply thoughtful approaches for themselves, significantly higher scores were recorded within child autonomy than any other teaching style in both settings. That said, evidence of most thinking styles was all but removed in the school classroom.

Scaffolding – Trends noted through the level of scaffolding offered to the children in preschool and reception	
Grouping	**Teaching Styles**
Children were addressed as a whole group in a quarter of the classroom observations, this was three times as many as in preschool. Nearly three quarters of whole group observations recorded no indication of the observed disposition. Dispositions that were highly positive in other styles of grouping were seen to sharply decline when in the whole group. Significantly less use of whole grouping in preschool saw its dampening of dispositions less keenly and were faster recovered from. Tendency to engage was most pronounced when working in a pair, these were twice as likely in preschool. Demonstration of dispositions increased consistently with potential engagement of other children.	Adult led (T1) teaching styles were seen in four times as many school-based observations than preschool. Significantly higher indifference or lack of opportunity for a disposition recorded within adult led teaching styles. In school, adult participation, rather than adult led observations evoked more positive responses to some dispositions. Group activities (T3) saw positive demonstrations of dispositions although less commonly utilised in school. Whilst adult support (T4) enhanced expression of dispositions in preschool, it more commonly saw indifference in school. Child autonomy dramatically enhanced engagements with many dispositions.

Independence saw significant engagement in preschool, but often disengagement in school. Nearly three times more opportunity for independence in preschool. In school, engagement when in small groups sharply declined, additional freedoms were required to participate as before. The same conditions elicited different reactions once in school.	Child autonomy reduced by two thirds when children transitioned to school. Greater variance was seen across the categories in preschool, increasing with independence.

Figure 6.2.21: Trends noted through the level of scaffolding offered to the children in preschool and reception

This chapter illustrated graphically, and through reflective accounts of the trends observed, that clear pedagogical impacts were seen on the learning opportunities offered to children. As these were shown to impact the experiences children were afforded, with potential impact on their developments, the value of extracting pedagogical recommendations from this work was evident. As the study turned to addressing the final question these trends, noted at the end of each thematic section, were gathered and taken into Chapter 6.3.

6.3 Reflections on pedagogical impact on early learning experiences

Throughout this chapter, meaningful reflections on the impact of pedagogy on children's realised experiences were explored. Chapter 6.1 considered these experiences by illustrating them alongside established learning theory. Through graphical illustration, Chapter 6.2 observed how they were impacted by opportunity, integrating the indicated wisdoms to emerge. Through this process, consistencies and comparisons were seen to emerge through the two years of observations. In Chapter 6.2 these were identified through the narrative and distilled into a table of trends at the end of each thematic section. This chapter takes these collective insights and considers how they can be used to inform and direct children's early learning experiences, challenging the current approaches to early pedagogies that are typically utilised and represented within this study (Question Two).

Observed impact of pedagogy on children's experience

After presenting each thematic view in Chapter 6.2, a set of reflections were offered. Constructed from the preceding narrative, these tables of comment explored the effects of pedagogy as noted within the observations, illustrating an emerging perspicacity for its impact. With children observed for one year in preschool, before a year of observations in a classroom setting, these comments strongly indicated an altered propensity for certain pedagogical strategies to be employed, along with a change in children's responses. The effects of these changes, reflected both in children's immediate reactions and their ongoing tendencies, were then considered within each theme (Figures 6.3.1 - 6.1.4).

<table>
<tr><td colspan="3">Agency – Trends noted through the level of agency offered to the children in preschool and reception</td></tr>
<tr><td>Involvement</td><td>Distractions</td><td rowspan="2">Distractions, interruptions by an adult and low involvement of the child were seen to decrease children's engagement with the dispositions, especially those requiring individuality.

In preschool most observations were uninterrupted, and most showed the child deeply involved, engagement with the dispositions was consistently positive, many of them highly so.

Most school observations saw the child's attention directed by an adult, low levels of involvement were predominant and little engagement was observed, often as there was little opportunity.

Children's behaviours changed once they moved settings, the conditions that would elicit engagement in preschool were met with reluctance in school, trialling became indifference and even slight distractions would see positive responses turn to reluctance as deeper levels of involvement were needed before they would engage.</td></tr>
<tr><td>Child settling only briefly recorded almost twice as frequently in school and indicated little involvement.

Moments of indifference and detachment strongly correlated with less involvement.

The same conditions elicited different reactions from the children once they moved settings.

Variance within preschool became indifference in school.

Positive engagements with dispositions required deeper levels of involvement once in school.

Children showed deeper involvement in preschool, this correlated with deeper engagements with the dispositions.</td><td>Most observations in preschool were uninterrupted and consistently saw positive engagements, many of them high.

Attention in most school observations were governed by an adult and invariably elicited little evidence of engagement.

Positive engagements increased as distractions and interruptions removed but levels declined once in school.

In school even slight distractions (D4) would see positive responses turn to indifference or reluctance.

Sociable engagements and independence saw great variance, especially in preschool when less distracted and free to move away.

Variance in preschool was largely replaced by indifference in school.</td></tr>
</table>

Figure 6.3.1: Comparing the employment of agency variables across the two settings

Intentionality – Trends noted through the level of intentionality offered to the children in preschool and reception		
Discussions	**Encouragement**	Child-instigated discussions and time alone, free from adult influence saw the highest levels of engagement. These opportunities significantly declined when children began school with enforced, adult led communication to the whole group more typical. These saw the highest levels of indifference or lack of opportunity to engage with the dispositions. Behaviours changed when the children began school, adult encouragement was required for some dispositions that had been freely demonstrated before. Additionally, where children had once approached an adult for support, a practice that had a noticeable impact on their thinking, this was not seen as often in school. Positive engagements in preschool became indifferent once in school and the variance seen across the full range of discussion styles within the preschool was lost as a considerable decline in levels of engagement were observed.
TC observations were considerably more likely in preschool and saw high levels of engagement. *In school, adult led communication to the whole group were most common and saw the highest levels of indifference or lack of opportunity.* *Greater variance seen across the full range of discussion styles within the preschool.* *Child instigated discussions saw the highest engagement with the dispositions, including thinking.* *Opportunities for child instigated discussions significantly declined once in school.* *Positive engagements in preschool became indifferent once in school.* *Approaching an adult for support saw high displays of thinking but was only seen in preschool.*	*When actions were enforced (E1), indifference towards the dispositions was invariably noted.* *Most of the school observations recorded enforced encouragement and noted high levels of indifference.* *Adult encouragement was required in school for some dispositions that had been freely demonstrated before.* *Decreased adult influence (E3 and E4) were more frequent in preschool and saw more positive reactions.* *Observations noting freedom from adult influence (E5) recorded significantly high levels of positive engagements.* *Freedom from adult influence (E5) offered twice as often in preschool.* *A considerable decline in levels of engagement were seen between the preschool and school observations.*	

Figure 6.3.2: Comparing the employment of intentionality variables across the two settings

Environment – Trends noted through the environments offered to the children in preschool and reception		
Choice	**Location**	Positive engagements were seen to increase in line with the levels of choice and freedom offered. Free choice and free access to the environment was typical in the preschool, in school, location became enforced and children's choice of activity was frequently removed. Absence of choice corresponded with an absence of positive engagements and these sharply declined once the children started school as dispositions frequently observed within the freedoms of preschool were rarely seen. Variance demonstrating children's attempts in preschool were replaced by indifference or lack of opportunity as freedoms to trial and retreat were replaced by an enforced requirement to conform. Small increases in choice saw a significant impact on children's likelihood to engage, however the decline in engagement observed in school due in part to enforced locations was also seen when greater freedoms were offered, as similar conditions elicited different reactions from the children in the two settings.
An absence of children's choices corresponded with an absence of observed positive engagements. *Absence of choice recorded in nearly two thirds of school-based observations.* *Positive engagements with dispositions increased with the level of freedoms offered.* *Free choice recorded in three times as many preschool observations.* *Significantly higher frequency of positive engagements recorded in preschool, sharply declining once in school.* *Opportunities for variance increased in preschool with opportunities to retreat, whilst school required children to conform.* *Variance demonstrating children's attempts in preschool were replaced by indifference or lack of opportunity in school.*	*Free access to the environment seen in more than half the preschool observations compared to one eighth in school.* *73% of school observations saw location enforced, 69% of these recorded no engagement.* *Engagements with dispositions increased as greater freedoms were offered.* *Dispositions frequently observed within the freedoms of preschool were rarely seen in school.* *Independent choice of location increased the likelihood of engagement, with small increases in choice seeing significant impact.* *Likelihood of engagement declined in school, due in part to enforced locations, but also seen when greater freedoms offered.* *The same conditions elicited different reactions from the children in the two settings.*	

Figure 6.3.3: Comparing the employment of environmental variables across the two settings

Scaffolding – Trends noted through the level of scaffolding offered to the children in preschool and reception		
Grouping	**Teaching Styles**	Demonstration of dispositions increased consistently with potential engagement with other children, this was most pronounced when working in a pair, a grouping seen twice as often in preschool. In school, children were predominantly addressed as a whole group, led by an adult and dispositions that were highly positive in other styles of grouping frequently unrecorded. On the rarer occasions whole grouping was used in preschool, its dampening of dispositions was observed less often, and it was faster recovered from. Where an adult was seen to participate, rather than lead a group, a more positive response was more typical, however once in school, an offer of support that would have enhanced engagement in preschool would more often be met with indifference. Group activities, although less commonly utilised, elicited positive demonstrations of dispositions in preschool, yet in school, engagement sharply declined with the children requiring additional freedoms to participate as before. Child autonomy and independence dramatically enhanced engagement in many dispositions in preschool, however opportunity for it reduced by two thirds in school, and often saw disengagement as the different reactions from the children in the new setting saw much of the variance observed previously become disengagement in school.
Children were addressed as a whole group in a quarter of the classroom observations, this was three times as many as in preschool Nearly three quarters of whole group observations recorded no indication of the observed disposition Highly positive dispositions in other styles of grouping were seen sharply declining when in the whole group Significantly less use of whole grouping in preschool saw its dampening of dispositions less keenly, and were faster recovered from Tendency to engage was most pronounced when working in a pair, this was twice as likely in preschool Demonstration of dispositions increased consistently with potential engagement of other children Independence saw significant engagement in preschool, but often disengagement in school Nearly three times more opportunity for independence in preschool Engagement when in small groups sharply declined in school, additional freedoms were required to participate as before The same conditions elicited different reactions once in school	Adult led (T1) teaching styles were seen in four times as many school-based observations than preschool Significantly higher indifference or lack of opportunity for a disposition recorded within adult led teaching styles In school, adult participation, rather than adult led observations evoked more positive responses to some dispositions Group activities (T3) saw positive demonstrations of dispositions although less commonly utilised in school Whilst adult support (T4) enhanced expression of dispositions in preschool, it more commonly saw indifference in school Child autonomy dramatically enhanced engagements with many dispositions Child autonomy reduced by two thirds when children transitioned to school Greater variance was seen across the categories in preschool, increasing with independence	

Figure 6.3.4: Comparing the employment of scaffolding variables across the two settings

Challenging current approaches to early pedagogies

Through this final analysis, the effects of pedagogical variables on the experiences of children as they transitioned through the final years of their Foundation Stage experience was evident. As attention turned to considering the second question, these observed impacts on children's engagements were heeded. The imposed restrictions on children's opportunities had a demonstrable impact on how they engaged with them. Even when restrictions were lifted, if conformity had been the norm, this reticence to engage continued despite its previous demonstration. With impact documented throughout the dispositions and reflected within children's immediate and ongoing reactions and behaviours, key observations emerged.

- Increased engagements were seen when -
    - The child was not interrupted or distracted by an adult, with opportunity to become deeply involved.
    - Opportunity was offered to instigate discussions with time alone, free from adult influence.
    - Free choice and free access to the environment was offered.
    - Collaboration with other children was offered, most pronounced when working in a pair.
- In preschool most observations were uninterrupted, with free choice of activity and environment. Most of these showed the child deeply engaged.
- Most school observations saw the child's location and attention directed by an adult, with enforced, adult led communication to the whole group offering limited choice and low levels of involvement.
- Considerable decline in levels of engagement observed once the children transitioned to school. Positive reactions became indifference and variance became conformity. Even when pedagogies relaxed, or child autonomy offered, it appears that children had become reluctant to deviate and engage.

Children's behaviours changed once they moved settings, in school -

- Offers of support that would have enhanced engagement in preschool were more often met with indifference.
- Children were less inclined to approach an adult for support.
- Dispositions frequently trialled within the freedoms of preschool were rarely seen.
- Deeper levels of involvement were needed before children would engage.
- Adult encouragement was required for dispositions freely demonstrated in preschool.
- Slight distractions saw positive responses turn to reluctance.
- Group activities that had seen positive engagement required additional freedoms to participate as before.
- Child autonomy and independence that dramatically enhanced engagement in preschool saw disengagement in school.

Actions that saw a positive impact on levels of engagement

- Small increases in choice saw significant impact on children's likelihood to engage.
- Enforced pedagogies were seen less often in preschool. When they were employed, the disengagement from dispositions that they resulted in were faster recovered from.
- Adult participation rather than lead saw a more positive response.

Whilst no suggestions of causal links would be appropriate, nor helpful, these observations would suggest that care and attention should be applied to the continual use of staple pedagogies often seen within classroom settings. Within the short period of time these children were observed, the study saw children disengage across all dispositions as formulaic approaches to teaching, typically consisting of adult led teaching styles with enforced distraction and location, became the norm. With

frequent sessions taught on the carpet to the whole group, a clear reticence established in the children as they conformed to expectations, even if more relaxed conditions were briefly reintroduced. Indicating the long-term effects establishing within the conformity and expectations of the classroom, this highlights again the importance of mindful management of enforced pedagogies within the early and primary years.

Throughout the course of this study multiple lenses have captured the realities experienced by a cohort of young children as they experienced learning within a range of pedagogical styles. Through children's demonstrated engagements, the impact of these styles was noted, reflecting on their immediate and longer-term ability to affect the behaviours and reactions of the children. A full account of the findings to come from this study was considered in Chapter 7, along with a theory and a method intended to draw attention to dispositional practice within the classroom.

- To illustrate the implication of effective experience on cumulative, life-long development, with particular attention to its establishment within childhood, the Theory of Lifelong Development – in Childhood (ToLD-C) is presented.
- Deeply embedded within early experiences of learning, the Method of Improved Childhood Engagement (MICE) then offers practical guidance to inform and direct children's early experiences of learning, challenging current approaches to early pedagogy.

7.0 Introducing the discussions

By considering the lifelong importance of dispositional development and the impact of children's experiences on their engagement with them, this phenomenological study sought to challenge current approaches to early pedagogy. Having rooted the study in established learning theory, its phenomenological methodology observed children during their early encounters of classroom learning as it considered its underpinning questions. Framed within these questions, Chapter 7 now offers a full account of the findings to emerge.

Grounding its reflections in its intentions, Chapter 7.1 drew together the insights gained from the literacy review, underpinning the findings from the field work. It then addressed the two questions posed by the study, offering its responses, along with unique contributions to the field. Through its considerations of children's opportunities for dispositional engagement (question one), an account of how life-long learning specifically pertains to childhood is offered in the Theory of Lifelong Development - in Childhood (ToLD-C). As it reflects on the impact of early pedagogy (question two), the Method of Improved Childhood Engagement (MICE) is offered. Complete with evaluative tools and programmes, MICE was written for use within individual children's ongoing assessment and educational plans, as well as at a cohort and classroom level as it evaluates and supports dispositional engagement. These are indications of the contributions to the field presented here as Chapter 7.2 goes on to consider the unique strengths and limitations of the study. Drawing together other claims of originality, it then considered next steps for this work before closing with consideration of the personal developments and increased knowledge that have resulted from this doctoral study.

7.1 Learning to come from the study

As Chapter 7 explored the findings of this study through discussions of its potential contribution to the field and considered the process of its completion, Chapter 7.1 begins by considering the learning that has come from it. This was grounded in an initial reflection of the intentions it began with before exploring the learning that came through its desk-based and field-based elements.

Fulfilling the intentions of the study

This phenomenological study sought to explore children's early experiences of classroom learning by observing how their engagement across a range of dispositions was impacted by pedagogical practices, based on the premise that dispositional development requires experiences engaging with them. Reflective of its paradigm, many hours of observation embraced the multi-layered environments inhabited by the children as social groupings, permissions, expectations and environments were noted. Without seeking to uncover a grand narrative or universal design, it noted pedagogical impact on children's propensity to engage, legitimising the supportive recommendations to follow.

By documenting and reflecting on the realities of children's current experiences within the foundation stage alongside the opportunities permitted through the pedagogies utilised, a unique insight into areas of development too often overlooked was offered. Through the observations and recommendations to follow, this distinctive study addressed its original questions (below), whilst adding additional urgency to debates regarding the lifelong importance of children's earliest experiences of learning.

- *To what extent are children given opportunities, intrinsically and externally, to engage with dispositions through their experiences of learning in the Early Years?*
- *How does this inform and direct children's early experiences of learning, challenging current approaches to early pedagogies?*

Informed by the literacy review.

To consider these questions, this study was underpinned by desk-based research in the fields of early childhood pedagogy and child development, executive functioning and dispositional development. The importance of holistic practices within the Early Years was highlighted in Chapter 2.1 as approaches focusing on the child, rather than classroom objectives, were advocated. Raising concerns for studies focusing on programme characteristics alone, the need to capture the complex realities of the classroom through systematic observational accounts of practice became clear. By observing typical social demands within familiar environments and circumstances, it suggested, the study would be elevated above those deriving meaning from isolated instances or from children's responses to the actions required of them.

Chapter 2.2 established the lasting impact of functions developed in the early years, highlighting young children's requirement for foundational experiences to secure development across a wide skill range. Despite this, it noted formal classroom pedagogies inhibiting expression of this functioning skill set with long-term effects, limiting children's foundational development, especially within emotional regulation and social engagement. Illustrating the need for multifaceted experiences of real-life decision-making, goal setting and questioning, it advocated dynamic, open-ended environments where children could engage with novel, contextual learning as they make connections, with time to practice and purposefully reflect. It advocated social interactions, with opportunities to think, to employ working memory and manipulate ideas. It also noted that any

research inferences need to consider wide ranging variables, including the social and emotional climate, adult behaviours and environmental potential which will ultimately impact motivations, and responses to demands.

Chapter 2.3 explored the potential of viewing pedagogical influence through a dispositional framework. Developed through experience, dispositions were defined as an inner guide to cognitive behaviours that go beyond acquired knowledge or inherited traits. Unlimited by demands for pre-existing knowledge, studies showed dispositions establishing and embedding through children's engagement and agency, opportunities and expectations. Impacting every aspect of life, they were shown to have clear educational import, as well as being instrumental to functioning within society, informing children's identity as an individual, as well as a learner. Highlighting opportunities for this study, this also illustrated the heavy responsibility to promote understanding and active permissions, advocating dispositional awareness within those managing children's early experiences.

With its child, rather than teaching objectives, focus, this study embraced the complex realities and social demands within the dynamic environment of the classroom. Noting the importance of individuality and active choice within experiential learning, childhood pedagogy was considered through children's opportunities to grapple through cognitive, social and meaningful situations. Through its explorations of the lasting impact of foundational experiences and their potential to secure development across a wide skill range, it captured multifaceted experiences as it considered wide ranging social and behavioural variables. Interested more in children's engagement, agency and opportunities than any demonstration of pre-existing knowledge, its dispositional framework was endorsed through their illustrated impact on established life trajectories. As links between effective development and successful outcomes established, alongside their role in informing children's identity, the importance of effective pedagogy on children's potential was recognised.

Informed through ongoing discussions with practitioners and teachers.

When beginning the study there were many unanswered questions. What would teachers' reactions towards certain dispositions be like? Would some be more valued than others and how would children respond to this? Is positive or negative language being used and what confidence might this illicit in the children? What is not being captured that could be influencing the observation? Is the observation the whole story? Could it be interpreted in a different way? In seeking to understand these influences on the observations, discussions with the practitioners and teachers in both settings began.

These weekly conversations allowed for a reflective, two-way dialogue and permitted a greater understanding of the process and intentions to develop. The importance of these reflections emerged from the initial staff interviews as feedback loops intended to confirm responses were then utilised by staff to reconsider their views. Prompted by discussions of the dispositions, they had changed their views of the children, observing their responses in previously unexpected ways. It was clear that these discussions would offer valuable insights and became a regular feature of the visits. Reflected on within the individual Child Journals (Appendix A3) and Observation Journals (Appendix A4) they were completed at the end of each visit, addressing the issues raised above and more besides.

These discussions supplied background context that allowed for deeper reflections on issues that may otherwise have been missed. For example, the impact on children's emotional well-being when friends were no longer attending, when a loved one was unavailable or a falling out had occurred. Speaking to the teacher offered insight into how well the children were settling into their new environment, and the struggles being experienced by some. For example, when expected to sit still and the notice this is gaining, especially towards the end of a session. Further information was offered regarding abnormalities of the day, for example a trip to the library, photographs, rehearsals or unexpected visitors. Background information was offered

when walking into a difficult situation. And if a substitute teacher were covering, that the session would be rather "led from the front".

A contextual understanding of a child's behaviours and responses that would not otherwise have been realised was offered. For example, a child's period of absence could be acknowledged, and its effects considered, recognising an observed reluctance to join in as resulting from this missed time. The ongoing effects of illness, different responses within focused group sessions or when one-on-one support was offered. A child's frame of mind on a particular day was better understood, acknowledging the external root cause rather than assuming it was anything within the setting, for example, a late night following a community firework display. Links with interests outside of school that are affecting crazes in the setting were also discussed, for example Minecraft prompting a high increase in Zombie play.

This shared context also offered a deeper understanding of the actions of the children. Having noted an apparent lack of wishing to volunteer ideas and thoughts, certain constraints put on the children's choices were explained by the teacher. Having been quietened and the rules of responding with the one correct answer having been emphasised, these responses were recognised for their external influence, rather than of a lack of internal creativity. When my observations suggested some children were struggling, the teacher could speak of their noted motivations as well as otherwise observed abilities. Increased energy levels on a sunny day were discussed in response to previously denied opportunities to be outside and the unaccustomed heat and physical freedoms this had brought them.

These conversations also allowed the responses of teachers to be better understood, for example why a child's choice was being limited, or why an unexpected action was receiving praise. Increased levels of management and limited choice were described as an active decision while the class teacher was keen to clearly define activities, required responses and expectations. The processes used to transition children from their parents at the beginning of the day were explained. Actively gradual, this allowed a few children at a time to receive the additional, dedicated attention that they still needed. Issues regarding a lack of supportive resources or managing extremes of weather were also discussed.

Perhaps most insightful were the opportunities to share the reflections of the day and gain an alternative view of them, from which deeper insights could emerge. For example, observations could focus on the minutia of individual children's responses, whereas teachers were better informed regarding any external influences that may inform them; development was seen both continuously (by the teacher) and through larger increments of change (through periodic observations); observations followed social interactions into outdoor and less governed spaces, where teachers could observe these developments daily.

Observed trends were offered additional insight. For example, highly governed activities, such as carpet time or group stories would tend to illicit few positive or negative responses on the FOLLEP scale. When this was discussed with staff, this was recognised not as active reluctance of a disposition, but that certain activities were limiting opportunities for children to demonstrate them. Whilst alternative opportunities were offered during these times, it did question the effect of overly directed periods. Having observed a child struggling with a task that was too difficult – that is, he was unable to show the correct answers when prompted to do so - the act of trying demonstrated high levels of aptitude within the dispositions that others who were not struggling did not do. Discussions centred around how this would arguably be missed within traditional methods of formative assessment guided solely by the expectations of the task.

The effects of unexpected conditions were considered as children were observed working more closely together with greater negotiation and sharing, when discussed, the dynamic these environmental conditions introduced to their play was recognised encouraging alternative dominant characters to emerge, detail that needed the teachers' level of understanding to appreciate.

Observations were shared that had encouraged exploration and discovery and the additional vocabulary this had encouraged, as well as particularly relaxed sessions prompting deep, free and uninterrupted play. The change in children, from sitting frustratedly (C2) or compliant (C4) to being very animated, imaginative and socially engaging when location moved from indoors to out was discussed, and how this was affected by freedoms of choice. Following a comment made by the teacher, children's confidence was discussed when they were on the verge of moving up to Year One. More familiar within the school, and conscious that they would no longer be the youngest, would this be reflected in their demonstrated behaviours following this transition? Would this see the dip in FOLLEP scores recover? Would this be reflected across other dispositions?

These discussions rooted the field work each week, allowing deep insights to be gained from the observations. As the findings were drawn together, the two questions posed by the study could be confidently considered.

Explored through field work.

- *To what extent are children given opportunities, intrinsically and externally, to engage with dispositions through their experiences of learning in the Early Years?*

Observing children's experiences over two years, across the dual settings of a preschool and reception classroom, allowed the effects of various pedagogies on children's opportunities to be observed along with the voice and freedoms permitted within them. Through multifaceted observational techniques, discussions and frames developed for the purpose, children's engagements and resulting behaviours and reactions were noted, allowing links between the richly coded experiences and children's dispositional engagements to be explored. As was illustrated when challenging current approaches to early pedagogies in Chapter 6.3, by noting the ways in which pedagogically influenced opportunities affected children's ongoing experiences and responses, reflection across multiple variables has been permitted. By noting clear trends within the impact of practice across the dispositions, significant observations were seen to emerge, with certain experiences seen to promote engagement, while others were seen to have a demonstrably negative effect.

The significance of experience within an effective education is nothing new. Locke (1632 – 1704) spoke of children's minds being shaped through the accumulating experiences and perceptions of an education structured to allow these experiences to combine as more complex ideas develop. This study sought an understanding of what happens when these opportunities become limited. With an interest in children's ongoing development, impact was indeed reflected when observations in the second year of the study were compared to the first. As noted by Dewey when identifying experience at the heart of education, children's active responsibility for their successes and failures altered (Dewey, 1966), with demonstrable effects on their behaviours and tendencies to engage. To gain a deeper understanding of how and what was occurring, the original observation transcripts were returned to.

The Theory of Lifelong Development - in Childhood (ToLD-C)

Through two years observing children's experiences of preschool and reception, the impact of 44 potential pedagogical variables were noted, applied in any permutation across eight established codes. Alongside children's engagements in 16 dispositions, this coded data underpinned rich descriptions of each of the 640 recorded observations, as illustrated in Chapter 4.1. Because these observations had been systematically coded, with identifying detail added to NVivo, it was possible to view the rich descriptions corresponding with each pedagogical variable, each disposition and each level of engagement – along with any combination therein - with relative ease.

Once each observation of interest was identified and brought together, processes of inductive reasoning (Atkinson et al., 1996) allowed understanding to crystallise and evolve from the descriptions and reflections offered, as Denscombe (2014) advocates. Once completed for all, processes of Qualitative Content Analysis (Schreier, 2014) saw key themes compared across the cohort, then grouped and sorted through subsequent levels. Through this analysis of children's evolving responses, their demonstrated propensity towards certain dispositional reactions emerged, along with their documented outcomes as the impact of experience on a child's opportunities, inclinations and expectations became evident, rooted in their tendencies towards dispositional engagement.

Reflective of its social constructivist positioning, observations captured children's responses as they reacted within their social and physical environment. They were seen responding to and challenging imposed limitations, whether these were personal or culturally defined as they actively constructed meaningful responses. As findings recognised and acknowledged children, not simply reacting to external stimuli but to their interpretation of those stimuli, the two motivations of internally driven behaviours and external expectation were continuously reinforced, both positively and negatively. Informed through previous experiences, these extrinsic and intrinsic reinforcements were seen to influence, motivate and drive their actions, that altered and matured over time. Demonstrating the impact of opportunity and experience on future responses, children's engagements with dispositions altered, affecting their subsequent tendencies and demonstrating the potential effect on future dispositional development.

Understandably, these developing tendencies, or attributes and the outcomes they prompted were influenced by the experiences and dispositional opportunities permitted. For example, a child's emerging knowledge of their own identity, body and mind was seen to support and be supported by an awareness of their personal needs, all of which required an element of practical independence. The developing reliance they had in their own abilities saw active choices being made, with self-motivated focus as they were seen to follow their own path, taking advantage of familiarity as outcomes were achieved that they were visibly proud of, all of which spoke to a developing self-awareness. Indicative of the collective findings of the study, attributes and the outcomes being promoted were illustrated in Figure 7.1.1, with the example of self-awareness featured in row A. The dispositions seen to specifically influence these attributes and outcomes were indicated numerically and referenced in the supplied key (Figure 7.1.2). For example, observations of children knowing their own minds were enhanced by increased independence (12), with self-motivation (1) promoting its outcomes. Once grouped and sorted through these successive levels, the attributes and outcomes suggested lifelong impact, reflected within key areas comparable to those posited by the World Health Organization (2015). Labelled A - I, this again indicates the potential long-term interest of this evolving development, rooted in early childhood.

	Lifelong Development	Attributes		Outcomes	
A	Self-awareness	Self-reliant (9,12) Knowing own body (11) Knowing own mind (12)	Aware of personal needs (7) Personal identity (3,11)	Active choice (13) Following own path (1) Familiarity (15)	Focus (1) Proud of outcome (14)
B	Personal growth	Avoiding difficulty (4) Managing feelings (4) Attentive (8,10)	Resilient to setbacks (6) Delayed gratification (4) Patient (4)	Personal interpretation (4) Apply learnt techniques (7,11) Ability to focus (1)	Applied vocabulary (1,10) Applied learning (9,11,16) Exploring own authority (3,14)
C	Belonging and well-being	Patient (1) Participatory (3,16) Self-soothing (12,14)	Self-assured (6) Socially aware (15) Sense of belonging (3,14,15)	Follows own path (12) Eager to please (15) Enjoyment (16)	Social acceptance (3,15) Immersive (10)
D	Develops thinking	Applying language (5) Linking learning (2,11) Evolving ideas (9) Abstract thought (8)	Predictive (5,15) Innovative (9) Add layers of learning (2,8)	Predictability (5) Investigative (10) Idea manipulation (2,5,8) Attention to detail (11)	Noticing pattern (5,13) Focus (1) Negotiation (3,7) Clarity of thought (5)
E	Promotes decision making	Self-assessing (5,15) Self-minded (14) Self-informed (5,11) Concentration (1,12)	Informed through action (7) Inquisitive (2,8) Ability to manipulate (7,9)	Independent investigation (1,4,12) Ability to plan (5,8) Considers options (8,15) Seeks deep understanding (10)	Engaged investigations (1,9,15) Apply technique (7,9,11) Practical application (7) Problem solving (5)
F	Develops effective relationship skills	Managing altercations (3,6) Relating to others (3) Engaging others (3,16) Negotiation (3)	Admired by others (3) Emulating others (3) Empathetic (3)	Social presence (2) Social interaction (14) Conformity (15) Need for friendship (3)	Covert alliances (2) Social awareness (10) Humour (3,16)
G	Values learning from others	Seeks support (6) Zones out distraction (15) Cooperative play (16)	Seeks approval (3) Listening to others (2,3,10) Takes on other ideas (4)	Directing others (14) Utilising others (3,14) Corroboration (2)	Opportunities to bond (12) Leadership (13) Responding to others (3)
H	Encourages grasping opportunities	Determined (1) Purposeful (12) Multitasking (2) Manages time (7,12)	Physical skills (7) Self-promoting (14) Mental agility (8) Enthusiastic, excited (16)	Aware of opportunity (2,8) Taking what is wanted (14,15) Setting own challenges (8) Committed (1)	Managing challenge (1) Experimentation (8) Optimism (13) Recognition (14)
I	Values risk taking	Persistent (1,14) Brave (6,14) Competitive (6,12)	Stands up for oneself (14) Attracted to challenge (6,10) Resilient (14)	Managers limitations (13) Engaging in the unknown (6) Trilling own ideas (7,9,12)	Pushing boundaries (6,13,15) Challenging rules (6,13)

Figure 7.1.1: Underpinning elements extracted from the child observations, grouped to illustrate meaning

Key	***Disposition***
1	*Self-motivated*
2	*Simultaneous*
3	*Sociable*
4	*Adaptable*
5	*Logical*
6	*Courageous*
7	*Practical*
8	*Wide*
9	*Imaginative*
10	*Curious*
11	*Reflective*
12	*Independent*
13	*Creative*
14	*Confident*
15	*Intuitive*
16	*Playful*

Figure 7.1.2: Key to dispositions indicated in 7.1.1

Reflecting its constructivist underpinning, successive experiences were seen to reinforce those that had come before, and to inform those to come. Positive experiences permitting children's personal involvement, where ownership of the experience allowed for exploration and ideas could be applied with timely encouragement were shown promoting opportunities to engage as dispositional responses were trialled and embraced. Through these experiences' children developed an understanding of themselves and their abilities as they learnt to manage their feelings and actions, becoming stimulated and focused and resolute within their endeavours. Through opportunities to deploy these developing attributes, children were seen independently achieving, aware of their accomplishments as they reacted in innovative and self-determined ways. These beneficial outcomes

were then seen to inform future responses to experiences as their dispositional engagement was seen positively enhanced. However, if children were more likely to experience being silenced or isolated within practices steeped in rules and compliance, dispositional engagement was low. Children were seen disengaging or actively avoiding participation as dispositional opportunity was prevented. Less favourable attributes were noted as children began to react to challenges as if they were incapable. Inappropriate actions and unmanaged feelings were observed as children became detached, indifferent or uninspired. From these attributes, less favourable outcomes established as children were observed as restless, frustrated or dependent on adult intervention as they avoided personal challenge. Reflecting the social and cognitive nature of learning (Goswami and Bryant, 2007), these observed outcomes appeared to be impacted by children's permitted experiences and the relationships they nurtured, and limitations, both imposed and internalised, were shown to have a negative effect. However, a far greater influence was understandably supplied by the external impact of the imposed restrictions they encountered (Figure 7.1.3).

Limited by	**Imposed restrictions**	**De-motivating**	**Attention**	**Limitations**	**Age appropriateness**
		Disappointment (1) Frustration (12) Lack of ownership (12) Not having a voice (3,14) Lack of initiative (11,15) Overlooked (14) Unfairness (3) Own ideas stilted (9,13) Dampened excitement (1,16)	Distraction (1) Disruption (1) Interruption (1,12) Boredom (1)	Lack of resources (13) Lack of opportunity (8,13) Conformity (8,9) Monotony (8,9) Disorganisation (5) Unoriginality (10)	Fidgety (12) Exhaustion (1,12) Being held back (12) Unsupported (7) Physical restrictions (9,12) Verbal restrictions (15)
	Internalised restrictions	**Self-doubt**	**Insecurity**	**Fear**	**Uncertainty**
		Seeking permission (14) Stepping back for others (14) Overwhelmed by task (14)	Need for familiarity (4) Need for attention (3) Not belonging (3)	Fear of doing wrong (14,15) Fear of failure (14) Fear of limitations (8) Fear of standing out (3,14) Anxiety (4)	Lack of understanding (15) Avoidance (1) Seeking approval (12,14) Confusion (14) Timidity (14) Ambiguity (5)

Figure 7.1.3: Limitations imposed on the cycle when negativity experienced, with dispositional links

As reflected in the work of Rogan, et al. (1997) when developing a new theory of motherhood, these methods of open coding and grouping that saw concepts labelled as categories emerged, allowed abstract ideas to develop. As with this 1997 research, these categories developed beyond their initial properties and dimensions as the data was examined and compared. As characteristics and properties were distinguished, relationships were noted as details within the data emerged. Uncovering its complexity through deeper examination "analysis changed from mere description of concepts and themes to the development of theory" (Rogan, et al., 1997; p880). In this case, the theory to emerge was the Theory of Lifelong Development (ToLD) – In Childhood.

Represented in Figure 7.1.4, the Theory of Lifelong Development – in Childhood (ToLD-C) postulates that lifelong development is a direct consequence of experience, rooted in those established in early childhood. It suggests that key experiences, as unique as each individual, facilitate the extent and nature of our engagement in dispositions (1). When permitted and endorsed, positive experiences, depicted in yellow, promote effective engagement, allowing for secure dispositional development (2). These personalised dispositional engagements lead to the establishment and development of personal attributes and values, which are in turn continually honed through sequential experiences (3). Once employed, these attributes facilitate a set of outcomes (4). As these outcomes are realised, the nature of future experiences and dispositional inclinations are informed, as the cycle, begun in early childhood, continues throughout life, determining skill development and ultimate future outcomes. Alternatively, the cycle can be negatively influenced as is depicted in red. As negative or absent experiences impact an individual's opportunities or inclinations to engage with dispositions, their developing attributes and realised outcomes are

affected, placing the cycle on a negative tilt. As their future experiences and engagements are negatively informed, the cycle continues, and this effect is further enhanced.

This cyclic portrayal of continuity and progression within lifelong learning and its potential for a negative tilt is recognised by Hewitt and Tarrant (2015) when troubling the effects of negatively impacting motivation and curiosity, cautioning its likely inhibition of future engagement, and the learning skills it enables. Referencing Claxton (2007) when suggesting that every time we learn something, we learn something about learning, they question the impact of fixed, non-negotiable activity, subject to high stakes. As reflected within the red regions of the ToLD-C cycle, Hewitt and Tarrant trouble the messages conveyed to children, suggesting that unstimulating experiences, no matter the context, "Is very likely to demotivate the learner and sow the seeds of dissatisfaction for the long term" (2015; p20).

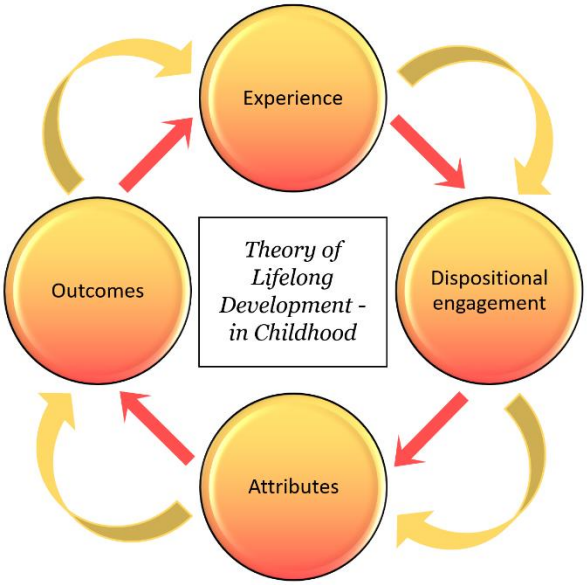
ToLD-C is then illustrated through the self-selected set of 16 dispositions utilised within this study, allowing the underlying theory to emerge. Whilst these specific dispositions had a recognised baring on the examples presented, they do not influence the structure of the theory which, as an explanatory framework is intended to hold true across all situations, people and time.

1 Experience

Having a voice	*Silenced*
Engaging with others	*Isolated*
Personal involvement	*Detached*
Opportunity to be absorbed	*Disinterested*
Collaboration	*Solitary*
Personalised learning	*Individual needs unmet*
Applying ideas	*Rules*
Exploring thinking	*Limitations*
Autonomy	*Compliance*
Enquiry and investigation	*Predetermined outcomes*
Freedoms	*Constraint*
Focused	*Distracted*
Blended learning	*Disconnected learning*
Exploration	*Confinement*
Support and encouragement	*Discouragement*
Nurturing	*Ignored or overlooked*

4 Outcomes

Independence	*Conventionality*
Comfort	*Unease*
Awareness	*Ignorance*
Accomplishment	*Frustration*
Contentment	*Restlessness*
Self-determination	*Dependence*
Lucidity	*Confusion*
Rationality	*Inconsistency*
Receptivity	*Obstinance*
Enlightenment	*Ignorance*
Social acceptance	*Rejection*
Recognition	*Ignored*
Validation	*Unverified*
Informed outlook	*Unsupported*
Mindfulness	*Neglectful*
Sense of commitment	*Uninterested*
Unhindered	*Restricted*
Innovative	*Avoids challenge*



2 Dispositional Engagement

Self-motivated	*Unmotivated*
Simultaneous	*Consecutive*
Sociable	*Unsociable*
Adaptable	*Inflexible*
Logical	*Illogical*
Courageous	*Nervous*
Practical	*Impractical*
Wide	*Narrow*
Imaginative	*Unimaginative*
Curious	*Apathetic*
Reflective	*Impulsive*
Independent	*Dependent*
Creative	*Uninspired*
Confident	*Insecure*
Intuitive	*Imperceptive*
Playful	*Serious*

3 Attributes

Knowing oneself	*Unaware*
Confident of ability	*Believed incapable*
Managing actions	*Inappropriate actions*
Managing feelings	*Unmanaged feelings*
Connected	*Detached*
Secure	*Insecure*
Applies learning	*Learning disjointed*
Established language	*Limited communication*
Clarity of thought	*Uncertainty*
Interested	*Indifferent*
Socially engaging	*Disconnected*
Aware of self-presentation	*Oblivious*
Listens to others	*Inattentive*
Open minded	*Unresponsive*
Stimulated	*Uninspired*
Focused	*Uninvolved*
Resilient	*Defeatist*
Resolute	*Hesitant*

Figure 7.1.4: Theory of Lifelong Development - in Childhood (ToLD-C)

Clearly complex and multifaceted, neurological studies of children's behaviour also note similar limitations, with psychological and neurological reactions profoundly shaped by the social interactions of the classroom. Recognising the brain as a social organ, Rock (2010) notes the effects of perceived reprimands, such as socially experienced rebuke, or unexpected denial of playtime arousing similar threat responses as that of physical pain. Evoking anxiety in the learner to trigger activity in the amygdala, also connected with memory activities, Blanchette and Richards (2010) suggest this has additional limiting effects on current learning, as well as increasing fear of future negative events, prompting risk aversion in decision making as potential threats and negative outcomes are minimised.

Reflected in the red areas of the ToLD-C cycle, these effects appeared recognised within this study when public adult approval or sanction was seen to evoke anxiety, disengaging the child and impacting their motivation and confidence within the classroom. Alongside these future experiences and dispositional potential being informed, was a dramatic change noted in the children during their first year in the school classroom, despite its inclusion of free-flowing EYFS pedagogies of the preschool setting. Whilst practices suggestive of positive development were observed, the inclusion of traditional teaching methods saw changes noted within the children's experiences and resulting outcomes as the cyclical process appeared to self-reinforce. However, most concerning was the observation that once negative aspects of the cycle were familiar and expected (reflected in red in Figure 7.1.4), children continued to react in the red, regardless of whether more positive opportunities were then introduced. As approaches to thinking and decision making, their responses to opportunity, collaboration and risk, as well as relationship skills, personal growth and sense of belonging and well-being were impacted, dispositional engagement was recognised as the linchpin to this cyclical theory of lifelong development (Figure 7.1.5). This study suggests that as more formal classroom-based practices are employed as children progress through subsequent years, at the expense of dispositionally engaged learning, negative impacts on the cycle will be increasingly noted, necessitating the need for a new framework.

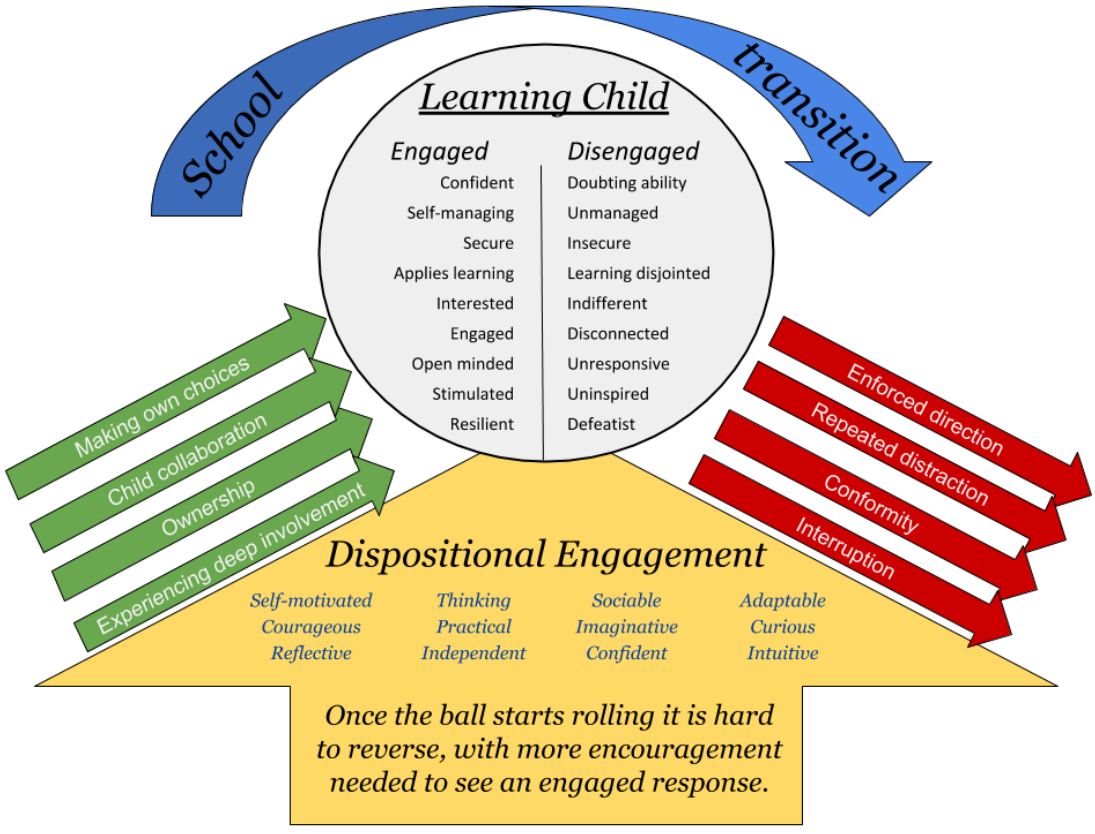


Figure 7.1.5: Dispositional engagement establishing as the linchpin to lifelong development

Potential implications on practice

- *How does this inform and direct children's early experiences of learning, challenging current approaches to early pedagogies?*

Throughout this study, well-established research has supported concern for overly formal approaches to learning within the Early Years. These pedagogical decisions, often externally influenced by the demand for discrete, measurable skills, have been troubled for their impact on children's learning opportunities. And when external demands become the focus of children's early experiences, the resulting long-term effects have been questioned. To recognise the potential for supportive interventions, this study sought and gained an informed understanding of the complex nature of children's learning through observations of the social and cultural realities of their learning experiences. Assuming a direct link between pedagogy, opportunity and experience, meaningful reflections on engaging practice were offered. Styles of discussion, involvement, grouping and choice along with teaching styles, distractions, location and encouragement were noted. As children's experiences were observed alongside their levels of engagement, both facilitated and realised, the effect of practice on their opportunities were considered

Acknowledging the impact of environment and social engagements, children's experiences and responses were recognised as not occurring within a vacuum. Variables that limited or enabled these opportunities, such as access to environments and resources, including time, location and social interactions, as well as additional expectations, activities or agendas were considered. Through this approach, pedagogical practices have been recognised as instrumental in encouraging or discouraging children's engagement. Governed by the actions of the adults around them, external agendas were seen to impact perception of valuable experiences as well as noteworthy responses reflected, not only in children's opportunities, but also their likelihood to engage in the opportunities being offered.

Forced interruptions, repeatedly distracted away from an area of interest, enforced direction within a given activity and long periods of expected conformity all saw children disengage as practice effectively lost sight of their intrinsic desires to learn. Becoming insecure and unable to effectively manage their responses, children would often appear disconnected from their learning, doubting their abilities as diverse accomplishments could be overlooked and application became fragmented. Indifferent to experiences being offered, they could appear unresponsive and uninspired, quick to lose interest when met with any challenge, and once child engagement waned, previously effective conditions seen to promote engagement would fail to see it reintroduced. These behaviours were more pronounced when imposed structure increased in the school classroom, as any remaining opportunities for dispositional promotion were often met with reluctance.

However, when given a voice, choice and social opportunities, when their need for multimodal learning was acknowledged and when culturally responsive pedagogy embraced their natural propensities for learning, children's sustained engagement visibly increased. As illustrated in Figure 7.1.5, experiences required to nurture dispositional engagement were found in children's autonomy, as afforded through their choice of location and activity. Ownership of the learning experience, rather than expected conformity was also seen to encourage engagement, especially when participation was permitted at a personal level. This was further enhanced through opportunities to corroborate and discuss ideas with peers, with sufficient time and resources to make these experiences authentic. Once engaged, children appeared confident and secure, actively applying their learning with open-minded interest. Self-managing, they appeared stimulated by the process of learning and resilient when additional effort was required.

Such observations have prompted reflections throughout the study, including those made below, as well as the key observations detailed in Chapter 6.3.

> *Holistic, episodic and uneven developments captured within free-flowing opportunities were missed once linear, compartmentalised objectives became the focus.*
>
> *Actions quickly became influenced by the choice's children were offered, both those influenced by the external environment and social demands, as well as internal influences of personal choice, motivation and engagement.*
>
> *Deeper layers of meaning were missed when focus turned to the fulfilling of predetermined objectives, potentially damaging any informed understanding of a child's potential.*

As their impact on children's experiences, their tendencies to embrace aspects of their learning and their resulting engagement levels were analysed, informed recommendations have been made possible (Figure 7.1.6). Questioning the validity of uniform planning and teaching practices that overlook children's diverse and unique development, these recommendations are rooted within children's fluctuating social and cultural realities. They also demand further debate and broader definitions of young children's requirements of learning, especially at a time of foundational growth and first impressions of themselves as a school learner if what were once an unquestioned belief in their abilities are not to be irrevocably damaged.

Offer children opportunities to –	**Limit –**
• Experience and trial dispositions frequently, with freedom to engage, retreat and retry. • Choose and manage their own activity and line of enquiry. • Work in small groups, especially as a pair. • Engage in discussions, free from adult influence. • Become deeply involved in an activity, without interruption or distraction, scaffolding only when needed. • Make choices from within a freely accessible environment as they combine and make links in their learning. • Request support as they need it, using processes of sustained shared thinking rather than direction. • Experience deeper levels of involvement before being stopped. • Experience autonomy and independence. • Experience, and be recognised for, a diverse array of abilities, thoughts and skills.	• Micro-management of children; their time, their location, the environment and their experiences. • Prolonged periods of whole group teaching that limits choice, ownership or direct involvement. • Distractions. Even slight distractions can see positive responses turn to reluctance. • Interruptions. Instead offer mindful encouragement when required, conscious of what is being encouraged. • Recognition of only one accepted response. Instead, recognise and value children's thinking and diverse responses.

Figure 7.1.6: Practice recommendations originating from the study.

The education profession is rooted in the notion that children's developmental potential is enriched through the experiences being offered, rather than a predetermined biological or inherited trait. This implies great opportunities, but also great responsibility, relying heavily as it does on the permissions of those aware of and advocating for its motives. Bruner (1972) spoke of a need for "cultural tools" for learning and thinking, offering children a way of communicating and responding to the world, acquired and developed through education. Hutchings and O'Rourke (2006) spoke of the importance of developing listening and communication skills, empathy, tolerance, negotiation and patience, time management and focus, all developing through enquiry-based learning processes. Whilst Hewitt and Tarrant (2015) looked to the additional skills required of children,

suggesting a need for flexibility learnt through experiencing adaptability, to be dynamic requiring swift thinking and responsiveness, whilst the ability to cope with uncertainty would need children to develop resilience. This study looked to children's dispositional engagements.

Through its compelling insights, the formative impact of experience on dispositional engagement has been shown. Developed and illustrated through the Theory of Lifelong Development and its initial establishment within childhood (ToLD-C), the cyclical, reinforcing nature of experience and the impact this had on developing attributes and outcomes was highlighted. Acknowledging the importance of underpinning dispositions and their support of later cognitive and social behaviours and attitudes ToLD-C recognised dispositional development as a cumulative, life-long pursuit, the roots of which are deeply embedded within early experiences. Concern is now voiced regarding the limitations imposed on children through more governed experiences. As a new way of viewing pedagogy is presented, reflections on the purpose of education are offered and key considerations from the last section are revisited.

As illustrated in Figure 7.1.5, engagement has been recognised as the linchpin of lifelong development with attributes and outcomes visibly impacted as children's engagement altered. As their response to learning opportunities changed, children's propensity to grapple with and pursue complex ideas altered and their general well-being was often seen to decline. As these effects became reinforced through the outcomes they were experiencing, their ToLD-C cycle was seen to tilt from positive to negative (Figure 7.1.4). With concern for the long-term effects of these changes, and as these observations have become better understood, the Method of Improved Childhood Engagement (MICE) has been developed. Having presented findings from its observations above, this study will now offer this framework for its recommendations. Noting opportunities for self-direction, social engagements and environmental freedoms, naturally influenced responses towards and potential engagement with the learning taking place, as well as children's propensity to apply understanding and thinking for themselves, direct suggestions of pedagogical influence on the development of dispositions will be offered.

Pedagogical recommendations

As reflected within the cohort of this study, whilst some children learn well, enjoy traditional teaching methods and make good progress, others struggle to engage when making the transition to school. With effects felt by children and teachers alike, the resulting behaviours, especially low-level disruption, has been cited as the main source of stress for most teachers across a range of countries (Hewitt and Tarrant, 2015). MICE proposes that long-term improvements to child engagement is better served through informed understanding of the individual children and the experiences they need, rather than universal attempts at more exciting teaching or wholesale purchase of expensive resources. Echoing social constructivist models of Bruner, Piaget, Zimmerman and Vygotsky, MICE recognises learning as a socially influenced, active process, central within the development of what Bruner described as an "agentive mind", "Proactive, problem-oriented, attentionally focused, selective, instructional and directed to ends" (Bruner, 1996; p93). Whilst remaining mindful of the importance of social interaction, it considers the nature of support offered through adult and peer interaction as advocated through the social models of Bruner and Vygotsky.

Through demonstrations of its ongoing impact, this study has illustrated the importance of experience within dispositional engagement, influencing developing personal motivations and attitudes. MICE utilises the findings of this study, and the theories and models it has generated to offer tools to support reflective practice and inform the experiences offered to children in the classroom. Echoing Hewitt and Tarrant (2015; p25) who suggest that "If learning is active construction of knowledge, then agency and active participation in the process is key", it offers methods to actively support children's personal construction of knowledge and understanding of their world.

The Method of Improved Childhood Engagement (MICE)

As discussed, and illustrated in ToLD-C (Figure 7.1.4), both positive (yellow) and negative (red) influences within children's experiences can impact the developmental trajectory of the child. With this in mind, MICE proposes that the potential impact of these influences must be considered. Mindful of a child's past, if future engagement is to be improved, attention must initially focus on current motivations, through an informed understanding of the child's ToLD-C cycle and the tilt that it is on, inclining towards the positive (yellow) or the negative (red). As the experiences of the child have formed and have been informed by their permitted engagements, developing their attributes and recognised within their outcomes, insight is permitted through careful observation. It is here, with the help of TOADs (Figure 7.1.7) that MICE must begin.

TOAD

TOAD

- **T**oLD-C - Become familiar with ToLD-C, mindful that every experience is reinforcing attitudes and beliefs children have in themselves, skewing their development cycle in positive or negative ways.

- **O**utcomes - Observe evidence of realised outcomes to understand the impact past experiences have had on a child's cycle. Through observation and the descriptions provided, consider children's actions and reactions to their environment and the people in it, indicating their position on the sliding scale.

- **A**ttributes - Mindful of children's outcomes, consider what this suggests about their developing attributes. From the previous observations and the descriptions offered, consider what this implies regarding children's developing attributes, indicating their position on the sliding scale.

- **D**ispositional engagement - With reference to areas of specific concern, consider the freedoms children have to explore dispositions, positively and negatively, in line with their own motivations.

Figure 7.1.7: TOAD - The first stage of MICE, establishing an understanding of children to effectively improve their engagement

Conducted at the beginning and the end of the process, TOAD is an indication of how children's ToLD-C cycle is positioned with regard to its positive and negative tendencies. Completed by a trained practitioner whilst in a supernumerary capacity, TOAD offers a portrayal of the typical actions and reactions of children as it begins to consider the insights these displayed behaviours offer. At the end of the process, it is utilised as a measure of improvement as barriers to engagement are evaluated and addressed.

With reference to figure 7.1.8, TOAD firstly considers the visibly displayed outcomes of children across the 9 key areas of development identified within the study. With knowledge of the children during typical session activities, and with reference to the descriptive comments, an indication is made on a sliding scale utilising the colours of the ToLD-C cycle (dark green). This can be focused on an individual child for a targeted improvement plan, or on a group of children if a cohort analysis is required. From these observations of the child's displayed behaviours, reflections are made on the developing attributes that these observations might suggest. With reference to the descriptive comments in pale green, these are again recorded on the sliding scale utilising the colours of the ToLD-C cycle.

Outcomes - observe children's actions and reactions to the environment and others, rating on the sliding scale	
Attributes - from the observed outcomes, consider what this implies regarding children's developing attributes, rating on the sliding scale	
A - Self-awareness	
Does the child appear lost within the environment, limited to following others or waiting to be directed?	Does the child appear comfortable in their surroundings and within tasks, independently accessing the resources and environment?
Does the child appear ill at ease? Unaware of their capabilities or needs, do they frequently look to others to guide them?	Is the child confident in their abilities, knowing what they are capable of, mentally and physically, stretching their own abilities?
B - Personal growth	
Is the child quick to become frustrated or ask for help, unable to remain on a task or unaware of the positive outcomes of their activities?	Is the child keen to try the things they have learnt, aware of what has gone well and the decisions they made, happy to talk about their achievements?
Is the child unable to avoid difficulties? Do they often make inappropriate choices, unable to focus or manage their feelings?	Is the child positive in their approach to learning, attentive, patient and able to avoid obvious difficulties? Are they able to manage their feelings and actions, even when things go wrong?
C - Belonging and well-being	
Does the child appear to be restless, dependent on others for direction? Do they often need to be refocused?	Does the child appear content, eager to please yet happy to follow their own path? Do they self-select resources, becoming immersed within tasks and keen to do well?
Is the child detached? Do they feel ill at ease within the environment, insecure and unable to manage themselves through minor difficulties?	Is the child secure in the environment, do they feel connected to its people and opportunities? Are they confident in its surroundings and able to self-soothe when difficulties arise?
D - Developed methods of thinking	
Does the child appear confused? Are they inconsistent in their thinking, unable to retain focus or attention to detail?	Does the child negotiate with others, manipulating ideas as they investigate? Are they clear in their thoughts, predicting outcomes and noticing patterns?
Does the child have limited communication skills? Are they unable to make obvious connections in their learning, waiting for direction rather than predicting or supplying next steps for themselves?	Does the child have established language abilities that they can freely utilise? Are they able to apply their learning, linking ideas as they innovate and think in abstract ways?
E - Ability to make decisions	
Is the child reluctant to engage? Do they remain outside of active enquiry, appearing ignorant of what to do or how to proceed?	Can the child independently plan and investigate, considering their options, applying techniques and problem solving as they seek understanding?
Is the child disinterested, or are they uncertain of how to proceed? Do they lack concentration or the ability to manipulate ideas in their head?	Is the child inquisitive and open-minded in their thinking? Are they actively interested in furthering their understanding, informing themselves through their actions and reflections?
F - Effective relationship skills	
Does the child appear to be on the outside of friendship groups, ignored or rejected? Are they unable to conform socially enough to fit in?	Does the child have friends, accepted into the games and conversations of their peers? Do they react to the needs of others? Can they recognise and use humour?
Is the child disconnected from their peers? Are they oblivious to how they present themselves, or to the needs of others?	Is the child able to engage their peers? Do they relate to others, imitating their behaviours and acting in ways that see them admired whilst managing disagreements?
G - Values learning from others	
Does the child proceed on their own, not looking to others for their confirmation or input? Do they prefer to work alone, even when they would benefit from support?	Does the child use others' ideas, responding to their suggestions? Do they look to other children to confirm their actions? Do they lead and direct, in ways that cement the bonds between them?
Is the child unresponsive to the ideas and actions of others? Are they easily distracted or oblivious to feedback and the suggestions of others?	Does the child listen to their peers, open-minded to their suggestions and support? Do they play cooperatively, able to zone out competing distractions?
H - Tendency to grasp opportunities	
Is the child uninterested in going after what they want? Do they appear oblivious to opportunities around them, uninterested in personal gratification or public recognition?	Is the child aware of opportunities around them? Do they set challenges with optimism that they are then committed to succeed in?
Is the child uninspired by novel opportunities or lack the determination to pursue? Do they lack physical skills or mental agility, appearing uninvolved or reluctant?	Is the child enthusiastic and excited around new opportunities? Are they easily stimulated, applying purposeful determination as they focus their time and resources to succeed?
I - Ease with risk and challenge	
Does the child restrict their actions to those they are familiar with? Do they avoid challenge, remaining within perceived limitations?	Is the child keen to try their own ideas, engaging in the unknown as they challenge rules and push boundaries?
Is the child unlikely to put themselves forward? Reluctant to engage, are they hesitant when presented with new opportunities and quick to assume defeat?	Is the child resilient and resolute in their determination? Are they keen to challenge themselves, to persist even when competition or bravery is required? Are they able to stand up for themselves?

Figure 7.1.8: TOAD Sliding scale used to offer underpinning indicators for dispositional engagements

Once an indication has been made of children's areas of positivity and negativity within their outcomes and attributes, their combined position on the sliding scale for each key area is transposed into Figure 7.1.9. Reflective of key dispositions involved in the development of these attributes and outcomes, this grid offers an indication of the dispositions that may require additional opportunities for engagement. Whilst this is not to be considered deterministic or prescriptive, this process offers an indication of children's tendencies within their learning cycle, the impact of previous influences and an indication of dispositions that may have previously been neglected or avoided, all the while focusing attention on the natural links within the cycle.

Dispositions - Transpose assigned scores to the scale below to gain an indication of dispositional engagement	
Self-awareness	
Impulsive, Dependent, Unimaginative	Reflective, Independent, Imaginative
Personal growth	
Indifferent, Inflexible, Impulsive	Curious, Adaptable, Reflective
Belonging and well-being	
Unsociable, Imperceptive, Subdued	Sociable, Intuitive, Playful
Developed methods of thinking	
Illogical, Narrow, Unimaginative	Logical, Wide, Imaginative
Ability to make decisions	
Imperceptive, Inflexible, Impractical	Intuitive, Adaptable, Practical
Effective relationship skills	
Unsociable, Serious, Imperceptive	Sociable, Playful, Intuitive
Values learning from others	
Indifferent, Uninspired, Nervous	Curious, Creative, Courageous
Tendency to grasp opportunities	
Unmotivated, Consecutive, Impractical, Narrow, Insecure	Self-motivated, Simultaneous, Practical, Wide, Confident
Ease with risk and challenge	
Nervous, Dependent, Uninspired, Insecure	Courageous, Independent, Creative, Confident

Figure 7.1.9: Dispositions particularly connected with each key area, used to draw attention to potential areas of required increased attention

This process is also designed to support an ontological and epistemological enquiry that Hewitt and Tarrant (2015) consider necessary if teachers are to fully understand the nature of learning, teaching and children within their school. Supporting progressive learning, they suggest, requires a good understanding of the current starting point of the child, a knowledge of the child's relationship with their school, their engagement in their learning, their interests as well as the content of the school curriculum. Emphasising this need to recognise children as individuals, TOAD offers a way to see beyond the homogeneous group, considering what best suits individual learning needs, as advocated by Robinson (2010) when troubling classifications within school systems. Having introduced the multi-faceted traits developing within the children, TOAD begins the process of enabling practitioners to observe beyond academic requirements or specific goals. As familiarity grows with children's

dispositional tendencies and their displayed behaviours, children are recognised as more than a product of current academic achievements and it is these enriched qualities that can then be reflected within improvements demonstrated to leadership and governing bodies.

The 10-Step Programme

Underpinned by the insights of TOAD, the Method of Improved Childhood Engagement (MICE) now turns its attention to experiences offered to children, considering and addressing potential barriers to engagement through a 10-Step programme (Figure 7.1.10). Focused on enabling dispositional opportunities, the 10-Steps consider optimal requirements within each area of delivery, posing questions to challenge negative and positive tendencies within the ToLD-C cycle. It then suggests initial actions to support practice and indicates key areas of development to be directly impacted.

By firstly considering the environment (Step-1) and its resources (Step-2), and then with focused reflection on the external influences placed on children (Steps-3 to 6) and the personal choices and freedoms this permits (Steps-7 to 10), all areas of children's experiences of pedagogy are addressed. All Steps within each colour coded area of environment, external and internal influence are to be considered together, with progression to the next section when ready. To support focused consideration of Steps 3-6 and Steps 7-10, adapted versions of the observation sheets developed for this study have been written (illustrated in Figure 7.1.12 and included in Appendix T). With coded variables also adapted from those written for this study (Figure 7.1.11), the physical environment proforma draws attention to Steps 3-6, while the child focused observation sheet allows consideration of Steps 7-10. These sheets also utilise the Dispositional Engagement Preference scale (DEP scale, Figure 7.1.13), adapted from the FOLLEP scale to meet the requirements of MICE. Ideally completed by an adult not involved in the delivery of the session, these observations focus on a group of up to four children at any one time, conducted through rotating methods as described in Chapter 3.3.

MICE - 10 steps to increased dispositional engagement					
		Consider	Question	Action	Develop
	1	Consider dispositions within every environment and lesson plan.	Are children's gatekeepers aware of the impact of secure dispositions on children's ongoing development and mindful of them within all interactions? Or are known facts and performance results seen as more important?	Conduct a dispositional audit of the environment. Offer training to staff, information to leadership and governing boards and focused parents evenings to families.	Continuous provision that enables development across all the key areas
	2	Offer wide access to the environment and the resources within it, including time.	Are children able to freely access all areas of provision at all times, engaging for as long as they need? Or is access to areas frequently limited and time strictly managed?	Question existing barriers, including access to outdoor space and the frequency of child interruptions and distractions. Consider how more choices can be made available and what routines and breaks could be adjusted to permit deeper engagement.	
	3	Limit times when location and attention are directed by adults, especially when in large groups.	**Teaching styles** Are children offered opportunities for enquiry and investigation within autonomous experiences? Or is expected compliance more commonplace, with predetermined outcomes?	Discuss what elements of whole-group learning, such as "carpet time", can be delivered through more engaged means. Be mindful of the amount of time children are expected to be listening and observe what they are actually doing during these times.	Develops thinking Promotes decision making Develops effective relationship skills Values learning from others Encourages grasping opportunities
	4	Allow children opportunity to become absorbed within an activity or enquiry.	**Distractions** Are children offered uninterrupted time to freely engage and focus? Or are their actions more constrained, with attention forcibly directed according to timetable?	Identify interruptions that may be avoided, including fast changing timetables. Where a break in concentration is unavoidable (lunch time) consider what opportunities children have to pursue an idea to its conclusion?	Belonging and well-being Develops thinking Promotes decision making Values risk taking
	5	Offer children methods of accessing their own support.	**Location** Can children make connections in their learning, accessing answers to their questions through open exploration and use of the environment? Or is learning disconnected, confined to its own time and place. For example numeracy time with the number line?	Identify how and where children are given the opportunity and freedoms to find their own answers. Address any issues that limit this, for example limited time, resources or practice.	Develops thinking Promotes decision making Encourages grasping opportunities
	6	Value children's diverse responses and range of insights, potential and abilities.	**Encouragement** Are children's developing thoughts and ideas supported, nurtured and encouraged, exploring further where these are unexpected? Or is anything but the expected answer discouraged, ignored or overlooked?	Be mindful of children's responses, rather than simply moving on when a unique idea is voiced, value the insight this offers. Offer opportunity for children to debate their ideas, demonstrating how there is often more than one "right" answer.	Self-awareness Belonging and well-being Develops thinking Promotes decision making Values learning from others Values risk taking
	7	Allow children opportunities to instigate and lead discussions with other children.	**Discussions** Are children given opportunities to voice their ideas with their peers, engaging in debate and assuming various roles? Or are children frequently silenced, or spoken to, isolated from peer interaction?	Offer children the opportunity to discuss introduced concepts within the safety of peer grouping. Less afraid of being incorrect, their own voice, and that of others can be heard and learnt from.	Personal growth Belonging and well-being Develops thinking and effective relationship skills Values learning from others Encourages grasping opportunities Values risk taking
	8	Offer children the opportunity to pursue their own investigations with ownership of the experience.	**Involvement** Are children given opportunities to become personally involved in the direction of their learning, indicated through their deep absorption? Or are children frequently observed detached and disinterested in the experiences offered?	Be mindful of children's opportunities to manage and self-direct their own learning. Pause before interrupting a busy, or apparently 'lost' child. If this is frequently observed, question the experiences being offered.	Self-awareness Personal growth Develops thinking Promotes decision making Values risk taking Encourages grasping opportunities
	9	Offer children the opportunity to collaborate with other children, especially within pair work.	**Grouping** Are children offered opportunities to observe and collaborate with peers, personalising experiences through allegiances they choose to make? Or are children often learning within enforced grouping, where they remain solitary, with their iIndividual needs unmet?	Consider where tasks can be tackled in small groups and pairs. Allow children to experience various roles within a team dynamic, choosing how to work, learning from each other and having a voice.	Personal growth Belonging and well-being Develops thinking Develops effective relationship skills Values learning from others Values risk taking
	10	Establish a classroom environment that invites children to trial and investigate.	**Choice** Are children able to apply their ideas, to explore their thinking and dip in and out of dispositional engagement? Or are children's experiences throughout the day limited and governed by expectations and rules?	Allow children opportunities to engage in dispositions within their own timeframe and at their own level. Periods of positive and negative trials recorded within the DEP scale are far more beneficial than a consistent zero.	Self-awareness Belonging and well-being Develops thinking Encourages grasping opportunities Values risk taking

Figure 7.1.10 MICE - 10-Steps to focus attention on the experiences offered to children

Physical Environment Observation Proforma - Externalised influences					
Teaching styles (T)	T1 – Adult led	T2 – Adult participation	T3 – Group activity	T4 – Some adult support	T5 – Child autonomy
Distractions (D)	D1 – Attention directed	D2 - Encouraged elsewhere	D3 - Offered alternatives	D4- Occasionally distracted	D5 - Uninterrupted
Location (L)	L1 - Enforced	L2 - Encouraged	L3 - Alternatives offered	L4 - Most options available	L5 - Free choice
Encouragement (E)	E1 – Expected responses actively sought	E2 – Children led towards expected responses	E3 – Desired response encouraged	E4 – Child's ideas heard	E5 – Child's ideas actively explored

Child Focused Tracking Observation Proforma - Internalised influences									
Discussions (D)	TC	TC → A	TC → C	TC → GC	A → TC	C → TC	GC → TC	A → GC	GC → A
Involvement (I)	I1 – Attention drifting, unengaged	I2 – Settled briefly	I3 – Engaged most of time	I4 – Some intense engagement.	I5 – Continual. intense engagement.				
Grouping (G)	UG - Unengaged within a large group	AG – Active within a large group	SG – Engaged in a small grouping	P – Chose to engage as a pair	A – Chose to be alone				
Choice (C)	C1 – No choice of activity	C2 – Limited choice	C3 – Some activities excluded	C4 - Only in/outdoors excluded	C5 – Freedom of choice				

Key to discussions - TC = Target child; A = Adult; C = Other child; GC = Group of children

Figure 7.1.11: Coded variables to be utilised in the MICE observations

Figure 7.1.12: MICE Observation sheet

Dispositional Engagement Preference Scale		
2	Strongly positive: Actively seeks out	This is a clear disposition of choice, they will actively seek it out and return to it. Shows clear enjoyment when engaged in this disposition.
1	Positive: Some indication	Keen to engage in this disposition, indicating a comfort within it but will move to another.
0	Neutral: Either no opportunity, or is indifferent	Shows indifference towards this disposition or there has been no opportunity for it.
-1	Negative: Shows reluctance	If given the opportunity they will indicate this disposition but are reluctant, finding alternatives if possible.
-2	Strongly negative: Actively pulls away	When given opportunities, they will actively demonstrate a reluctance to engage in this disposition. They do not volunteer positive evidence, verbally or physically.

Figure 7.1.13: Dispositional Engagement Preference Scale - DEP scale

Completed by a trained practitioner in a supernumerary capacity, these observations capture sessions as they note the impact of pedagogical styles on child engagement. Supported through rich descriptions, the pedagogical styles are recorded, alongside dispositional engagement as reflected within the displayed actions of the children, forming a focal point for discussion. Repeated during a period of targeted improvements, they can be used to observe the impact of evolving practice or periodically to offer comparison. For example, used to capture practice across a range of sessions they will offer an indication of the opportunity's children experience and the impact this has on their engagement. If extensive directed teaching has been identified as a potential concern, dispositional engagement can be observed during alternative approaches as they are trialled.

Recognising the risks taken by innovative teachers when implementing new teaching strategies at the classroom level, Hewitt and Tarrant (2015) caution that good intentions are useless without a way to implement and assess them. Noting that sustained, incremental change can be more effective than the grand gesture, they also advocate a reference point to offer focus

and recognise improvements so that small changes are not missed. Together with the baseline offered through TOAD, the 10-Step Programme and its accompanying documentation offers this structured support.

The 10-Steps of MICE are a direct derivation of the findings of the study, however, their advocated practices are deeply rooted and supported through current knowledge and research.

- Steps-1&2 look to the environment and its resources, a key consideration of the Montessori philosophy as it mindfully considers learning potential within environments designed to permit children's independence, freedom and exploration. Advocating for trial, ownership and risk taking, this allows mistakes to be made and rectified without the need for close teacher supervision or intervention (Montessori, 1966).

- Step-3 questions default carpet-based, whole group teaching styles, which Hewitt and Tarrant caution, risk undervaluing children's contributions and sense of responsibility to evoke a "learned helplessness" (2015; p25). Reminded that "Teaching is only demonstrating that it is possible. Learning is making it possible for yourself" (Coelho, 1998; p23), it advocates social processes of learning within guided construction and exchange of ideas, as it troubles over-reliance on disconnected transmissions, seen to stifle children's thinking. Heeding the NESTA (2007) definition of innovative learning techniques it advocates combining mastery of the basic skills, with a deep subject knowledge that allows the creation of new ideas.

- In keeping with its constructivist theory of learning, Step-4 recognises the development of thinking and problem-solving skills as an active process evoking change in the organisation of information in the learner. Requiring new experiences, authentic information and time to tinker as children create original work (Wolk, 2008), open-ended experiences are advocated, through which children are immersed in learning (Hannafin et al., 1994), allowing extended exploration, manipulation and opportunities to discover. With freedoms to explore and experiment, children become more deeply engaged, suggests Jaeckle (2008), promoting varied and challenging learning (Roussou, 2004). Becoming more willing to initiate, participate, to practice their skills and transfer their learning, they indicate their security within it (Standards and Testing Agency, 2012).

- With effective forms of thinking improving learning across all areas of the curriculum, Step-5 promotes children's opportunities to make connections in their learning. With opportunities to identify their own learning needs, utilising existing knowledge within self-directed processes, children's natural curiosity, exploration and investigation is stimulated and encouraged as children's personal identity develops (Kahn and O'Rourke, 2005).

- Step-6 promotes enquiry-based learning as it recognises children's questioning as a powerful tool to develop thinking and learning. Establishing the classroom as a "community of enquiry" (Lipman et al., 1980; p45), children are actively engaged as multiple solutions and responses are valued, allowing processes of discovery, whilst avoiding dismissal of all but the expected response. Encouraged to listen to one another, challenging and building on each other's ideas, ready answers are avoided as children engage with scenarios and problems in context.

- Echoing Vygotsky who spoke of thinking being rooted within rich dialogue, where a world view is developed through interactions with others, Step-7 promotes children's opportunities to talk with one another. Promoting important social, emotional and communicative functions, Wegerif (2005) celebrates its value in developing thinking and learning in the classroom. Specifically noted in this study for its benefits within small groups, personal identity was seen to establish as children sought to understand each other through processes of shared enquiry, without critical challenge. A process that Alexander (2006) argues builds cognitive power.

- Step-8 develops children's abilities to identify and solve their own problems, applying previous knowledge to new situations across different contexts, through a process that Hewitt and Tarrant (2015) suggest enables a journey of learning, discovery and innovation. When opportunities to demonstrate their creative potential or ideas are limited, caution Kaufman and Beghetto (2009), children are unable to express themselves in articulate or challenging ways.

- Step-9 looks to children's opportunities to collaborate, to apply their ideas, feelings and relationships, developing their knowledge and understanding as they develop control, mastery and competence (Bruce and Meggitt 1999). With

highly engaged observations captured when children were given opportunity to learn from one another, this is reflective of Education Scotland (2012) when suggesting learning is frequently most effective when children are given opportunity to think and talk together, discussing ideas, questioning, analysing and solving problems without the constant mediation of the teacher.

- To develop confidence in their abilities and belief in themselves children require control of their own learning, where choices are made and risks taken, suggest Hewitt and Tarrant (2015). Step-10 promotes an environment where children are offered opportunities to explore, investigate, question and take risks, as skills and knowledge are acquired across all areas (Benson, 2004). Involving children in their choice of work and approach, children were more likely to become involved, as Ofsted advocate when noting children given an authentic voice are far more likely to persevere, even when faced with failure, with impact on behaviour, motivation and ultimately standards in school (Ofsted, 2010). Self-governed approaches and risk become an essential part of the learners toolkit (Claxton, 2007), as choice allows children to discover what works well and what does not (Education Scotland, 2009), developing resilience through the challenges, barriers and setbacks they overcome.

Whilst developed to support children's engagement in their learning across the primary curriculum, MICE can also be used within any environment where a degree of active learning is desired. Written to support careful reflection of children's experiences of learning, it looks to better understand the impact these experiences are having on them. Through its holistic style of writing and nature of approach, observations inform an understanding of children's displayed behaviours, as barriers to engaged learning are identified. Supported in their pedagogical choices, practitioners can then actively manage the nurturing of dispositions. Written to actively support children's engagement through targeted experiences, MICE then establishes positive reference points to direct children's outcomes and inform their ongoing actions. Reflective of the complex nature of child behaviour and development, MICE consciously avoids any curriculum framework, so that wider definitions of achievement are recognised and promoted. In doing so, its application is suitable internationally as discussions focus on children's potential across their developing attributes.

For use with individual children, or as a classroom based evaluative tool for practice development, MICE is suitable for use across a range of scenarios. For example, if engagement of summer born children is a focus, or the behaviours of certain children are a concern, observations of this cohort can be conducted across a typical week. If disengagement during numeracy sessions has been identified, observations can focus on the impact of pedagogical practices employed during these sessions, identifying circumstances where engagement is a concern. MICE can also be used to specifically target aspects of an individual's engagement, for example a child may engage well during a PE session, but struggle during a class led phonics session. MICE can be used to focus on aspects of practice, allowing fluctuating engagement to be more effectively addressed. Providing tangible evidence to support discussion, target setting and improvement, TOAD informs and underpins the tailored application of the 10-Steps of MICE, which may collectively form part of a schools ongoing practice development portfolio. Built into a school's evaluative processes, the insights generated by MICE and the impact demonstrated across given cohorts offer a valuable addition to a school's key performance data.

Referencing anecdotes from Albert Einstein, Henry Ford and Steve Jobs, Hewitt and Tarrant (2015) talk of the ingredients of creativity and greatness being present within every child, just requiring the opportunities and permissions to be original, to utilise their experiences and to make the connections they need. However, this requires the greatness of children to be recognised and captured, rather than dismissed as not fulfilling the given brief, or for being new or unexpected. Through wider definitions of achievement, that capture the full potential of children's dispositions, disengagement should cease to be the main source of stress experienced by teachers, as all children are motivated to achieve.

In a changing society that requires adaptation to new forms of knowledge and technology, an "education for liberation" is required, suggest Hewitt and Tarrant (2015; p97), where learners are provided with the skills, knowledge and motivation to become active, compassionate and successful citizens for today and tomorrow. In today's knowledge economy, stimulated and driven by creativity and ingenuity, these wider considerations are ever more pertinent, suggests Hargreaves (2003), if we as a nation, are not to be left behind. Echoed by industry and the creative arts who are fighting for learners who continue to learn, capable of applying problem-solving and core skills to a variety of contexts, displaying innovation, cooperation, analysis, resilience and enterprise (Edwards and Mercer 1987; Istance, 2008). A culture of performance and compliance in itself does not provide a context for innovation suggests NESTA (2007), a school curriculum for the present and the future must prepare children for future careers in areas unknown and towards longer periods of old age in which employment may not be the central concern.

Implications of the study – policy and practice

The social constructivist framework this study sits within suggests that children's responses to their learning are rooted within the meanings they place on them, both independently and socially. As they grow and develop, they construct this meaning, modifying and adapting through the opportunities they are offered to do so. This requires children to be recognised for more than their presenting sum of abilities, but rather as a changing, developing person with ideas they need to question and wide-reaching potential that needs to be considered. However, this study illustrated that as children transition into the primary classroom and focus becomes trained on academic skills, predetermined outcomes and classroom procedures, children's recognised abilities can become limited to these definitions, and any genuine understanding of their wider knowledge and abilities are diminished.

Children's engagements, and any inclinations to think and act independently became effected by environmental and pedagogical influences. Permitted choice and social expectations affected any realised opportunities, as their agency, motivations and reflections were impacted. Permissions to make their own meaning, to transform and apply knowledge and to integrate and adapt their skills were dependent on the social engagements, encouragements and distractions taking place within the moment. Permissions to be verbal, to give ideas, to show initiative and pursue original ideas determined their opportunities to adapt their thinking, apply reason and investigate and to have any such efforts recognised. Furthermore, once children had transitioned into the formal classroom, behaviours were expected that were rarely given opportunity to develop. Expected to pay attention and persist with challenging tasks, little opportunity was given to develop intrinsic motivation for a personal goal. Expected to remember new rules and avoid distractions, few experiences of multi-faceted environments were offered where choices could be simultaneously made, or multiple options held in mind while decisions were applied. Expected to suppress extraneous movement, to sit still and be goal oriented came without regular opportunities to move their growing bodies freely and physically, responding to every instinct within them.

This study advocates for a child's right to these opportunities; to think, to question and imagine, and to demonstrate their capabilities, to themselves as much as others. Deeply concerned that attempts at controlling children's innate behaviours are leading to ineffectual development, especially within emotional regulation and social engagement, it sought ways to retain their natural inquisitiveness and harness their engagements instead of effectively switching them off as they walk through the school gates. But this requires wider definitions of teaching and learning that look further than discrete or adult led learning goals, teaching objectives or produced data. With school readiness agendas focusing too frequently on children's ability to conform to

the requirements of the classroom, this study asks whether the expectations of the classroom need reforming. Demanding a change of focus if we are to realise children's true potential.

Recognising education for its wide capacity in developing the whole child through the experiences it offers is nothing new. Numerous reports and inquiries (Hadow, 1931, 1933; Plowden, 1967; Rumbold, 1990; Ball, 1994; Primary Review, 2010) have recognised the importance of this finite time within children's learning experiences, advocating for child-centred approaches through which children are educated as individuals. Child-centred play is continuously recommended as the main vehicle for learning, and the importance of retaining children's interest through autonomous learning experiences is repeatedly recognised, rooting learning in its social and cultural context.

Despite all of this, Hewitt and Tarrant (2015; p88) trouble the continuing effects of administrative and bureaucratic governance of schools that is effectively creating "learning factories," promoting set ways of acting, prescribed ways of thinking and static forms of knowledge that are no longer sufficient educational goals as they advocate for teaching that needs to evolve into the 21st century. Noting a resulting "performance orientation'' within teachers when practice becomes overly focused on the achievement of outcomes, Dweck (1999; p122) suggests that a "mastery orientation" to learning should be the aspiration of those valuing deeper understanding and competence. A caution James and Peddar (2006) heed when suggesting industrial and regimented forms of assessment are resulting in industrial and regimented forms of learning.

Mindful of these sentiments, and explicitly troubled within the literature review (Chapter 2.1), this study strongly questioned the enduring use of formal practices in the delivery of discrete, measurable skills. Challenging its effective skewing of children's opportunities, affordances and experiences through its desire for universal and focused outcomes, it has troubled their continued directing, governing and measuring of children's recognised abilities and achievements. In its observations, attainment targets and demands of Key Stage One that saw formal teaching styles continuing to cascade down into preschool and reception classroom environments noted children's natural propensities for learning becoming disengaged. Once overly academic objectives were seen directing experiences of learning with practices that young children were not yet ready for, engagement in that learning effectively diminished. Their wider potential became constrained, negatively influencing their developing identity within the classroom, as long-term effects began to embed, despite the children still being very much a part of the Early Years Foundation Stage.

Throughout the Early years, the curriculum framework of the EYFS continues to cause concern, regardless of its periodic reviews. With its latest version due to become statutory from September 2021, proposed revisions focused on clearer early learning goals and a strengthening of literacy & numeracy in readiness for the learning intentions of Year 1 look set to go ahead, despite well-researched and considered cautioning from the sector and experts at every stage of the consultation process. With its focus on outcomes and school preparations, its underpinning knowledge base is being questioned (Wood, 2020), troubling its lack of acknowledgment of the messy constructs residing within learning and development. Lacking a broad, well-rounded and holistic approach to child development, its narrow and overly formal approach continues to be troubled by the profession (Leitch, 2020) as apprehension remains for the direct impact this will have on pedagogy and its focus on assessment. Furthermore, once this is inevitably linked to performance criteria, a deep impact on practice within the early years is troubled. Driven by the need for children to achieve learning outcomes, rather than focusing on children's learning needs, an alternative is required, Wood suggests, to "challenge the (il)logic of the Early Years Foundation Stage" (Wood, 2020; p321).

This study consciously drew attention away from the achievement of learning objectives and assessment criteria as it considered the development of underpinning dispositions and their effect on child engagement. Mindful that primary aged children are learning not just what to study, but how to study (Rose, 2006), it identified early years pedagogy that encouraged children's engagement with learning. It considered children's propensity to grapple with and pursue complex ideas, to think, to be self-aware and grasp opportunities. It captured children's responses within a wide range of learning opportunities as they demonstrated what they were inclined to do with what they knew, rather than their responses to the requirements of a test. Mindful of the importance of free choice and socially supportive environments, alongside children's need for and right to make decisions, to experience risk and to develop a sense of belonging, it asks to look again at the requirements of learning goals and testing within the Foundation Stage.

By consciously removing its attention from any desired learning outcome or subsequent school-based curriculum agenda, it sought a comprehensive and holistic approach to capture, not only the messy constructs residing within learning and development, but also the social and cultural realities of children within their experiences of learning. In doing so it acknowledged and recognised the impact of pedagogy, formal and otherwise, on the engagements of children, both in the moment and as predispositions took root. Through this recognition of the direct impact that pedagogical choices have on children's depth of engagement, their attitudes towards their learning and the outcomes being offered, this study actively considered the underpinning reason why so many children present as disengaged and disconnected from their learning so soon after their formal experiences of it begin. A devastating reality when in the preceding years this had been the most basic of natural human instincts, allowing for staggering levels of learning to occur in a few short years.

The pedagogical recommendations offered by this study were focused on creating confident, self-motivated individuals capable of engaging in a lifelong process of intellectual curiosity and learning. By supporting teachers to "actively consider learning above accountability" (Hewitt and Tarrant, 2015; p88) it offered a structured approach to experimentation, decision making and innovation, addressing the question of how "Unproductive policies and practices can be stopped from diminishing intrinsic student motivation and classroom morale" (Bowman, 2011; p118). The Theory of Lifelong Development in Childhood (ToLD-C) considered the impact of key experiences on children's propensity towards dispositional engagement by noting cyclical effects of opportunity, inclination and expectation on developing attributes and consequential outcomes, to positive or negative effect. Whilst MICE offered a structured framework for practitioners to implement the recommendations offered. This study then suggests that if a dispositional focus rooted in the theory and method it provided were to become the focus of performance criteria and publicised achievements, children's natural instincts for learning could be harnessed rather than denied, and their true potential, wherever it may reside, be acknowledged, nurtured and celebrated.

Taking these findings forward

This study has demonstrated the importance for any framework for the Early Years to look beyond Early Learning Goals, to consider what it takes to function within society. Children need opportunities to develop a set of interrelated behaviours and reasoning strategies that allow their thinking and actions to advance beyond responses to the demands of others and repetition of acquired knowledge or learnt skills. With displays of what is known becoming devalued within a technology rich age, children need to be comfortable within their abilities to engage in learning, solving complex problems within new environments as they access and produce knowledge rather than simply reproducing it. Managing new problems within unexpected situations, encountering setbacks with motivation and perseverance and exploring alternative directions with courage and insight. Along with the ability to offer opinions, contribute ideas and work collaboratively, unafraid of the requirement for one desired answer.

By focusing attention on dispositional development, this study has captured these behaviours and responses, demonstrating the impact of experience on children's reactions to novel situations, their motivations, and their ability to manage. With functioning developed in the early years shown to have lasting impact, with secure development effecting physical health, social-emotional well-being and life satisfaction, this impacts every aspect of life. With clear educational import, this also establishes functionality within all facets of home, work and relationships and these interconnected facets of learning need acknowledging and nurturing. Dynamic developmental features need considering above any locally derived construct, as children's individual, fluctuating and holistic approaches to learning are fostered, unlimited by demands for required knowledge and unconstrained by lack of permission or pre-conceived expectation. Whilst formal classroom pedagogies inhibiting expression to focus on the accumulation of discrete skills and knowledge have their place, they must be an informed and conscious decision, rather than the default method of delivery.

However, to develop this level of functioning, children need opportunities to engage. Development involves complex processes of assimilation, requiring opportunities to engage with, as well as retreat from, and return to dispositions, in their own time and at their own pace, unlikely within an enforced external agenda. Through the experience of employing dispositions, with the opportunity to act freely within a wide range of circumstances, trialling various responses, and learning from wide-ranging reactions, their tendencies towards them may develop. As children are observed engaging within the social and environmental opportunities and freedoms offered, their predispositions to act in certain ways can be captured as they are seen developing established notions of themselves as an individual, as well as an effective learner during these primary years. This requires the understanding and permissions of all the adult gatekeepers who are determining the nature of the learning experienced. With its rightful place in early years discourse, training and ongoing CPD, practitioners, leaders and policy makers may become aware of its underpinning significance and potential within the life-trajectories of the children in our care. For practitioners, teachers and schools throughout the primary age phase to embrace these recommendations, this involves reaching out to parents, practitioners, leaders and policy makers.

As professional CPD

Achieving these aims in practice involves engaging early years practitioners and leaders in a continuing professional development (CPD) programme that begins with delivered content and continues through practice-focused and research informed programmes of active implementation and setting improvement plans. Modules written to be studied independently would then build towards an ongoing programme of CPD; beginning with Dispositional Development and leading to modules on the Theory of Lifelong Development (ToLD) and the Method of Improved Childhood Engagement (MICE). Delivered using the supportive tools contained within TOAD and the ten-stage MICE method, practitioners and settings would be supported in their application through an action research style approach. With additional modules designed for managers, leaders and policy makers, this would then provide an introduction to District or nursery chain-based setting improvement processes designed to embed and sustain an approach to pedagogy which maximises children's learning, engagement and potential.

As a programme of study

Beginning in the undergraduate classroom, programmes of study would initially look to develop underpinning vocabulary, knowledge and understanding of practice. With sessions focused on child development, dispositional learning and the role of the adult, the programme would consider the effect of practice on children's engagement. With the knowledge base it offers and the professional skills it begins to develop, students will be equipped to reflect on pedagogy as they look at their own experiences of learning through a different lens, as well as that of children. Prescriptive methodologies and constructs would be questioned as children's reactions are viewed as responses to developing inclinations, rather than an acquired skill indicative of

advancement along a linear developmental trajectory. Pedagogical influence would be recognised within the context of the myriad of variables affecting children's responses and inclinations. As they enter the workforce, they will be ready to support children's experiences of learning in ways that recognise, nurture and support dispositions of lifelong learning. With this dispositional focus, content transcends curricular or localised objectives to focus instead on foundational needs of children, and their development of curiosity, creativity, and self-motivation, establishing a deep-rooted and enduring love of learning.

As an invitation to widespread discourse

For practitioners, teachers and schools throughout the primary age phase to embrace these recommendations, discussion at a policy level is required, recognising the imprecise nature of children's processes of intellectual exploration and advocating for a less restricted view of what success within education means. This requires presentation of this material through conferencing, and publication. Looking for the wide readership and notice this debate requires, conferencing and publications accessed by both the research (BECERA, EECERA), teaching (BERA), regulation (Ofsted Big Conversations) and Early Years professions (Nursery World, NDNA) will be utilised. All with a view to developing discourse and policy mindful of safeguarding children's learning needs (Figure 7.1.14).

Children need –	**Within practice that advocates for –**
• Multifaceted experiences, rich in real-life decision-making, goal setting and questioning. • Fluctuating environments and experiences to support adaptability and initiative. • Environments where they can mentally, physically and socially take risks and push their limits. • Holistic engagement with novel, contextual learning and materials to support them in making connections. • Time to practice, to purposefully reflect on their knowledge and past experiences. • Social interactions as they embrace wider thinking strategies and approaches • Opportunity to think creatively, employing working memory and manipulating ideas.	• Holistic learning experiences encompassing and nurturing the richness of children's wide-ranging abilities. • Motor, social, emotional, language and cognitive skills, captured in ways more complex than simple testing can illustrate. • Wider definitions of a child's abilities. • The richness of unpredictable responses, rather than seeking a desired response with questionable universal suitability. • Recognising, nurturing and celebrating a child's developing thoughts, ideas and abilities beyond the expected response. • An awareness of external variables – teaching styles, distractions, permitted locations and encouragement; and internal motivations – permitted discussions, involvement, grouping and choice. • Learning experiences mindful of a child's social, emotional and cultural needs, and sensitive to the realities of the classroom. • Practitioners awareness of the fluctuating environmental challenges, distractions and demands placed on children and the reciprocal influences of practice, environment and opportunity on a child's actions and reactions.

Figure 7.1.14: Practice recommendations originating from the study.

As informative advice for parents

Written as an online resource, this series of modules introduces parents to core aspects of their child's development, before looking at The Secure Child, The Happy Child and the Learning Child. Using current research and informed advice, parents are taken on the foundational journey their child is on, rooting an understanding of the importance of dispositional development and experiential learning that will support them throughout life.

From the collective findings of this study, the effect of early experiences has been evident, along with the ongoing impact this has on engagement and children's potential for development across a range of life skills. The impact of experience on engagement, the resulting implications on developing attributes and the realised outcomes this permits in both the short and long-term, offer compelling argument for dispositional discourse to be included within the vocabulary of all practitioners and teachers. Having noted the responses of children as they received and interpreted experience, a deeper understanding of the

importance of pedagogical decisions and their impact on successful outcomes emerged. Responding to the attitudes and opportunities presented to them, ideas of themselves both as a learner and a person were informed and reflected in their ongoing responses. As children's wider capabilities were visibly constrained, with cumulative impact on their engagements, attainment and ultimately their developing life-skills, this must be worthy of recognition at every level. To raise this awareness and promote effective dialogue, both within the profession and within society, ToLD-C and MICE have been presented. By actively supporting their application, valuable insight and guidance can be offered to any classroom setting, and with the global nature of its focus, a multi-national appeal and influence permits active communication of its recommendations to a wide audience.

In the final section of Chapter 7, the unique strengths and limitations of this work are presented, written to strengthen the credibility of its findings as it goes on to suggest the steps that may now be taken as this work continues.

7.2 Concluding comments

Chapter 7.1 addressed the findings of this study through specific attention to the two questions originally posed. In doing so it has presented a theory and a method; The Theory of Lifelong Development - in Childhood (ToLD-C); and The Method of Improved Childhood Engagement (MICE). Chapter 7.2 then draws together the unique strengths and limitations of the study before making its claims of originality. It then considers future intentions for this work and reflects on the professional learning and development to have come from it.

Unique strengths of the study

Two-year study of experience across two settings

Through its approach of illustrating the impact of various experiences of children through focused observations within two settings, an informed view of the establishing long-term significance of early childhood experiences was considered. Unconcerned with the successful delivery of fluctuating curriculums or learning objectives, it focused instead on children's responses to the complex nature of pedagogical delivery, permitting a meaningful reflection of the impact of practice as the cohort progressed from preschool to the school classroom. Through this approach the Theory of Lifelong Development - in Childhood (ToLD-C) evolved, enabling a compelling argument for the reconsideration of children's earliest experiences within the classroom.

Multi-faceted methods allowing socially constructed influences within experiences to be observed

Within its child centred, social constructivist positioning the study remained mindful of experiences being dependent on the individual child experiencing them, impacted through the presentation and interpretation of the social and physical environment. It then captured each child's reality as distinct from the expectations of adults, set within the myriad of variables capable of affecting their responses and inclinations. The influence of environmental and action-based choice was noted, set within children's social engagements. Children's opportunities to determine their own behaviours, to discuss, ponder and reflect were documented, along with the impact of authority as it considered the effect of imposed decisions. As children demonstrated their motivations and reflections, freedoms within the environment were noted, social encounters and autonomy were recorded alongside their opportunities to be verbal, to give ideas, to show initiative and pursue original thoughts. As timeframes and disruptions were observed, children's inclinations to adapt their thinking, apply reason or investigate were considered as these pedagogical variables were compared.

Methods of documentation written for the study

Through its multifaceted methods, complex variables were documented in ways allowing for consideration in any permutation of interest. The interrelated nature of dispositions was acknowledged, not considered mutually exclusive nor seeking one universal truth, they were independently captured in any combination of application. These were depicted alongside contextual detail as the study remained aware of reciprocal partnerships of practice and environmental and social influences. These methods described individual children's autonomy and motivations as their wide-ranging and unpredictable responses were viewed within the communities they inhabited, embracing fluctuating environmental challenges and reactions of children within typical classroom distractions and demands.

Holistic and naturalistic approach to dispositional observation

Set within their own socially constructed reality, the subtleties and complexities of social interactions and classroom environment were embraced. This permitted an emotional and contextual ease, but also a deeper relevance to the findings as the natural spread of observations allowed reflections to emerge across all variables. As the unpredictability of a range of

children were followed across diverse realities and contexts, that which may otherwise had been overlooked or assumed was given opportunity to be questioned. For example, presuming the child sat quietly is listening, whilst those appearing distracted have their attention focused elsewhere.

Number and range of observations and the scope of the variables included

Having captured realistic depictions of children's experiences in the context of typical social and environmental expectations, the impact of pedagogy as it is received and interpreted through the actions of the children could be considered. Through 640 observations, pedagogical influences within holistic, playful environments and more traditional school-based settings were contrasted. Children's agency and choice were captured alongside the effect of social groupings, noted within individual, pair, small group and full class combinations. Opportunities for free choice, to take social, emotional and personal risk and to face dilemmas and interact were also noted, alongside indications of children exploring their own ideas and explorations, making their own mistakes and using their imagination. Aware of the active progression permitted through experiencing opposing dispositions, variance within levels of engagement were also noted as children sought to grapple with opposing dispositions and balance their behaviours. These insights into children's opportunities illustrated the limitations experienced within more confined environments as it looked towards children's opportunities to self-govern and self-direct.

Consistency applied to methods allowing for comparative analysis

As unique reflections were cast from multiple perspectives, authentic evidence was gathered in accessible ways, supported by rich descriptions, coding systems and audit trails to ensure clear accountability through the progressive stages and of the conclusions drawn. Through the structure written into its documentation, frames and scale and the uniformity employed through its timings, rotations and application, direct comparisons could be offered whilst still embracing the free movement and responses of the children. This consistency employed throughout these methods over a prolonged period enabled contrasts to be drawn between settings and circumstances, remaining mindful of inferences of instructional practices from single occasions and enabling longer-term impact on children's proclivities towards dispositions to be questioned as they changed over time.

Mindful incorporation of familiar requirements and careful illustration of findings to relate to its intended audience

As the importance of dispositional opportunities within practice became apparent, so too did their need for careful management, beyond external demands. Speaking to the impact adults can have on young children's opportunities and ongoing development, the study sought empathy with its readers as they identify with practices described, intentionally rooting the framework in the EYFS themes to ensure pertinence within the emerging messages. With meaning and value to every individual, on a personal as well as societal level, the original knowledge generated through this study makes an impactful contribution to the field, offering the capability of challenging and innovating current practice.

As it problematises current assumptions of academic teaching, care has been taken to present the significant content of this study with clarity, presenting the report through participant's comments and imagery as its vivid and engaging story was constructed. The sequential chapters convey the impact of personal experience as the layers of complexity built through detailed description, explanation and diagram, supporting each progressive stage. As its credible, honest and compelling messages are derived, it encourages readers to probe more deeply, asking questions of current practice so that a wider understanding of children's potential may be realised.

<u>Acknowledged limitations of the study</u>

This study is not wholly representative. It provides no claim for causation and offers no guaranteed outcome

The recommendations made within this study are reflective of decisions made within the study and interpretations of its findings. It does not make any claims for causation, nor does it offer any set criteria for a guaranteed outcome. Instead, it explores the phenomenon through the children, adults and methods represented within the study. Whilst it hopes that key insights are offered into pedagogical practices within the foundation and primary years, illuminating the disengagement experienced by many when transitioning into more formal learning, it is limited by the observations that formed them. With its child centred social constructivist approach, the study focused on the experiences of ten specific children within one preschool and one school. Whilst this allowed for a deep examination of these children, it did not consider a wide range of locations or settings and does not claim to be wholly representative of all children, or all school experiences.

The study does not consider specific demands of teaching practice

By design, this exploration of dispositional engagement does not consider optimal pedagogical requirements of curriculum delivery, suggesting instead that to achieve in these areas fundamentally requires child engagement if their potential within the classroom is to be realised. It does not consider the demands of the profession, such as teaching objectives, testing requirements or class size and it has not specifically considered the additional needs of some children.

This study does not represent an exhaustive account of variables affecting children's experiences

Whilst multifaceted methods embraced a wide range of variables, this was in no way exhaustive. Within the complex nature of children's learning, many aspects were not considered. For example, the support the child received at home, how frequently homework was completed or how established the family were in the community. Various styles of focused discussion conducted with each child's family every term and key worker or teacher each week informed understanding, but this was achieved through their thoughts on the child's dispositional engagements, discussions did not explore other aspects of learning, for example the ease with which children were grasping the number system.

The study is limited by the data it captured

The observations sought to capture the realities of the moment. This does not mean that a different representation of dispositional engagement would have been seen at a different time. Whilst care was taken to spread observations throughout the days and sessions of the week, this could only ever be a representation. A different view may have been afforded at a different time.

The study is susceptible to bias and subjectivity

Whilst repetition, coding and frames were introduced to mitigate bias within observational judgements, they were subjective. The rich pictorial and narrative data supported these judgements as layers of understanding built, however its volume is too substantial to be presented here, beyond the examples offered. Likewise, notes sections allowed reflection on how the child presented on the day, however specific detail would always be limited, such as questioning a difficult morning or detailing what had happened on the way into school, this detail was purposefully not acquired.

<u>New contributions to the field - Written to support the study</u>

Educational and Social-psychological Conceptual Framework of Executive Functioning

From its desk-based research key aspects of early childhood research were considered. From the literature review of executive function research, the Educational and Social-psychological Conceptual Framework of Executive Functioning (Figure 2.2.1) was devised to establish the relationships between the various aspects of executive functioning.

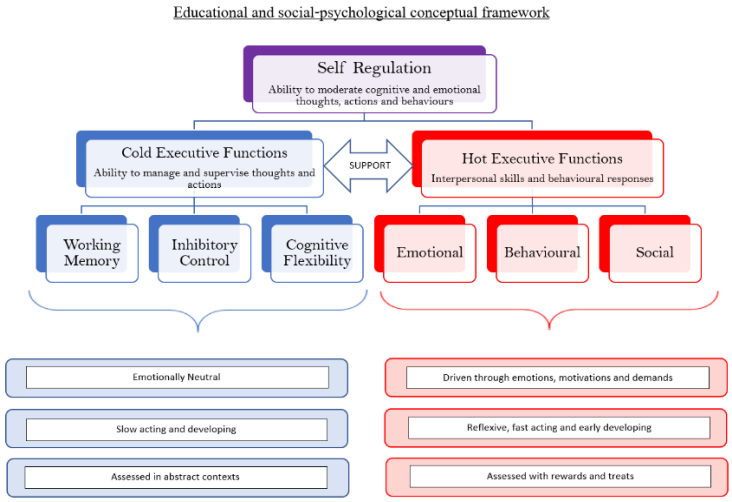


Figure 2.2.1: Educational and social-psychological conceptual framework of executive functioning

To address complex questions impacted by many variables, the field-based research drew on its theoretical frameworks, scales and concise methods of data collection and analysis. Designed for and duplicated across its adult, preschool and reception phases, these allowed the contrasting perspectives of the phenomena of early learning to be compared, these included the following contributions.

The framework of Internalised and Externalised Influences on the Experiences of Children (IEIEC)

Concerned by studies that look to isolate children before extrapolating findings to the social environment of a school classroom this study recognised and embraced the rich variables directing children's experiences within a well-defined framework, underpinned, but not beholden to curriculum requirements.

Teaching - How pedagogical practices are framed by the adult	*Learning – How the pedagogical practices are experienced by the children*								
Internalised influences	Child Focused Tracking Observation Proforma								
Discussions	TC	TC - A	TC - C	TC - GC	A - TC	C - TC	GC - TC	A - GC	GC - A
Involvement	1 – Floating, unengaged		2 – Settles briefly		3 – Engaged most of time		4 – Some intense engagement.		5 – Continual. intense engagement.
Grouping	F - Flitting		WG – Whole grouping		SG – Small grouping		P – Pair		I – Individual
Choice	1 – No choice		2 – Limited choice		3 – Some activities excluded.		4 - Only in/outdoors excluded.		5 – Freedom of choice
Externalised influences	Physical Environment Observation Proforma								
Teaching styles	T1 – Adult led		T2 – Adult participation		T3 – Group activity		T4 – Adult support		T5 – Child autonomy
Distractions	D1. Att. forcibly broken		D2. Encouraged elsewhere		D3. Offered alternatives		D4. Distracted		D5. Uninterrupted
Location	L1. Enforced		L2. Encouraged		L3. Alternatives offered		L4. Most options available		L5. Free choice
Encouragement	E1. Enforced		E2. Directed		E3. Encouraged		E4. Adult preference		E5. No adult influence

Figure 1.1.6: The observational framework of Internalised and Externalised Influences on the Experiences of Children - The IEIEC Framework

The FOLLEP scale

Designed to permit ease within rapid and subjective recording in the field, the FOLLEP scale was written with clear divisions and worded to be instantly recognisable within the reactions of children. Inspired by the Leuven Scale, and influenced through Erikson's discussions of children actively grappling with dispositions (Erikson, 1994), the FOLLEP scale rooted judgements of children's engagement within clear and consistent terminology whilst reflecting positive and negative engagement.

Scale	Engagement	Examples
-2	Strongly negative: Actively pulls away from this feature	Not present: When presented with opportunities, they will actively demonstrate a reluctance to engage in this feature. They do not volunteer positive evidence, verbally or physically.
-1	Negative: Shows reluctance to demonstrate this feature	Limited presence: When given opportunity they will indicate this feature but are reluctant to do so, finding alternatives if possible.
0	Neutral: Either no opportunity, or that shown is indifferent	Neutral: Shows indifference towards this feature or there has been no opportunity for it.
1	Positive: Shows behaviours to indicate this feature	Active presence: Keen to engage in this feature, indicating a comfort within it but will easily move on to another.
2	Strongly positive: Actively seeks out opportunities to engage this feature	Strong presence: This is a clear feature of choice, will actively seek it out and return to it. Shows clear enjoyment when engaged in this feature.

Figure 3.1.2: The FOLLEP Scale

Multifaceted child observation sheets

Capturing the lived experiences of children in the moment, these observational methods allowed for the simultaneous documentation of multiple variables impacting a child observation whilst allowing greater potential analysis. This included dispositional engagement (3), coded pedagogical factors (2) as well as detail allowing cohort analysis, including gender, birth date, internal/external location, day of the week, session, teacher and numbers present. They also included rich narrative descriptions of each observation (1) as well as overall recollections of the day (4).

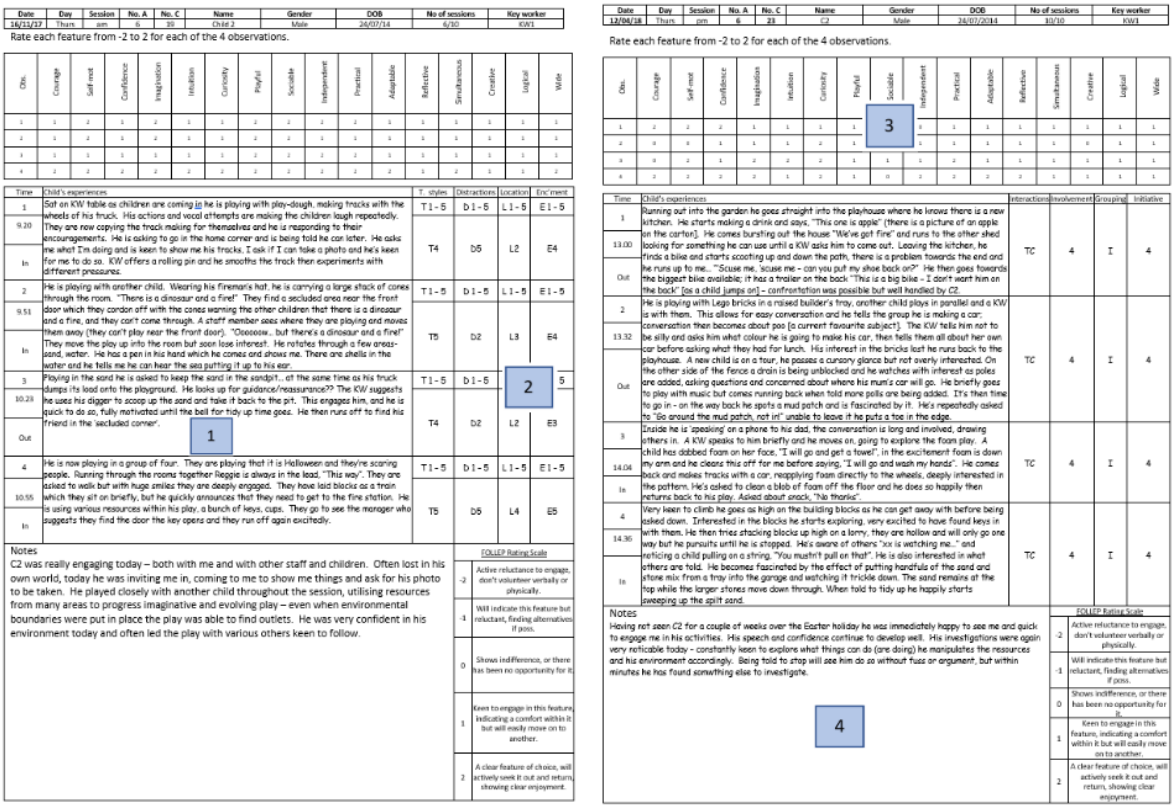


Figure 4.1.4 and 4.1.5: Physical environment and Child focused observation sheet

New contributions to the field - Emerging from the study

The Theory of Lifelong Development - in Childhood (ToLD-C)

Through extensive observations within the child study, children's experiences as impacted by the observed pedagogical variables were noted and the effect this had on their propensity towards dispositional engagement was considered. With reference to the rich data collected, the children's evolving responses throughout the two years were analysed as they demonstrated their emerging attributes and tendencies towards realised outcomes. From this work The Theory of Lifelong Development with specific attention to childhood (ToLD-C) was devised. The theory implies that this development cycle can operate on a positive or negative tilt, depending on the opportunities permitted. With direct impact on children's propensity for dispositional engagement, these cumulative experiences enable development of children's attributes and realised outcomes, establishing dispositional engagement as the linchpin to this cycle, established in childhood and continuing throughout life.

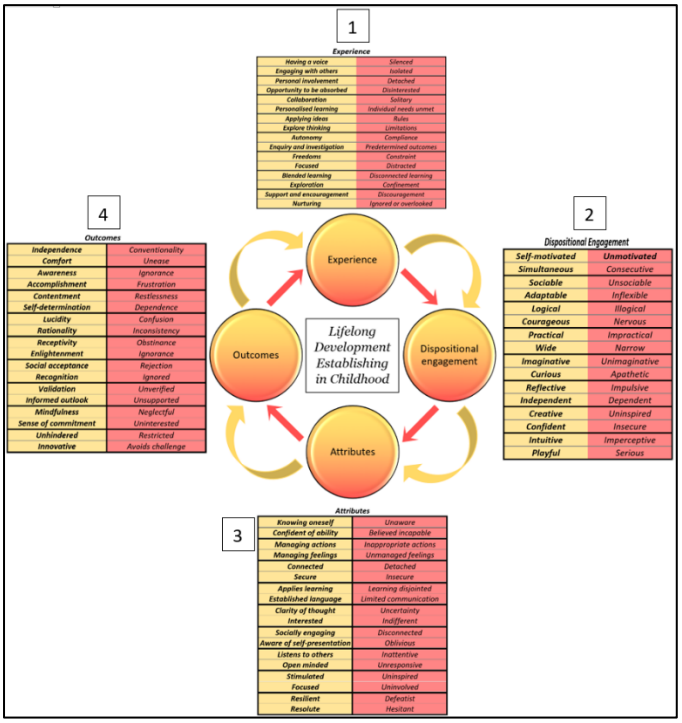


Figure 7.1.4: Theory of Lifelong Development - in Childhood (ToLD-C)

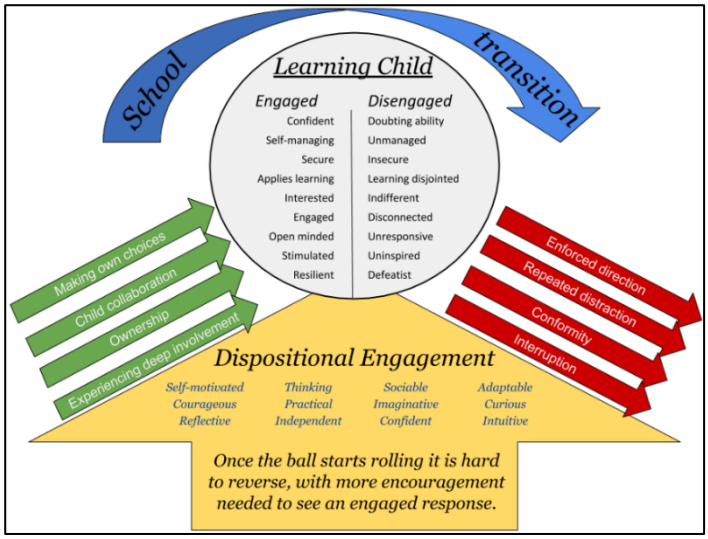


Figure 7.1.5: Dispositional engagement establishing as the linchpin to lifelong development

These conceptual frames illustrate the impact of effective dispositional engagement on lifelong development. Established through effective experiences, where life skills can develop and benefits be realised, dispositional engagement was seen to influence an individual's personal, social, academic and professional outcomes. With particular reference to childhood experiences within the classroom, ToLD-C explores the nature of effective experiences, illustrating the impact of choice, interaction, ownership and involvement as it reflects the realities of play-based and formal learning environments. From this work, MICE was developed.

The Method of Improved Childhood Engagement (MICE)

Having established the importance of engagement on children's development cycle, and its ongoing impact throughout all areas of life, a method was sought allowing pedagogy to be viewed in a new way. Rather than seeking to optimise children's abilities within learning objectives, attention turned to maximising their engagement and desire to learn.

TOAD

With the help of TOAD, it begins and ends by establishing the positive/negative tilt of the child's ToLD-C cycle through careful observations of the child's outcomes. From these outcomes, developing attributes are considered and potential gaps in dispositional engagement are identified. Whilst indicating potential areas for specific consideration and offering a baseline for any intervention, this process allows the individual needs of the children to be better understood. Introducing the multi-faceted traits developing within the children, it supports a wider dialogue of their developmental potential for use in the following stage and in conversation with leadership and governing bodies.

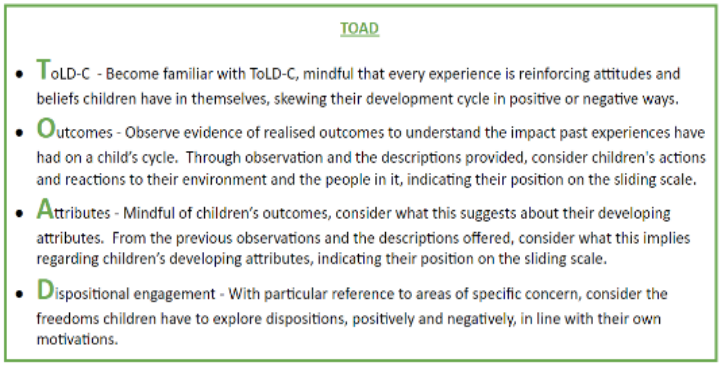


Figure 7.1.7: TOAD - The first stage of MICE, establishing an understanding of children to effectively improve their engagement

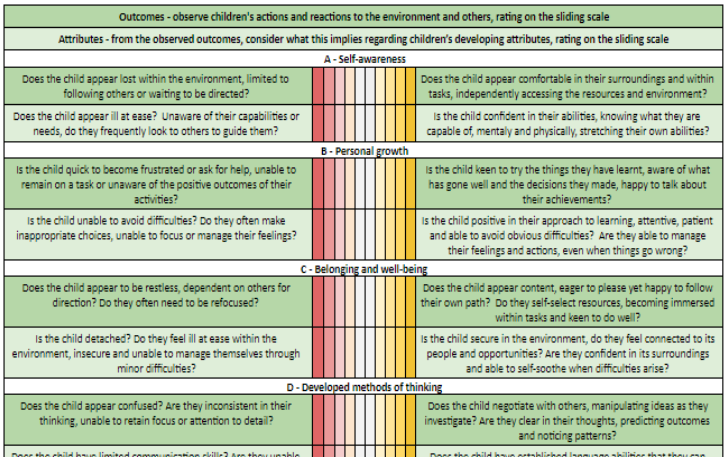


Figure 7.1.8: TOAD Sliding scale used to offer underpinning indicators for dispositional engagements

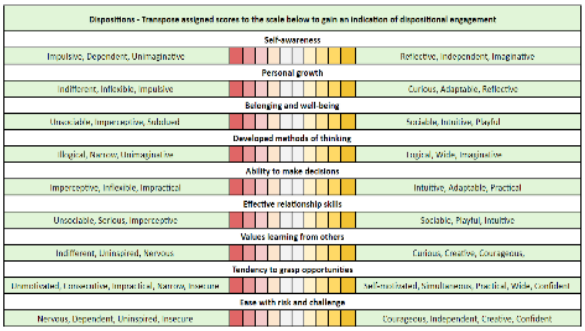


Figure 7.1.9: Dispositions particularly connected with each key area, used to draw attention to potential areas of required increased attention

The ten steps

A 10-step programme is then introduced to address the environment (Step 1), its resources (Step 2), external influences placed on children (Steps 3 - 6) and the personal choices and freedoms this permits (Steps 7 - 10). Within each step, practice optimising dispositional engagement, as derived from the study, is considered. Questions written to challenge the positive (yellow) and negative (red) extremes of current practice are voiced, and initial actions are suggested. Attention is then drawn to key areas of

development particularly considered within these steps, allowing focused consideration according to the TOAD findings. To support this process, observation sheets have been adapted from the study for use in Steps 3 - 6 and Steps 7 - 10, together with revised coded variables and the Dispositional Engagement Preference (DEP) Scale, adapted from the FOLLEP scale. Written to provide tangible evidence in support of discussion, target setting and improvement they will also inform reflections when TOAD is reconsidered.

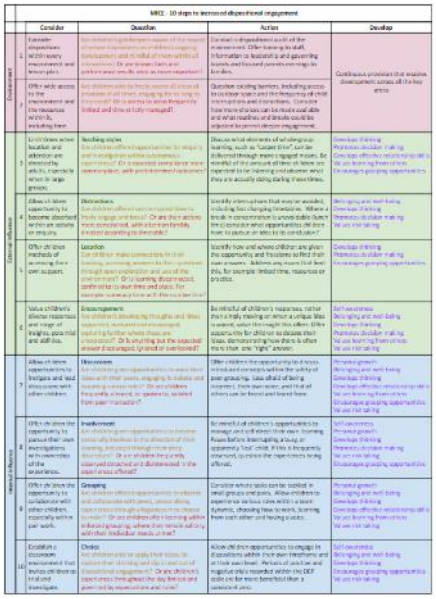


Figure 7.1.10 MICE - 10 steps to focus attention on the experiences offered to children

Physical Environment Observation Proforma - Externalised influences					
Teaching styles (T)	T1 – Adult led	T2 – Adult participation	T3 – Group activity	T4 – Some adult support	T5 – Child autonomy
Distractions (D)	D1 – Attention directed	D2 - Encouraged elsewhere	D3 - Offered alternatives	D4- Occasionally distracted	D5 - Uninterrupted
Location (L)	L1 - Enforced	L2 - Encouraged	L3 - Alternatives offered	L4 - Most options available	L5 - Free choice
Encouragement (E)	E1 – Expected responses actively sought	E2 – Children led towards expected responses	E3 – Desired response encouraged	E4 – Child's ideas heard	E5 – Child's ideas actively explored

Child Focused Tracking Observation Proforma - Internalised influences									
Discussions (D)	TC	TC → A	TC → C	TC → GC	A → TC	C → TC	GC → TC	A → GC	GC → A
Involvement (I)	I1 – Attention drifting, unengaged	I2 – Settled briefly		I3 – Engaged most of time		I4 – Some intense engagement.		I5 – Continual. intense engagement.	
Grouping (G)	UG - Unengaged within a large group	AG – Active within a large group		SG – Engaged in a small grouping		P – Chose to engage as a pair		A – Chose to be alone	
Choice (C)	C1 – No choice of activity	C2 – Limited choice		C3 – Some activities excluded		C4 - Only in/outdoors excluded		C5 – Freedom of choice	

Key to discussions - TC = Target child; A = Adult; C = Other child; GC = Group of children

Figure 7.1.11: Coded variables to be utilised in the MICE observations

Figure 7.1.12: MICE Observation sheet

Dispositional Engagement Preference Scale		
2	Strongly positive: Actively seeks out	This is a clear disposition of choice, they will actively seek it out and return to it. Shows clear enjoyment when engaged in this disposition.
1	Positive: Some indication	Keen to engage in this disposition, indicating a comfort within it but will move to another.
0	Neutral: Either no opportunity, or is indifferent	Shows indifference towards this disposition or there has been no opportunity for it.
-1	Negative: Shows reluctance	If given the opportunity they will indicate this disposition but are reluctant, finding alternatives if possible.
-2	Strongly negative: Actively pulls away	When given opportunities, they will actively demonstrate a reluctance to engage in this disposition. They do not volunteer positive evidence, verbally or physically.

Figure 7.1.13: Dispositional Engagement Preference Scale - DEP scale

Figures 7.1.11-13 Observation sheets, codes and scales adapted from the study to support MICE

Reflections on the experience

Having begun with a core knowledge of early childhood and a master's level understanding of key research concepts, I was keen to advance my knowledge so that original contributions could be made to the field. Aware of existing boundaries within my skills and expertise, I began with a period of extensive reading, attending lectures on research methodology at CREC and by gaining a PGCert in Research Methods at BCU. With a conscious attempt to understand the paradigms, methodologies and methods available to me and a continual desire to further my own understanding at every stage, this valuable grounding

allowed me to better utilise the support of my deeply knowledgeable supervision team as my personal growth as a researcher developed immeasurably.

As the basic themes of the project were identified, its focus, direction and intentions were clarified and a range of tools, such as QCA, EndNote, NVivo and the Google suite were learnt and utilised. Conducting the literature review allowed experience of managing vast quantities of self-selected data, sought for its appropriateness and relevance. Developing techniques of search and discovery I learnt to quickly assess for quality, integrity, and authenticity of primary and secondary research. By developing methods to code, manage and utilise large volumes of information, methods to assess for reliability, authority, and relevance have developed. Personal development was further demonstrated as methodologies and techniques were applied and adapted to meet the needs of the project, justifying the principles and analytical techniques selected. These skills then translated, assisting the summarisation, and reporting of my own data as the project progressed. Through my reading, techniques allowing constructive defence of research outcomes have also developed, allowing me to evidence my ideas and findings through the writing of the thesis, structuring and referencing arguments concisely.

My knowledge and application of technical language as it pertains to research has also developed, furthering my understanding and interpretation of academic writing, as well as my ability to produce and communicate appropriately within an academic context. This also extends to writing for presentation as I have spoken at a range of conferences, to specialist and non-specialist audiences. IT skills have advanced as a range of analysis and presentation techniques have called for them, seeking support and advice when required, for example, requesting a personalised NVivo training session. Critical analysis techniques have allowed connections to be identified and links to be made in my work, whilst articulating findings and developing critical thinking with care. As my ability to analyse, evaluate and validate my findings developed, assumptions became clear, problems were identified, and alternative paths were considered. Supported through weekly personal reflection, and endorsed through supervisor dialogue, this process has drawn attention to required areas of support as guidance was sought to meet challenges, to add depth to thinking, and for risks and strengths to be debated.

Ignited through the innovation and creativity of research, my intellectual insights and interests have been enhanced, broadening into international and non-academic opportunities. Research, speaking, writing and curriculum development opportunities have arisen through a range of private, academic and public bodies, developing my interests, confidence and skills as a speaker and writer. Through establishing networks, I have spoken at the Lego Inspiration conference in Denmark, the Fathers and Families Coalition conference in LA, as well as EECERA conferences in multiple European cities. These platforms have also invited critical appraisal and rich debate, both of my own work as it developed, and that of others. Benefitting from these exchanges, constructive dialogue has been actively sought, allowing the potential impact and outcomes of my own research to emerge.

From its inception this doctoral study has been fuelled by a personal interest in its findings. Perhaps because of this, every measure was taken to explore each avenue to its full extent. This did, on occasion, encourage an attempt to include all possibilities within its methods and analysis, with blind alleys followed and unutilised. Whilst on occasion, this saw the work become overwhelming in its magnitude, it did permit a deep relationship with the material generated, allowing an understanding to develop that would not otherwise have been possible. Additionally, this journey has demonstrated the importance of the discussed dispositions within my own personal journey, not least self-motivation, and courage during the more difficult times. Having experienced the highs and lows of independent research, the importance of finding and maintaining enthusiasm and motivation has been made clear and found in the passion and pride for what was being

attempted. As obstacles and setbacks were met, self-discipline, motivation, and a developing confidence in the results being generated allowed progression to continue.

Through articulate planning this multi-phased project has managed personal objectives as well as external commitments and those of its participants. Effective project management supported by the advice and direction of my supervisors has allowed ambitious research goals and intermediate milestones to be set and delivered. With careful time and risk management and with a strict work-ethic, this project has been completed ahead of schedule despite unforeseen eventualities of a global scale. If beginning this process again I would however consider being more selective in the intentions of the project. Impassioned through desires to adequately represent children, to effectively account for the futures we need to prepare them for and to acknowledge the bursting potential they begin with, an all-encompassing world view was sought. Within the scope of this research that was an ambitious intention. As discussed above, a volume of material was gathered that was not fully utilised, with hindsight, some simplification of the extended methods could have occurred. However, this would have been at the expense of the deeper understanding that it offered.

Where could this work go next

In conducting this research, a large volume of data was gathered. To develop the findings of the study, further aspects of this research could be considered.

- The contrasting views of the key worker (teacher) and parents' perceptions of the children, and how different this was to the dispositions the children were observed engaging in. This would provide interesting material for a study into adult perceptions and the effect this has on children's expectations of themselves.
- Through the data collection, volumes of rich description and photographic evidence was collected, allowing further study through various permutations. For example, how engagement differed inside and outside; during the morning or in the afternoon; between the girls and the boys.
- The evolving experiences gathered of each child through diaries, photos and accounts would allow a more detailed case study to be explored through any one of the participants.
- Deeper consideration of the variance observed within the levels of engagements between the two settings. Preschool observations fluctuated widely between deep engagement and active reluctance across the dispositions, whereas school based observations tended to focus on indifference or the lack of opportunity to engage.

However, throughout this study it has been my intention to invite widespread debate on the learning experiences offered to young children and the engagement with their learning that various practices promote. Through ToLD-C the importance of children's effective experiences has been illustrated, informed through demonstrations of the impact of pedagogical variables. With these effects demonstrated within this small-scale study, as they were shown establishing and intensifying as children moved through the reception year, increased concern is now felt for the ongoing impact on children's personal and academic outcomes as they move through their primary schooling. The next area of focus for this work is to see how these observed effects continue into year one and above, questioning children's engagement levels and the impact this has on achievement as children progress with their academic journey.

It is my intention to raise awareness of this study so that the pedagogical variables utilised within children's early experiences of learning are considered more carefully. A key element of facilitating children's experiences is an awareness and understanding of their importance within the adults around them. A key aspect of continuing this work will be in raising this awareness, both in the research community and in the profession. Whilst journal publications of its findings are intended, international presentations are also planned, allowing personal contact in ways that may also reach the profession, here and abroad. This will

include conferencing on the international stage, as well as speaking at universities where early childhood and teaching qualifications are delivered. A second book publication is being considered, aimed at practitioners as it presents its messages using imagery, and publication of MICE as a teacher's aid to reflective development. Key to any change however is in facilitating its management, and this involves addressing policy makers and leaders. To this end, opportunities to address headteachers, school governors, academy trusts and authoritative figures will be sought out and embraced. By demonstrating how the facilitation of enriched engagement in our children, across a wide range of dispositions, allows their attributes and realised outcomes to flourish, success may no longer be confined to set objectives and the long-term impact of a child's full potential may be realised.

A complex and multi-layered project, this study has explored children's engagements throughout a range of internally felt and externally imposed teaching and learning conditions to consider why, for so many children, engagement in learning can decline as their formal experiences of it begins. With a focus on dispositions, arguably more indicative of a child's state of mind than curriculum ability, the long-term impact of early experience has been demonstrated. The foundational importance of secure dispositional development has been established through collective reflections and the potential effects of pedagogy highlighted. Providing unique insight and weight to the discussions and evidence presented, this study demonstrates the impact of pedagogy on children's developments, the bearing this can have on life trajectories and the disservice being done to children when adequate attention is not paid to their wide-ranging dispositional potential.

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8.2 Appendices

Name	Location	Description
Appendix A	1.2, 3.4, 3.5 and 7.1	Personal reflections - 1. Personal statement 2. Child visit journal entries Reflections supported through discussions with practitioners and teachers - 3. Child Journals (reflecting on practitioner/teacher insights) 4. Observation Journals (reflecting on practitioner/teacher insights)
Appendix B	2.2	Studies focusing on executive functioning in young children over the last five years, together with their area of focus
Appendix C	2.2	Concerns regarding the conclusions claimed from EF studies and the potential impact on early childhood practice.
Appendix D	2.3, 3.1	Definitions of the dispositions
Appendix E	3.3 and 5.0	Photographs taken during observations within the preschool and reception settings
Appendix F	3.4	Participation Information Leaflets - 1. Professionals in child study 2. Parents in child study
Appendix G	3.4	Participation Consent Forms - 1. Professionals in child study 2. Parents in child study 3. Children
Appendix H	3.3	Semi-structured interviews used with parents and practitioners
Appendix I	3.3	Child Focused Observation Sheet
Appendix J	3.3	Physical Environment Observation Sheet
Appendix K	4.1	Completed Physical Environment Observation Sheets - Child case studies
Appendix L	4.1	Completed Child Focused Observation Sheets - Child case studies
Appendix M	4.1	Completed Focused observations sheets - Child case studies
Appendix N	5.1	The impact of observed practices on other dispositions 1. Sociable 2. Confidence 3. Thinking logically
Appendix O	5.1	Word cloud produced from written observations of children showing active reluctance towards the dispositions
Appendix P	5.1	Word cloud produced from written observations of children showing each disposition as a clear feature of choice
Appendix Q	5.1	Original content of observations showing high engagement with imagination
Appendix R	6.1	Findings from dispositions viewed under other pedagogical variables
Appendix S	6.2	Representations of children's experiences and engagements across 640 observations
Appendix T	7.1	Observation sheets to be used with MICE

Appendix A1 - Personal Statement

I believe that children need and deserve a childhood where the holistic nature of learning is recognised and appreciated more than any discrete ability or skill. Society needs success in many shapes and forms and requires more than academics able to pass a test. By expecting school children to conform in this way we run the realised risk of turning children off from learning in all its forms. Whereas learning rooted in enquiry and developing understanding allows the true nature of learning as a fun, magical process to emerge.

To develop the dispositions and motivations to want to learn, children need the encouragements that suggest the process of acquiring knowledge is worth the effort. Building upon relatable experiences and mastered skills it is the experience of previous rewards of learning and encouraging adult reactions within cognitively stimulating care that will provide the fuel. Children require and deserve early experiences rooted in the experiences that matter. Best offered within stable, supportive home environments the impact of effective early years provision must also be a focus, especially where effective home environments are lacking.

School and education with its attitudes, practices, policy and curriculum is a highly cumulative affair. Where the impact of familiarity, relevance and accessibility impact the speed the child will hit the ground running at these features not only determine the position in the race, but also cumulatively intensifies as they progress, informing the perceptions of others.

The eldest of three and an only child until the age of six I spent most of my early years either by myself or in the company of adults, entertaining myself with limited toys and lots of imagination. My father was in the Air Force, so we moved homes a great deal. I had attended 9 schools before returning to England alone (leaving my family in Germany) to study for my A levels. This was at a time before the National Curriculum so I experienced a great deal of repetition and gaps within the linear content studied as well as fractured social relationships as either myself or newly made friends would move on. These experiences have informed a first-hand realisation of the significance of children's well-being, stability and social relationships within their ability and capabilities to achieve and succeed. These experiences also demonstrated to me the feeling of having decisions made for you and things done to you without really understanding why or having a say in the process. This is reflected in my desire to embrace the child's voice within the research and to include their input in the design process.

From a young age I was keen to do well, both at school and in the eyes of my parents. Praise and feelings of good will came from achieving in ways that could be visualised (a clean and tidy bedroom) or quantified and counted (coming top in the class or achieving 100%) - If I came home with 2nd place it would be viewed as 'such a shame'. I was considered academic from an early age and high expectations were set, I did well at school, but because I worked very hard, not because it came easy. I was the only member of my family (including extended relations) to follow any kind of academic path and as such the nature of it, its demands and more meaningful conquests were little understood. Assuming that the experiences and values that are given to us in the early years have deep and lasting effects on the adults that we become we must value the wide range of skills and attributes children have, recognising them for their importance to children's well-being and sense of pride, worth and validation as well as for the good of society. Ensuring they are deemed as important and worthy of effort as maths and English so that children are encouraged to persist. This informs my desire to see a wide range of abilities and passions recognised in children from an early age, promoting and communicating the value and equal importance of them wherever they may lie.

With praise and recognition being generated through my academic achievements (especially as siblings came along) I pushed myself towards what I considered (as a child) to be the greatest academic challenge - from the age of ten I decided I would become a doctor. This announcement then drove every other decision and it wasn't until I was back in England studying my A

levels, having been accepted on to a number of medical degree programmes, that I was able to acknowledge that this wasn't what I wanted. From a position of not being in tune with my own abilities, talents and passions and instead conforming to others ideals and expectations, I have moved between a number of career paths as I have tried to find my way - the only common feature being to push as hard as possible. This is a familiar pattern I see in a lot of friends and has led me to consider what the effect would be if children saw that many areas of interest are equally valid. As adults, success is found in a range of pursuits beyond the traditionally academic, were these adults encouraged to follow wide ranging pursuits from a young age, or were these stumbled upon regardless of messages from childhood? These questions drive me to seek success within the full range of its definition to explore these questions.

It was not until the birth of my own children and helping within their nurseries that I began to fall in love with the early years. I entered the profession at a time of uncertainty and flux as Birth to Three Matters was in the process of becoming incorporated into the EYFS and I found myself in nurseries that had changed little in decades. Worksheets were commonplace and planning involved sheets of tasks for each child to complete by the end of the day; ice one cupcake, paint one picture. Practitioners would be 'stationed' at a table, ready to ensure the set activity was completed as planned so that pre-designed Christmas cards produced by 18 month olds would all look the same, even when unwilling hands were forced into correct positions. With limited professional experience or names to put to it this was not my idea of the experiences best suited to children's needs, development or wellbeing. Even when I moved to a well-known nursery chain expecting a different, more informed practice, I experienced similar behaviour. Children forbidden from going outside between 10.30 and 2.30 from May to October as part of a safety in the sun policy, planning that was written months in advance.

Gaining the EYPS, and later my MA allowed me to challenge my instincts, supporting them with academic rigour and allowing me to put names and theory to the strong pedagogical beliefs that were forming within me. This also gave opportunity to express these views with others who thought as I did and were experiencing similar challenges. This validation ignited in me a strong desire to make early childhood experiences better, not just for these children, but for all children. To this end I hope that this research begins to identify the importance of a wide range of skills that can be clearly represented within future success and consider the impact of validating these skills from an early age. By demonstrating the wide ranging, holistic experiences and opportunities that can be offered to young children to embrace their natural love and passion for learning and enquiry I hope to demonstrate the riches to be found within. With the assistance of the young children within the study showing me the important features within their world I hope to identify where such practices can and do exist.

My earliest experiences saw validation in one kind of pursuit, one kind of skill, this just happens to be the one that we continue to test and reward with bestowed qualifications and opportunities so I have been able to achieve a great deal. But there are many kinds of talents that are essential within society - ironically, those that succeed in these are the ones that schooling, and academia tend to fail. This makes me wonder what would be possible if we didn't wait for the lucky dancers, artists, inventors and designers to find their feet for themselves after 'failing school' or more to the point, after school has failed them as they experience frustrating years with no clear direction, if instead we recognised, facilitated and validated these rich talents from day one and capture those that would otherwise slip through the net and give up.

By identifying how this has been realised for some we can explore the practices and pedagogical styles where this is being best nurtured for children. To not do so undermines and undervalues abilities within children that do not fit the expected mould. I was a child who loved to learn, to experience the success born of trying, however, for many children similar experiences disengage them from the process, labelling them as unsuited to success before they have begun to discover what success could uniquely mean to them. I want to add academic depth and validation to features of learning that recognise the wide range of

skills inherent in children. I want to offer weight to the argument for allowing children to find their feet, to do what they need and experience praise and recognition for it, rather than conforming to dated ideals, to be tested and judgements passed on them from earlier and earlier ages.

I would give anything to go back and visit that little girl I once was and to share with her what I now know (even though this is rarely easy to put into practice). Whilst we can no sooner do this than know with any certainty how the lives of little ones today will be influenced by our actions, what we can do is learn from those who have settled into life choices that have proved highly successful for them and understand the opportunities they needed and begin offering these to our children today.

Throughout these reflections I have become increasingly aware of the potential for misrepresentation and bias when considering life stories. As it is my intention to utilise personal memories within the research I will acknowledge and mitigate these effects through triangulated methods of additional data collection and seek crystallisation through the opinions of others.

With 15 years' experience in education and the early years I have first-hand knowledge of working in practice, managing the demands of parents, owners and regulators whilst delivering practice to best meet the needs of children. As Head of Childcare and Education for a chain of 47 nurseries and through my consultancy and lecturing work I have experience of a wide range of practice and its impact. I also have experience working at executive level, appreciating the additional demands and considerations involved in policy making and directives.

Having conducted a research project at master's level that was awarded a distinction I have demonstrated my ability to conduct a well-managed independent study. Initially designed to consider changes within styles of play when young children moved outside, the design of the project and the analysis tools developed for it allowed for the significance of deeper attributes of learning to become clear, directing my interest in the wider development of 'learning readiness'.

I have published a book on the theories behind lifelong learning and the concept of school readiness demonstrating my knowledge in the field and my ability to write a peer reviewed manuscript of 60,000 words.

Appendix A2 - Examples from the Journal of child visits

YEAR ONE – PRESCHOOL

26/09/16 – PE - My first official observation today. It became difficult to observe and code in all ways in the time slot given which meant that this had to be completed later – and therefore not as reliably. I have then re-designed the scheduling – I will now observe for 5 minutes, then allow 3 minutes for coding in the moment before moving on to the next child. This means the cycle will take just over two hours, but this has the added benefit of capturing a fuller range of the children's experiences (carpet time, group work as well as free choice activities). I have also given myself a lot to do in terms of coding, analysing, journaling and reflecting so I have also designed a checklist with hyperlinks to all the relevant documents to make this easier. I worked with a small group today to select their icons and opt into me coming to see them play. I am not sure they fully understood, but hopefully this will build over time as they repeatedly see their cards and elect to participate with them.

01/11/17 – PE - This was my first visit after the half term and with a day's closure yesterday, a first day back for many of the children too. It was also the morning after Halloween so many of the children appeared to be very tired. With a settling child from Hungry with no English there was a little unrest. I did manage to speak to two parents today and have arranged their interviews over the coming days. I will be going into the nursery again on Friday to do as many of the remaining staff interviews as I can manage. The target children for today were all in the same group to go outside so this made the logistics of observing them a great deal easier. I have now observed all children at least once, all but one has been observed twice.

06/11/17 – CF - Due to the logistics of children's scheduled attendance, actual attendance and trying to retain a balance of days/times visited and style of observation taken, the focus child and chosen observation is not happening perfectly uniformly, however the balance of observations of each child is very nearly uniform and is being carefully monitored to ensure a balance over time. Today I did the final initial staff interview. These will be repeated at the end of the year to see development and growth. I have also booked another parent interview – with two done and three booked over the coming days I am halfway through and will continue booking to meet the first term deadline for all round one interviews. The children seemed very tired today after last night's firework celebrations, but they are all very relaxed in my company now, many of which asking me to help with shoes for outdoor play, retrieving toys etc.

22/11/17 – PE - It is becoming apparent that when activities are tightly governed – for example carpet time, group stories – the FOLLEP scale tends to stay at 0 throughout. This is not that children actively pull away from the characteristics but that they do not have opportunity to demonstrate them. This does not mean that these activities should be left out of the day, there are lots of rich opportunities of other types, but it does demonstrate what the effect of this would be if a child's day became overly directed in these ways, in the absence of freer pursuits.

25/04/18 – CF – C10 very confidently took a leadership role within his playful encounters today. He had other children carrying out his bidding (building sections of Lego to go on his model, seeking his praise and preferred friendship). Whilst done in a very friendly way, he had other children wrapped around his finger today, responding in full to his direct requests. This came across as exploring his leadership potential rather than any attempt at manipulation. Towards the end of the session he still enjoyed the central role within the play and a large group of 6-7 were responding to him, queuing to be a part of the game.

03/05/18 – PE – Today has been my first visit this term where the sun has been shining. Children were able to remove their coats outside and both the mud play and water play were available to them. They explored the slide, checking for its dryness before that was also opened for the children's use. Various children were taken off during the session to complete name writing tasks, adult led activities or for a snack, but other than that, most areas throughout the session were open and available.

06/06/18 – PE – The children have been playing a lot of Minecraft outside of nursery of late and as such have become fascinated by the idea of Zombies coming to get them! This has seen lots of chasing outside where the actions and discussions clearly mirror ideas, they have become exposed to at home. For those that are unsure of

this new game, they quickly pick it up and join in. This has enabled a rich roleplay and a new twist on 'superhero' play. There was something particularly relaxed about today's session – I don't know if this was because it was in the afternoon, because the children had been off last week or because the sun was shining but every observation saw the children freely playing, uninterrupted and this was really impactful.

27/06/18 – PE – The children have been undergoing school visits all week in small batches. Several are out today making the numbers lower than usual and many of those in today have recently had their turn. Conversation throughout the day often returns to what happened on their visit. They talk of time in the garden, eating biscuits and watching Pepper Pig! They can speak of the class they are going into and the teacher they are going to have, but the only other memory is of TV watching. There have been no anxious or worried comments in any way. The children are a little sleepy today with the weather (it has been extremely hot) and the lateness of the term. The small numbers may have helped with the management of this.

YEAR TWO – RECEPTION CLASS

03/10/18 – CF – This is my first visit to see these children in their new school environment. There are a couple that appear unsettled, but this does not seem to impact the others too heavily who seem to know the routine, finding their key group tables and settling to the laid-out activities well. Parents are greeted at the door by the teacher and the children taken in arms where needed as the TA helps children to settle in the room. The children will be staying for the full day from this week and appear ready to do so. This has meant that I have been able to see the full range of activities today including inside and outside sessions and break time. This has given opportunity to see the children independently choose social groupings and enjoy much larger spaces in which to play.

11/10/18 – CF – The children have had a rather disjointed day with the school photos being taken. This has not seemed to distract them too much and they have managed to get on with things as requested. The time spent waiting for photos also gave the children an unexpected opportunity for social exchanges as they discussed all the funny faces they would be pulling and how important their jumpers (having been made to wear them) and hairbands were. I am noticing that the observations in the school setting are attracting very few negative FOLLEP ratings. They are then much more even, few highs or lows, (bland?) no ups or down, it seems more important to simply conform. Even when creativity is attempted by a child, they are brought straight back onto task "What are you doing… that's not what I asked you to do!".

23/10/18 – PE – The session followed the familiar format again today with the various phonics activities primarily on the carpet with some children taken out for one-to-one time towards the end. Then Challenge Time (various activities set up inside and time for others outside). During the phonics session I did note that as children were asked to think of a word beginning or ending with the sound, the words offered were invariably the ones that go with the action, "Think" for a word ending with nk, it would be interesting to see if the children know that this is how the word ends, or whether this is just the response to this question.

13/11/18 – CF – I have joined the children today at lunchtime in the playground where developing social groups were clearly demonstrated with the children showing clear friendships with children beyond those they came from the playgroup with. After ten minutes we walked in rows back into the classroom. The children come in, hang up coats and are assigned positions on the carpet (for those that need it) and sit in their own spaces where this is not an issue. After registration, the children engage in a numeracy activity where they are again learning the names of 3D shapes through a number of activities. This does go on a little long for the children not to get fidgety but most stay with it. The rest of the session was in activity time (all cohort children spent this outdoors today) and then playtime so for this group, the majority of the afternoon was spent in outdoor play, although a clear distinction is made within the environment and the resources offered.

14/05/19 – CF – C10 was away for the beginning of today so the observations went ahead with three children until C10 joined them just before break. One of the things that is really becoming apparent is the fact that the children are no longer demonstrating as many negative FOLLEP scores as they did in preschool now that they are in Reception. This would suggest that there is now an increased level of management being demonstrated within their day, their reactions and their potential responses to situations. They appear to have less chance to interpret a

situation or trial things as they are told what to do, along with expectations that greatly reduce how they can play with ideas, take risks or trial their abilities. The importance of the negative aspects of the dispositions was something stressed through the adult study as being of great importance.

23/05/19 – CF – Today the sun has come out for the first time in a while, so joining the children after lunch as they come in from their playtime on the field I expected them to be a little worn out from the unaccustomed heat and physical freedoms the lunch time has brought them. There was an interesting moment with C6 today, suggesting a pronounced reflection on the observation of the dispositions. A task was set that was too difficult for the child – that is, he was unable to show the correct answers when prompted to do so - however, through the act of trying he did demonstrate a high level of aptitude within the dispositions. Something that the other children in the group who were not struggling did not do. This strong dispositional demonstration would arguably be missed with traditional methods of formative assessment guided solely by the expectations of the task. Although not necessarily relevant to this study, I did notice today how often (exclusively) the TA leading the session favoured the girls. For every request to go to their book bags, wash their hands or line up at the door, the girls were asked to do so first followed by the boys.

05/06/19 – PE – Back in after the half term break, I join the class today as they come in from their lunch break. With just the two cohort children in this classroom, focus will rotate between child focused and physical environment observations as I observe the two of them. With regards to the physical environment, the difference in the children's reactions, actions and interactions was obvious when location moved from indoors to out, and when freedoms of choice were increased. These children changed from sitting frustratedly (C2) or compliant (C4) to being very animated, imaginative and socially engaging.

19/06/19 – CF – I join the class as they come in from their lunch break. Various children come to greet me as they notice me in the room, but they are quick to settle as the children's teacher comes in and addresses the class. Today I observed the phonics session where the children went through sound groups they had learnt and were then asked to write sentences that gave instructions. Some children really struggled with this, more because of motivation than ability, while others embraced the opportunity and used it to independently progress their work further with new sentences. I also saw the support being offered to some children to encourage participation in small groups designed to allow them a voice. Challenge Time saw children assigned to activities based inside or outside (depending on whether they had been out this morning). A group outside became very deeply involved in solving a self-inflicted problem outside that utilised problematic areas of the environment (full of thistles and nettles) and the resources needed to retrieve a toy thrown into it as the potential of the less clinical outside space was clearly demonstrated.

20/06/19 – CF – The sun is finally shining after a long period of rain and they all seem energised by this, dressed in summer uniform, unencumbered by coats and umbrellas as has been the case recently. Several of them tell me that the sun is shining today. The session is a little interrupted with the children needing to go to the hall for class photos, but the main disruption is the requirement for all the children to do a piece of extended writing today. Every child is to write a set of instructions for riding a bike; First you get on to the bike. Then you put your feet on the pedals. Then you move them round and round. It is not clear where the driver for this activity has come from but is clearly an issue of some stress for the teacher. Managed through the separation of children into ability differentiated groups, the teacher utilises space on tables and floor both in the classroom and in the hallway, regularly telling the children that she understands how difficult this task is but that they are all doing a fantastic job. They are then rewarded with an additional playtime.

Appendix A3 - Examples of Child Journals (reflecting on practitioner/teacher insights)

Child 1 – T1 PS - 26/09/17 – PE - C1 seemed quite tired and unsure of herself today, when speaking to her key worker I was told that her best friend started school (mornings) but that I would see a difference when she came in later. Once back together the pair were inseparable, and a very different character emerged.

Child 1 – T1 PS - 29/04/19 – PE - The children seemed very excited today, on talking to the key worker I was told they were enthused by a trip to the school library today. C1 had a difficult start to the morning, when speaking to her KW I was told she had arrived late and had been upset at having to join the group halfway through carpet registration. I watched as, with some dedicated attention from the teacher she soon settled, and this did not appear to have a lasting effect.

Child 2 – T4 – Rec - 11/10/18 – PE - C2 seemed to struggle when spending time on the carpet today, beginning to wriggle and fidget when asked to sit still for long periods, despite visibly trying hard not to. The teacher told me that when she has him join her for a more focused group session he is more closely observed and immediately brought back on task. I was then able to see the techniques being used "What are you doing… that's not what I asked you to do!".

Child 2 – T4 – Rec - 27/09/18 – CF - Talking with C2s teacher I was told that he rarely contributes answers within a session. When watching an activity, and on reflection, that C2 is aware of the correct answers, flinching as one is called out, but he tends to look around to see what others are doing before he tries for himself, waiting a beat before committing to a response. He notices this within himself when playing Popcorn, announcing "I'm going to be faster". During a group activity with the teacher he suggests a number of new ideas but is corrected and brought back on track, is this dampening his creativity or willingness to contribute?

Child 3 – T6 Rec - 29/04/19 – PE - When I came into the classroom today the TA informed me that C3 had been away for some time and was unsure how she would be this morning. When she arrived, she settled quickly at her Star Group table and begun the set activity with ease. She was quick to make her opinions known and had an opinion regarding other conversations going on in the room. However, I did note she has not volunteered answers to questions posed by the teacher today or become as involved with group discussions as she would do usually.

Child 3 – T6 Rec - 11/06/19 – PE - When talking about C3, the teacher told me of her tendency to become easily distracted, this is most pronounced during carpet time where she appears to struggle persevering with a task or even sitting on her bottom. They were to make a point of praising efforts made when she saw them, however I saw C3 use these moments of praise to engage in further discussion, rather than progressing the work she was supposed to be doing. One to one attention by the teacher tended to prompt a more positive response, when she would generate her own ideas and add mature comments to the task.

Child 5 - T1 PS - 04/12/17 – CF - I am told C5 came in rather upset today and will likely gravitate towards his twin. I watch as he has a cuddle with his key worker who gives him the attention he needs then takes him off to the bathroom. By the time he comes back he is more settled and finds his twin, sitting next to her without speaking. They play in parallel most of the time as his endeavours remain independent – finding challenges that he has set himself, persevering through them.

Child 5 – T4 Rec - 16/10/18 – PE – The teacher spoke to me today about the strong link C5 has with his twin sister, becoming unhappy when asked to move away from her (although this is quickly recovered from). I saw this reflected in the playground as he became unsettled whenever he 'lost' her, not settling until a teacher intervened. This may help to explain teacher's tendencies to quickly move him during numeracy time. *These conversations subsequently informed social observations of C5.*

Child 5 – T6 Rec - 14/05/19 – CF - Discussed C5's 'break' from his twin with the teacher again this morning. She told me he is now able to come into class completely independent of his twin, finding their own tables and starting the assigned task. He is happy to engage with others, continuing independently if they are uninterested. This was reflected in my observations of C5. Rather chatty, he would turn around to his friends during carpet time, talking over the teacher and calling out. While this began as interested and insightful questions, it resulted in him being placed on the 'Thinking Cloud'.

Child 8 – T4 – Rec - 16/10/18 – PE - Discussions with the teacher today mirrored my own reflections of C8 as a very confident child. Attentive during lessons, I am told she will always try very hard, is quick to raise a hand and gives very complete (and usually correct) answers when called upon. Eager to answer every question she is often reminded by the teacher to give the other children a chance to respond! I have also seen this confidence mirrored in her social interactions - small in stature she is very popular, even with older children in the playground, and is often leading the play. However, today I am told she has been a little distracted by things going on around her, complaining about another child which is most uncharacteristic. Despite this she remains involved in the lesson, making every effort to participate and do well.

Child 9 – T1 PS - 18/10/17 – CF - Talking with C9's KW I am told that she is settling well and is well liked by the other children. I see her spending time observing the goings on around her, taking it all in without always getting involved. This is apparent from the opinions she offers, and the comments she makes. Her social group is clearly important, spending all their time together they appeared to enjoy each other's company, so much so that she was clearly uncomfortable when for a time there was a split in the group. She was confident within the environment, gaining the resources she needed and knowing where to look when she was not sure what she needed.

Child 9 – T1 PS - 01/11/17 – PE - Reflecting on discussions with C9s KW, I could see the social skills developing within C9 today as she explored the affects her actions can have on social relationships and how far she can push a bond. Declaring a friendship 'over', figuratively and physically pushing the child away when she tried to re-join the friendship group. But then toying with her, looking around when the other child began to give up trying, calling her back or following behind her as the attention declined. C9 recently started at the pre-school having struggled to settle at her old setting. I am told she has quickly made friends, and has assumed a dominant role within the group.

Child 9 – T4 – Rec - 23/10/18 – PE - In discussions with the teacher I am told C9 has been a little distracted by others around her today, needing to be put back on task by the teacher, but she has responded to this straight away. During the observation she appeared really keen to get involved, shooting her hand up to respond to questions, but when she has not been selected this enthusiasm was seen to diminish. When asked to respond to a question, she does so correctly, is very focused on the individual white boards during phonics time, persevering to get her writing correct, with her attention focused more so here than on the class teacher. Very independent, she is negotiating the space well and using it to actively progress her enquiries (how to get a giant teddy up the ladder to go on the slide with you) and has enjoyed being sociable with her friends. She is well behaved in the class, but has been distracted by other, more interesting (to her) things going on.

Child 10 – T6 Rec - 14/05/19 – CF - Discussing C10 and his adaptability with the teacher this morning I was told that despite arriving late for the session, he did not seem put out either by events of the morning or his late entry into the classroom. I saw this adaptability reflected in the observation as he was equally happy engaging with others or progressing through tasks independently. Quietly getting on, he would overlook interactions of others or a need to respond to the questions of the teacher. When faced with limited resources, or an unexpected direction of progress, he would simply move to an alternative response.

Appendix A4 - Examples of Observational Journals (reflecting on practitioner/teacher insights)

20/09/17 – I have spent time with the manager today identifying the actual cohort for the study now that we know who the children are that will attend this year. We looked for an even spread of girls and boys, a mix of social backgrounds and experiences and a spread of birthdates. This together with the requirement of children in their final year that had no family plans for moving far afield in the next two years with parents who would be interested in the study made the selection quite clear. I was told of several (new starter) children whose home language is not English. I have decided to actively exclude these children as language may prove problematic within parental discourse, and they have a lot to deal with in settling in.

26/09/16 – My first official observation today. I worked with the staff and a small group of children to select their icons for weekly assent. I'm not sure they fully understood, but hopefully this will build over time as they repeatedly see their cards and elect to participate with them. In the process of writing up the pilot – two considerations occur to me… what adult reactions are you seeing towards certain dispositions? Are some more valued than others? And how do children respond to this? What language is being used and what confidence does this illicit? Secondly although I have some comment here, how is children's progress impacted by time frames, curriculum, society, and expectations? Insights will be offered through continued discussions with staff, so these opportunities remain important.

06/11/17 – The children seemed to be very tired today. When speaking with the staff after the observations I was told that many had attended firework celebrations last night. Despite this, staff commented on the children's change in reaction towards me – where some of them had been a little wary, they are very much taking me in their stride now. Children who had clearly avoided talking to me are now approaching me, inviting me into their play and showing me things they have found of interest, asking me to join in, telling me things and asking for my help.

16/11/17 – Following the staff interviews, feedback loops were utilised to confirm responses. Having discussed dispositions during this process it was interesting to see how the views of practitioners changed as a consequence with many asking to change their responses once they started observing the children in previously unexpected ways.

22/11/17 – It had become apparent that when activities were tightly governed – for example carpet time, group stories – the FOLLEP scale tended to stay at 0 throughout. When I talked this over with the staff, we saw that this was not because children were actively pulling away from certain dispositions, but that these activities do not offer opportunities for children to demonstrate them. Through these discussions, rich opportunities of other types offered within these activities were clear, but it did question what the effect of this would be if a child's day became overly directed in these ways, in the absence of freer pursuits.

28/11/17 – There are quite a lot of children off today poorly, noting that others appeared to look a little tired or pale, I talked this over with the staff who echoed my observations. They spoke of the various Christmas crafts being offered and the time spent in the garden as scheduled, but as it was an extremely cold day, and not all children had particularly warm coats, or gloves/hats, the decision had been taken to limit activities. I shared the observation that this had encouraged the children to work more closely together which added an additional dynamic to their play. I had seen greater negotiation and sharing required of the children, which caused the staff to comment on expected characteristics of the children, reflecting on how different environmental conditions had led to alternative dominant characters emerging.

17/05/18 – There are lots of sensory and experiential activities on offer for the children today – a creative activity that allows them to select and stick a range of sensory materials on to a disk – leaves, petals and buds. But it is the foam activity with splashes of paint and hidden ice-cubes, and the magnets in the sand that have attracted the most activity today. When sharing my observations with the staff, we noted how these activities encourage exploration and discovery which has been a big hit today, with lots of exploratory discussion both in the absence and the presence of adults.

06/06/18 – I was told the children have been playing a lot of Minecraft outside of nursery of late and as such have become fascinated by the idea of Zombies coming to get them! This was reflected today in the chasing going on outside, and when discussed with their KW - with actions and discussions to mirror ideas they have become exposed to at home. For those that are unsure of this new game, they quickly pick it up and join in. This has enabled a rich roleplay and a new twist on 'superhero' play. I also reflected with staff about the particularly relaxed feel to today's session – we were unclear as to whether this was because it was the afternoon, because the children had been off last week or because the sun was shining but every observation saw the children freely playing, uninterrupted and this seemed to be really impactful.

11/09/18 – This is my first visit to observe the children in their formal classroom. I note certain constraints put on the children's choices and when discussing the day with the teacher I am told children were assigned to groups and told to stay in them, explaining their reluctance to explore elsewhere. They were told that they would be spending time in or out depending on

whether they went out yesterday and the plan of the morning was gone through. On the carpet they were told the objectives of the morning, which included set activities, one to one time with the teacher, or free play outside. I was told of the behavioural management techniques employed during these early days, something I had seen as rules were emphasised, and the children repeatedly told not to talk, to sit still and to respond in ways expected. This also clarified my interpretation of observations as I noted children appearing to want to offer ideas and thoughts in response to things during the morning, but this was quietened and the rules of responding with the one correct answer were emphasised.

27/09/18 – This was my first visit with this class. I saw the children come in, find their names on the 'star board', locate the group they should be in and busy themselves with the activities they found there. On speaking to the teacher, I am told the children have appeared to be well settled into their new environment and know their way around it. However, one of the cohort is clearly struggling with expectations to sit still especially towards the end of the session and is beginning to get noticed – and reprimanded – for it.

04/10/18 – I noted more reliance on technology today and a strict adherence to the routines detailed on the wall. Discussing the observations at the end of the day I am told that as the teacher was out for prep time, the TAs are responsible for both taking the session and supporting it. The Head of Reception caught me on my way out to ask about the images I am capturing as there are several within the year group that cannot have their image leave the school. I reassure her that I am only capturing still photography focused on the cohort children, however on reflection I am concerned that another child may inadvertently enter the frame, or staff may be concerned this will happen. I will speak to her further next week to decide on the best cause of action going forward.

11/10/18 - I am noticing that the observations in the school setting are attracting very few negative FOLLEP ratings. They are then much more even, few highs or lows, (bland?) no ups or down, it seems more important to simply conform. Even when creativity is attempted by a child, they are brought straight back onto task "What are you doing… that's not what I asked you to do!". With careful language I discussed the children's behaviours with the class teacher at the end of the session who spoke about clearly defined activities and expectations.

21/11/18 – As I am here from the start of the day, I see the transition as the children come in from their parents. I ask the teacher to talk me through their approach and am told this is done in a gradual process, a few children at a time, so that the teacher can offer the additional, dedicated attention that some of the children need. A couple in the class have been identified as needing this additional help while others in the group wait outside.

26/04/19 – A substitute teacher was covering today so I was told the session would be rather 'led from the front'.

12/05/19 – C1 arrived late to the morning session and was clearly upset leaving mum but soon settled with some assistance from the teacher. I was told on entering this morning that C3 had been away for some time (three weeks – two weeks for Easter and then off sick last week), but she came in and settled with ease, although looking a little pale.

14/05/19 – One of the things that is really becoming apparent is the fact that the children are no longer demonstrating as many negative FOLLEP scores as they did in preschool now that they are in Reception. This would suggest that there is now an increased level of management being demonstrated within their day, their reactions and their potential responses to situations. They appear to have less chance to interpret a situation or trial things as they are told what to do, along with expectations that greatly reduce how they can play with ideas, take risks or trial their abilities.

23/05/19 – Today discussions picked up on the energy levels of the children. The sun had come out for the first time in a while, so joining the children after lunch as they come in from their playtime on the field, they were a little worn out from the unaccustomed heat and physical freedoms the lunch time has brought them. I also discussed a personal reflection with the teacher – having observed a child struggling with a task that was too difficult – that is, he was unable to show the correct answers when prompted to do so - through the act of trying he did demonstrate a high level of aptitude within the dispositions that the other children in the group who were not struggling did not do. We agreed that this strong dispositional demonstration would arguably be missed with traditional methods of formative assessment guided solely by the expectations of the task.

05/06/19 – We spoke today about the difference in the children's reactions, actions and interactions when the physical environment changed, I was interested to see if the teaching staff had also picked up on this. We spoke about how children changed from sitting frustratedly (C2) or compliant (C4) to being very animated, imaginative and socially engaging when location moved from indoors to out, and when freedoms of choice were increased.

05/06/19 – With regards to the child focused observations, I had been wondering whether the children's confidence is increasing now that they are on the verge of moving up to Year One (in part because of a comment made by the teacher to suggest that this is the case). As well as their familiarity with the school, they are conscious that they will no longer be the

youngest in school, I wondered if this is being reflected in their demonstrated behaviours. Would this see the dip in FOLLEP scores recover? Would this be reflected across other dispositions?

11/06/19 – It has been raining all day today, so the children have had a 'wet weather lunch' which means they have not been outside all day. As such the teacher warns me as I enter that the afternoon may not be as expected. When I arrive, there is only a slight drizzle, but the decision has been made to remain inside – even though the Reception Year have their own enclosed (roofed) space outside. Today I saw a clear example of where additional freedoms worked against the achievements of a child. Left to their own devises they were frequently distracted and spent time gazing into space. Whilst unclear how much thinking and internalising was going on during these periods, no insight or refocused effort was seen afterwards. When this child had additional support and the applied the concentrated effort that was prompted by one to one adult attention, they were able to generate a greater degree of visible achievement. However, given the terminology used by the child and the actions this resulted in, she is clearly used to direct adult attention and quickly becomes lost and unfocused without it. Not necessarily a reason to warrant more of it.

19/06/19 – I join the class as they come in from their lunch break, quickly settling as the teacher comes in and addresses the class. Observing the phonics session today, children went through learnt sound groups and were asked to write sentences that gave instructions. My observations suggested some children were struggling with this, but the teacher suggested this was more about motivation than ability. On reflection there was a clear progress divide with some children embracing the opportunity and using it to independently progress their work with new sentences. I also saw the support being offered to some of the children to encourage their participation in small groups designed to allow them a voice.

20/06/19 – The session was a little interrupted today with each child required to do a piece of extended writing - a set of instructions for riding a bike. On discussion with the teacher it was not clear where the driver for this activity had come from but this clearly an issue of some stress for the teacher. Managed through the separation of children into ability differentiated groups, the teacher utilises space on tables and floor both in the classroom and in the hallway, regularly telling the children that she understands how difficult this task is but that they are all doing a fantastic job. This clearly had an impact on dispositional engagement, but as a part of their genuine experience, was as important to record as anything else. They were then rewarded with an additional playtime.

26/06/19 – I noted a level of tension in the class today and was told by the teacher that a child was having a particularly stressful episode and all the children were to be taken outside while it was managed. A high number of the afternoon's observations were then captured outside, but with its environment focus, this made for some rich observations. When the children did come back inside, they were rewarded with an additional snack and an interactive, amusing story. When asked to suggest an idea from the story I noticed that every child is now suggesting their own – in previous observations this would soon have seen the children repeating ideas previously given by others.

Appendix B - Studies focusing on executive functioning in young children over the last five years, together with their area of focus

Reference	Focus	Test	Method
Fitzpatrick et al., 2014)	Academic achievement	Woodcock–Johnson III Tests of Achievement, one subtest from the Woodcock–Johnson III Tests of Cognitive Abilities; Applied Problems subtest The Letter-Word Identification and Picture Vocabulary subtest	Mathematical word problems with extraneous information; ability to identify a letter or word printed on a page from the verbal prompt; ability to verbally identify objects depicted in pictures.
Duncan et al, 2017	Academic achievement – Mathematics, emergent literacy and vocabulary	Woodcock-Johnson Psycho-Educational Battery – III Tests of Achievement; Applied Problems; Letter-Word Identification; Picture Vocabulary subtest	Understanding quantities, simple calculations, and solving practical problems; identify letters and pronounce words, increasing in difficulty (both receptive and expressive); point to or name a target picture
Fuhs et al., 2015	Academic achievement	Head, Toes, Knees, and Shoulders [HTKS]	Children are asked to touch their heads when the examiner says, “touch your toes” and to touch their toes when the examiner says “touch your head.”
Fuhs et al., 2015	Academic learning	Work-Related Skills subscale of the Cooper-Farran Behavioural Rating Scale (WRS)	Likert-type scale assesses behaviours anchored to classroom expectations
Baptista, 2016	Academic readiness	The Lollipop Test	Individually administered diagnostic screening test
Fitzpatrick et al., 2014)	Attention shifting	Item selection task	Child Is shown two images sharing a common feature (e.g., a red cat and a blue cat). Identify the common feature.
Fuhs et al., 2015	Attention shifting	Head Toes Knees Shoulders (HTKS)	Children are asked to touch their heads when the examiner says, “touch your toes” and to touch their toes when the examiner says “touch your head.”
Duncan et al, 2017	Attention shifting and cognitive flexibility	A Card Sort task	Similar to the traditional Dimensional Change Card Sort measure
Cadima et al., 2016	Attention, working memory and inhibitory control	Head–Toes–Knees–Shoulders task	Children asked to touch their heads when the examiner says, “touch your toes” and to touch their toes when examiner says “touch your head.”
Fuhs et al., 2015	Attention flexibility	Dimensional Change Card Sort (DCCS	Sort a set of cards according to one dimension (colour) and then another (shape)
Duncan et al, 2017	Behaviour and academic achievement	CBRS - Teacher ratings of classroom behavioural regulation	Likert-score rating across 10 items
Fuhs et al., 2015	Behaviour and academic achievement	Cooper-Farran Behavioural Rating Scale (CFBRS) Two subscales, WRS and IPS.	Work-Related Skills (WRS) - 16 items testing independent work, compliance, memory for instructions and ability to complete tasks. Interpersonal Skills (IPS) - 21 items testing ability to engage effectively in interactions with peers and teachers.
Fuhs et al., 2015	Behaviour and academic achievement	Child Behaviour Rating Scale (CBRS)	Focus on executive functioning skills as manifested in typical classroom behaviour.
Iruka et al., 2018	Behavioural competence	The Strengths and Difficulties Questionnaire (SDQ)	25-item rating scale of the child's behaviours completed by the parent
Moreno et al., 2017	Behaviours	Preschool-Setting Executive Function (PSEF)	Mature dramatic play, metacognitive language and narrative talk and varied object play
Iruka et al., 2018	Behaviours	Parent-child interaction at home	10-minute puzzle task - three puzzles of increasing difficulty
Duval et al, 2016	Behavioural inhibition	NEPSY-II Statue subtest.	Child must stand completely still and resist the impulse to respond to distracting behaviours
Cadima et al., 2016	Classroom climate and support	Classroom Assessment Scoring System (CLASS)	7–point Likert on 10 distinct dimensions grouped in three domains (a) Emotional (b) Classroom organization (c) Instructional support

Fitzpatrick et al., 2014)	Cognitive Abilities	Battery of executive function tasks, Applied Problems and Letter-Word Identification subtests of the Woodcock–Johnson Tests of Achievement III and Picture Vocabulary subtest of the Woodcock–Johnson Tests	Two sessions with a trained research assistant
Baptista, 2016	Cognitive flexibility	Dimensional Change Card Sort task	Cards show shapes of colour, child is asked to sort the cards, first according to colour and then according to shape
Duval et al, 2016	Cognitive flexibility	Dimensional Change Card Sort	Cards show either a boat or a rabbit, in red or blue, the child is asked to sort the cards, first according to colour and then according to shape
Pazeto et al., 2014	Cognitive flexibility	Trail-making Test for Preschoolers (TT-PS)	Pictures of five dogs and bones; link them in order of size
Duval et al, 2016	Cognitive inhibition	The Day–Night task	Cards show a sun or moon, say night when the sun card is presented and day when the moon card is presented.
Fitzpatrick et al., 2014)	Cognitive processing	Touch a blue dot	reaction time task administered using a touch screen
Duval et al, 2016	Development of executive functioning	Self-Ordered Pointing task	
Fuhs et al., 2015	Development of executive functioning	Behaviour Rating Inventory of Executive Function—Preschool Version (BRIEF-P)	A clinical and neuropsychological assessment to assess deficits in particular areas
Fuhs et al., 2015	Development of executive functioning	Copy Design	Copy eight simple geometric shapes of increasing difficulty
Finch et al, 2017	Delay of gratification	The Gift Wrap task	Facing away from the assessor a gift is noisily wrapped. Assessor then needs to find a bow in another room - left for three minutes. Performance compared when the assessor in and out.
Pazeto et al., 2014	Fluid reasoning	Cancellation Attention Test (CAT).	Child presented with a target stimulus, indicating all stimuli identical to the target among various others in a matrix.
Pazeto et al., 2014	Fluid reasoning	The computerized Peabody Picture Vocabulary Test (PPVT) -	four pictures in black and white, computer emits one spoken word, child chooses the image which corresponds
Pazeto et al., 2014	Fluid reasoning	The Child Naming Test (CNT)	Child names 60 line drawings representing objects (e.g. a chair, a sword); animals (e.g. a dog, an elephant) and people (e.g. a nun, a baby)
Niklas et al., 2018	Fluid reasoning	'Concept Formation' subtest from the Woodcock-Johnson III battery of tests of cognition	Standardized, normed measures of cognition (e.g., Howell & Kemp, 2010).
Niklas et al., 2018	Fluid reasoning	Concept Formation tasks	Children apply rules and switch frequently from one rule to another.
Baptista, 2016	Inhibitory control	Head–Toes–Knees–Shoulders task	Children are asked to touch their heads when the examiner says, "touch your toes" and to touch their toes when the examiner says "touch your head."
Becker et al, 2014	Inhibitory control	Day–Night Stroop task	Inhibit the natural response by responding to a picture of a sun as "night" and a picture of a moon as "day."
Duncan et al, 2017	Inhibitory control	The Day-Night Stroop task	Inhibit the natural response by responding to a picture of a sun as "night" and a picture of a moon as "day."
Finch et al, 2017	Inhibitory control	Computerized Flanker task (NIH toolbox)	Focus on a given stimulus while inhibiting attention to stimuli flanking it.
Fitzpatrick et al., 2014)	Inhibitory control	Sound Stroop measure,	Child is shown images of a cat and a dog while hearing a bark or a meow. The child was asked to touch the dog after hearing a meow and the cat after hearing a bark.

Fitzpatrick et al., 2014)	Inhibitory control	In spatial conflict arrows,	Child is shown an arrow pointing to right or left above one of two targets at the bottom of the screen. The child touched the target on the side of the screen corresponding to the direction the arrow was pointing. On congruent trials, the arrow appeared on the same side of the screen to which it was pointing; on incongruent trials, the arrow appeared on the opposite side of the screen.
Fitzpatrick et al., 2014)	Inhibitory control	Go no-go task,	Child shown images of animals - touch the screen when an animal appeared, except when the animal was a pig.
Fuhs et al., 2015	Inhibitory control	Peg Tapping	Child taps a peg once when an examiner taps it twice and to tap twice when an examiner taps once
Fuhs et al., 2015	Inhibitory control	Head Toes Knees Shoulders (HTKS)	Children are asked to touch their heads when the examiner says, “touch your toes” and to touch their toes when the examiner says “touch your head.”
Pazeto et al., 2014	Inhibitory control	Computerized Semantic Stroop Test.	Child names the pictures using the opposite noun (for example, say ‘moon’ when the picture of the sun appears).
Domitrovich et al, 2013	Integration	PATHS	balanced literacy framework of standard programming
Duval et al, 2016	Interactions	Block Design subtest (WPPSI-III, Wechsler, 2005)	Reproducing models with wooden blocks within a specified time limit.
Iruka et al., 2018	Language development	Wechsler Preschool and Primary Scale of Intelligence (WPPSI) and the Preschool Language Score.	Used the Receptive Vocabulary and Block Design subtests
Pazeto et al., 2014	Language development	The Phonological Awareness Test by Oral Production (PAT-OP).	
Fuhs et al., 2015	Language skills	Academic Knowledge	Tests of factual knowledge (science, social studies, and the humanities) by labelling and identifying pictures, heavily relying on vocabulary
Fuhs et al., 2015	Language skills	Oral Comprehension	Complete an orally presented passage by providing the appropriate missing word
Fuhs et al., 2015	Language skills	Picture Vocabulary	Name objects presented in pictures
Fuhs et al., 2015	Literacy skills	Letter-Word Identification and spelling subtests	Identify and pronounce alphabet letters and words, draw simple shapes and write orally presented letters and words
Fuhs et al., 2015	Mathematics skills	Applied Problems and Quantitative Concepts subtests	Solve numerical and spatial problems, number identification, sequencing, shapes, and symbols
Fuhs et al., 2015	Motor coordination (gross)	Head Toes Knees Shoulders (HTKS)	Children are asked to touch their heads when the examiner says, “touch your toes” and to touch their toes when the examiner says “touch your head.”
Fitzpatrick et al., 2014)	Non-verbal intelligence	Raven's Coloured Progressive Matrices	
Duval et al, 2016	Planning	Tower of Hanoi	Two boards, three vertical rods bearing discs of varying sizes, reproduce pattern of discs on rods in the fewest number of moves possible
Howard, 2018	Self-regulation	Head-Toes-Knees-Shoulders	Preschool Situational Self-Regulation Toolkit (PRSIST) observation assessment
Fuhs et al., 2015	Self-regulation	Child Behaviour Questionnaire	A temperament scale using Likert-type ratings of emotional and cognitive regulation with an inhibitory control subscale
Aleksić et al., 2016	Social skills	Personal, Social, and Emotional Development Scale	11-item scale
Denham et al, 2014	Social skills	Social information processing model (SIP) Challenging Situations Task (CST)	Criteria listed. - self-reported emotional and behavioural responses to hypothetical peer provocation situations
Iruka et al., 2018	Social skills	The Head Start Competence Scale (HSCS;	parent (16 items) or teacher (12 items) report used to measure
Cadima et al., 2016	Teachers’ relationships	Conflict and closeness subscales of the Student-Teacher-Relationship-Scale (STRS,	Teachers’ perceptions
Becker et al, 2014	Visuomotor skills	Beery visual-motor integration (VMI)	Requires the child to accurately copy figures.

Cadima et al., 2016	Vocabulary skills	Peabody Picture Vocabulary Test–Revised (PPVT–R	Child points to one of four pictures matching a word read aloud.
Baptista, 2016	Working memory	Backward Digit Span task	
Becker et al, 2014	Working memory	The Woodcock–Johnson Auditory Working Memory subtest	Requires child to repeat back to the assessor a list of numbers and objects
Duval et al, 2016	Working Memory	The Forward and Backward Digit Span	repeat 2- to 4-item series of digits in reverse order, with each test becoming slightly more difficult than the last
Finch et al, 2017	Working memory	The Backward Digit Span, from the Wechsler Intelligence Scale for Children-IV	Verbally presented with strings of digits that increased in length, asked to repeat in reverse
Fitzpatrick et al., 2014)	Working Memory	Operation span task,	Child is shown images of houses with different animals and colours inside, named the animal and colour. Then images of empty houses and recalled either the animal or colour in each house.
Iruka et al., 2018	Working memory, inhibitory control and attention shifting	Spatial Conflict Arrows (SCA), The Silly Sounds Stroop (SSS) task, The Animal Go No-Go (GNG)) and (The Something's the Same (STS)).	Battery of six tasks
Fuhs et al., 2015	Working memory and Visuo-spatial short-term memory	Corsi Blocks task	A series of block patterns becoming progressively difficult, asked to repeat the pattern as presented, forward then reverse.
Fuhs et al., 2015	Working Memory	Head Toes Knees Shoulders (HTKS)	Children are asked to touch their heads when the examiner says, “touch your toes” and to touch their toes when the examiner says “touch your head.”
Pazeto et al., 2014	Working Memory – phonological, Short term	Pseudowords and Words Repetition Test (PWRT).	Various sequences of two to six words spoken, child to repeat back.
Duncan et al, 2017		The Head-Toes-Knees-Shoulders (HTKS)	Children are asked to touch their heads when the examiner says, “touch your toes” and to touch their toes when the examiner says “touch your head.”

Appendix C - Concerns regarding the conclusions claimed from EF studies and the potential impact on early childhood practice

Early reflections coming from the EF literature review – How will this inform the study?

There is much we don't understand about the development of executive functioning, or the relationships between the multiple strands within it. To assume that we do, isolating these strands and testing children within artificial environments to be able to draw conclusions from them, may go some way to explaining the lack of consistent, practical data coming from much of the research to date.

With concern that not enough is known about the links between EFs or the impact they have on each other to confidently draw conclusions from research, this study is reluctant to isolate functioning from each other or attempt to view it in the absence of non-EFs. The study needs to be multi-faceted, rather than relying on only one method such as direct assessment, and full details recorded. But needs to retain clear elements of consistency.

Key findings and actions taken as a result;

Reference	Key finding	Design of study	Documentation
Garon, Bryson, & Smith, (2008)	Accelerated growth of executive functioning occurs from 18 months to 5 years, with central components of cognitive function beginning to take a more central role at around 4 years old.	Limit this study to children in their final year of preschool (four years old).	Date of birth and age of children.
Duncan et al., (2017)	Discrete focus on tasks devoid of context deny greater learning opportunities that executive functions and behavioural regulation allow children to participate in.	Conduct observations within a naturalistic environment, do not remove children.	Inside/outside. Type of activity Freedom of choice - location
Morrison et al., (2010)	Focus on staged tasks overlooks the mechanisms of learning that EF supports.	Conduct observations within a naturalistic context, do not stage activities for children to complete.	Type of activity Freedom of choice - initiative
Finch et al, (2017)	Contextual factors, individual characteristics and environmental contexts all contribute.	Need to get to know the children and families. Need a range of children over a prolonged period of time.	Questionnaires with parents. Activities for parents to complete with their children.
Blair and Raver (2012)	Individual neural correlates and developmental trajectories of the children have an impact on how and when EFs are developed.	Observe each child individually, focusing on each in turn.	Separate observation sheets for individual children – not individual cycles of observation.
Shaul and Schwartz (2014)	EFs are primarily concerned with the control and coordination of information and the assistance of goal-oriented behaviours.	See children exhibit natural behaviours, processing a range of information.	Logical thought
Stanton-Chapman (2015)	EF are required for performance-based tasks.	Children need to be able to demonstrate what they can do.	Courage
Finch et al, (2017)	Important within goal-directed activities. Predesigned tasks are more abstract, fuelled through rewards or treats.	Children need to be self-motivated, rather than driven by a reward.	Encouragement Self-motivation
Obradović et al. (2012)	Current studies tend to show little accountability for the context in which children grow and learn.	Full documentation needed for the context of the observation.	Get to know the children, taking account of existing EF skills. Teaching styles Distractions Location Encouragement
Pazeto et al., (2014)	The EFs develop at differing rates.	Ensure observations record all variables through all periods of the study.	Rich, multi-variable observation sheets used throughout every observation.
Niklas et al., (2018)	Typical studies use a 'battery of tests'.	Design methodology without using psychometric testing.	Naturalistic observations
Duval et al, (2016)	Effective learning needs to go beyond regulating children's behaviours.	Observe children without regulating their behaviours.	Document freedom of choice in location, grouping and initiative.

(Cadima et al., (2016) Fuhs et al., (2015),	Typical studies administer tests in a quiet room or area of the building.	Keep children in the familiar context of their typical preschool rather than a controlled or neutral context, devoid of the realities of the ecological context of a classroom.	Include contextual background to each observation, demonstrating the riches of the moment.
Halle and Darling-Churchill (2016)	Typical studies tend to split the constructs of EFs to focus on each in isolation, potentially losing the multiple steps being incorporated in the process.	Each observation needs to capture all aspects rather than focusing on anything predetermined.	Rich, multi-variable observation sheets used throughout every observation.
Miyake et al., (2000), Fuhs et al., (2015)	By isolating observed constructs, typical studies are prone to "task impurity", losing the impact of multiple EF skills and other abilities.	Each observation needs to capture all aspects rather than focusing on anything predetermined.	Rich, multi-variable observation sheets need to record all aspects with the fullest detail.
Lord & Levy (1994)	Cognitive control systems potentially acting as a gateway between cognition and action, splitting these factors risks losing this effect.	Need to capture children's abilities to adjust, activate engagement and pay attention, completing tasks despite distractions or frustration.	Adaptability Self-motivation Involvement Distractions Encouragement

Develops…

Blair and Razza; (2007), Riggs et al., (2006)	Cognitive and emotional capacities	Modes of thinking; simultaneous, creative, logical and wide.
Stanton-Chapman, (2015)	Manipulating, organising, and storing of new information	Logical thought
Jahromi and Stifter (2008)	Emotional regulation and control of impulsive behaviours	
Baptista (2016)	Concentration, impulsivity and social learning activities	Involvement Independent Sociable
Raver (2002)	Ability to engage in classroom activities	Grouping Teaching styles
Blair & Razza's (2007)	Important within wilful control, delay of gratification, and cognitive and emotional self-regulation	
Shaul and Schwartz (2014)	emotional and social regulation, interactions with teachers and peers inhibit incorrect thoughts, and bypass habitual responses	Acknowledge the social aspects of learning. To gain a full picture, speak to those who know them best. Build relationships over a decent period. Sociable
Blair and Diamond (2008) McClelland and Cameron Ponitz (2012) Morrison et al. (2010)	Required to suppress extraneous movement, to sit still, maintain attention and be goal oriented	Observe a mix of teacher led and free choice sessions. Teaching styles Location Involvement
Blair et al., (2015) McClelland et al., (2015)	Pay attention, to persist with challenging tasks and avoid distractions	Observe during teacher led carpet time Grouping Interactions Distractions Self-motivation
Blair et al., (2007)	Important within remembering new rules	Observe during teacher led carpet time Grouping Interactions Initiative Encouragement Reflection
Fuhs et al., (2014)	Required to inhibit incorrect responses	Observe during teacher led carpet time Grouping Interactions Initiative Encouragement Reflection
Ahmed et al. (2018)	Required to control impulses	Observe during teacher led carpet time Grouping Interactions Initiative Encouragement Reflection

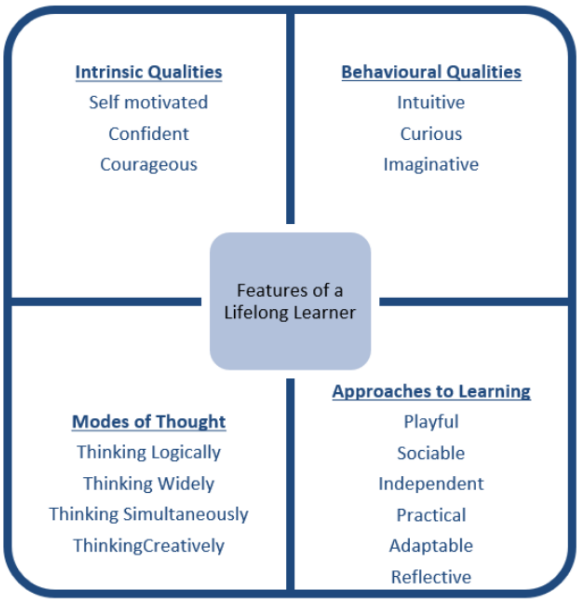
Gazzaniga et al. (2006); Malloy-Diniz et al. (2008)	Ability to undertake voluntary, independent, self-organised actions directed toward specific goals	Self-motivation Independence
Barral, et al., (2010); Hongwanishkul et al., (2005); Welsh, et al., (2010)	Connected to motor, social, emotional, language and cognitive functioning	Social Practical Modes of thinking; simultaneous, creative, logical and wide.
Shonkoff et al., (2000)	Abilities to adapt to fluctuating environmental demands	Timing of observations to determine how quickly things fluctuate. Adaptability Confidence Interactions – specifically adult led
Blair (2002); Zelazo & Carlson (2012)	Sustained attention, and response inhibition	Involvement Social
Brocki and Bohlin (2004)	Attention-switching and rejecting distractions	Distractions
Best and Miller (2010); Diamond and Lee (2011)	Goal-directed behaviours support and inhibit impulsiveness.	Intuition
Willoughby et al., (2010); Zelazo et al., (2012)	Supports attention control and thoughtful planning of future actions	Observed as a motivated, engaged child, persisting in the face of challenge – Involvement Curiosity Independent Imagination
Raver et al., (2016)	Required for flexible shifting and focusing of attention and in controlling anxiety when children face challenging tasks	Timing of observations to determine how quickly things fluctuate. Record the groupings involved and interactions. Involvement Grouping Interactions Courage Self-motivation
Koziol et al., (2012)	Important in regulation of thoughts and actions.	Involvement Intuition
Bierbman et al., (2008)	Important in being able to interact and conform to the rules required for learning in social contexts	Grouping Social Playful
Anderson (2002) Blair et al., (2007) Samuels et al., (2016)	Important in being able to pay attention, follow rules, and concentrate on various cognitive and behavioural tasks	Observe during teacher led carpet time and led group sessions Grouping Interactions Initiative Encouragement Reflection

Study needs…

Stanton-Chapman (2015)	Be aware of potential links between achievement, executive functions and their impact over time.	Do not try and split these elements out and conduct the study over a decent amount of time
Duval et al, (2016)	Intrinsic factors found within typical classroom environments, such as interactions, will have a bearing.	Need to be aware of teaching styles, distractions and degrees of freedom/enforcement that were occurring during each observation.
Raver and Blair (2016)	Social and emotional aspects involved within self-regulation.	Get to know the children so that their emotional state within an observation is clear. Take note of these together with social variables (who they are playing with) during each observation.
Ahmed et al., (2018)	Children need to go beyond abilities demonstrated within a prescribed test (plan, focus their attention and remember past experiences).	Do not use prescribed tests, observe natural demonstrations of their abilities and obtain fuller pictures by speaking to the teacher.
Clements (2016)	Children need to be motivated to complete tasks even when faced with problems, fatigue or distraction, working with persistence and a positive disposition.	Naturalistic observations need to capture persistence, engagement and freedoms within a task – is this their choice? Time stamp.
Blasi et al., (2006); Chein et al., (2005) Luu et al., (2002) Miller et al., (2001); Pennington et	Children need to be able to retain focus on the goals and rules of a task, to inhibit irrelevant information whilst consistently	Freedoms within actions need recording, together with who they choose to work with and level of engagement. Timestamp to judge persistence and always add context.

al., (1996) Ridderinkhof et al., (2004).	selecting an appropriate response, monitoring for errors.	
Chein et al., (2005) Luu et al., (2007).	Executive functions are increasingly activated when encountering new information and experiences, with decreasing activation over repeated exposures	Record teaching styles and capture a wide range of experiences – both unique and prescribed (repeated).
Blair et al, (2014)	Children need opportunity to purposefully and intentionally engage with learning materials	Need to monitor children's experiences and abilities demonstrated within naturalistic rather than staged methodologies, making full note of the physical environment.
Schmitt et al., (2017)	Children need opportunity to engage throughout the day spontaneously and independently.	Record abilities demonstrated within naturalistic observations along with degree of freedom (location, activity, grouping).
	more complex situation than a simple direct relation exists	Be aware of multiple EFs simultaneously, not pre-empting and limiting the field of vision
Finch (2017)	Need to observe processes within a natural situation if we are to see how children will function within it.	Play-based observations of children need to be in their actual real-world setting, following the EYFS if we are to draw meaningful conclusions from them.
Mittal et al., (2015) Finch et al., (2017)	Contextual factors have an influence on participants' performance.	Need to ensure these contextual factors are recorded every time – location, drivers, limitations.
	Children come with great diversity.	Focus on naturalistic observations within enabled environments catering for all children - do not focus on tasks that exclude many.
Fuhs et al., (2015)	Young children may experience difficulties within pre-set tasks	Do not expect children to perform within areas they are not familiar with. Nothing new – their turf.
Burchinal, et al., (2014)	Prior experiences, behaviours in class, methods of teaching (including degree of academic focus, level and content of instruction) and interactions all potentially have an impact on that displayed.	Children within the study to be observed (and got to known) over a decent length of time. Watched for a year prior to going to school; contextual info gathered (prior experiences, typical behaviours). Ensure methods of teaching are documented.
Clements (2016)	Cognitively demanding subject-matter within context increases learning and EF processes	Observe cognitively demanding activities. Record child's experience and interactions within context and abstract activities, with full contextual detail – compare, do not engineer away variables.
Duval et al, (2016)	Social and emotional climate as well as instructional support are important.	Document interactions, involvement, groupings and initiative, as well as physicality of the environment.
Moreno et al., (2017)	Adult behaviours impact on children's'. meta-cognitive support, concept development and offer structure to the environment and activity	Document support offered by adults and the structure of environment and day - interactions, groupings and initiative as well as teaching styles, distractions, location and encouragement given.
Burchinal, et al, (2014)	Importance of academic focus, level and content of instruction and the degree of adult interactions.	Not a single rating on a single occasion- wide range of detailed variables to be recorded consistently, across a range of occasions, designed to repeat and compare.
Ahmed et al., (2018)	Cautions against the use of long-term studies with repeated use of the same methods across a wide range of developmental years.	Limit study in the same form to two years.
Brydges et al., (2012) Usai et al., (2014)	Major reorganization of EF during late childhood and early adolescence.	Ensure study does not cross this age divide
Kovächs et al., (2009),	Cautions that complex EF abilities cannot be directly measured until children are two or three years old.	Ensure study does not include children younger than three years old.
Carlson, (2005)	Suggests social and emotional competencies are demonstrated in distinct ways in infancy compared to that at age five.	Ensure study does not cross this age divide
Blair et al., (2014)	Stresses that intentionally engage with learning materials offer children opportunities to purposefully reflect on knowledge.	Ensure observations offer children opportunities to engage with materials, recording degree of reflection.
Conners-Burrow, (2017)	Relationships, emotional climate and classroom structure are all critical elements	Children's abilities need viewing holistically, allowing these elements to entwine and demonstrate.

Appendix D - Definitions of the dispositions



Abbreviated definitions - carried on a card during all observations

Courage	Comfortable in complex situations, pushing perceived limits & stretching abilities, not afraid to take risks, keen to seek challenge & test boundaries.
Self-motivation	Enthusiastic self-esteem, persistence, investment and resilience, embracing challenges with extra effort without need for praise, untroubled by setbacks, distractions or fear of failure.
Confidence	Competent self-assurance sees them embrace challenge and secure emotional well-being allows requests for assistance when required
Imagination	Initiates activities/ideas, inquisitive, mentally rehearsing, using ingenuity to explore possibilities, uncovering new potential, untethered to perceived/expected outcomes.
Intuition	Logical judgements and predictions in new situations informed by prior experience, knows where to start enquiries, predicting and testing potential outcomes.
Curiosity	Seeking out opportunities to go deeper in their understanding, enthusiastic questions, insatiably enquiring with healthy scepticism, investigating and experimenting with ideas.
Playful	Playing, experimenting and rehearsing without commitment, complete immersion in satisfying experiences, independently and with others, trialling ideas within safe environments.
Sociable	Interacting and engaging actively, balancing diplomacy, self-promotion, assertion and self-regulation, with collaboration and cooperation. Communicating, sharing and promoting ideas, taking on other perspectives with empathy and understanding.
Independent	Autonomous & self-motivated, at ease with their own abilities, thoughts, ideas and opinions. Not relying on following others, they take personal responsibility.
Practical	Demonstrates problem solving, mentally planning and reactively adjusting thinking with unforeseen difficulties, changing direction and appreciating success, even when evolved through process.
Adaptable	Open minded & comfortable with open-ended, evolving approaches, not concerned with rigid precision & end products. Flexible in approach, reacting to circumstances and resources, evolving ideas as needed.
Reflective	Considers prior experience and alternative approaches when repeating without losing confidence, can ponder a thought, idea or unsolved challenge, then return to trial a different approach.
Simultaneous	Intuitively gains & processes information simultaneously from multiple sources, using peripheries & specific detail as required not just that in front of them, utilising information from various sources.
Creative	Embraces ideas in fresh, unique ways, asking questions, having ideas and seeking their own answers. Reacts in innovative ways even if the information is limited or unexpected.
Logical	Finds familiarity in unknown situations, seeing patterns and commonalities with previous experiences, constructing links with prior understanding, sequencing, grouping and categorising to find common ground.
Wide	Embraces open-ended activities, resources & new directions, thinking laterally to consider opportunities, unafraid of mistakes. Investigates & explores rather than jumping to conclusions (or obvious end results) comfortable when direction is absent.

Full definitions as taken from Peckham (2017b)

Intrinsic Qualities	***Reflected in adult life***
Courageous	
Comfortable to be uncertain in complex situations they will have experienced pleasurably intrinsic rewards of pushing perceived limits and stretching abilities, mentally and physically to safely achieve goals. Not afraid to take measured risks they are keen to seek challenge, eager to test boundaries rather than being content to remain within comfortable familiarity.	Courageous adults are life's go-getters, unlikely to become stuck in a job or relationship that is unfulfilling, too scared to make the move. Not put off by fear of the unknown or feelings of personal inadequacy, they are ambitious and keen to get the most out of life through work and personal endeavours.
Self-motivated	
Self-motivated children display enthusiasm and self-esteem born from experiencing satisfying, rewarding proficiency that comes from persistence with tasks. Keen to embrace challenges for their own gratification, unperturbed by the absence of praise or reward they will persist with tasks for the time required to succeed through various approaches untroubled by initial setbacks, mistakes or distractions. Unhampered by fear of failure, resilience and sense of investment will see them value the extra effort required to achieve.	Pursuit of long-term goals such as academic qualifications, promotion, or when mastery is gradual such as learning to drive, martial arts or playing a musical instrument requires self-motivation to persist through delayed gratification, un-reliant on external praise or recognition even when setbacks or difficulties arise.
Confident	
Confident children develop self-assurance in the belief of their endeavours and appreciation for their developing abilities and qualities. This competent self-esteem originates from feelings of security and emotional well-being that allows them to embrace challenge, happy to request assistance when they require it.	Confident adults have self-belief that allows them to strive for what they want and succeed with it. Without appearing conceited they are assured of their own worth with the practiced confidence to demonstrate this to others, able to seek support and guidance required to develop into a complete all-rounder.
Behavioural Qualities	
Imaginative	
Able to initiate activities, or new directions within them imaginative children inquisitively try new approaches just to see what will happen, able to mentally rehearse situations in order to explore their possibilities, uncovering new potential along the way as their proficiency develops. Not unnecessarily tethered to perceived or expected outcomes they use their inventiveness and ingenuity to approach situations from new directions.	In a rapidly changing world, it is imaginative adults that are able to embrace the challenges this brings. Without the need to follow well-trodden paths they can look at problems in new and exciting ways. With the ability to mentally process ideas they can run through multiple scenarios before selecting the right one. With good imagination they are less likely to become bored with a world of new possibilities open to them.
Intuitive	
Informed by all previous practical experiences intuitive children are able to make logical judgements and reasoned predictions given new situations or sets of resources with a level of understanding to begin further enquiries and predict potential outcomes with a starting place to test those predictions.	When we encounter problems in adult life, they are rarely exactly the same as problems we have encountered before or provide all the information we would like. Intuitive adults can take the information given and together with previous experiences use instinct to draw conclusions without needing immediate proof. Skills used by doctors during diagnosis or police officers understanding a crime scene.
Curious	
Seeking out opportunities to indulge a wonderment about objects, events and people, children with curiosity will be fascinated, wanting to go deeper in their understanding, enthusiastically questioning that which is presented. With an appetite for knowledge and an insatiably enquiring mind they probe with healthy scepticism, driven to investigate, experiment and play with ideas.	Curious adults are not content to take things at face value, wanting to know more, to really understand how a thing operates. It is curious adults that will invent new solutions to future problems and succeed in academic study; medical researchers, designers of new technologies, innovative architects and anyone seeking refreshingly new solutions will require a curious nature.
Approaches to learning	
Playful	
Able to approach problems and situations in a playful way, children use past experiences and observations of others to trial ideas within safe environments as they play, able to experiment and rehearse without commitment, experiencing complete immersion in satisfying learning experiences, independently and with others.	As an important source of relaxation and stimulation being playful can enhance creativity and fuel imagination as well as having positive effects on emotional well-being. Playing around with ideas in unstructured, creative ways enhances problem-solving abilities, allowing new ideas to emerge. Unafraid of getting something wrong, variations can be trialled and experimented without commitment when the focus of experience is play, not accomplishing preconceived goals.
Sociable	
With the ability to interact and engage in active learning with others, sociable children balance a level of diplomacy, self-promotion, assertion and self-regulation, allowing them to benefit from collaborative and cooperative learning within group dynamics. Utilising emerging acquisition of language and the social nature of learning they communicate and share ideas with others for feedback, promoting new ideas and taking on other perspectives with empathy and understanding.	Being able to interact and engage well with individuals, exchanging ideas and communicating through multiple means leads to the friendships and mutually beneficial relationships essential to adult life. The ability to convey ideas or points of view whilst listening and taking on board that of others are invaluable skills necessary to effective working with others, benefiting from collective knowledge and skills. Adult life invariably involve interacting with people, working within teams and communicating ideas, understanding how to interact with others is key to good personal and career relations.

Independence	
When understanding has been the result of their own discoveries the learning is significantly more powerful and able to drive the next discovery with an autonomous self-motivation. Through this ease within their own abilities and sense of mind independent learners become aware of the power of their own thoughts, ideas and opinions and will not have a reliance on following others within a group, instead taking responsibility for their own endeavours.	To achieve success, there are times that we need to be self-reliant. Whether it is finishing an assignment, a project at work or one within the home, adults need to draw on personal qualities to know the direction to take. Fuelled by previous feelings of satisfaction from having completed a personal endeavour, and with the qualities to determine their own progression and access what they need, the motivation and capabilities to succeed are secured within themselves.
Practical	
Through many practical experiences where they have played with concepts such as trial and improvement and cause and effect practical learners will have ideas on how to approach a problem. They can mentally plan and reactively adjust their thinking as they encounter unforeseen difficulties, unafraid to change direction, appreciating successes, even when the result is different to the original objective.	When contemplating how to approach a situation, previously gathered information is invaluable. The experiences of a practical adult will supply a real-world dimension to this. When looking at a ton of soil that needs moving, they will know the effort, time and resources required and realise how dark clouds overhead may need to adapt the approach. When considering catering a party of 20 they will have some idea of how and where to start, even if informed the night before that a vegan is amongst the guest list. Through previous hands-on experiences the practical adult will be well equipped to proceed with any new endeavour.
Adaptable	
Having experienced possibilities arising from being open minded to a situation and the successes that come from open-ended, evolving approaches, adaptable children are not overly concerned with rigid precision where specific end products are not the main goal. Instead they can remain flexible in their approach, reacting to circumstances and resources, evolving their ideas as needed.	Adaptable adults are flexible as things change, open to new people, ideas and concepts, they can work independently or as part of a team, able to carry out multiple tasks, projects or assignments, setting priorities and adapting to changing conditions as they arise. Adults who are experienced in adapting their thinking and embracing an evolving approach can take developments in their stride and arrive at an endpoint that has benefited from the diversities of the journey.
Reflective	
Following an experience, reflective children will consider what has happened and consider alternative approaches when repeating the experience without losing confidence or even being aware that this process is taking place. Able to hold a thought, an idea or an unsolved challenge in their head they can ponder a problem then come back to it to trial a different approach.	Reflective adults can naturally and instinctively look back and assess prior actions and thoughts, using them to inform personal learning and self-development. By allowing this process to inform future understanding they gain insights from past endeavours that can be used to inform and improve current and future actions.
Ability to…	
Think simultaneously	
Intuitively gaining and processing information from multiple sources, not limiting experiences to what their eyes are telling them, children are able to simultaneously process information from a variety of sources, using their **peripherals** while focusing on specific detail as required.	When dealing with many issues in adult life we need to process information from a variety of sources to fully understand the situation. Only by combining what we see, hear, and feel together with what our previous experiences intuitively adds can we fully assess the issues involved.
Think creatively	
Able to look at things in fresh and unique ways, creative thinkers embrace new ideas knowing how to ask questions, have ideas and seek their own answers. They can react in innovative ways even when limited information is given or an unexpected situation arises.	Within adult life, personal and work events often necessitate the need to think creatively. The ability to 'think outside the box' in new and refreshing ways, when combined with qualities of curiosity and imagination allows new opportunities to become possible in a constantly changing world. Not put off by setbacks or changing circumstances, creative thinkers find innovative ways around potential obstacles, producing creative solutions.
Think Logically	
Able to find the familiar within unknown situations logical thinkers can see patterns and notice commonalities with previous experiences, constructing links within their own understanding. Given a new problem or an unfamiliar set of circumstances they can draw on methods of sequencing, grouping and categorisation within what they already know to direct them towards a common ground.	Coming into unknown situations, adults with the ability to think logically can rationalise information presented, noticing or extracting understanding and forming logical conclusions based on previous experiences or trusted sequential steps. They can consider the realities of a situation as well as being able to explain observed events through concepts such as probability and chance. Looking at any number of potential solutions to a problem they can test the merit of each, using any negative results to inform and arrive at the preferred course of action.
Think widely	
Unafraid of mistakes children able to think widely are happy to embrace open-ended activities and resources, evaluating and considering the potential of all the opportunities on offer. With an investigative nature they are keen to explore without needing to be told what to do or made uncomfortable when there is a lack of adult direction. They are comfortable to try new directions and think laterally rather than jump to conclusions or preconceived end results.	The ability to think widely is utilised in adult life whenever we need to consider several different variables or employ several different techniques. By not limiting our approach or our actions many possibilities become available to us and biased views can be avoided.

Appendix E – Photographs taken during observations within the preschool and reception settings.

Photographs taken within the front room of the preschool –








Photographs taken within the back room of the preschool -






Photographs taken in the outdoor space of the preschool –








Photographs taken within the school classroom –












Photographs taken in the outdoor space of the school –












10th July, 2017

Dear Practitioner,

School readiness is a familiar term to anyone working with children in their early years, or indeed anyone picking up a paper or listening to the news. However, with no agreed definition of what this means, it can be misinterpreted. I am in the process of conducting a PhD research project that aims to shine light on not just what children need to be 'school ready' but the skills and attributes they need to become successful lifetime learners, a project I believe is of fundamental importance to us all and I would like to invite you to become involved.

With many years' experience in early years and now as an Early Childhood Consultant and Author, the opportunities we offer to young children have always been of great importance to me. My recent book looks at school readiness, identifying 16 features that, when nurtured throughout children's development from birth, facilitate their lifelong learning. I am now interested in observing the extent these 16 features are present in successful adults and how we nurture and support them in young children during preschool and Reception year.

The project is entitled 'Challenging school readiness: How far and in what ways does the Reception Year experience nurture life skills and attributes intrinsic to future success' and will seek to answer the following questions.

- What skills and attributes are important to lifelong success?
- To what extent and in what ways are these skills and attributes nurtured as children transition through the Reception Year?
- How does this inform and direct preparation of children, challenging current concepts of 'school readiness'?

By understanding the extent that qualities such as resilience, confidence, self-motivation and inquisitiveness are present in children during their early years, I will be able to follow them through their Reception Year at school to see how the development of these skills continue and the impact this has on their formal learning. I have been looking for a setting that offers children the opportunity to embrace these natural methods of learning, enabling them to understand complex ideas in ways they are developmentally ready for and capable of. XXXX fits this brief perfectly and I would like to invite you as a member of staff on this project.

I would like to conduct case studies on 8 children due to start school in September 2018 as they complete their last year of preschool with you and as they transition through their Reception Year. Your role would be in helping me to understand these children while they are with you through access to their learning journals and observations and discussions with the children (subject to parental and child consent) and through informal discussions with you as I observe the teaching styles you utilise, giving you the opportunity to share with me how these children's confidence is growing and developing within the 16 features of lifelong learning.

The informal conversations and observations with the children would happen during their normal day at preschool. During these discussions and unobtrusive, 'fly on the wall' observations, I would also ask that you, in your usual capacity as key worker, ensure that the children's well-being is monitored and safeguarded. The intention of these observations is so that I can capture natural demonstrations of their learning styles and practices and so that their voice is reflected in the study. It will not distract from or interfere with their play or affect the planned activities you have for them in any way. All of this will be recorded using a combination of handwritten notes and digital recordings (please see the 'Questions' below).

To aid you in your decision I have answered as many potential questions as I can below but if you have any further questions, please do not hesitate to get in contact. I do hope you would like to be included in this exciting study, you have plenty of time to consider whether you would like to be involved or to seek any further clarification as this process will not begin formally until September, however given the summer holiday I do ask that Consent Forms are returned to XXXX before 10th July 2017.Kindest regards,

Kathryn Peckham

Kathryn.peckham@mail.bcu.ac.uk

Questions

What exactly am I agreeing to?

1. Access to your planning and learning journals in respect of the case study children
2. Access to observe sessions involving the case study children (subject to parental and child consent)
3. Opportunity to speak with the case study children regarding their learning (subject to parental and child consent)
4. Informal discussions during the time of the case study – September 2017 – July 2018
5. Your support in safeguarding the well-being of the children during the time I am with them.

What happens if I change my mind?

Once you have agreed to become involved with the study your participation becomes very important so I would ask that you carefully consider your involvement and ask as many questions as you need before agreeing. However sometimes circumstances change and if you decide to drop out during the study, any data gathered with you up to this point will be removed. Whether you participate or not, this will not adversely affect children's access to services, education or care in any way.

What are the risks of participating?

The study will invite you to share your views on the development of children you care for. This may call into question your own beliefs, values, views or perspectives on education from a practical, emotional or psychological perspective. The discussions will be informal and relaxed and can be stopped at any time. No question will be presented with the intention of making you uncomfortable, however if this is the case discussions will be amended as required.

What about confidentiality and data protection?

Both you and the children involved in the project will be assigned a code for the purpose of all recording so that names are not used. In accordance with the Data Protection Act 1998, all data gathered (observations, recording of discussions) and the following analysis will be kept on a password protected memory stick and a password protected home computer. Any handwritten notes will be kept in a locked box in a secure home office. In accordance with university policy, all gathered data will be kept for a minimum of five years. I also have a personal registration with the Information Commissioner's Office to safeguard the holding of client's data. Any information gathered during the project will be accessed by myself and supervised by project supervisors whose details are supplied below.

What are my rights within this study?

As a participant within the study you have the right to informed consent. This means that before agreeing to become involved it is important that you understand everything you are agreeing to. To this end, if feel you require any further information at any stage, please ask. You have the right to withdraw from the study at any time without prejudice, at which point data collected with your involvement will be removed from the project. You also have the right to anonymity and data protection (please see above).

Who is funding this study?

There are no external funders involved with this independent study.

What if I have questions or concerns?

Please contact me in the first instance, either at preschool or by email on Kathryn.peckham@mail.bcu.ac.uk. Should you ever have questions or concerns that I am unable to resolve, you can contact the studies supervisors at Birmingham City University and the Centre for Research in Early Childhood. Details of named contacts are provided below.

Dr Eleni Kanira	Dr Chris Pascal	Dr Tony Bertram
Senior Lecturer in Early Years	Centre for Research in Early Childhood	Centre for Research in Early Childhood
Health, Education and Life Sciences	St Thomas Children's Centre	St Thomas Children's Centre
Birmingham City University	Bell Barn Road, Attwood Green	Bell Barn Road, Attwood Green
University House	Birmingham	Birmingham
15 Bartholomew Row	West Midlands	West Midlands
Birmingham	B15 2AF	B15 2AF
B5 5JU		
0121 331 7756	0121 464 0020	0121 464 0020

What if I have a complaint?

If neither I nor the named supervisors above have been able to resolve your concern please contact the Insurance Lead at BCU directly, Dr Barbara Howard Hunt.

How do I give my consent?

Please complete the consent form attached and return to XXXX.

10th July, 2017

Version 2

Dear Parent,

School readiness is a familiar term to many parents, or indeed anyone picking up a paper or listening to the news. However, with no agreed definition of what this means, it is often misinterpreted. I am in the process of conducting a PhD research project that aims to shine light on this concept and seek clarification of the skills and attributes children need to become successful learners, a project I believe is of fundamental importance to us all and I would like to invite you and your child to become involved.

I am an Early Childhood Consultant and Author. Having recently published a book that considers how to nurture the development of children from birth in ways that facilitate lifelong learning I am now interested in observing how 16 identified features are represented in the characteristics of highly successful adults and the extent to which they are nurtured and supported in our young children during preschool and Reception year.

I have been looking for a setting that embraces children's natural methods of learning, enabling them to understand complex ideas in ways they are developmentally ready for and capable of. XXXX fits this brief perfectly and as your child is now entering their final year of preschool with them, I would like to invite you on to this project. Your participation is completely optional, the purpose of this letter is to give you all the background information you need to decide whether you would like to become involved.

The project is entitled 'Challenging school readiness: How far and in what ways does the Reception Year experience nurture life skills and attributes intrinsic to future success' and will seek to answer the following questions.

- What skills and attributes are important to lifelong success?
- To what extent and in what ways are these skills and attributes nurtured as children transition through the Reception Year?
- How does this inform and direct preparation of children, challenging current concepts of 'school readiness'?

It will do this by initially speaking with successful people to understand the skills and attributes that facilitated their success; things like resilience, confidence, self-motivation and inquisitiveness – this is Phase One of the project. I would then like to conduct a case study on a number of children during their final year of preschool to find out how these qualities are being supported and nurtured during their early years, and then follow them through their Reception Year at school to see how the development of these skills continue and the impact this has on their formal learning.

With the assistance of XXXX and her team at XXXX I would like to include 8 children due to start school in September 2018 and their families in the study, selected to include boys and girls and those with summer and winter birthdays.

The study will initially involve an informal discussion with you and your family at a time and place that suits you – I live local so can be very flexible. As your child's first and most important educators, this discussion gives you the opportunity to share with me how your child's confidence is growing and developing within the 16 features of lifelong learning. I would also like to have informal conversations with your child about their play so that their voice is also captured in the study. During these discussions, your child will be asked if they are happy to participate ensuring their approval and well-being is sought and monitored throughout the process with the help of their key workers.

I would then spend time regularly observing your child during their normal sessions at preschool; however these 'fly on the wall' observations would be very unobtrusive and would not distract from or interfere with their play or affect the planned activities for your child in any way. The intention of these observations is so that I can capture

natural demonstrations of your child's learning styles and practices. This would then be followed up with a second discussion with you in the months before they move to school to understand how this process is going. The observations would then continue during your child's first year at school. All of which will be recorded using a combination of handwritten notes, digital recordings and photographs securely stored (please see the 'Questions' below).

I do appreciate this is a long term commitment as the project will span two years, so to aid you in your decision I have answered as many potential questions as I can below but if you have any further questions, please don't hesitate to get in contact. You have plenty of time to consider whether you would like to be involved or to seek any further clarification as I will make the selection in September. I do hope you would like to be included in this exciting study. If so, please complete the Consent Form attached and return to XXXX.

Kindest regards,

Kathryn Peckham

Kathryn.peckham@mail.bcu.ac.uk

Questions

What exactly am I agreeing to?

1. An informal discussion (approximately one hour long) as your child is beginning their final year of preschool.
2. An informal discussion (approximately one hour long) as your child is about to start school.
3. Allowing me to observe your child during their normal sessions during their final year of preschool and their first year of school.
4. Allowing me to have discussions with your child regarding their play.

What happens if I change my mind?

Once you have agreed to become involved with the study your participation becomes very important so I would ask that you carefully consider your involvement and ask as many questions as you need before agreeing. However sometimes circumstances change and if you decide to drop out during the study, any data gathered up to this point will be removed from the study. Whether you participate or not, this will not adversely affect your child's access to services, education or care in any way.

What are the risks of participating?

This study will invite you to share your views on the development of your child. This may call into question your own beliefs, values, views or perspectives on education from a practical, emotional or psychological perspective. The discussions will be informal and relaxed and can be stopped at any time. No question will be presented with the intention of making you uncomfortable, however if this is the case discussions will be amended as required.

What about confidentiality and data protection?

Your child would be assigned a code for the purpose of all recording so that their name is not used. In accordance with the Data Protection Act 1998, all data gathered (observations, recording of discussions) and the following analysis will be kept on a password protected memory stick and a password protected home computer. Any handwritten notes will be kept in a locked box in a secure home office. In accordance with university policy, all gathered data will be kept for a minimum of five years. I also have a personal registration with the Information Commissioner's Office to safeguard the holding of client's data. This information will be accessed by myself and supervised by the project supervisors.

What are my rights within this study?

As a participant within the study you have the right to informed consent. To this end, if feel you require any further information at any stage, please ask. You have the right to withdraw from the study at any time without prejudice, at which point collected data will be removed from the project. You also have the right to anonymity and data protection (please see above).

Who is funding this study?

There are no external funders involved with this independent study.

What if I have questions or concerns?

Please contact me in the first instance, either at preschool or by email on Kathryn.peckham@mail.bcu.ac.uk. Should you ever have questions or concerns that I am unable to resolve, this study is being supervised by Birmingham City University and the Centre for Research in Early Childhood. Details of named contacts are provided below.

Dr Eleni Kanira	Dr Chris Pascal	Dr Tony Bertram
Senior Lecturer in Early Years	Centre for Research in Early Childhood	Centre for Research in Early Childhood
Health, Education and Life Sciences	St Thomas Children's Centre	St Thomas Children's Centre
Birmingham City University	Bell Barn Road, Attwood Green	Bell Barn Road, Attwood Green
University House	Birmingham	Birmingham
15 Bartholomew Row	West Midlands	West Midlands
Birmingham	B15 2AF	B15 2AF
B5 5JU		
0121 331 7756	0121 464 0020	0121 464 0020

What if I have a complaint?

If neither I nor the named supervisors above have been able to resolve your concern please contact the Insurance Lead at BCU directly, Dr Barbara Howard Hunt.

How do I give my consent?

Please complete the consent form attached and return to XXXX.

24th April, 2017 Version 1

BIRMINGHAM CITY University

Are children supported through their first encounter of formal schooling in ways that nurture lifelong skills and attributes intrinsic to future success?'

1. What skills and attributes are important to realised success?
2. To what extent are these skills and attributes nurtured as children transition through the Foundation Year?
3. How does this inform and direct preparation of children for optimum learning, coined by the phrase 'school readiness'?

A project to explore the concept of school readiness and seek clarification of the skills and attributes needed to become successful learners.

Dear Teacher/Assistant,

I would like to invite you to become involved within Phase Two of the above project; a case study to explore children's learning styles in their final year of preschool and Reception Year. Your involvement is entirely voluntary, and I would direct you to the Participant Information Sheet for further information. If you do decide to become involved, data gathered during the project will be included in the final analysis.

Please read through the following carefully and ask any questions you may have before indicating your preference. Please then return your form to the school office by 15th July 2017, ready for the project to commence in September 2017.

	Yes	No
I have read and understood the Participant Information Sheet		
I have had opportunity to ask any questions I may have		
I understand that my participation is entirely voluntary		
I agree to informal discussions regarding the learning styles of children in the selected group during their Reception Year - September 2018 - July 2019		
I agree to informal observations that consider how styles of practice impact the experiences of children in the selected group during their Reception Year - September 2018 - July 2019		
I agree with safeguarding the well-being of children when the researcher has informal conversations with them regarding their play during their normal lessons in my usual capacity as a member of staff.		
I agree to the researcher having access to learning journals and planning in respect of children from the selected group.		
I agree to data being recorded;		
Using handwritten notes		
Digital recording devices		
Photography		
I agree to any data gathered being utilised within the final project analysis which will be published as a PhD Thesis.		
I understand that I can stop any part of the process that I become uncomfortable with at any time and withdraw my involvement from the study without prejudice, at which time any gathered information will be removed from the study.		
I understand my rights to anonymity and confidentiality, and I am happy with the measures being taken to ensure these rights are being met (see the Participant Information Sheet for full details)		

Name……..Signature…….

Position…….Date…….

Kathryn Peckham

Kathryn.peckham@mail.bcu.ac.uk

24th April, 2017 Version 1

BIRMINGHAM CITY University

Are children supported through their first encounter of formal schooling in ways that nurture lifelong skills and attributes intrinsic to future success?'

1. What skills and attributes are important to realised success?
2. To what extent are these skills and attributes nurtured as children transition through the Foundation Year?
3. How does this inform and direct preparation of children for optimum learning, coined by the phrase 'school readiness'?

A project to explore the concept of school readiness and seek clarification of the skills and attributes needed to become successful learners.

Dear Parent,

I would like to invite you to become involved within Phase Two of the above project; a case study to explore children's learning styles in their final year of preschool and Reception Year. Your involvement is entirely voluntary, and I would direct you to the Participant Information Sheet for further information. If you do decide to become involved, data gathered during the project will be included in the final analysis.

Please read through the following carefully and ask any questions you may have before indicating your preference. Please then return your form Olney Preschool by 15th July 2017 for selection, ready for a September commencement.

	Yes	No
I have read and understood the Participant Information Sheet.		
I have had opportunity to ask any questions I may have		
I understand that both mine and my child's participation is entirely voluntary		
I agree to be involved in an informal discussion regarding my child's learning styles during the Autumn term of 2017 (Sept/Oct) and Summer 2018 (June/July).		
I agree with the researcher having informal conversations with my child regarding their play during their normal sessions at preschool and during their first year of school.		
I agree to the researcher observing my child during their time at preschool and during their first year of school.		
I agree to data being recorded;		
Using handwritten notes		
Digital recording devices		
Photography		
I agree to any data gathered being utilised within the final project analysis which will be published as a PhD Thesis.		
I understand that I can stop any part of the process that I become uncomfortable with at any time and withdraw mine or my child's involvement from the study without prejudice, at which time any gathered information will be removed from the study.		
I understand my rights to anonymity and confidentiality, and I am happy with the measures being taken to ensure these rights are being met (see the Participant Information Sheet for full details)		

Name……..Name of child……..

Signature……Date……..

Kathryn Peckham

Kathryn.peckham@mail.bcu.ac.uk

24th April, 2017 Version 1

BIRMINGHAM CITY University

Name.....

Are you happy for me to watch you play?

Are you happy for me to talk to you about how you like to play?

Are you happy to tell me about things you like to do at preschool?

Are you happy for me to spend some time playing with you?

Appendix H - Semi-structured interviews used with parents and practitioners

Parent		Child		Date	
Tell me about your child (likes/dislikes, position in family… let it flow)					
COURAGE – Does xxx appear to be comfortable in unfamiliar situations? Are they happy to take a risk or push their limits?					
SELF-MOTIVATION – Do they persist in an activity, keeping going through setbacks, even if they cannot immediately do something? Or are they easily distracted, or put off by a fear of failure?					
CONFIDENCE - Would you consider xxx to be confident and self-assured?					
IMAGINATION – Does xxx have a good imagination? Not just in the stories they may tell, but being inventive, trialling different ways of doing things? Maybe thinking about new ideas and possibilities, rather than sticking to expected outcomes or the way everyone else is doing something?					
INTUITION – Have you found that xxx has a good intuition about things? Knowing what is about to happen or how something will work without needing to be told?					
CURIOSITY - Do they take things on face value or do you find they need to question, investigate and experiment? Do they come into a new environment or meet new people with a curiosity and a desire to understand?					
PLAYFUL - Do they like to play with new ideas, investigating and trialling what a new resource or toy can do before committing to it?					
SOCIABLE – Would you describe them as being very sociable? Do they like to be with others, communicating and learning from them, sharing ideas?					
INDEPENDENCE - How important is their independence? Even when this means they cannot manage to do something?					
PRACTICAL - Would you say they like to take a practical approach? Hands-on, thinking on their feet, utilising whatever is available?					
ADAPTABILITY – How comfortable are they with change and evolving circumstances? Do they remain flexible and easily reactive to new situations?					
REFLECTIVE - Have you noticed them actively learning from past experiences? Has something that they have experienced informed their actions the next time, maybe suggesting a different approach?					
SIMULTANEOUS – Have you noticed them taking in information from multiple sources at the same time, even if they do not realise they are doing it? One eye on what they are doing whilst reacting to something else?					
CREATIVITY - Have you noticed them being creative in their thinking? Suggesting a new way of doing something or an innovative solution to something?					
LOGICAL - Have you noticed them spotting patterns or repetition in the things around them, using this to inform their actions?					
WIDELY - Have you noticed them considering various factors or opportunities before committing to something? Taking advantage of everything on offer before leaping to the obvious?					
ACADEMIC – Do they actively select traditionally academic pursuits (pen on paper, sitting with a book)?					
Any further comments					

Appendix I - Child Focused Tracking Observation Sheet – Internalised influence

Date	Day	Session	No. A	No. C	Child 1	Child 2	Child 3	Child 4

Observations to be completed with a maximum of four children from the specified cohort of eight, selected for their presence and grouping, so that they are inside or outside together given the limitations of free flow within the setting. Focus observations to last five minutes per child before moving to the next, during which time notes will be taken and judgements made. The full cycle (of four children) will take 20 minutes before repeating a further three times – a total of 80 minutes observation (20 minutes per child).

	Key to observations									
Interactions	TC	TC - A	TC - C	TC - GC	A - TC	C - TC	GC - TC	A - GC	GC - A	
Involvement	1 – Floating, unengaged		2 – Settles briefly		3 – Engaged most of time		4 – Some intense eng.		5 – Cont. intense eng.	
Grouping	F - Flitting		WG – Whole grouping		SG – Small grouping		P – Pair		I – Individual	
Initiative	1 – No choice		2 – Limited choice		3 – Some activities excl.		4 - Only in/outdoors ex.		5 – Freedom of choice	

1	**Courage** - Comfortable in complex situations, pushing perceived limits & stretching abilities, not afraid to take risks, keen to seek challenge & test boundaries.
2	**Self-motivation** - Enthusiastic self-esteem, persistence, investment and resilience, embracing challenges with extra effort without need for praise, untroubled by setbacks, distractions or fear of failure.
3	**Confidence** - Competent self-assurance sees them embrace challenge and secure emotional well-being allows requests for assistance when required
4	**Imagination** - Initiates activities/ideas, inquisitive, mentally rehearsing, using ingenuity to explore possibilities, uncovering new potential, untethered to perceived/expected outcomes.
5	**Intuition** - Logical judgements and predictions in new situations informed by prior experience, knows where to start enquiries, predicting and testing potential outcomes.
6	**Curiosity** - Seeking out opportunities to go deeper in their understanding, enthusiastic questions, insatiably enquiring with healthy scepticism, investigating and experimenting with ideas.
7	**Playful** - Playing, experimenting and rehearsing without commitment, complete immersion in satisfying experiences, independently and with others, trialling ideas within safe environments.
8	**Sociable** - Interacting and engaging actively, balancing diplomacy, self-promotion, assertion and self-regulation, with collaboration and cooperation. Communicating, sharing and promoting ideas, taking on others perspectives with empathy and understanding.
9	I**ndependent** - Autonomous & self-motivated, at ease with their own abilities, thoughts, ideas and opinions. Not relying on following others, they take personal responsibility.
10	**Practical** - Demonstrates problem solving, mentally planning and reactively adjusting thinking with unforeseen difficulties, changing direction and appreciating success, even when evolved through process.
11	**Adaptable** - Open minded & comfortable with open-ended, evolving approaches, not concerned with rigid precision & end products. Flexible in approach, reacting to circumstances and resources, evolving ideas as needed.
12	**Reflective** - Considers prior experience and alternative approaches when repeating without losing confidence, can ponder a thought, idea or unsolved challenge, then return to trial a different approach.
13	**Simultaneous** - Intuitively gains & processes information simultaneously from multiple sources, using peripheries & specific detail as required not just that in front of them, utilising information from various sources.
14	**Creative** - Embraces ideas in fresh, unique ways, asking questions, having ideas and seeking their own answers. Reacts in innovative ways even if information is limited or unexpected.
15	**Logical** - Finds familiarity in unknown situations, seeing patterns and commonalities with previous experiences, constructing links with prior understanding, sequencing, grouping and categorising to find common ground.
16	**Wide** - Embraces open-ended activities, resources & new directions, thinking laterally to consider opportunities, unafraid of mistakes. Investigates & explores rather than jumping to conclusions (or obvious end results) comfortable when direction is absent.

Field notes

Date	Day	Session	No. A	No. C	Name	Gender	DOB	No of sessions	Key worker

Rate each feature from -2 to 2 for each of the 4 observations.

Obs.	Courage	Self-mot	Confidence	Imagination	Intuition	Curiosity	Playful	Sociable	Independent	Practical	Adaptable	Reflective	Simultaneous	Creative	Logical	Wide
1																
2																
3																
4																

Time	Child's experiences	Interactions	Involvement	Grouping	Initiative
1					
In Out					
2					
In Out					
3					
In Out					
4					
In Out					

Notes

FOLLEP Rating Scale

-2	Active reluctance to engage, don't volunteer verbally or physically.
-1	Will indicate this feature but reluctant, finding alternatives if poss.
0	Shows indifference, or there has been no opportunity for it.
1	Keen to engage in this feature, indicating a comfort within it but will easily move on to another.
2	A clear feature of choice, will actively seek it out and return, showing clear enjoyment.

Date	Day	Session	No. A	No. C	Name	Gender	DOB	No of sessions	Key worker

Rate each feature from -2 to 2 for each of the 4 observations.

Obs.	Courage	Self-mot	Confidence	Imagination	Intuition	Curiosity	Playful	Sociable	Independent	Practical	Adaptable	Reflective	Simultaneous	Creative	Logical	Wide
1																
2																
3																
4																

Time	Child's experiences	Interactions	Involvement	Grouping	Initiative
1					
In Out					
2					
In Out					
3					
In Out					
4					
In Out					

Notes

FOLLEP Rating Scale

-2	Active reluctance to engage, don't volunteer verbally or physically.
-1	Will indicate this feature but reluctant, finding alternatives if poss.
0	Shows indifference, or there has been no opportunity for it.
1	Keen to engage in this feature, indicating a comfort within it but will easily move on to another.
2	A clear feature of choice, will actively seek it out and return, showing clear enjoyment.

Date	Day	Session	No. A	No. C	Name	Gender	DOB	No of sessions	Key worker

Rate each feature from -2 to 2 for each of the 4 observations.

Obs.	Courage	Self-mot	Confidence	Imagination	Intuition	Curiosity	Playful	Sociable	Independent	Practical	Adaptable	Reflective	Simultaneous	Creative	Logical	Wide
1																
2																
3																
4																

Time	Child's experiences	Interactions	Involvement	Grouping	Initiative
1					
In Out					
2					
In Out					
3					
In Out					
4					
In Out					

Notes

FOLLEP Rating Scale

-2	Active reluctance to engage, don't volunteer verbally or physically.
-1	Will indicate this feature but reluctant, finding alternatives if poss.
0	Shows indifference, or there has been no opportunity for it.
1	Keen to engage in this feature, indicating a comfort within it but will easily move on to another.
2	A clear feature of choice, will actively seek it out and return, showing clear enjoyment.

Date	Day	Session	No. A	No. C	Name	Gender	DOB	No of sessions	Key worker

Rate each feature from -2 to 2 for each of the 4 observations.

Obs.	Courage	Self-mot	Confidence	Imagination	Intuition	Curiosity	Playful	Sociable	Independent	Practical	Adaptable	Reflective	Simultaneous	Creative	Logical	Wide
1																
2																
3																
4																

Time	Child's experiences	Interactions	Involvement	Grouping	Initiative
1					
In Out					
2					
In Out					
3					
In Out					
4					
In Out					

Notes

FOLLEP Rating Scale

-2	Active reluctance to engage, don't volunteer verbally or physically.
-1	Will indicate this feature but reluctant, finding alternatives if poss.
0	Shows indifference, or there has been no opportunity for it.
1	Keen to engage in this feature, indicating a comfort within it but will easily move on to another.
2	A clear feature of choice, will actively seek it out and return, showing clear enjoyment.

Appendix J - Physical Environment Observation Performa –Externalised influence

Date	Day	Session	No. A	No. C	Child 1	Child 2	Child 3	Child 4
		am pm						

Observations to be completed with a maximum of four children from the specified cohort of eight, selected for their presence and grouping, so that they are inside or outside together given the limitations of free flow within the setting. Focus observations to last five minutes per child before moving to the next, after which time, 3 minutes will be given to finish notes and code. The full cycle (of four children) will take 32 minutes before repeating a further three times – a total of 128 minutes observation (20 minutes of observations per child). In this way the two and a bit hours will cover the full session of structured and free time.

Key to observations					
Teaching styles	T1 – Adult led	T2 – Adult participation	T3 – Group activity	T4 – Adult support	T5 – Child autonomy
Distractions	D1. Att. forcibly broken	D2. Encouraged elsewhere	D3. Offered alternatives	D4. Distracted	D5. Uninterrupted
Location	L1. Enforced	L2. Encouraged	L3. Alternatives offered	L4. Most options available	L5. Free choice
Encouragement	E1. Enforced	E2. Directed	E3. Encouraged	E4. Adult preference	E5. No adult influence

1	**Courage** - Comfortable in complex situations, pushing perceived limits & stretching abilities, not afraid to take risks, keen to seek challenge & test boundaries.
2	**Self-motivation** - Enthusiastic self-esteem, persistence, investment and resilience, embracing challenges with extra effort without need for praise, untroubled by setbacks, distractions or fear of failure.
3	**Confidence** - Competent self-assurance sees them embrace challenge and secure emotional well-being allows requests for assistance when required
4	**Imagination** - Initiates activities/ideas, inquisitive, mentally rehearsing, using ingenuity to explore possibilities, uncovering new potential, untethered to perceived/expected outcomes.
5	**Intuition** - Logical judgements and predictions in new situations informed by prior experience, knows where to start enquiries, predicting and testing potential outcomes.
6	**Curiosity** - Seeking out opportunities to go deeper in their understanding, enthusiastic questions, insatiably enquiring with healthy scepticism, investigating and experimenting with ideas.
7	**Playful** - Playing, experimenting and rehearsing without commitment, complete immersion in satisfying experiences, independently and with others, trialling ideas within safe environments.
8	**Sociable** - Interacting and engaging actively, balancing diplomacy, self-promotion, assertion and self-regulation, with collaboration and cooperation. Communicating, sharing and promoting ideas, taking on others perspectives with empathy and understanding.
9	**Independent** - Autonomous & self-motivated, at ease with their own abilities, thoughts, ideas and opinions. Not relying on following others, they take personal responsibility.
10	**Practical** - Demonstrates problem solving, mentally planning and reactively adjusting thinking with unforeseen difficulties, changing direction and appreciating success, even when evolved through process.
11	**Adaptable** - Open minded & comfortable with open-ended, evolving approaches, not concerned with rigid precision & end products. Flexible in approach, reacting to circumstances and resources, evolving ideas as needed.
12	**Reflective** - Considers prior experience and alternative approaches when repeating without losing confidence, can ponder a thought, idea or unsolved challenge, then return to trial a different approach.
13	**Simultaneous** - Intuitively gains & processes information simultaneously from multiple sources, using peripheries & specific detail as required not just that in front of them, utilising information from various sources.
14	**Creative** - Embraces ideas in fresh, unique ways, asking questions, having ideas and seeking their own answers. Reacts in innovative ways even if information is limited or unexpected.
15	**Logical** - Finds familiarity in unknown situations, seeing patterns and commonalities with previous experiences, constructing links with prior understanding, sequencing, grouping and categorising to find common ground.
16	**Wide** - Embraces open-ended activities, resources & new directions, thinking laterally to consider opportunities, unafraid of mistakes. Investigates & explores rather than jumping to conclusions (or obvious end results) comfortable when direction is absent.

Field notes

Date	Day	Session	No. A	No. C	Name	Gender	DOB	No of sessions	Key worker

Rate each feature from -2 to 2 for each of the 4 observations.

Obs.	Courage	Self-mot	Confidence	Imagination	Intuition	Curiosity	Playful	Sociable	Independent	Practical	Adaptable	Reflective	Simultaneous	Creative	Logical	Wide
1																
2																
3																
4																

Time	Child's experiences	T. styles	Distractions	Location	Enc'ment
1		T 1 - 5	D 1 - 5	L 1 - 5	E 1 - 5
In Out					
2		T 1 - 5	D 1 - 5	L 1 - 5	E 1 - 5
In Out					
3		T 1 - 5	D 1 - 5	L 1 - 5	E 1 - 5
In Out					
4		T 1 - 5	D 1 - 5	L 1 - 5	E 1 - 5

Notes

FOLLEP Rating Scale	
-2	Active reluctance to engage, do not volunteer verbally or physically.
-1	Will indicate this feature but reluctant, finding alternatives if poss.
0	Shows indifference, or there has been no opportunity for it.
1	Keen to engage in this feature, indicating a comfort within it but will easily move on to another.
2	A clear feature of choice, will actively seek it out and return, showing clear enjoyment.

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In Out					
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In Out					
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In Out					
2		T 1 - 5	D 1 - 5	L 1 - 5	E 1 - 5
In Out					
3		T 1 - 5	D 1 - 5	L 1 - 5	E 1 - 5
In Out					
4		T 1 - 5	D 1 - 5	L 1 - 5	E 1 - 5

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Appendix L – Completed Child Focused Observation Performa – Internalised influence

Date	Day	Session	No. A	No. C	Name	Gender	DOB	No of sessions	Key worker
13/11/18	Tues	pm	2	22	C8	Female	XXXX	XXXX	XXXX

Rate each feature from -2 to 2 for each of the 4 observations.

Obs.	Courage	Self-mot	Confidence	Imagination	Intuition	Curiosity	Playful	Sociable	Independent	Practical	Adaptable	Reflective	Simultaneous	Creative	Logical	Wide
1	2	2	1	1	1	1	0	0	1	0	0	1	1	0	1	0
2	1	0	0	1	1	0	1	1	0	0	0	1	0	0	0	0
3	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0
4	0	1	1	1	1	1	1	0	1	1	1	1	0	0	0	1

Time	Child's experiences	Interactions	Involvement	Grouping	Initiative
1 1.27 In	The children are sitting in a large circle on the carpet having 3D shapes described to them. She is quick to respond to every description indicating she knows what it is. She is called on to name one which she gets right. She is already on 'the golden pot' so is told she will get a sticker which gets her very excited. With every beginning of an explanation she is very quick to react, clearly keen to offer a suggestion which are always correct.	A-GC	4	WG	1
2 1.51 Out	She has bumped her nose and is crying. Sat with a TA she is getting a cuddle, but it is bruising so the TA goes for a compress. She stays sat at the table playing with the few resources that are there, staring into space. Another child comes and engages with her which attracts a little more attention and she happily plays along with a space rocket and characters. The discussions become more animated as the children clearly enjoy the interactions with each other.	TC-C	3	P	3
3 2.15 In	The children are coming back inside from activities outside. She walks sensibly put chatting animatedly to her friends all the time. They have been asked to keep their coats on as it will soon be playtime, but she starts taking hers off before realising that she shouldn't be. Struggling back into her coat she listens with interest to another child telling the teacher a long story about what he did outside.	TC-GC	2	I	2
4 2.39 Out	She is playing with a group of others, moving hand fulls of leaves from where they have gathered around equipment to a pile on the playground. There is lots of social interactions taking place as they discuss what they are doing. She notices several other children are putting arm fulls go leaves in the bin. She comes up to tell me what they are doing, and I ask her "Where will all your rubbish go if your bin is full of leaves?" To which she replies, "Yes – what will happen to the worlds… they don't seem to care about that!".	TC	3	I	4

Notes

C8 has been very keen to get involved in the lesson again today – eager to answer every question she is often reminded by the teacher to give the other children a chance to respond! A child had been silly during the lunch time play in a way that had affected her so she reports it to the teacher during registration time. The teacher responds to say that it is very unlike her to complaine about anything. She has been a little distracted by things going on around her today but this doesn't get in the way of her lessons which she makes every effort in, clearly very eager to participate and do well in.

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Appendix M - Focused observation sheets

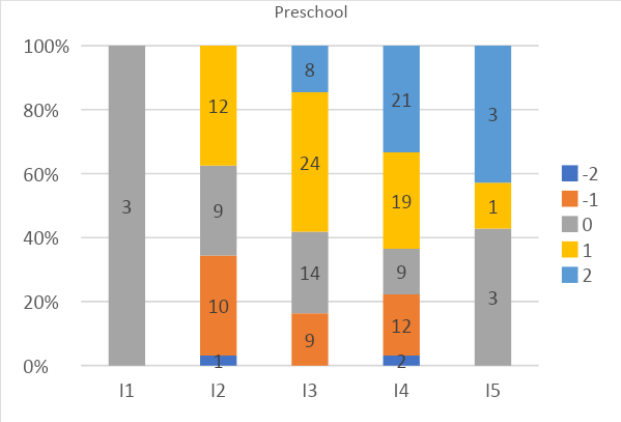
Comparison of same child (C10) in preschool and reception - 22/01/18 and 27/03/2019

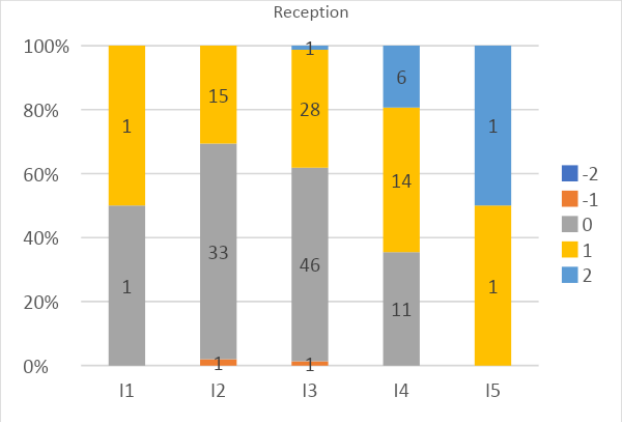
Brave - Courage & Confidence	
Preschool	Reception
After a vigorous race up and down the garden he tells me "That was hard!" He really wants to join in with the railway track play, finding it difficult he tries a variety of techniques to the other children "Can I have this train?" ("No – I got it out") Sits, arms folded and pouting… He finds another one "Can I have this one?" ("Yeah - that's a boy isn't it?") Through this exchange he had the courage and confidence to keep trying, having a go at being included. This required persistence but had a successful conclusion.	When the teacher asks for the Star Helpers C10 immediately stands and keenly takes the register. On his return the teacher poses a range of questions, by the fourth problem all the children are keenly volunteering answers but C10 is just listening. The teacher begins a new activity with the children sitting in a circle, there are different coloured puppies in a tray in the middle with two circle carpets. The children are asked to notice differences, C10 looks on but does not volunteer answers. Following the physical demonstration, the children are asked to discuss a problem then feedback, nearly all the children have their hand up but C10 does not.
Doing things for yourself - Self-motivation & Independence	
Preschool	Reception
He wants to go on a space-hopper outside, it is a struggle but he preserves and manages independently without asking for help. Repeatedly going up and down the garden, he announces at the end "That was hard work!" His play spreads across the entire environment, freely accessing a range of resources. At snack he independently washes his hands, retrieves a plate and cup then accesses all the offerings, spreading his own butter, unwrapping a banana, pouring a drink. Wanting to join in with a game he persistently tries to get involved – it takes a while but eventually he manages it. He is struggling with the straps on a baby bouncer, but he persists.	In the taught session he listens to the questions from the teacher but does not respond with any answers. Outside during Challenge Time, when playing with a larger group of children he chooses to break off with a smaller group of six boys. When there is some pushing and shoving for ownership of a resource he does not get involved and quickly returns to the original group. Play continues based on the family role play with negotiations regarding what should happen next. He soon gets bored with this and runs off with the smaller group again, preferring the physicality over the prolonged debates. Re-joining the larger group, he resumes his role as one of the dogs, running upright and on all fours. Not obliged to be with either group he alternates between them as his interests evolve demonstrating his independence. At the end of the session he takes the initiative to put a pushchair away. He is then supposed to be changing out of his wellies but wanders around aimlessly for a time, as a result he joins the back of the line to go in and can talk unnoticed.
Having good ideas - Imagination & Intuition	
Preschool	Reception
Playing hopscotch, he uses an opposite foot placement style, reaching across the midline. Engaging in play with others he becomes a plane, he uses a rich and varied vocabulary when playing in the house. Coming in wearing ear-defenders he shouts, "Can you hear me?!" He is excited to show me how the phone needs to go in the washing machine… not sure why. I pass him some 'fruit' so he can join in with the play "Thank you for the food – I will make a smoothie." He places a {plastic} banana in his cup, I comment on the flavour of his smoothie and he tells me "No – that's a straw!" Being frustrated with play with the train track he suggests to a friend that they explore the playdough and plastic worms (of different lengths to invite fine manual manipulation and replication) on the table. "Pretend I was the dad" [finding a large worm} "Let's have lots of babies [finding the smaller ones] "We like babies!" "Pretend these were the babies' beds" [forming ridges in the playdough] "They like going in daddy's bed." "Pretend this is the blanket" [covering with playdough] "Is that alright?" He then negotiates play with the friend – as other ideas are given, he reacts and includes them in his play. [Having buried the worms] "Pretend daddy has trapped them" "Let's go into mummies bed…" "And then the big crocodile comes… help, I'm in his tummy!"	As the register is taken, he is preoccupied with his sock but listens for his name and answers in Spanish (some of the others have been responding in other languages)! Once outside his class is joined by the other Reception classes. He listens to instructions and responds to the action songs as expected then listens to the options on offer, moving quickly to the wellie storage when able as these are needed to go on the grass. There are many children doing the same and the area quickly becomes very congested, but he holds his ground and finds a pair and a seat to put them on.
Having fun (with friends?) - Playful & Sociable	
Preschool	Reception
Seeing another child in the playhouse making food from play dough he wants to join in "What are you doing…? What's that…? Can I help…? He gets a chair and starts to join in. Seeing a child with a doll in a pushchair he runs to get one of his own, there are no more pushchairs, so he brings a bouncy chair to join in with the play, coming to tell me all about it.	C10 recognises me as he comes in for the afternoon session and smiles. The children can sit where they want on the carpet and C10 sits next to a friend in the front row. When a problem is put on the board the teacher asks the class to discuss the answer with a neighbour and he engages in focused debate with the friend next to him. For most of the session he has his head in his hands, until the children are asked to discuss a problem between themselves, then

He wonders around independently trying to draw others into play. After a while this works and becomes involved in their play. While playing with the others he is quick to suggest actions. Waiting in line to go outside he does a loud burp that a KW comments on sounding like a 'man-burp'. "I did a man-burp at my mum's work" he tells me. He sings as he plays, trying to get involved in the others' play. Having watched others pushing each other on the bikes he follows suit as the game progresses, then taking his turn on the bike as the 'brothers' get busy.	he becomes more animated and joins in. Outside the children are sent ahead to form a circle and as the first to arrive he joins hands with those around him. Running over to the grass he helps instigate a chasing game with several others, then assumes a role of prisoner in a wooden cage. When another child comes close, he negotiates an exchange of roles. As the play becomes more involved more children join the group and C10 splinters off with some others. Re-joining the group, he 'becomes an animal' running on hands and feet. A conversation with nonsense words has started and he is finding this very funny, especially as he makes those around him laugh. C10 has become a dog in the game and is repeatedly petted by the girls. He responds to this well, taking their head strokes happily, then crawling around the grass again.
Doing new things - Adaptability & Curiosity	
Preschool	Reception
As he sees things around the environment his play moves and evolves as he checks things out, adapting as he sees/discovers new opportunities.	On his return from taking the register to the office, he retakes his place on the carpet and listens to the teacher demonstrate repeating patterns. Although he does not volunteer answers or put his hand up until the third go, he does pay attention and mouths the right answers. As the demonstration becomes more complicated, he becomes more interested in his sock even though children all around him are becoming more involved. Another child comes over with a one-wheeled resource that he runs around the space with, C10 shows an interest and follows him, running quickly around the space even though he is not given a go. They hear the other group announce they are 'going on holiday' and they quickly run to join them.
Having a go - Practical	
Preschool	Reception
Having managed the straps on a baby bouncer, he tips it upside down to see if the doll will fall out. He then flings it on his back, using the strap as a rucksack.	The teacher has given a physical demonstration of sorting on the carpet, C10 did not seem as keen as the other children to become involved in this. He does count on his fingers as children asked to demonstrate are given a countdown. As the children line up to go outside C10 responds to cues quickly. Very physically active in his play he runs at speed around the available space, dropping to his knees, finding inside structures and engaging in vocal and physical battles as the play continues within different sized groups. Various role plays are going on, some of which are very physical, but he takes an active role in all, rolling down hills, throwing himself on the ground, initiating alternative directions. He finds a pushchair and tries to re-join (fix) the seat, he cannot but pushes it for a while anyway. He is particularly interested with the gradients of a mound (3 foot high) that he repeatedly climbs up and down.

Agency – Involvement and Distractions

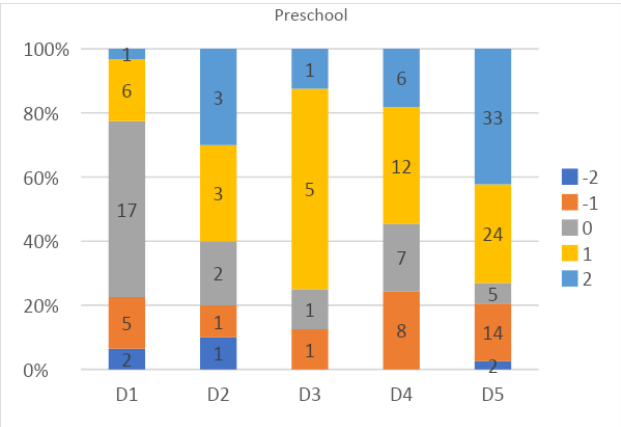
Involvement – Do children show evidence of being involved in their activity? Are they permitted the time and opportunity to pursue their choices free from distraction?

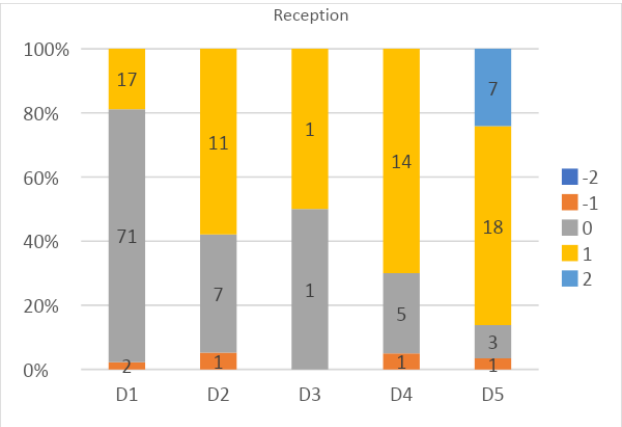




When talking of the need for sociable engagements, the importance of nurturing and supportive environments and of benefiting from the support of loving foundations is clear. By experiencing this support, children learn to rely on others, and to experience the reliability they themselves can bring. It could be suggested that when sociable opportunities are matched to children's developing needs, this would be demonstrated through prolonged periods of content involvement as a general sense of well-being develops. Certainly, within the school setting, high occurrences of indifference were seen when the child settled only briefly (I2), but equally, being engaged most of the time could reflect an indifference to opportunities for social connections around them. There were more incidents of active reluctance within the preschool setting where children were permitted more freedoms, this was seen over a range of depths of involvement.

Distractions - Are children permitted the time and opportunity to pursue their choices free from distraction?



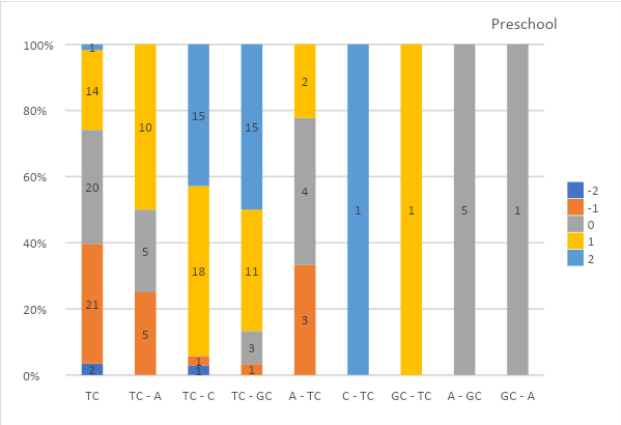


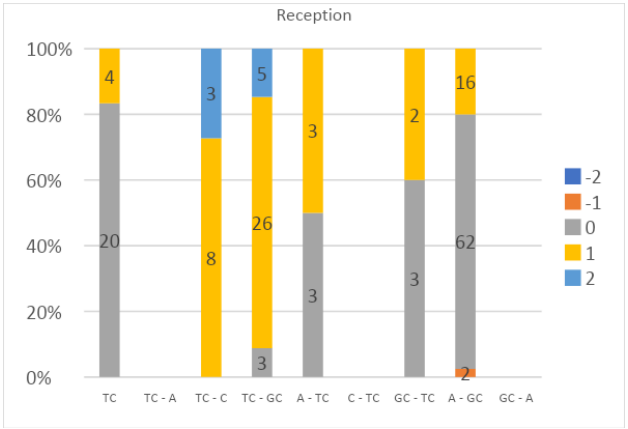
To develop social dispositions requires the personal skills to engage with others, to develop and sustain healthy relationships and to deal with difficult issues without causing offence, difficult concepts to master when you are learning how to make relationships. It could be suggested that the degree of emotional intelligence and maturity that this requires comes through experiences, of remaining responsive and sympathetic while establishing who you want to mix with along with identifying who your real friends are. This takes practice, and on occasion, guidance and support. There were more observations in preschool to demonstrate active reluctance to engage, moving away from a social encounter, especially where the child is less distracted elsewhere. In the school setting a significantly higher number of indifferent observations were recorded, by the nature of the opportunities offered to children within this setting, these usually occurred while the child's attention was being forcibly broken,

limiting opportunities to develop their social skills. When undistracted (D4) or uninterrupted (D5) significantly higher sociability was recorded, more so than that recorded in preschool, perhaps by virtue of the child's advanced age.

Intentionality – Discussions and Encouragement

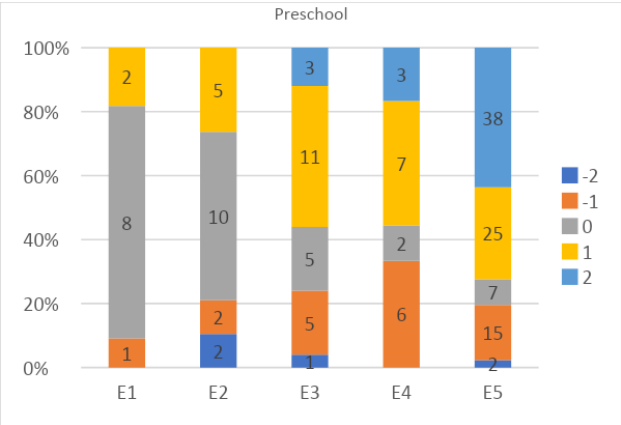
Discussions –Are discussions dominated by the adult or the child voice?

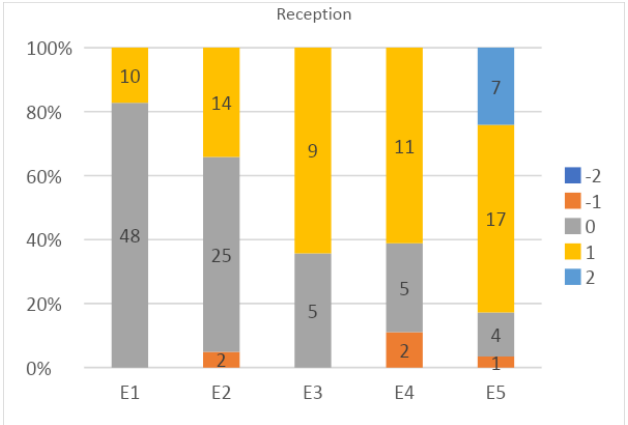




The development of a social disposition requires natural opportunities to socially interact through a wide range of social experiences, through which one's own voice may develop. This would suggest a need for all styles of discussions, and this was seen within the preschool observation where active participation and reluctance to socially engage were seen. Within the school setting the range of discussion style was more limited and predominantly featured an adult addressing a group of children where there was an expected indifference to social exchanges. Discussions led by the observed child demonstrated the most positive social exchanges in both settings.

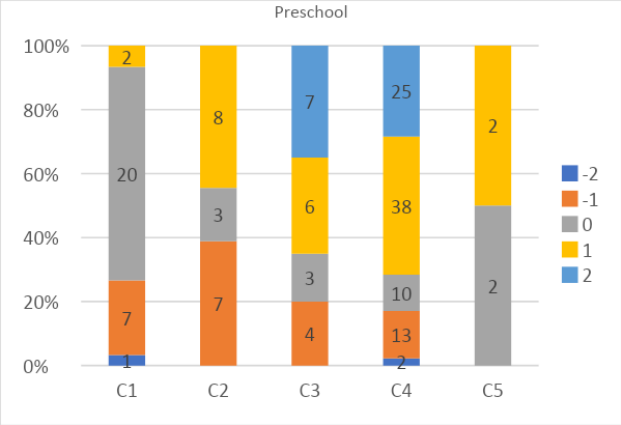
Encouragement - Are actions driven by the intentions of the adult or the child?

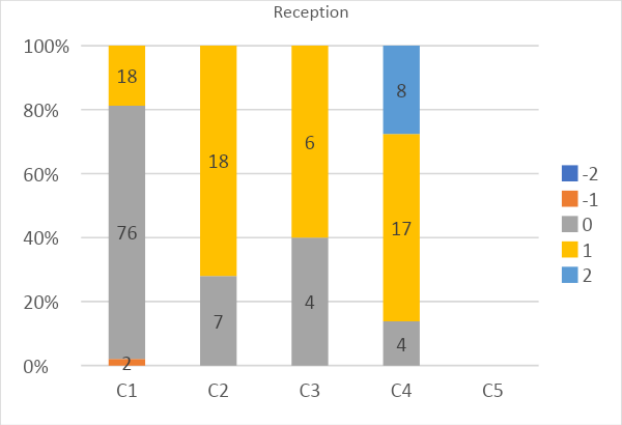




The connections between people facing social skills, emotional intelligence, communication skills and an ability to treat people with respect benefit from experiences of being brought together with a wide range of others. The development of these skills benefit from seeing them modelled, and then trialling them for oneself as relationships are formed with different people. This would suggest that combining opportunities for independence along with time to engage with others as children motivate and encourage each other offer a greater range of experiences to promote social interaction as opportunities, including those that may otherwise be avoided, are explored. Certainly, the range of encouragement styles experienced in the preschool setting allowed for both active social engagement and active reluctance, especially where adult influence was limited (E4 and E5). A high proportion of reception observations documented enforced encouragement which showed an expected indifference to sociability.

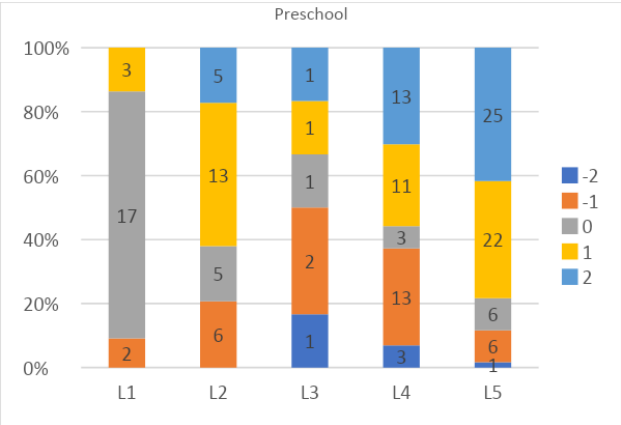
Choice - Are children given choice within the activities they select?

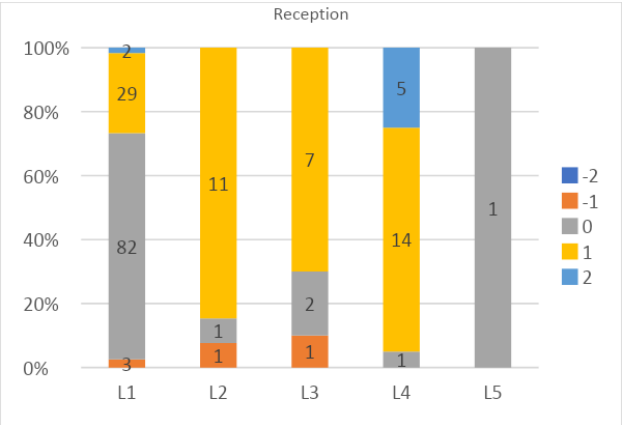




The development of social skills requires a need for experiencing the skills involved within social interactions first-hand, to participate in social engagements with a degree of independence and freedom from adult intervention, where opportunities to practice can be experienced. The alternative, remaining in overly directed or academic environments, could result in social awkwardness. This would suggest that more positive social interactions would be observed where children's freedom of engagement is less limited, where a choice of activity across groups and location is offered, and this was certainly the case in the child study (C4). Very few interactions would be afforded where the child was offered no choice (C1), and the significantly high proportions of these can be seen within the school study. The other finding of note is the variance seen in the preschool study, where children are more likely to remove themselves from social encounters than they do within the school setting, perhaps because they are playing with these new ideas, yet by a year later tend to behave in more conformist ways.

Location - Are children given choice within the environments they occupy?

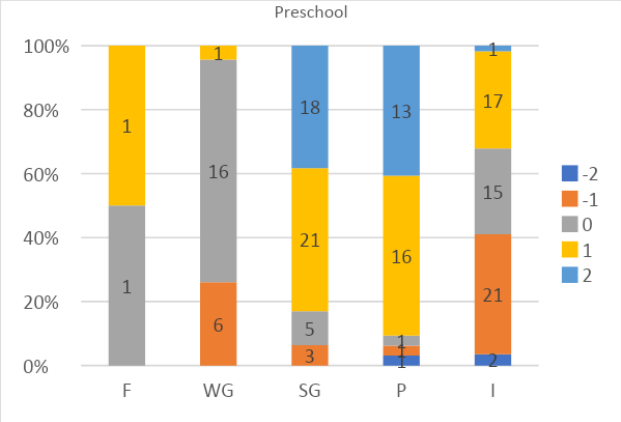


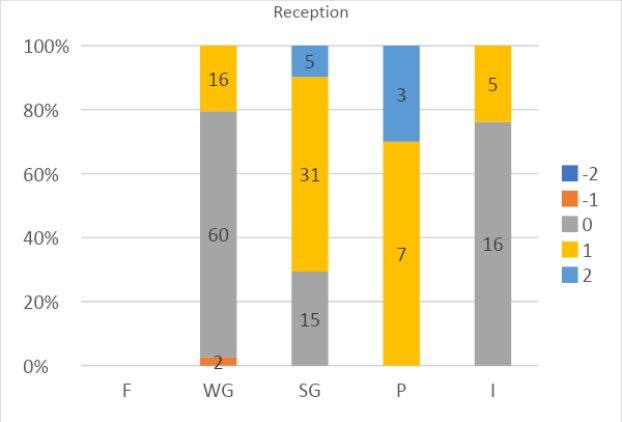


Through experiences of interacting with many people of different ages, backgrounds and personalities, an appreciation and understanding of the perspectives of a wide range of others can be acquired, and a sense of where they belong developed. Arguably, this is more likely to happen when opportunities are offered to bring children together in an environment of free movement so they can find familiarity within friendship groups whilst assuming appropriate behaviours with those they are less familiar with, exploring where different boundaries apply. As children experience these complex concepts for the first time, a range of reactions would be expected as children are drawn towards and back away from a range of social encounters. This high degree of variance was reflected in the preschool observations. The majority of the school-based observations took place within an enforced location that resulted in indifference from the child. Where more choice was offered, positive reactions were noted.

Scaffolding – Grouping and Teaching Styles

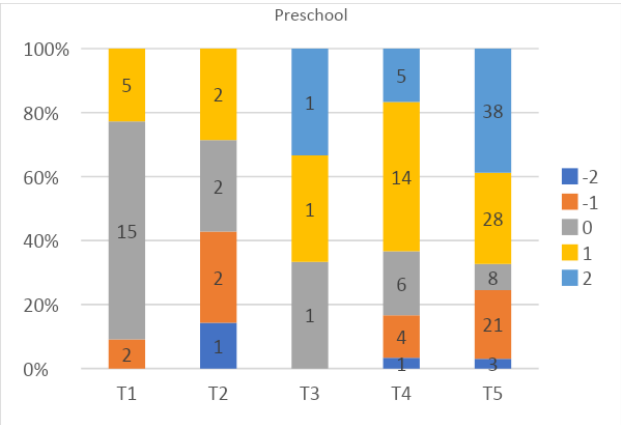
Grouping - Are children engaging independently, or supported by their peers?

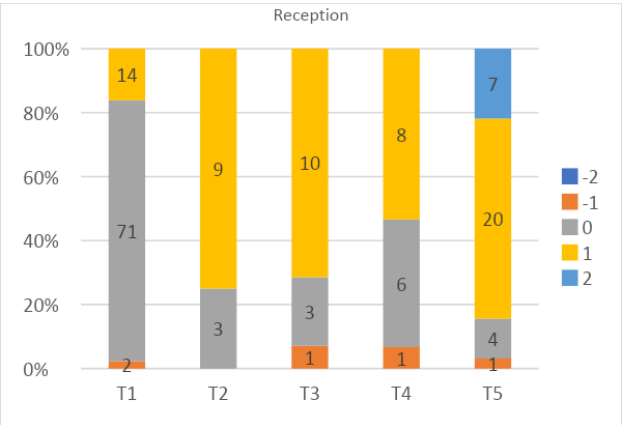




Children need stable, happy, multi-aged experiences to develop social skills through the communication and interaction skills observed, modelled and learnt. Through friendship groups and interactions, companionship can be experienced as one learns to fit in with others, discovering who they want to be with and rely on. Through opportunities to socialise and be part of a group, a sense of belonging develops, easing initial feelings of difference. This would suggest a need for higher exploration of social skills permitted within pair and small grouping, and this was reflected within the study. Observations as a whole group were the most frequent within the school setting, eliciting indifference from the children, although when seen in preschool, active reluctance to perhaps the closeness of social interaction was seen. There were also differences where the child was alone (I), in preschool the full range of responses to social interactions were seen, where indifference was mostly detected in the school environment.

Teaching Styles - Are children engaging independently, or led by the adults around them?



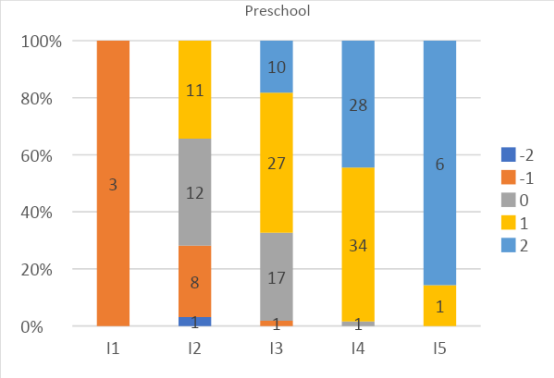


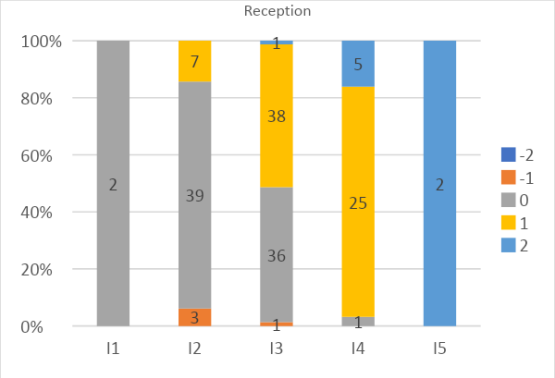
Sociability means relating authentically to others, interacting and engaging effectively, listening and showing interest. To be able to present a point of view with diplomacy, assertion and self-regulation, while understanding people are different, requires empathetic knowledge of other perspectives, backgrounds and beliefs, not judging others solely by one's own experience. It could then be suggested that such interactions require modelling and practice as children develop their ability to engage in friendships, becoming part of a community where everyone feels equally important, valued, cared about and understood. This could be expected where the child experiences adult participation (T2) along with opportunities for autonomy (T5). Within preschool, adult participation saw a great variance within the child's reaction, this is different to what was seen in the school environment where a positive response was the more typical reaction. This was also reflected within the observations that saw child autonomy, great variance within preschool, more uniformly positive within school. Where a teacher led approach was observed this was almost always responded to with indifference and represented most of the school-based observations.

Appendix N2 - The impact of observed practices on children's propensity for confidence

Agency – Involvement and Distractions

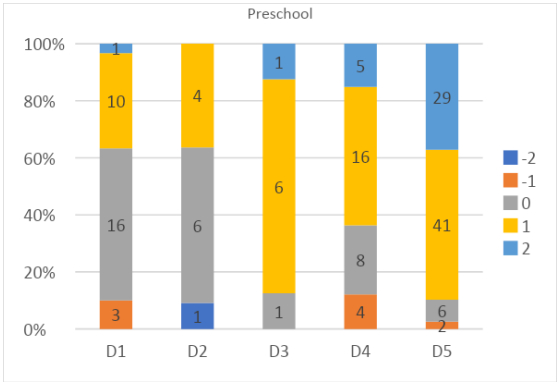
Involvement – Do children show evidence of being involved in their activity? Are they permitted the time and opportunity to pursue their choices free from distraction?

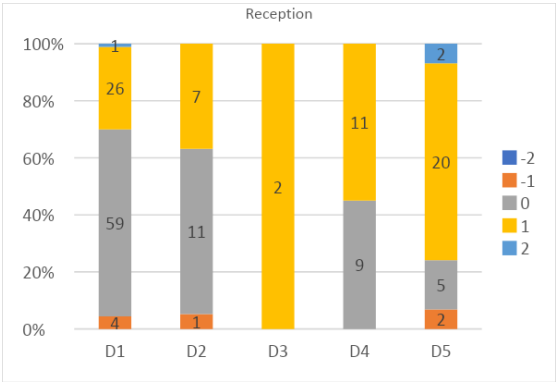




Developing confidence, along with feelings of well-being and a sense of security are experienced as risks and challenges are learnt to not be feared. Reflected in periods of increasingly focused efforts, self-doubt is combated, and setbacks and obstacles are more readily persisted through. Distractions are avoided and next steps are embraced as engagement becomes more intense in the active pursuit of a goal. This would suggest that high propensity for confidence would then coincide with some (I4) or continually (I5) intense engagement. This was clearly reflected in the observations with I4 and I5 recordings almost unanimously attracting positive FOLLEP scores. Indifference and negative scores were seen where choice was limited or not present.

Distractions - Are children permitted the time and opportunity to pursue their choices free from distraction?

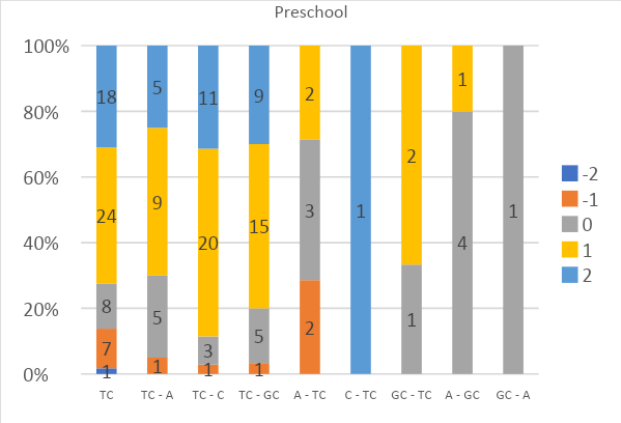


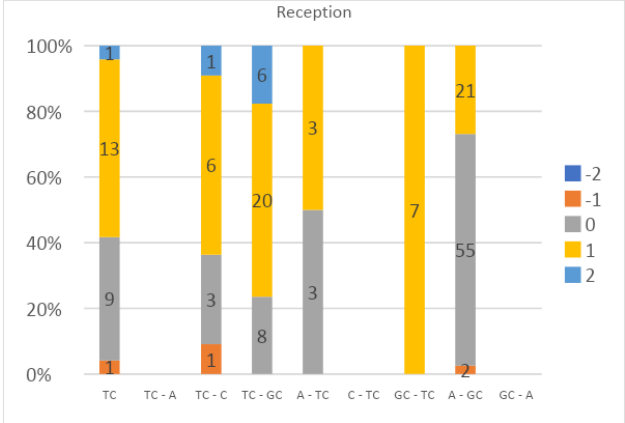


It could be suggested that to be confident within oneself and one's capabilities requires a recognition of ability. Developed both through successes and setbacks, opportunities are needed to experience both. It is through adversities and a permission to fail that strength and resilience develop, inspiring the determination to come back stronger. Whilst fuelling ambition and driving future effort, this also offers an invaluable sense of humility. This would suggest a need to offer children uninterrupted time, free of distractions, to gain a sense of their own abilities and this was reflected in the child study. Where the child's attention was forcibly broken (D1) or where they were encouraged elsewhere (D2), indifference was repeatedly recorded.

Intentionality – Discussions and Encouragement

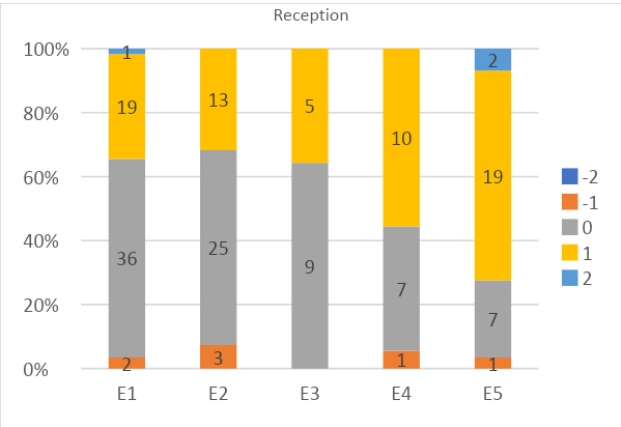
Discussions –Are discussions dominated by the adult or the child voice?

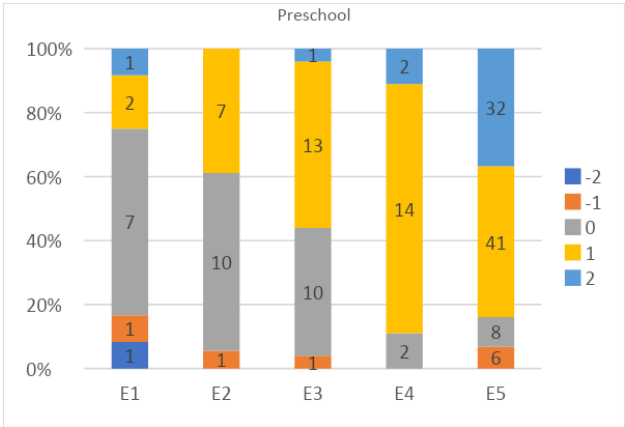




It could be suggested that to develop confidence, opportunities are required to socialise with the knowledge that the support of relaxed others is available if it should be required. With this experience, and as confidence develops, any negative encounters can be handled independently as external validation is no longer required. This developing confidence would then benefit from opportunities to engage in discussions alongside opportunities to engage following the modelling of interactions by supportive adults. Within the child observations, higher occurrences of positive scores were seen where children had opportunity to engage in conversation, with higher incidences of indifference occurring where the adult led the conversation. Some of the highest incidences of highly positive reactions were seen where children had autonomy.

Encouragement - Are actions driven by the intentions of the adult or the child?

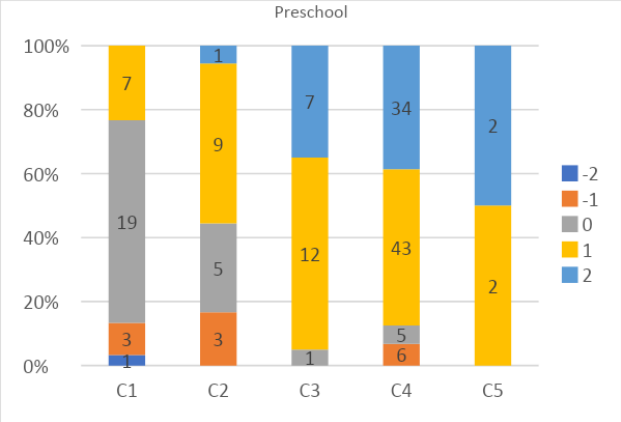


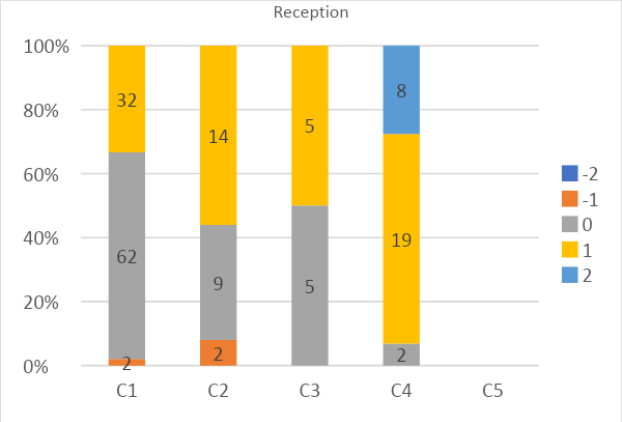


It could be suggested that self-confidence grows with opportunities to grasp experiences that stretch beyond expectations. This in turn, then promotes confidence of others in you as it offers a recognised degree of authenticity. This confidence in the views and opinions of a wide mix of people then allows for a greater degree of recognition for your knowledge as well as a greater ability to manage the negativity of others as challenges and risks become more readily accepted and faced. It might then be suggested that some degree of encouragement into unexplored areas, accompanied with the freedom to trial and pursue independently (E4) might encourage a more confident response. This was certainly reflected within the observations, both with some gentle adult preference (E4) and which the child was free to pursue (E5). Where actions were enforced (E1) or directed (E2), far higher incidents of indifference were recorded along with reluctance to show a confident response.

Environment – Choice and Location

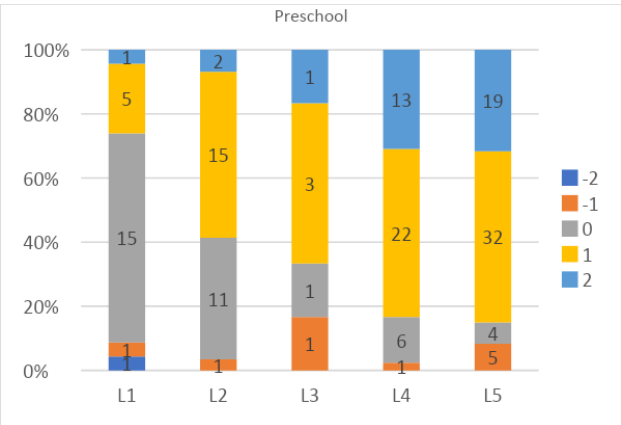
Choice - Are children given choice within the activities they select?

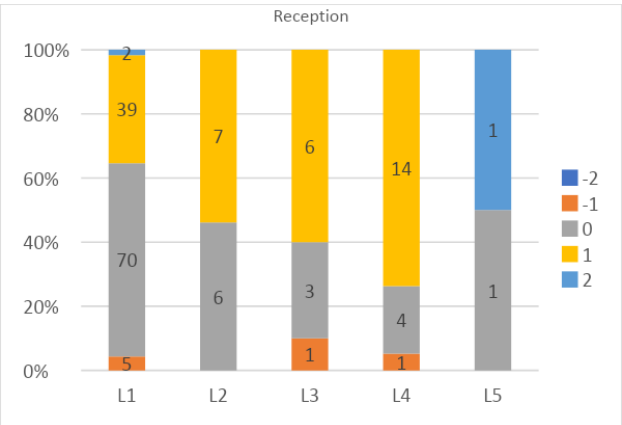




Whilst confidence can be seen developing through experience, benefitting from encountering different people and situations, trialling different activities and facing different challenges and conditions, knowledge of where weaknesses lie can also be important. If thrust into an erroneous experience too early this could have a negative effect. It could then be suggested that for children to develop confidence, they require experiences steeped in freedom so that they can gravitate towards positive experiences whilst actively moving away from negativity, coming to things when they are personally ready. It may then be argued that given time and experience, confidence can grow and evolve. Within freedoms of direction, practice can be gained where needed and incompatible paths can be retreated from as confidence within diverse talents becomes recognised, embraced and celebrated, suggesting a need for freedom of choice within activity. This was mirrored within the observations, with higher degrees of freedom eliciting more confident responses, and where no choice was offered, a significant occurrence of indifference. This was the case in most of the reception observations.

Location - Are children given choice within the environments they occupy?

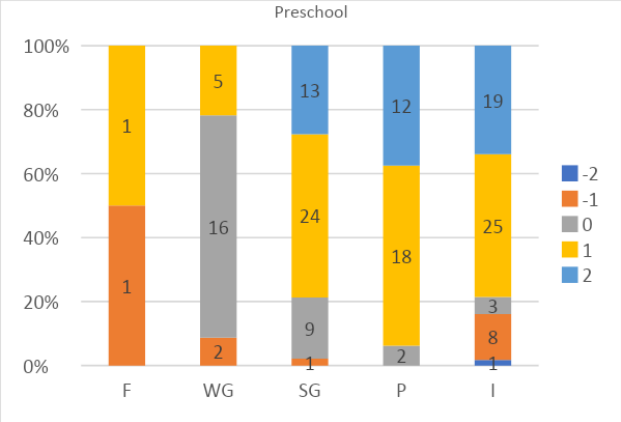


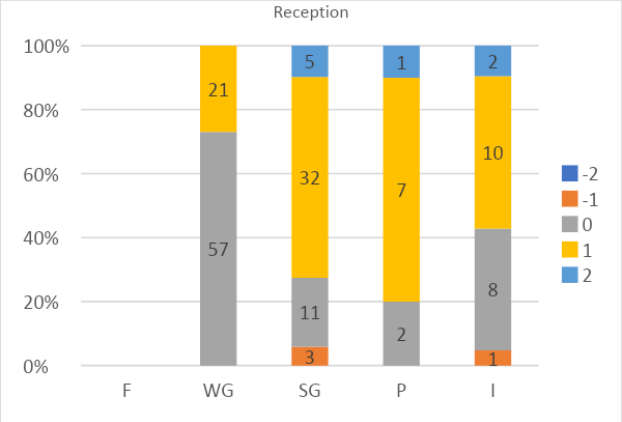


It could be suggested that to with self-awareness comes a confidence to step away from overly difficult situations or those selected in error, so that one can distance themselves from overly negative influences and withdraw from unsuitable paths as one learns to pursue opportunities that are more appropriate. This might suggest that when permitted freedoms within their choice of environment children would be able to self-select appropriate opportunities, fully embracing those that present useful or engaging experiences as they gain the confidence to actively pursue a chosen goal. Within the observation, children's confidence was seen to increase with the additional degrees of freedom offered, however, in reception the vast majority of observations noted a forced location which in turn recorded an indifferent response within the children's confidence levels.

Scaffolding – Grouping and Teaching Styles

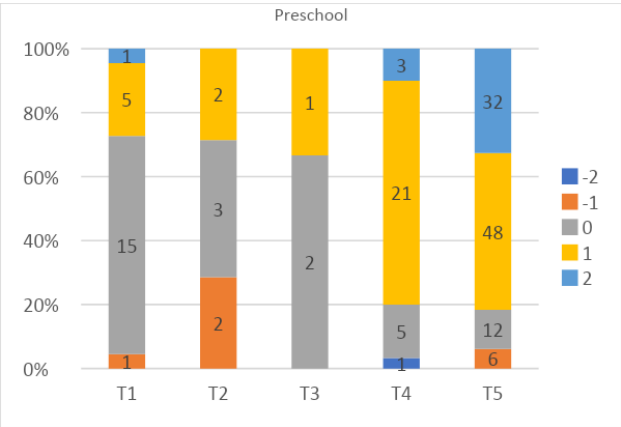
Grouping - Are children engaging independently, or supported by their peers?

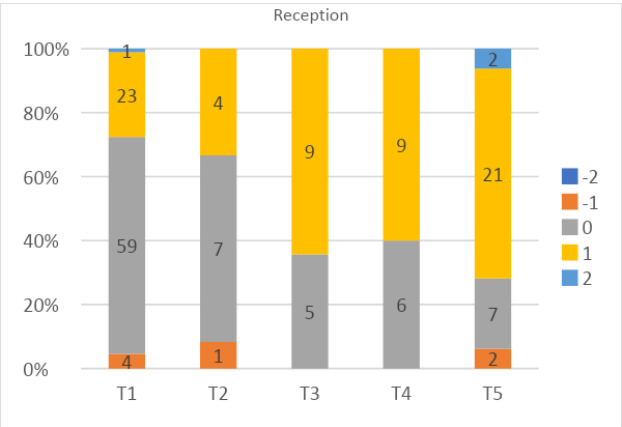




It could be suggested that to display appropriate levels of courage requires an honest appraisal where strengths and weaknesses lie, and that a self-awareness of ability allows inner strength and self-belief to develop and drive self-worth. As an awareness of ability develops, so too does knowledge of the value that a situation can offer. This would suggest a need for children to experience their individual abilities (I), along with a need to experience the supportive networks that can exist within small group (SG) and pair (P) groupings as they make confident strives forward. This was reflected within the study as small groups, pairs and individual groupings recorded the highest percentage of positive scores, the highest noted when in pairs. Whole groups recorded a significant proportion of indifferent responses which accounted for most of the reception observations.

Teaching Styles - Are children engaging independently, or led by the adults around them?



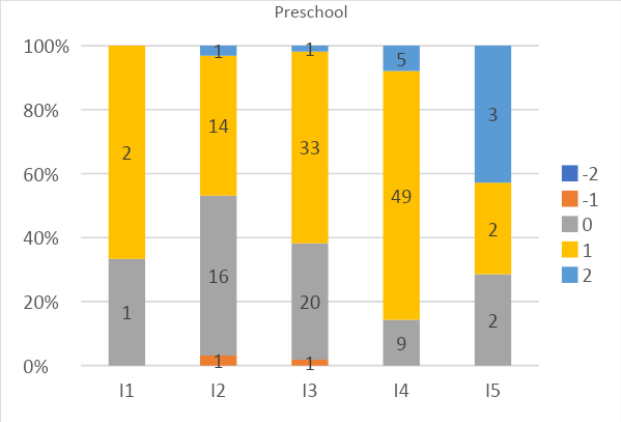


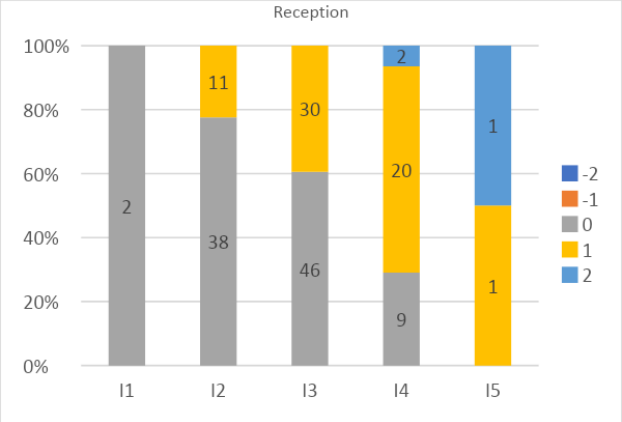
It could be suggested that confidence develops when security is offered from within stable, nurturing and supportive environments, through which much can be learnt from the opinions of others, allowing informed aspirations to formulate. From a secure base offering a balance of support and independence an empowering self-belief can develop as a range of skills is confidently applied, and achievements seen as confirmation of their ability. From this place of security and emotional well-being, unconventional decisions and opinions can be voiced. As an outwardly confident and informed character develops it was suggested that one learns to stand up for what they believe in and to speak for others with less of a voice. This would suggest a need for offering children a balance of autonomy (T5) with some adult support (T4) to develop a confident response, and such observations did note an increased propensity for a confident response. Whilst this made up the majority of the preschool observations, most of the reception observations recorded a teacher led pedagogy which noted indifference towards the child's confidence.

Appendix N3 - The impact of observed practices on children's propensity for thinking logically

Agency – Involvement and Distractions

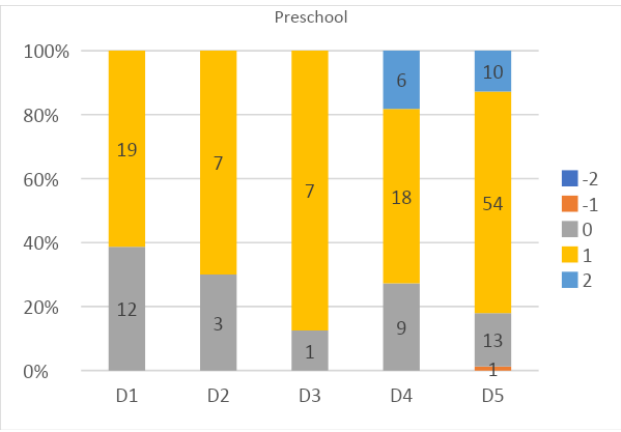
Involvement – Do children show evidence of being involved in their activity? Are they permitted the time and opportunity to pursue their choices free from distraction?

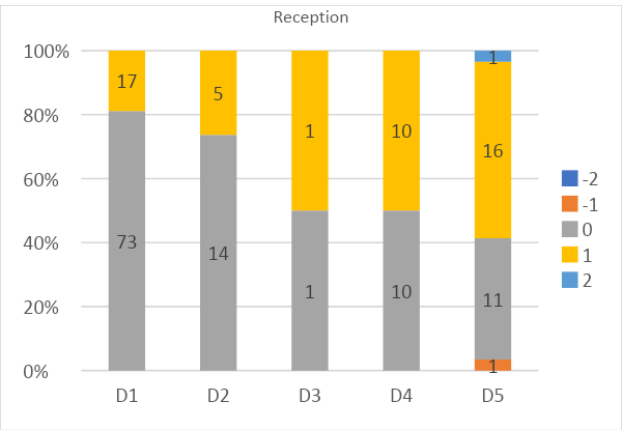




It could be suggested that to develop logical thinking processes requires opportunities to assimilate information, making connections and drawing conclusions. With further experience, evidence-based logic can help develop a clarity of thinking, which adds structure to one's thoughts and planning as hidden truths are uncovered and problems solved. As experiences may come from a variety of sources, children need opportunities to independently access the experiences they currently need. When this is effective, one can expect this to be reflected through the greater depths of involvement demonstrated by the child. Intense engagement (I4 and I5) was seen twice as often within the preschool observations and logical thinking featured highly within them. There were almost twice as many observations showing the child settling only briefly (I2) in the school classroom compared to when in preschool, the majority of these observed no evidence of logical thought process.

Distractions - Are children permitted the time and opportunity to pursue their choices free from distraction?

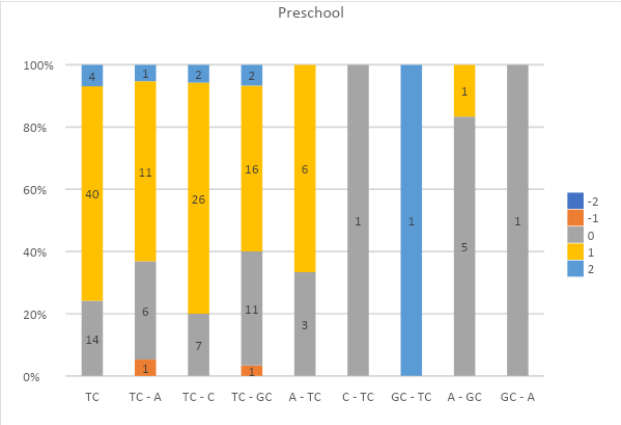


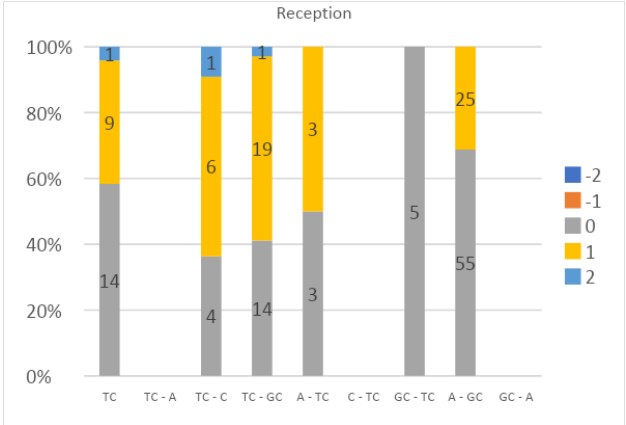


Children need logical thought within the fast-paced environments and interactions that are encountered daily. Logical plans and strategic directions help them navigate the multifaceted realities of the day, and offer direction when problems are encountered, but this needs implementing and modelling by those more experienced. Once familiarity is embedded, it could be suggested that fact-based, logical assumptions and paths are more likely to be followed, especially when rooted in information verified through experience. This would suggest a need for children to gain a wide range of independent, first-hand experiences. Within the school classroom, children experienced significantly higher incidents of having their attentions forcibly broken, whilst this in itself typically resulted in the absence of any observed logical thought, when fewer distractions were experienced, and the child could pursue their own direction, this was less likely to follow a logical path than it had in preschool.

Intentionality – Discussions and Encouragement

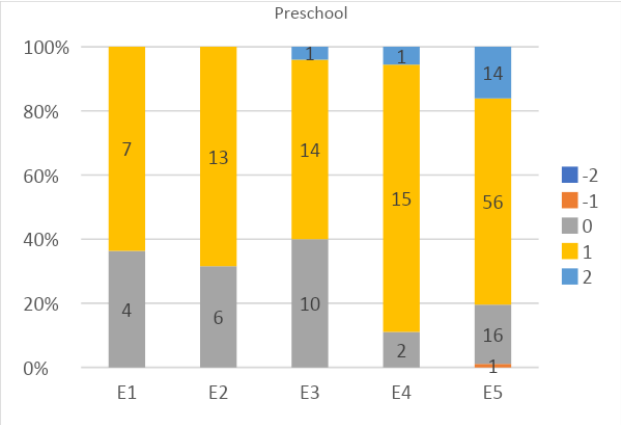
Discussions – Are discussions dominated by the adult or the child voice?

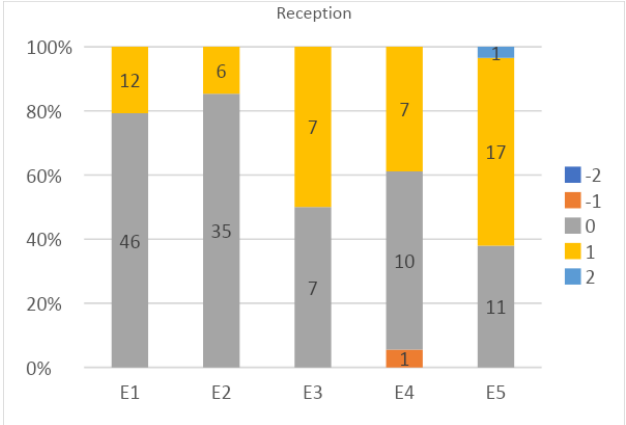




It could be suggested that discussions led by more knowledgeable adults are important as it allows one's own thinking to become clarified as missing or misunderstood information is addressed. During this process, links can be constructed and prior understanding enforced as logical expectations are developed and utilised as responses are formulated and structured thought processes developed, allowing for fast decisions to be made. This would then highlight the need for children to engage in conversations with more knowledgeable others, especially adults who can model and scaffold these exchanges within a two-way process. Demonstrations of logical thought were recorded almost twice as often in preschool compared to when the children moved to the classroom. In this environment they experienced a wide range of discussion styles, including exchanges with adults. In the school setting, most observations documented an adult led delivery where an exchange of dialogue was not possible and far fewer indications of logical thought were documented.

Encouragement - Are actions driven by the intentions of the adult or the child?

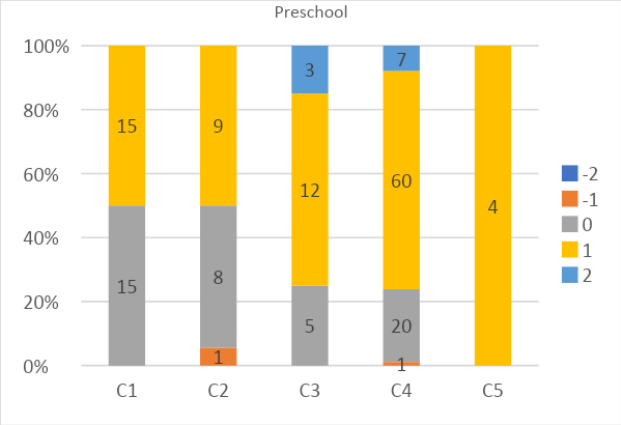


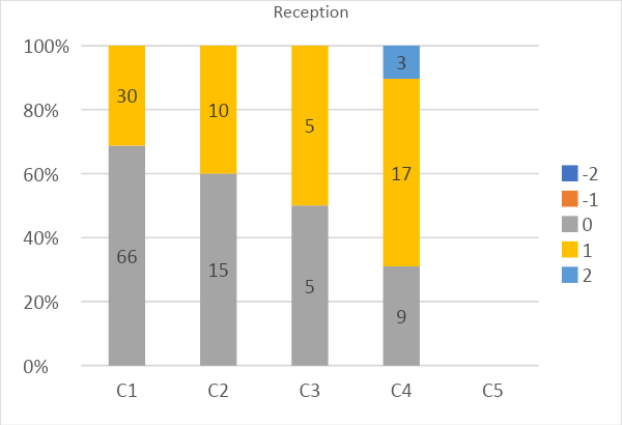


The sense of familiarity offered through logical approaches within structured systems brings with them a sense of being supported as well as a shared basis, and clarity during stressful situations. To introduce logical thought patterns and structures to children arguably requires some adult direction (E2), balanced with the lighter touch of adult preference (E4). By establishing a common ground, and carefully supporting their progress as they experience logical thought processes for themselves, children can progress beyond a feeling or instinct which enables the involvement of others. This balance of approaches was seen more strongly within the preschool environment where logical thought was more actively demonstrated by the children. Within the school classroom, more enforced approaches were utilised (E1) which offered little opportunity for logical thought to be demonstrated.

Environment – Choice and Location

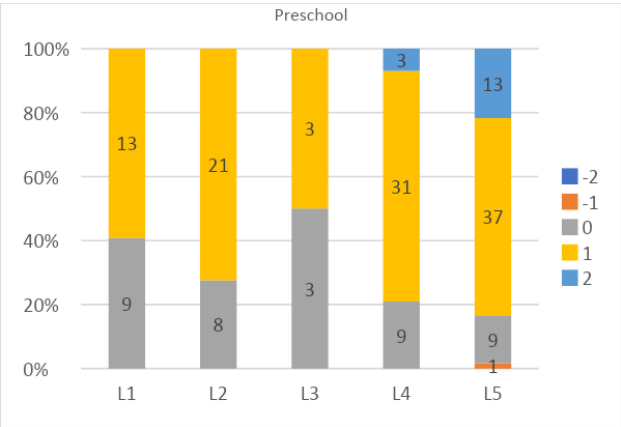
Choice - Are children given choice within the activities they select?

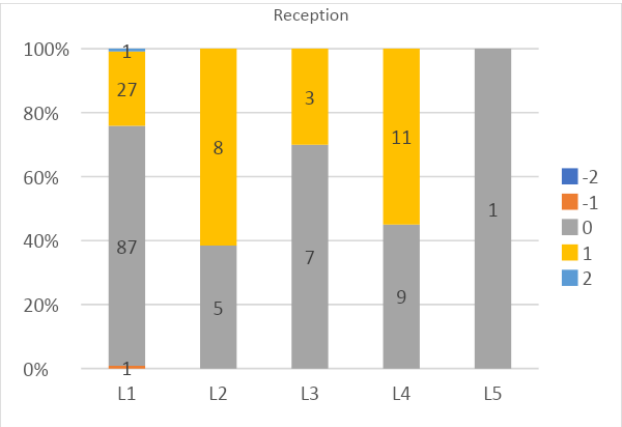




Dependable routines, structures and processes offer stability, reliability and order around what can appear to be a chaotic world, a reality for children in their early years. Familiar, logical processes may then support children as they compartmentalise their thinking, seeing and finding commonality with past experiences as they apply order to complex information, supporting their development of logical and analytical thinking. This would suggest a benefit in structured portions of the day without choice (C1) or limiting it (C2) so that structures can be introduced. Where limitations of choice were offered in the preschool, children responded in logical ways half of the time, then continued logical approaches throughout less structured times. When in the school setting, the more structured observations elicited less evidence of a logical response, perhaps because it was over utilised, constituting three quarters of the observations. Only when left to act independently (C4) were the children likely to respond in a logical way. Within both settings, logical responses increased in line with the freedoms offered to the children.

Location - Are children given choice within the environments they occupy?

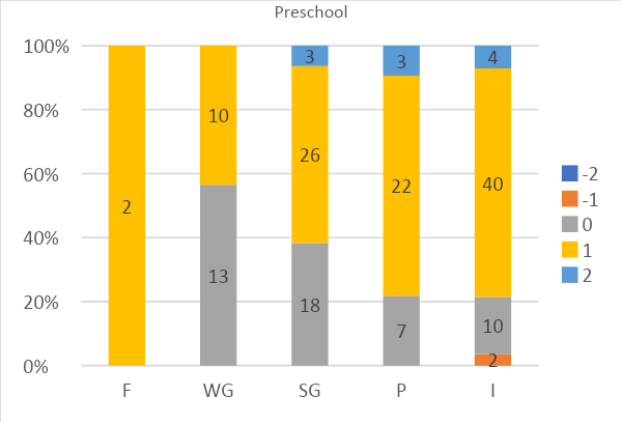


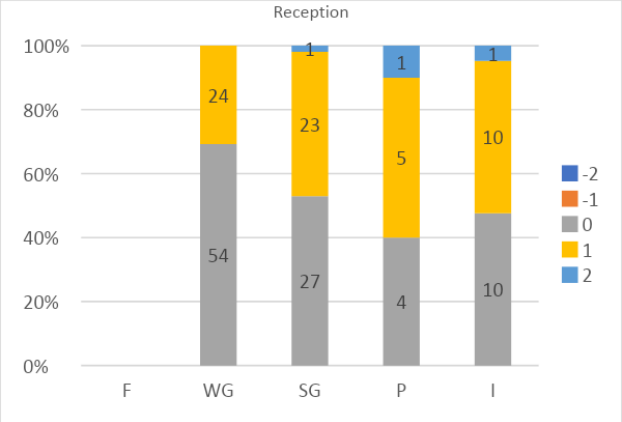


Familiarity and consistency can offer a degree of structure within environments and social groups, especially when these are particularly busy or unfamiliar. Where logical patterns and expectations are present, this logical structure can offer a degree of stability in what may otherwise appear to be a chaotic situation. This might suggest that children would benefit from logical structure and expectations within their busy and often unfamiliar environments, especially at times of transition. Within the child study, the children received more structure within the school classroom, with their location enforced throughout most of the observations (L1), however, this was not balanced with many periods offering a greater degree of freedom. The children's own logical thought processes and actions were not seen as often once in the school environment as they had been when in the preschool environment, perhaps because this had become more familiar to them.

Scaffolding – Grouping and Teaching Styles

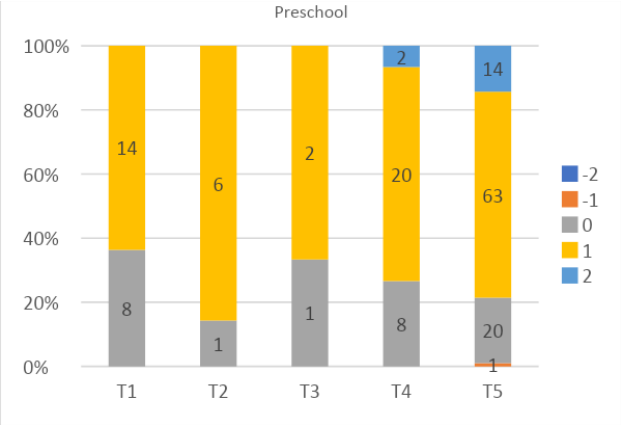
Grouping - Are children engaging independently, or supported by their peers?

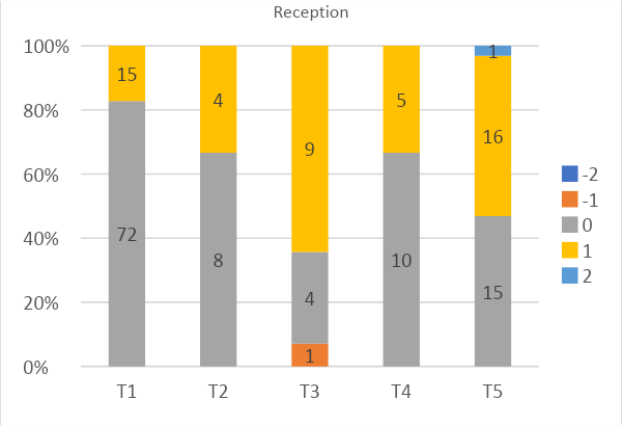




It could be suggested that logical thinking is enhanced by experiencing logical approaches. Opportunities offered within small groups, to work with others in ways that help children to clarify their own and the groups thinking allows children to learn from the modelling of others. Benefits are also realised from the developing logical approaches within the group dynamic, seen in its support of emotional stability and reliability, with consistency helping to sustain feelings of well-being. This would suggest benefits in offering opportunities to children to work in small groups (SG). Where this was seen in the child study, the children did demonstrate logical responses in both settings, although this was more pronounced when working in a pair.

Teaching Styles - Are children engaging independently, or led by the adults around them?





It could be suggested that experiencing repetition and pattern within one's environments, routines and expectations establishes a sense of normality and proven reliability. Through logical, well tested stability, a logic within one's thinking can be assumed, through which structures are offered from which new ideas are shaped, allowing future growth whilst knowing there is dependable support available when difficulties are encountered. This might suggest a need for adult led direction (T1) within the experiences of the children. However, in the school setting this described two thirds of the observations, allowing little opportunity for the children to apply logical approaches within their own thinking and actions. Whilst it was present in the preschool, it was observed in less than 15% of the observations, allowing the children to apply logical approaches for themselves, which were then seen in a significantly higher frequency, especially where they had the support of an adult (T2) and where they had opportunity to act autonomously (T5).

Appendix O - Word cloud produced from written observations of children showing active reluctance towards the dispositions.

Word clouds – Descriptions of all observations where children were actively reluctant to show the attribute or there was no opportunity for it.

1 Self-motivation	2 Simultaneous
	

3 Sociable	4 Adaptable
	

5 Logical	6 Courageous
	

7 Practical	8 Wide
	

9 Imagination	10 Curiosity
	

Appendix P - Word cloud produced from written observations of children showing each disposition as a clear feature of choice

Word clouds – Descriptions of all observations where children showed the attribute as a clear feature of choice, actively seeking out and showing clear enjoyment.

1 Self-motivation	2 Simultaneous
	

3 Sociable	4 Adaptable
	

5 Logical	6 Courageous
	

7 Practical	8 Wide
	

9 Imagination	10 Curiosity
	

40 - C1 has been investigating the bubbles but has seen a problem with one of the resources. She asks for some adult help and gets some direction. She now accesses the bubbles independently. It's tricky to get to the bubbles without falling over the ridge of the builder's tray, but she slows down and works out how to manage it.

41 - She is sat at an activity table where the objective is to complete a shopping list for the characters. She looks a little perplexed as it is explained but she continues with it as others drift away. Content in her own company she talks to herself as she plays. She goes to ask her KW "Excuse me… can I have that {Princess castle}" and the King and Queen she is shopping for moves into the castle, along with all the shopping lists.

100 - Is at the playdough table – there is another child there yet he doesn't interact. He has rolled out a large piece of playdough which he puts on his arm as a sleeve. He comes to show me and I ask if I can photograph it. He goes to the home corner to get a teapot then 'makes tea' for the staff and hands round plastic cookies.

104 - He is helping to wash the cars, repeatedly accessing the bucket of water with his sponge. He then explores the effect of the sponge on the wall, noticing the dark patches as he makes out wet. He comes to tell me what he is doing, inviting me to have a go. He shows me all the cleaning they have been doing. He then goes to the sand pit where he persists in filling a truck with sand for a long period of time, smoothing it off then adding more sand as required. He's asked to be the leader going back inside but is reluctant to do so. He becomes rather shy and would clearly prefer to stay in the sand pit.

105 - C2 has asked for some large toys to be passed down off the shelf where he sits playing contently. Another child joins him and they play next to each other. There is no verbalising of the play but he is deeply involved. When the other child engages him, he does respond, but the space rocket soon flies away. As it does so Reggie does engage with other children briefly, but his main attention is his own game rather than others.

106 - Running out into the garden he goes straight into the playhouse where he knows there is a new kitchen. He starts making a drink and says, "This one is apple" (there is a picture of an apple on the carton]. He comes bursting out the house "We've got fire" and runs to the other shed looking for something he can use until a KW asks him to come out. Leaving the kitchen, he finds a bike and starts scooting up and down the path, there is a problem towards the end and he runs up to me… "'Scuse me, 'scuse me – can you put my shoe back on?" He then goes towards the biggest bike available, it has a trailer on the back "This is a big bike – I don't want him on the back" [as a child jumps on] – confrontation was possible but well handled by C2.

107 - He is playing with Lego bricks in a raised builders tray, another child plays in parallel and a KW is with them. This allows for easy conversation and he tells the group he is making a car, conversation then becomes about poo [a current favourite subject]. The KW tells him not to be silly and asks him what colour he is going to make his car, then tells them all about her own car before asking what they had for lunch. His interest in the bricks lost he runs back to the play house – a new child is on a tour, he passes a cursory glance but is not overly interested. On the other side of the fence a drain is being unblocked and he watches with interest as poles are added, asking questions and concerned about where his mum's car will go. He briefly goes to play with music but comes running back when told more polls are being added. It is then time to go in - on the way back he spots a mud patch and is fascinated by it. He's repeatedly asked to "Go around the mud patch, not in!" unable to leave it alone he does resist going in.

108 - Inside he is speaking on the phone to his dad, the conversation is long and involved, drawing others in. A KW speaks to him briefly and he moves on, going to explore the foam play. A child has dabbled foam on her face, "I will go and get a towel", in the excitement foam is down my arm and he cleans this off for me before saying, "I will go and wash my hands". He comes back and makes tracks with a car, reapplying foam directly to the wheels, deeply interested in the pattern. He's asked to clean a blob of foam off the floor and he does so happily then returns back to his play. Asked about snacks, "No thanks".

109 - Very keen to climb he goes as high on the building blocks as he can get away with before being asked down. Interested in the blocks he starts exploring, very excited to have found keys in with them. He then tries stacking blocks up high on a lorry, they are hollow and will only go one way but he pursues until he is stopped. He's aware of others "xx is watching me…" and noticing a child pulling on a string, "You mustn't pull on that". He is also interested in what others are told. He becomes fascinated by the effect of putting handfuls of the sand and stone mix from a tray into the garage and watching it trickle down. The sand remains at the top while the larger stones move down through. When told to tidy up he happily starts sweeping up the spilt sand.

110 - It is pouring with rain but this doesn't impact his play – they are playing chase up and down the garden and path, excitedly chasing each other. His play then moves into the sandpit where he plays with another, working together to fill a bucket with sand. He then moves over to the kitchen, searching for something? Then starts to 'do the dishes'. He sees a child drawing "Excuse me – do you need this? A conversation starts which he manages well, then goes back to the sink, filling one cup with water then pouring into another, then into a jug, then into another. Stirring with a spoon he tells everyone what he is making.

116 - He has found a number of planks and has carried an armful out into the larger space. Independently he is trying to join them together, thinking they may be magnetic he perseveres at trying to get them to join. He tells me he is trying to make a barrier so that the children don't go under the covered area (this has been excluded for today). He can't get them to join, making his 'wall' idea problematic, so tells me he is now leaning them against the wall to indicate the direction the children should be going in.

163 - She is exploring the Bee Bot on the floor – making it go forward, then alternately putting things in its way and clearing its path to see what happens. Another child comes by and she hands her the resources she has dropped. She finds a dump truck and explores whether the Bee Bot will fit in the back, then takes it for a ride.

175 - Playing with a small group they are up on the blocks playing mums and dads. She seems deeply involved and engaged with the game, but quickly breaks to come and paint a picture. They have white candles and crayons to draw a design, then paint to reveal it. She starts applying the paint, but no design comes through – we talk about how she hasn't put any wax on. She thinks about it and suggests maybe starting again. When it now works she is thrilled, bouncing up and down laughing. She tells me she will do one for me to take home.

296 - Free choosing time he has found a present wrapping activity and is negotiating paper, egg boxes, scissors and tape to wrap the present. He makes the move to the floor to help with balancing the box and managing paper. He is struggling a little but perseveres. He wants to wrap two egg boxes together but has realised that the paper he has cut is too small. He cuts additional small pieces of paper to make it cover. After repeated efforts he goes to one egg box but still struggles, repeatedly saying "I can't do this…" although doesn't give up.

355 - Comes independently down the slide then finds a trolley – pushes it to the table where they're playing shops. He puts some food in his trolley and shows a teacher – he's protective of what he has when another. Child investigates and pushes it away down the path, secluded in the bike path he unloads his shopping into a bike and cycles off.

371 - Just allowed outside and given their options he chooses to play with a truck, loading large rocks into the back and tipping out. He finds a solo spot in the big sandpit and uses his hands to scoop sand into the truck, persevering until completely full, then 'drives off' making the required noises. He plays in the sand, noting how it moves and explores the stones and leaves within it. He supplies the noises as his play is clearly with purpose – making ridges in the sand etc.

486 – She is sitting alone on the carpet surrounded by craft materials. She is exploring the joining of cardboard tubes and cones, cutting tape with scissors, fully engaged in her activity, not put off by any others.

Appendix R – Findings from dispositions viewed under other pedagogical variables

Intentionality – Discussions and Encouragement

The importance of developing a voice, with opportunities not dominated by the voice, actions and intentions of others.

Discussions

Imagination – Discussions involving the comments and actions of others could be expected to ignite children's imagination. Especially when this was followed by opportunities to act on any imaginative responses these discussions inspired. The high scores recorded for imagination where discussions were initiated by the target child would seem to support this, seen predominantly in the preschool study. Where discussions were adult led, predominantly in the school observations, the child showed a higher indifference towards an imaginative response. Interestingly, these observations illustrate that discussion style alone is insufficient to elicit an imaginative response with the relative scores seen in the absence of external discussions with the target child, TC, differing widely, suggesting that the preschool child is more inclined to react imaginatively when left alone, compared to the child in school who will act imaginatively indifferently.

Intuition - Experiences that permit the development of and trust in one's own, inner voice might be considered important when developing a personal intuition. Opportunities to listen to one's own instincts on a sensory level would allow one to learn to trust in it. This would suggest the need for periods of quiet contemplation (TC), something that happened more readily within the preschool setting and demonstrated highly intuitive reactions. This was also seen within the child-initiated discussions. There was a far higher occurrence of an indifferent response within the school setting, typically occurring within adult to group interactions which represented the majority of the observations. Where child led discussions were permitted, significantly higher responses to intuition were seen.

Courage - To have the courage to stand up for what one believes in, requires establishing a voice capable of voicing an opinion. This requires opportunities to experience doing so, developing the bravery and self-belief to face concerns head on. This would suggest that courageous responses would be seen more frequently where children had the opportunity to voice opinions for themselves and this is reflected in the observations. Where an adult led the discussion, a far higher occurrence of indifferent responses was recorded. This was the case in most of the school-based observations. Within the preschool setting, children left alone did on occasion respond with active reluctance.

Encouragement

Confidence – It could be argued that self-confidence grows with opportunities to grasp experiences that stretch beyond expectations. This in turn, this might suggest, then promote a confidence of others in you as it offers a recognised degree of authenticity. This confidence in the views and opinions of a wide mix of people then allows for a greater degree of recognition for your knowledge as well as a greater ability to manage the negativity of others as challenges and risks become more readily accepted and faced. It might then be suggested that some degree of encouragement into unexplored areas, accompanied with the freedom to trial and pursue independently (E4) might encourage a more confident response. This was certainly reflected within the observations, both with some gentle adult preference (E4) and which the child was free to pursue (E5). Where actions were enforced (E1) or directed (E2), far higher incidents of indifference were recorded along with reluctance to show a confident response.

Playful – Permissions for play, as well as the absence of enforced direction towards other things is required to facilitate it. This would suggest that observations showing some adult preference (E4) along with those recording an absence of adult influence (E5) would encourage a positive reaction towards play and this was seen in the observations. As encouragement and

enforcement decreased (E1→E5) a more playful response was noted, including highly positive responses where the child was free from adult influence. Observations that noted enforced or directed adult influence saw highly indifferent reactions to play and active reluctance within the preschool setting.

Sociable – People facing social skills, emotional intelligence, communication skills and an ability to treat people with respect are all skills that benefit from experiences of being brought together with a wide range of others. There is benefit to seeing such skills modelled, and then being able to trial them for oneself as relationships are formed with different people. This would suggest that combining opportunities for independence along with time to engage with others as children motivate and encourage each other offer a greater range of experiences to promote social interaction as opportunities, including those that may otherwise be avoided, are explored. Certainly, the range of encouragement styles experienced in the preschool setting allowed for both active social engagement and active reluctance, especially where adult influence was limited (E4 and E5). A high proportion of reception observations documented enforced encouragement which showed an expected indifference to sociability.

Environment – Choice and Location

The importance of choice to explore one's environment and the activities explored and engaged with.

Choice

Practical – To develop practical skills requires first-hand physical and practical experiences of life with permissions to apply one's learning. By exploring and re-creating in applied ways, thinking develops in ways to react to practical information, to understand the realities of cause and effect and to make informed, independent and dynamic decisions. This would suggest a benefit in introducing these skills to children through a combination of directed approaches, followed by experiences to trial for themselves. Within the child study, observations where the child had no choices (C1) almost always resulted in an indifference to any practical demonstration of ability, this represented most of the school-based observations. Where there were only some limitations to the activities on offer (C2) or where children were only limited by their movements between indoors and outdoors (C4), the highest propensity for practical application was seen. The latter of which was represented by most of the preschool observations and attracted a high number of very highly positive reactions.

Reflective – Children need opportunities to make and learn from their own mistakes, to experience modifying their actions as opportunities are offered and to reflect on what needs further practice. Free to consider alternative approaches, environments and outcomes that may deviate from expected, non-linear progression can be reflected upon as paths are promoted, adjusted and adapted. With decisions that are free to be different today than they were yesterday one can continue to be informed by everything that has gone before. Direction is provided in times of anxiety as children become aware of that which can and can't yet be done, and personal improvement is realised. This would advocate a freedom of choice within children's environments, and processes of reflection were seen to increase with any additional choice offered in the classroom setting. However, most observations offered no choice and subsequently a high number of observations failed to demonstrate reflection. Within the preschool setting a far higher degree of choice was offered, often only limited by transitions inside or outside (C4). This demonstrated a high propensity for reflection, and a significant level of variance across the opportunities offered.

Adaptable – The ability to flexibly adapt and evolve allows for personal growth and a resilience to inevitable change. By experience of adapting to changing circumstances and available resources, a confidence can develop within one's range of abilities. With skills to match open-ended or evolving situations, actions can be revised, and original plans adapted as a degree of comfort grows, supporting their actions when direction or a given outcome is lacking. Once established, environments

unsuited to need can be reacted to as rather than simple acceptance, one knows when it is time to move on. Across both settings, observations offering more choice were more likely to offer a higher degree of adaptive responses. This was despite the high frequency of classroom observations offering no choice to the children, showing that once introduced the children were quick to demonstrate their adaptive nature.

Location

Curious – When a variety of areas are offered for exploration, enhanced benefits are available, with curiosity developing across a breadth of interests. Through freedoms of choice, the implications of any decisions being made can be considered as alternative pathways are considered and freely validated and tested through the new experiences being offered. It could then be suggested that a wider range of locations would promote children's curiosity, promoting explorations as freedom of choice permits a depth of involvement and combinations of possibilities. A high level of curiosity was noted within the preschool environment, much of which was at a high level, and increased as the options offered to the children increased. The same reaction to increased choice of location was seen in the school classroom, however the children's location was typically enforced within these observations which, as with preschool, reflected a high increase of disengagement from curiosity.

Self-motivated – Children need opportunity to stand back and look at the bigger picture in order to appreciate the progress being made. This self-motivating practice allows for the identification of potential outcomes, rather than becoming discouraged when challenges are faced. This would suggest that the importance of experiential learning needs valuing within environments that balance possible selection of the activities required (L4) with a focus that prevents aimless wanderings, as might be seen through the encouragement of the adults (L2). Within the preschool, both encouragement (L2) and freedoms of choice (L4 and L5) were frequently observed, as were high levels of self-motivation. Whilst there was a high level of motivated behaviours observed within the classroom, where they were not seen (in around 45% of the observations) these predominantly occurred where the child's location was enforced (L1).

Scaffolding – Grouping and Teaching Styles

The importance of opportunities to engage independently, with the knowledge of available support where required.

Grouping

Independent – Independence develops when reliance on or assistance of others is no longer a necessity and personal responsibility for one's own actions can be taken. By taking ownership of choices and actions, true potential and personal growth can be realised, fuelled by the experience of independent success. However, whilst it could be argued that following an independent path and fighting for what is wanted takes an inner courage that requires self-reliance and a belief in one's own skills and abilities, once personal responsibility for positive and negative outcomes is accepted, success becomes linked to personal effort and children can become self-motivated within their actions as independent decisions and goals are made. This would suggest a need for individualised experiences to develop this level of positivity within their independence. Within the child study, independence (I) was offered more frequently within the preschool setting, in the school classroom, whole grouping (WG) was favoured where far fewer opportunities were offered. Even extending children's personal responsibility as far as small groups (SG) would allow saw the children's opportunities for independence rise significantly.

Thinking creatively – When given creative opportunities, innovation can be realised in one's self and recognised in others. This might suggest that, provided activities and resources are not overly prescribed, children can avoid becoming too rigid in their thoughts and actions and instead, remain open to new processes and ideas. With the addition of creativity being modelled to children through the sharing of ideas, they may also become inspired to find creative answers of their own. This would suggest

a need to balance small group (SG), pair (P) and individual (I) experiences for the child, and this was certainly where creative responses were seen within the child study. They were all but ruled out where a whole class approach was utilised which possibly explains the lack of creativity embraced by the children when working independently in the school classroom compared to their responses within preschool.

Teaching styles

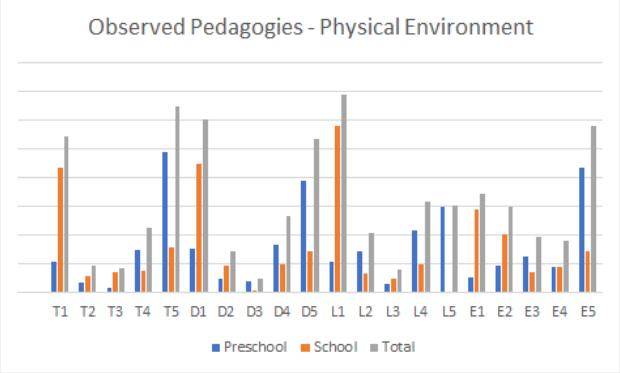
Thinking simultaneously – An ability for simultaneous thought could be considered to be supportive within the multifaceted worlds children inhabit and to enlighten more complex paths which could otherwise be ignored. It could then be argued that when children are presented with clearly focused, linear activities, tasks and teaching styles, as is often the case in the school classroom, they miss out on the richness that could otherwise be afforded. When experiences incorporate many moving pieces, different ideas become integrated as children combine their thoughts simultaneously across multiple disciplines and environments. As children's attention becomes focused on more than their own objectives, the intentions of others, future demands and changing environments can simultaneously add and combine knowledge across disciplines as gaps in understanding are supplemented. Certainly, where opportunity for group work (T3) and autonomy within their learning (T5) was offered, children were seen to respond in ways to indicate simultaneous thought, strongly so in the case of autonomy within the preschool environment. And where the more linear approach of adult led deliveries was utilised (T1), simultaneous thought was seen to sharply decline. This accounted for a high number of the school-based observations.

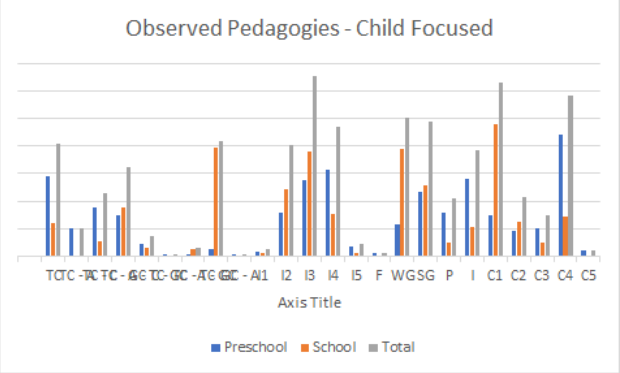
Thinking logically – Experiencing repetition and pattern within one's environments, routines and expectations establishes a sense of normality and proven reliability. Through this logical, well tested stability, a logic within thinking can be assumed, offering structures to which new ideas are shaped, allowing future growth whilst knowing there is dependable support available when difficulties are encountered. This might suggest a need for adult led direction (T1) within the experiences of the children. However, in the school setting this described two thirds of the observations, allowing little opportunity for the children to apply logical approaches within their own thinking and actions. Whilst it was present in the preschool, it was observed in less than 15% of the observations, allowing the children to apply logical approaches for themselves, which were then seen in a significantly higher frequency, especially where they had the support of an adult (T2) and where they had opportunity to act autonomously (T5).

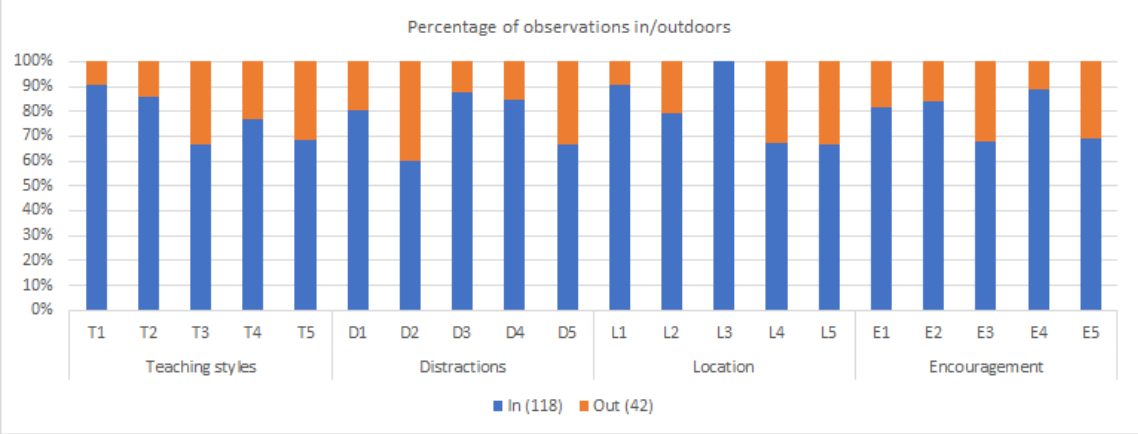
Thinking widely – By encouraging wider approaches to thinking, the opportunity is offered to incorporate the actions, views and skill sets of others within one's own thinking. As people and processes are brought together there is greater exposure to a wide range of opinions and outlooks as the collaboration, team management and communication that is required is experienced. As the issues and agendas of others are considered, appreciated and incorporated, one learns to benefit from the pool of expertise, experience and opportunities that a wider outlook can bring. It could be expected that through experiencing the interactions, deep discussion and debate permissible within flowing group activities (T3), that children may learn to balance the demands and needs of others with their own as their individual outlook is widened. This teaching style was rarely seen within the observations, however more frequent demonstrations of wide thinking were seen as teaching styles permitted greater freedoms, with child autonomy promoting its use significantly more than other teaching styles in both settings.

Appendix S - Representations of children's experiences and engagements across the 640 observations

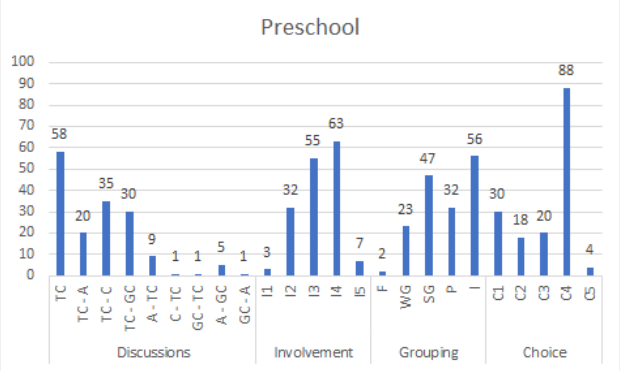
Opportunities afforded to children over 640 observations

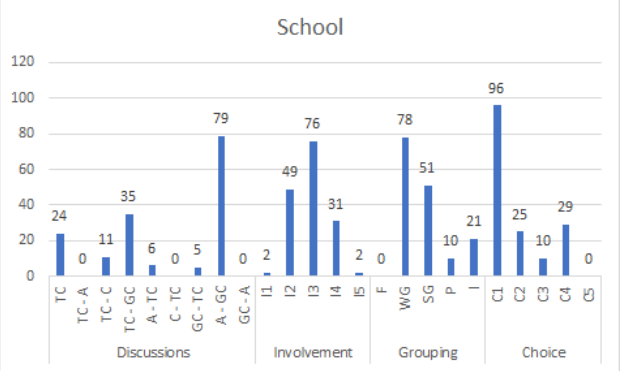


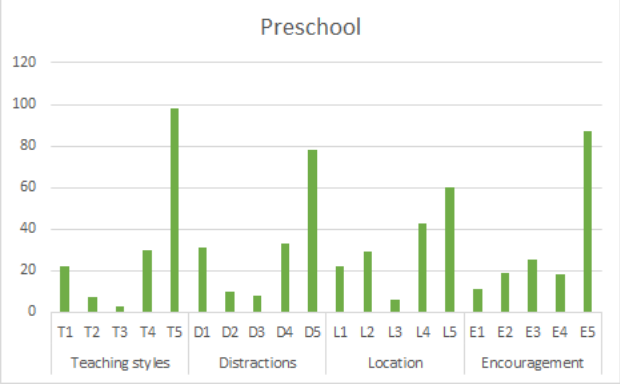


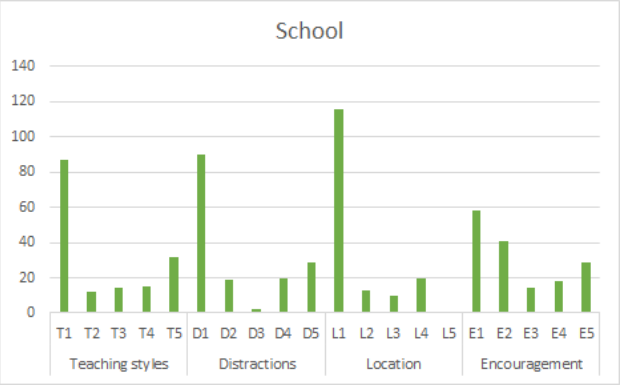


Observed level of engagement within each pedagogical variable









Rich data to compare and contrast observations through - Child 4

Preschool

Observation journal – Term 1- Preschool
20/09/17 - The child appears to be very settled and happy within her surroundings. She is very vocal in her play which is cooperative in nature throughout my visit. Different children join her and the game changes location, purpose and resources but she remains vocal and a driver of these changes throughout, communicating in large and discrete ways. As play moves she is quick to accommodate others ideas, negotiating her own points of view. There is a lot of emotional/social play with discussions regarding family and relationships. Others are seeking her approval. **18/10/17 -** The child is very social both in her play and in her interactions with others. Her group of friends are clearly important to her, but so too are the others around her and she does what she can to include them and continue their play. She will engage with adults if she needs some help or guidance but didn't appear to seek it out as a constant. **01/11/17 -** The child has a clear desire for a friendship with a child in the group who is aware of this and often makes it difficult. She told Child 4 today that they were no longer best friends. Clearly upset at first, C4 tried repeatedly to get the other child to change her mind, speaking to staff for support. She followed her around, did all she could but was rebuffed. Eventually she took herself off to play alone (initially returning periodically before giving up), once she did so the other child noticed the lack of attention and called her back. C4 was quick to respond, clearly the relationship and bond is important to her, but the social games being played were confusing and upsetting. **06/11/17 -** Today C4 has been independently accessing the space and resources, exploring freely, using various senses and a wide-ranging vocabulary. She has used this to explore the nature of things such as the movement of spaghetti when held aloft. She is aware of the wider goings on around the room, knowing when it is garden time and what she needs to do to be able to go, persevering where needed. She has found joy in playful activities – waiting for snacks, playing with the empty cup and plate. Her imaginative play saw many areas and resources utilised in a prolonged game of doctors. **22/11/17 -** C4 was very upset leaving mum this morning. This is the first time I have seen this. After a time, she was calmed down and settled to some colouring. This she did with prolonged attention and care, asking for the colours she needed and couldn't see, and another picture when she was done. By the time play moved outside she had found a familiar friend and they were playing together. They became interested in a directed game involving a giant dice, C4 stood back for a while observing what was going on, then joined in, demonstrating the patience required to play (allowing the dice to come to a stop). Back inside she is very independent in her actions and choices, although is at times happier to sit back watching rather than getting stuck straight in. She will frequently have a very astute contribution to make.

Focused observations - Term 2- Preschool
Brave - Courage & Confidence
Has decided to dress as Anna (Frozen) and freely approaches staff to help with dress. She very confidently 'has the floor' on many occasions, telling the group all about her nail-polish machine at home, it's contents and the characters on it, the colours you can use, how it is operated and the issues she has with it, "I also have lip-polish, but that isn't healthy for you and it makes your lips crack, but I had a bath so I was ok. Going into the garden to play she is the first to notice that the gate has been left open from the group before and is quick to inform the staff. Playing on the climbing frame she climbs up the ladder, over the frame and through the curved ladder on the other side "I did it!" With a massive sense of achievement.
Doing things for yourself - Self-motivation & Independence
At the snack table she realises she hasn't had a drink. "I'm going to get some milk" which she pours for herself. Unprompted she announces, "I'm going to dip my breadsticks in my milk." When she hears the bikes have been permitted in the garden (she can hear them moving) she leaves others she was playing with to run and investigate. When playing on the bikes C4 independently manages to coordinate the free-wheeling motion with her legs, keep an eye on her competitors, negotiate the route and repeatedly pull her hood back up.
Having good ideas - Imagination & Intuition
While standing looking at the ducklings C4 keeps up a running commentary; "There is only one more to hatch… He's looking at me… He's scared of us I think, maybe we're scaring him with our loud voices, we need to be more quiet… He's called Sunflower – then Heart Flower – then it will be Sunflower again… They've got webbed feet… They're all interested in me… They want a drink, but I think that water is very old… I think I will get to hold them today… They are so big… I am saying "Tweet-Tweet", then I can be like their Mummy… Why are they so interested in us? They nearly got me… You don't put your fingers in because then they might bite you … The other one still hasn't hatched… I think they are saying "Tweet-Tweet I love you" … I think they are waving at me… They are so fluffy!... I think they're cleaning each other – that's what they do. When she asks me to read her a story she chooses The Teletubbies Birthday Party. Looking at the cover (with all characters shown) I ask her whose birthday she thinks it might be? "Any" she replies… "Any means you don't know!" Unprompted, she begins talking about the ducklings again "Their Mummy is on a farm with the other babies. At the end of the week these babies will go back to join them. At the weekend [staff member] took them home and they went in her bath!" She finds this very funny as she imagines it. A toy can't be located in the garden and a staff member starts singing "We're going on a toy [Bear] hunt…" C4 continues the song using her imagination to fill in the blanks. The children are making 'pirate' flags [they've been given black paper, white chalks and pictures of skull and crossbones] – C4 looks very different, having freely created her own design. When she falls off the see-saw she tells me it was the wind that must have blown her off. When outside she feels raindrops on her face. She thinks for a moment then tells me "I thought I saw little drops on the slide earlier!"

Having fun (with friends?) - Playful & Sociable

During the session she invites me to join her in various areas – "Would you like to come into the other room?" She then asks me if I will read her a story. Through the book she engages with me as we talk about the story, finding certain images very funny. She talks about having dinner tonight at her Nannies house and what may be made for tea – she had sausage and hoops last time, maybe this would be the same. After snack she asks if I want to come back and finish the story. A child comes and gives her a handful of gold coins, she thanks her then offers me half. Given the freedom of activity and environment the children can adapt their play and their social groupings freely, this allows for games and friendships to flourish throughout the session, spending time with whomever and however they choose. She instigates play on a two-person see-saw. She falls off one end and it ricochets back, hitting the other child hard in the face. Her sense of guilt/empathy is clear and she becomes very upset. I go to her and explain it was an accident and she tells me it was the wind. Asked to check on her friend afterwards she thinks for a moment and replies "Well, she didn't go to my party" [categorising the nature of friendship through this lack of attendance].

Doing new things - Adaptability & Curiosity

She spends several minutes moving around the space, looking at what is on offer to play with and what others are doing. She stays for a few minutes listening to a story at the side of the group, then adapts her activity to something else. She considers the weighing activity with the Compare Bears, then moves over to the ducklings. A child at the snack table crunches their breadstick and C4 becomes interested in the fact that hers [being dipped in milk] no longer crunch "They're still crunchy on the inside, but only in the middle. Within the story I read her she wants to count everything.

Having a go - Practical

Another child tries to put his finger into the duck habitat, "We're not allowed to do that, it might bite you… No! I think you were asked to go into the garden". She applies the practical rules she has been told to another child, and when he continues to behave in ways C4 doesn't approve of she finds a practical solution. She has a clear grasp of the rules and is not shy to enforce them on others – shocked as she sees another child picking paint off the radiator she tells a staff member… "I keep telling them!" When it starts raining outside she tells me "It doesn't matter – I have a thick coat on anyway".

Additional notes - The nursery took delivery of 6 duck eggs last week and a habitat for the hatched ducklings, including a heated bed area, food trough, water and paddling area. With one of the eggs failing to hatch (this is typical) the children have watched five of the six ducklings grow and thrive throughout the week with continual access to the habitat in the playroom. The ducklings are due to be collected at the end of the week.

Observation journal – Term 3 - Preschool

12/04/18 - The observations began inside today when C4 was in a minor altercation with another child, C4 wanted to play with a pirate ship without the other child's involvement. This was being handled well by the children, but the play did not look like it was about to reunite. The children then went outside (while I observed others), when they came back in they very quickly began playing together, and with the toys they had been squabbling over before going outside. I did not see what happened outside, but on coming back in they played deeply and contentedly for a long period of time – until the bell for tidy-up time was heard.

25/04/18 - C4 has played very confidently with a range of children today. Happy to be by herself and with others she is very self-assured in her actions and not easily put off by others. When play around her becomes distracting – either through the noise created, invasion of space or intrusion – she will acknowledge it, but it does not stop her pursuing her own wishes. Even when this involves heavy rain. She has been very entertaining today with her verbal outbursts, showin great character and self-assurance and has been consistently joined by an array of friends.

16/05/18 – She has been very engaged socially today, playing a range of games with other children (one consistent) that has involved lots of discussion and negotiation – both physically and within their imaginative play. She is very happy to adapt from one activity to the next and changes location with ease. When given the opportunity she will explore the full extent of the environment, but she is also happy to settle down with one activity for long periods of time.

06/06/18 – C4 has been deeply engaged in a range of role play today as games have evolved and developed over time and space, un-detracted by enforced changes in location. The open nature of the environment has enabled this and permitted the addition of resources to enhance this play. The nature of the locations has also allowed physical challenges to spring up, further encouraging her play and on occasion, problem solving that she has managed with a slight pause and some thought.

Observation journal – Child 4 – T4 - Reception
27/09/18 - C4 has clearly demonstrated self-confidence today, happy to manage herself within the space she takes part in the activities. Even when this involved being singled out as Helper of the Day, she happily stood up at the front of the class and walked with another child to take the register to the office.
27/09/18 - She has self-confidence within the space, happy to manage herself within it, taking part in the activities. Even when this has involved being singled out as Helper of the Day, standing up with another child and taking the register to the office.
11/10/18 - C4 has happily negotiated the environment today, finding her way around the hall and back to class after having her photo taken. She has engaged with the wide range of resources on offer through the group activities, happy to select what she needs and access her tray etc. to put things away. When settled at an activity she will often look around the space at things going on elsewhere – the setup of the room makes this possible with an easy view of everything. During carpet time she tends to sit quietly with a friend.
27/09/18 - C4 has been quietly getting on with it today. She has seemed really tired, joining in with everything, she will also spend long periods in 'quiet contemplation' (staring into space). She has got on with all the activities on offer today and has been keen to do so with friends, but once with them hasn't seemed overly interested in conversations. She has clearly accessed the things she has needed without much guidance or support.

Focused observations - Term 5 - Reception
Brave - Courage & Confidence
On entering the classroom, she quickly finds her Star Group and sits down to the activity – copying d's on a worksheet. She has confidently written a row as prompted by the sheet. Her d's are very neat and precise but she has not progressed to the next activity – writing words beginning with d… instead she is squeezing more and more d's onto the sheet. Taken to a side room with a small group and the TA for reading time she confidently follows phonic sounds in a book with her finger as prompted. Responding mostly correctly, when unsure this doesn't stop her. When it is her turn to sound out a word she tries, a little timid, and almost gets it, but perseveres. When the group reads the sentence collectively, she has a go, when prompted to turn the page she appears to look ahead, then has a go at reading each word in turn. When back with the whole class, she doesn't volunteer answers when asked, preferring to watch the actions, not putting her arm up or respond vocally as the teacher intended. When children are asked to name a tricky word she had just encountered in group reading she doesn't raise her hand but is asked by the teacher what it is and she gets it right immediately. Asked for a word rhyming with hat she puts her arm up briefly for the first time. Someone else says pat and she is quick to bend to write it, but now doesn't volunteer another answer when prompted.
Doing things for yourself - Self-motivation & Independence
C4 comes in happy, separating from mum well. She checks her star group and settles to the task. In her small group reading with the TA she is quick to look ahead in the story. Where she stumbles, she doesn't give up, keeping on trying. As others take turns she listens and watches, smiling as attempts are made. As new words are sounded out, she does follow vocally but isn't motivated to raise her hand or proactively volunteer that she knows any answers. Asked to change position on the carpet she does so but continues to look very tired, yawning and gazing into space, not overly motivated. Having not been working independently, discussing what they should write with those around her, the teacher reminds them to think for themselves and that mistakes are ok. When going through the words as a class she listens and watches, continually looking back to her own work seeing what she had done. Asked to write 'hat' she starts quickly, very confident of her 'h'… she then loses confidence and starts looking around again. She then thinks for herself, has an idea (sudden intake of breath) and bends again to continue for herself. With a lull in proceedings she starts gazing around the walls again as her motivation slips once more.
Having good ideas - Imagination & Intuition
When Star Group time ends, the teacher calls for the children's attention. C4 immediately puts her pencil down and responds, intuitively knowing what is expected. When taken to a side room by the TA the small group are asked to put reading diaries into the centre and she does so quickly, opening her book and finding her place with her finger. When re-joining the classroom, she puts her bag away observing what is going on then finds a place on the carpet. She then shares her attention between the board and looking outside. After the writing time she conforms quickly, wiping her board, putting lids on pens and packing away, looking to the door as other classes are preparing for break time.
Having fun (with friends?) - Playful & Sociable
Sitting with others during Star Group she will occasionally interact and giggle with them. When prompted to write the given sentence on her board she writes the first word straight away then realises she's forgotten the second word. Asking friends around her they discuss their writing trying to work out what comes next… looking at others she tries to copy what they have done – when a friend remembers she excitedly exclaims "Yes – that's it!" And bends again to write. She asks those around her what comes next, actively learning from each other as they exchange ideas. When asked with the girls to get their coats on she responds quickly and is out and lining up with her friends, listening as they are deep in conversation.
Doing new things - Adaptability & Curiosity
She frequently looks around the room, observing what is going on, seeing what others on her table are doing. When she is selected to go with a small group to do reading with the TA she immediately responds and adapts to her new surroundings quickly and with ease. When the teacher demonstrates what they are to write on the board she watches and looks back to her own work, very clearly concentrating on what is being written.
Having a go - Practical
During Star Group time she settles quickly to the task with some periods of deep concentration as she is quick to have a go. She uses a number of physical techniques within her learning, whilst initially prompted these seem to be natural for her. She uses her finger to follow the words in the book throughout the

various exercises and this practical approach seems to help. She is quick to join in with the physical approaches to learning (robot arms) when back in the classroom where other group prompts have been ignored.

Additional notes - The regular teacher is on a sudden long-term sick leave, so the class is being taught by a Year 2 teacher. When mum drops off, she explains that "While I'm here it's like her voice disappears" and the teacher reassures her that she was chatting happily with her yesterday. She does yawn a lot throughout the session today, these frequent yawns do stop her repetition of the words they are reading off the board and she will occasionally be gazing off into space, but on the whole her attention seems to remain focused.

Observation journal – Child 4 – T6 - Reception

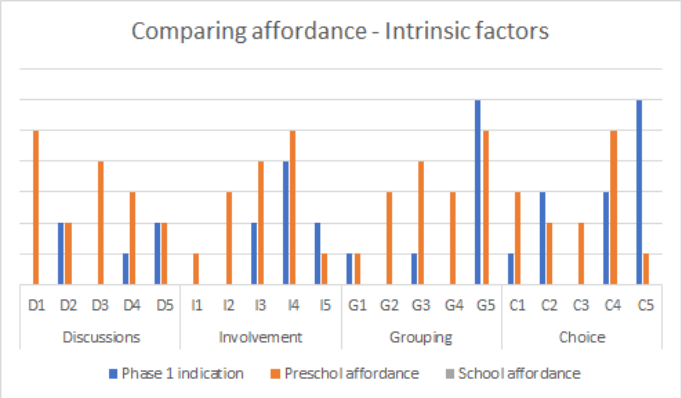
07/05/19 – C4 was very early to arrive today and immediately found her place on her Star Group table where she began to make various shapes with the play dough that had been set up there. As other children arrived they came and had conversations with her and she quickly integrated into the group. C4 is clearly comfortable in her environment where she quietly 'gets on with it'. She doesn't tend to talk or interact when sat on the carpet, but becomes animated as soon as she is given the greater freedoms of being outside. Here she engages with others and plans her actions with the insights required for greatest effect. As with other experiences of observations, a portion of the observations were done while the children were watching a programme on the white board. For these observations, Interactions were recorded as if the programme was delivered by an adult (that is, A – GC) and Teaching Styles recorded as Adult Led (T1).

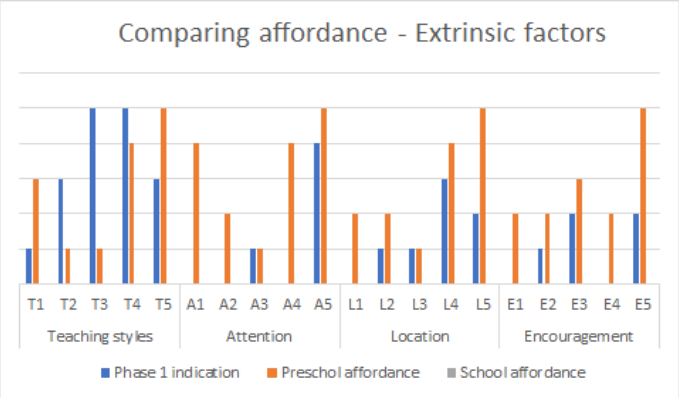
07/05/19 – Very conscientious in her actions and responses C4 is frequently well focused and attentive, although is often reluctant to offer solutions or responses when the class are asked to do so. This doesn't appear to be because of a lack of knowledge as she will mouth answers and pre-empt expected responses. She also demonstrates the depth of her thinking through her immediate reactions when able to choose the location of play, and also the depth of discussions that occurred when playing as a pair outside. These discussions showed social awareness, ability to plan and imagine, substituting one object to represent another and drawing frequent comparisons between the real and imagined world.

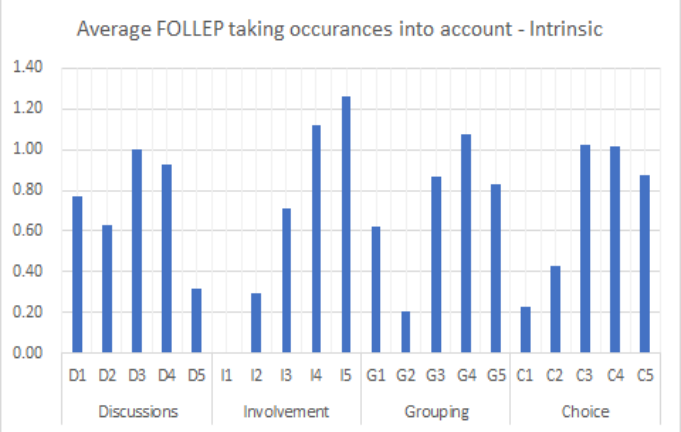
05/06/19 – Once again, C4 was not overly forthright in joining in with group activities today. She sits and pays attention, but when the class are expected to participate as a group, she often avoids doing so. As a large portion of the indoor observations were spent on the carpet where this was expected today, this was observed frequently. This is in direct contrast with her level of participation when she went outside and was offered the greater freedoms of location, grouping and activity where she became far more animated and involved.

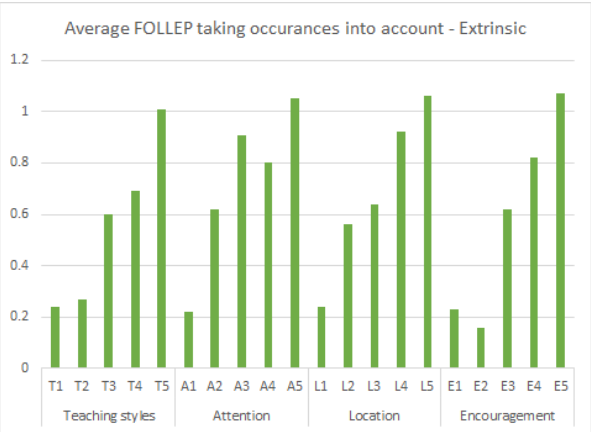
05/06/19 – C4 has appeared to be self-assured today, happily progressing through her work, showing her efforts then continuing with the next task, even when she has previously written the wrong answer. When she was asked to go to the hall to have her photograph taken (all the children went in small groups through the afternoon) she happily did so, rejoining the session with ease on her return. When given the extra freedoms of being outside she showed great imagination in the small group games she played, this is in complete comparison to her solitary and disengaged reactions on the carpet indoors.

Findings represented within both the preschool and reception settings.









Appendix T – MICE Observation sheet

Physical Environment Observations - Used to address MICE steps 3 - 6

Date	Day	Session	No. A	No. C	Name	DOB	Class	Teacher

Rate each disposition according to the DEP scale from -2 to 2 for each of the 4 observations

Obs.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																

Dispositions							
1	Self-motivation	2	Simultaneous	3	Sociable	4	Adaptable
5	Logical	6	Courageous	7	Practical	8	Wide
9	Imaginative	10	Curious	11	Reflective	12	Independent
13	Creative	14	Confident	15	Intuitive	16	Playful

Observe each child for five minutes before completing the coding and notes		Teaching styles (T1-5) Distractions (D1-5) Location (L1-5) Encouragement (E1-5)			
Time	Description of the observation	T1-5	D1-5	L1-5	E1-5
1					
In / Out					
2					
In / Out					
3					
In / Out					
4					
In / Out					

Any additional notes

DEP Rating Scale	
-2	Active reluctance to engage, does not volunteer verbally or physically.
-1	Will indicate this feature but reluctant, finding alternatives if possible
0	Shows indifference, or there has been no opportunity for it.
1	Keen to engage in this feature, indicating a comfort within it but will easily move on to another.
2	A clear feature of choice, will actively seek it out and return, showing clear enjoyment.

8.3 Index of Figures