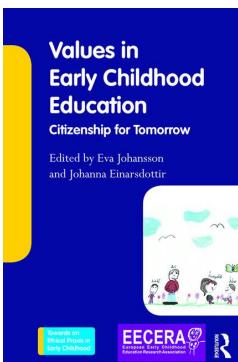


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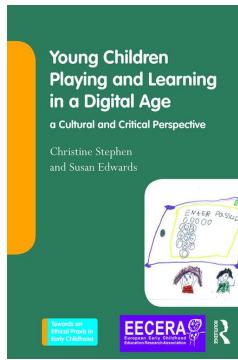
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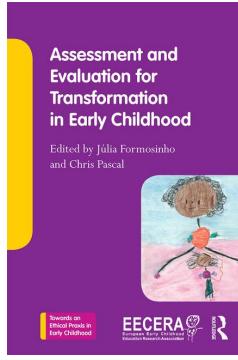
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9

PLAY IN AN ETHNICALLY DIVERSE PRESCHOOL

Conditions for belonging

Berit Zachrisen

Introduction

In Nordic preschools, play has a central position and is emphasized in all the curricula as a very important arena for children's learning and peer interaction (Einarsdóttir, Puroila, Johansson, Broström, & Emilson, 2014). Through play, children can establish contacts, gain important experiences and live their lives. For most children, preschool represents their first opportunity to experience interethnic interaction and collaboration in play. The experiences that children gain through their daily encounters with other children in play can be important for their growing understanding of democracy and equality in a diverse ethnic society and in counteracting discrimination (Biesta, 2011; Quennerstedt, 2011). Article 2 in the Universal Declaration on Cultural Diversity (UNESCO, 2001) states: "In our increasingly diverse societies, it is essential to ensure harmonious interaction among people and groups with plural, varied and dynamic cultural identities as well as their willingness to live together." The declaration describes cultural diversity as a means to achieve a more satisfactory intellectual, emotional, moral and spiritual existence for everyone and as indissociable from a democratic framework (UNESCO, 2001). Encountering ethnic diversity in preschool does not guarantee children will develop friendships or a feeling of community across ethnic borders.

In a small-scale ethnographic study in a Norwegian preschool, I observed interethnic play among ethnically diverse children ranging in age from 3 to 5 years old (Zachrisen, 2013). In the study, the term "interethnic play" describes play among children from ethnic minority and ethnic majority backgrounds. The conditions for interaction and participation in the interethnic play situations appeared to be multiple and compound, and the children often seemed to need the practitioners' support to establish equal and mutually recognizable relationships. While the study was conducted in only one multicultural preschool and thus cannot be generalized

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to all multicultural preschools, it does support other studies that have explored interethnic interactions among preschool children (Brooker, 2005; Clawson, 2002; Gulløv, 2010; Löfdahl & Hägglund, 2012) by demonstrating how challenging it may be for children of different ethnic and linguistic backgrounds to play together – especially symbolic and imaginative play.

Brooker (2005) points to the discrepancy between the minority children's home culture (children from Bangladeshi backgrounds) and expectations for the children imbedded in the English preschool practice. She found that the children from Bangladeshi backgrounds seemed less prepared for a pedagogical practice emphasizing children's self-initiated play than the children from the majority background. In line with this, Clawson (2002) highlights that a preschool practice emphasizing self-initiated play can expose children from minority backgrounds to interactions in which the knowledge they have previously used to guide their social interpretations and actions is questioned or ignored. In play, children make use of and expose their everyday experiences and these are socio-culturally situated (Göncü, Jain, & Tuermer, 2006). Experiences with ethnic diversity in preschool may teach children that there are several communities and that the gap between them can be significant (Gulløv, 2010). Attitudes towards diversity, which are associated with positive social identities and acknowledgement of others' culture, are not easily constructed during children's peer activities (Löfdahl & Hägglund, 2012). Further, practitioners' involvement in these situations is important (Brooker, 2005; Löfdahl & Hägglund, 2012).

The findings from my own and other researchers' studies show that interethnic play and contact in preschool are not sufficient to ensure that children develop strong relationships across ethnic and linguistic borders and a sense of belonging with peers. In this chapter, I take it a step further and discuss conditions for belonging in several illustrative interethnic play situations from the study. The question I ask is: what opportunities exist for children to experience belonging with peers in interethnic play?

Belonging can be defined as a fundamental emotional need and as a democratic right, the right to belong (Kunnskapsdepartementet, 2011; UNESCO, 2001; Walton, Cohen, Cwir, & Spencer, 2012). The two approaches are seen as closely connected: the right to belong has its roots in belonging as an essential human need connected to physiological survival. A child's right to belong or to be included on an equal basis in his or her preschool group is a human right rather than something that rests on his or her personal attributes (social competencies, common background or attractive resources).

Belonging as approached in this article is about children's emotional attachment to, and their sense of fellowship with, their peers in an ethnically diverse preschool group (Kunnskapsdepartementet, 2011; Walton et al., 2012). Developing belonging is viewed as a complex process, established over time and based on a number of interactions with certain qualities. Different degrees of belonging can exist, and children can belong to different objects of attachment (Yuval-Davis, 2006). This study focuses on conditions for belonging among preschool children in an

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ethnically diverse group. Important conditions for belonging are linked to the possibilities that exist for shared experiences in equal and respectful relationships and the space for diverse, individual expression.

Participants and context

The study was conducted in the context of a Norwegian preschool, in which children spent six to nine hours each day. The preschool was a municipal preschool with a long history of working with ethnically diverse groups. Written informed consent for participation in the study was obtained from the practitioners and from the children's parents. In addition, each observation required that the researcher display sensitivity to the children's reactions to being observed.

Approximately one third of the practitioners were qualified preschool teachers while the others were assistants. All except one of the practitioners came from an ethnic majority background. However, the single practitioner with an ethnic minority background did not share a background or first language with any of the children. The participants were recruited from two groups (classes) of children age 3, 4 and 5 years. All the children in these groups were invited to participate. A total of 34 children accepted the invitation. Ten of the children were from ethnic minority backgrounds: five girls and five boys. The 24 children from the ethnic majority background consisted of 15 boys and 9 girls. In every subgroup, the children were from 3 to 5 years old. During the unstructured playtime, all the children were together.

Only one of the children from an ethnic minority background, a 3-year-old, was new this fall. The others had attended the preschool for at least one year, and one child (Basir) more than three years. Because some of the girls from an ethnic minority background seemed to prefer being with other girls from the same ethnic background, the boys were dominant in the interethnic play arenas. This gender distribution is reflected in the observations presented in this chapter. For all the children from an ethnic minority background, Norwegian was their second language, and their parents were from an ethnic minority. The children's ethnic backgrounds were Somali, Kurdish, Croatian, Azerbaijani and Nuer. For all the children from an ethnic majority background, Norwegian was their first language, and at least one of their parents was from the ethnic majority group in Norway.

Participant observations were made live and by hand. The focus was verbal and nonverbal communication, as I saw these aspects as integrated with each other. Nonverbal communication includes glances, facial expressions, verbal sounds, signs of listening, touch, chronemics, physical gestures, postures and movements. The analysis was based on 43 observations of interethnic play. Play situations are informal situations in which the children may choose what they want to engage in. The observations lasted from approximately four to 30 minutes.

The start of an interaction was defined as when two or more children from an ethnic minority background and an ethnic majority background initiated a

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common play or were involved in an ongoing interethnic play situation. When most of the participants left the location or when the play turned into an intra-ethnic situation, the interaction was considered to have ended.

Further, I first discuss opportunities for experiencing belonging among playmates in two interethnic play situations. In this chapter, only the *conditions* for experiencing belonging in some specific interaction are discussed. In the second part of this chapter, Allport's contact hypothesis is taken as the starting point for a discussion of how practitioners can strengthen the conditions for belonging in an ethnically diverse preschool group (Allport, Clark, & Pettigrew, 1979).

Conditions for belonging in play

This section discusses opportunities to experience belonging in two play situations. Play can be described as an activity that moves between two poles. At one pole, play is seen as a game of power, positions and resources, and at the other, play is considered deep immersion in the common interaction and transcendence of the playmates' self-interest (Åm, 1989, pp. 84–91). When immersion increases, the potential of the play to be an arena for pleasant and gratifying common experiences in which the play itself takes hold also increases. The here and now comes into focus. Playfulness is viewed as an important indication of immersion in play and is a mental attitude that cannot be directly observed (Bateson, 2000). However, an observer can look for signs. Playfulness can present itself through laughter, mischievous eyes, the use of role-typical voice or gestures and words, such as "pretend," or in some languages, the use of verbs in the past tense. When immersion in play increases the opportunities for experiencing belonging with playmates also seem to increase. The subject is further emphasized in the next section.

The right to jump

Five boys play together with the door closed in a room meant for gross motor activity. Asli (5), Basir (5) and Ilham (5) are from different ethnic minority backgrounds, while Johan (5) and Olaf (5) are from an ethnic majority background. (I am the only adult in the room.) The play starts with one leading position and four following positions. A small change in the play makes changes in the leadership of the play, and two boys occupy leading positions.

Under Olaf's leadership, the five boys place a huge mattress on its short side against some wall bars. Olaf instructs the others to run away and hide. Asli, Basir and Ilham run away, but Johan remains standing beside Olaf; both lean against the mattress. Johan looks at Olaf and says, "We are staying behind because we are the best!" Olaf does not respond. Shortly afterward, Johan climbs to the top of the wall bars. Olaf steps aside, and the mattress falls to the floor. Johan jumps down and lands on the (falling) mattress. Johan and

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Olaf then take turns climbing and jumping from the wall bars and leading the work team (Asli, Basir and Ilham) placing the mattress on the floor. The three boys from an ethnic minority background participate only in the work with the mattress. In one instance, Olaf says that he was not satisfied with his jump and therefore he will take another turn at jumping. Johan says that is unfair, and the two boys begin to discuss what is fair and which rules apply. The exchange of words is rapid, and their voices are high and irritated. Asli, Basir and Ilham stand silently around the two debaters. After some discussion, Olaf and Johan agree to continue the play, and the established organization of the play continues.

The noise level of the play is often very high. At different times, several practitioners peek into the room and encourage the children to calm down. However, none of the practitioners comment on the distribution of rights in the play. After a while, one practitioner who enters the room sits down and watches the play. After observing it for some time, she stands up and helps the five boys create a routine for taking turns. None of the boys resist this, and after the practitioner leaves the room, the new routine is maintained.

Olaf and Johan possess leading positions in the play. A leading position is defined as a position with much influence, for example, on the content and the ideas on which a play is based. Usually, a leading position implies a certain responsibility regarding organizing joint activity and keeping the group's interest in the play alive. Asli, Basir and Ilham have all accepted a following position with little influence in the interaction. Usually, a following position also involves little responsibility in organizing the joint activity and upholding the group's interest in the play (Zachrisen, 2013).

Olaf and Johan take turns jumping from the wall bars and leading the work team on the floor. Asli, Basir and Ilham constitute the work team who, under the leadership of Johan or Olaf, place the mattress against the wall. At one point, Johan and Olaf have a dispute about who has the right to jump, but none of the boys comment on the main distribution of rights and work in the play. However, when one of the practitioners introduces a new routine for jumping involving all five boys, none of the boys resist this, either. Moreover, the new routine is maintained even after the practitioner has left the room. The practitioner's involvement modifies the conditions under which rights are distributed in this interplay.

Shared involvement in an interplay can be important for experiencing belonging with others. At first glance, the play appears to give the five children an opportunity to share experiences. However, shared involvement is not enough; experiencing belonging is also about equal relationships and space for individual expression. The children have very different positions and influence in the interaction. In one instance, one of the boys from an ethnic majority background (Johan) says to the other boy (Olaf) from the same background: "We are staying behind because we are the best!" It is difficult to interpret exactly what he means, but the utterance implies

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that he is referring to a distinction between the two groups: us and them. The play itself divides the five boys into two groups: the two boys in the leading positions form one group, and the three boys on the work team form another group. The grouping corresponds to the children's ethnic minority or ethnic majority backgrounds. This classification may give the children an opportunity to experience shared involvement with their playmates in the same subgroup, but it may not give them many opportunities to experience shared involvement with playmates in the other subgroup. The unequal distribution of rights in the first part of the play provides little support for a feeling of *mutual* respect and recognition between the children. According to Gulløv (2010), experiences with diversity in preschool may teach children that there are several collectives and that the gap between them can be huge. Especially, the first part of this play may provide the children with these experiences. In this part of the play, the space for diverse, individual expression is narrow for the boys in the following positions.

In the second part of the play, after the introduction of the new routine for taking turns, the opportunities for experiencing shared involvement among all five children seem to increase. Within the new structure for taking turns, there is equal sharing of the right to jump. Through this change, Asli, Basir and Ilham have more influence in the interaction, but the allocation of positions does not seem to have changed. However, equal sharing is observed within each subgroup, and the signs of playfulness seem to increase as the play progress. This applies in particular to the three boys in the following positions. They act freer and less "synchronized" and perform their following positions more actively and independently as the play evolves. The space for diverse, individual expression expands. The practitioner's involvement in the interaction is essential for the progress towards greater equality in the interplay among the five boys.

To summarize, as the play develops, the children's attention moves from distribution of power, positions and resources to a more playful interaction. Increasingly, the play itself seems to take hold of the participants (Gadamer, 2004). Simultaneously, the children's influence in the play becomes more equal. A higher degree of equality in the distribution of rights and power among the children increases their opportunities for experiencing reciprocal respect and recognition and shared involvement. Based on the idea of equal sharing in a respectful relationship with freedom for individual expression, the conditions for experiencing belonging within the group may improve. A similar development of the interplay can also be observed in relation to the last observation.

Collecting leaves

The following interaction occurs outdoors on the playground. (All five participants are 5 years old.) When the observation starts, Johan stands next to a pile of leaves and calls himself a guard. Two boys (Asli and Ilham) and two girls (Natuma and Samira) are running around the playground picking up leaves. All the leaf collectors

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are from an ethnic minority background (two different ones). Johan is the only one from an ethnic majority background.

Johan calls out to the other children running around the yard: "Run! March! Come on!" The other children collect leaves and run over to Johan to deliver them. After a while, the collecting activity seems to slow down. The collectors spend more and more time only running around under the trees in the yard, laughing and talking together and ignoring Johan's calls. When Ilham comes over to Johan, Johan asks Ilham if he wants to be a guard now. Ilham accepts the offer and takes his place beside the pile. Samira and Asli say they also want to be guards. Ilham rejects them with a firm "No!" and a dismissive gesture with his arm. Samira, Asli and Johan run over to Natuma. Ilham stands beside the pile looking beyond the playground in which the other children are moving around. Suddenly, one of the children calls out: "Attack!" The children begin to yell and shout while they run around the playground. Ilham runs away from the pile and joins the others. New screams of "Attack!" are heard from different children. Each call leads to an increase in the group's running and shouting activity. Soon after, the play changes once more, this time to run-and-catch play. Some of the children are catchers, and some are caught and are temporarily put in jail under a tree. However, soon after, they escape. Joyful howls, screams and laughter are heard.

When the interaction begins, Johan seems to have acquired a leading position as a guard for the pile of leaves. He organizes the play through calls and instructions to the other children. Asli, Ilham, Natuma and Samira seem mainly to adapt to Johan's instructions. They are interpreted as having accepted following positions. When the play soon changes, the children's positions seem to change, too. The focus of the play moves away from collecting leaves to running around among the trees on the playground, laughing and talking together. The guard seems to lose his authority as a leading position. In this situation, Johan offers Ilham the role of the guard. He accepts and defends the role against Asli and Samira. However, soon after, he gives it up and joins the others in an attack play (the second part of the play).

In the attack play, the children seem to possess nearly equal positions. No one tries to coordinate or control others' behaviour. Each child seems to have the freedom to call out "Attack" and through this influence, the common play and others' behaviours. The freedom of each child continues in the third part of the play, the run-and-catch part. In this part, the roles become interchangeable. One who is hunted may turn around and begin to threaten and hunt the hunter. The quality of the play, with an emphasis on physical capabilities and the children's similar age, may be central to how the interaction develops and which possibilities each child gets to take the initiative and influence the play. As the play progresses, the organization of the play seems to be looser. Despite this openness, the participating children seem important to one another.

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The playgroup is heterogeneous in gender and ethnic background. Some of the children are rarely observed playing together. The interaction can be interpreted as giving the actors an option to share a collective experience characterized by a lot of humor and the expression of good feelings and to interact in equal positions, two important conditions for experiencing belonging in a common play.

The interaction can be described as a development towards greater immersion in the joint activity. Gradually, the here and now comes to the fore. Other features, such as social status, competence in the Norwegian language and ethnic background, can fade. The focus in the play, on physical competencies and nonverbal communication, can be essential for the possibilities the children have to indulge in a common interaction. Play as immersion in a common playful interaction is an antithesis to play as a game of power, resources and positions.

To summarize, essential conditions for experiencing belonging are equal sharing in respectful relationships with space for individual expression. In the second and third parts of the collecting leaves play, the children possess equal positions with similar opportunities to take the initiative and influence the common play and to change roles. These parts of the play offer the five children opportunities to experience belonging with their playmates.

Pedagogical approaches for strengthening conditions for belonging among preschool children from diverse ethnic backgrounds

This section discusses how early childhood practitioners can strengthen conditions for belonging among children in an ethnically diverse group. This issue is based on Allport's contact hypothesis (Allport et al., 1979). According to this hypothesis, social contact among people from different groups (under certain conditions) can lead to greater tolerance and can strengthen the bonds between them. Social contact can work to reduce prejudice and to encourage appreciation of other individuals as unique and interesting social actors. However, previous research in Scandinavian preschools shows attitudes to diversity (connected with positive social identities and acknowledgement of others' culture) are not easily constructed during children's peer activities (Gulløv, 2010; Löfdahl & Hägglund, 2012). Allport describes the conditions under which bonds among ethnically diverse groups are most likely to be strengthened. He formulated hypotheses about four criteria. The contact hypothesis was primarily developed with the aim of building social networks between older children and adults. Although the four criteria may not be a complete solution to counter injustice and cultural hegemony and establish harmonious interaction among children, the criteria can make a significant contribution to strengthen social bonding among children in a diverse group. Educational work to strengthen social bonding among preschool children will be a work to strengthen the same children's opportunities to experience belonging. The four criteria are interdependent and interactive. However, they are presented one after the other, although the content

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partly overlaps. In addition to the four criteria, this study adds a fifth criterion that encompasses parents' contribution to the work/effort.

Equal status

The first criterion highlights that the participants have to appear with equal status (Allport et al., 1979). Different interpretations exist about why equal status is important and how status influences relationships. One interpretation highlights that equal status should be established and maintained on a more general level in order to build good relationships between two groups. Another interpretation points out that positive relationships can be established if group members appear to hold equal status (only) in specific situations (Pettigrew & Tropp, 2005). In the second and third parts of the *Collecting leaves* play, the children possess equal positions and through this equal status. However, equal positions are not an enduring condition in all parts of this play. Unequal positions seem more common than equal positions in interethnic play in general in the data.

To strengthen social bonding among children in an ethnically diverse group, experiences with equal status should be repeated in different playful interactions and other situations over time. The children's interactions in play have to be seen in light of the sociocultural context in which they unfold. To strengthen social bonding, children need many opportunities to get to know each other as equal, distinctive and competent individuals. How practitioners ensure that the educational environment provides a wide range of experiences of recognition and identification for all children is important. Narrow spaces for recognition mean less opportunity to bring thoughts, knowledge and skills into the world and to be socially visible and recognized as a subject (Arendt, 1958).

Supporting children's equal status in the playground implies arrangements for wide-ranging play situations: situations in which children's different skills and knowledge are made relevant, visible and valued, and in which children's opportunities for experiencing collectivity and belonging are supported (Zachrisen, 2016). This calls for practitioners who know each child, are familiar with his or her competencies and backgrounds *and* support children's shared experiences. Diversity and community are seen as interrelated values in the pedagogical work.

Common goals

The second criterion emphasizes active cooperation to achieve *common goals* (Allport et al., 1979). In play, the main goal lies in the process (Vygotsky, 2002, 1933): it is to play and to have a good time together. Why children stay in a play situation, although their spaces for taking initiative and being acknowledged are not the best, for example, in the first part of *The right to jump*, can be seen in light of this goal. Being together and having fun are the heart of play, and the five boys seem to have fun although the distribution of goods is not optimal, and they may experience shared involvement within their subgroup. Active cooperation to achieve common

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goals in play can be interpreted as children's mutual adaption in relation to each other and the shared activity. The pressure for adaptation in interethnic play has to be seen in relation to the positions the children hold. The pressure for adaption can be greater in a following position than in a leading position (Zachrisen, 2013). Equal status, common goals and active cooperation in an interethnic play may call for a practitioner's active involvement in the children's play. In *The right to jump*, only a little input by the adult is required before the distribution of rights changes and the five children's opportunities to experience more equal fellowship and community increase.

In the data material, interethnic play often seems to have a center of gravity in competition and conflict, rather than in cooperation and deep, pleasant experiences (Zachrisen, 2013). Such conditions are unfortunate if the target is to build strong interethnic bonds among preschool children from diverse ethnic backgrounds. When the degree of immersion in play increases, children's ethnic backgrounds can appear less important (cf. parts two and three of *Collecting leaves*). One approach to this challenge is *frame play* (Broström, 1999), in which the whole group plays together. It starts out as intended and planned dramatic activities under adult's leadership, and develops towards free role-play. Another approach is based on how time and space are organized (Løkken & Moser, 2012). Normally, children need time and a sheltered playground to get into a state of deep immersion in play. In a contested and hurried institution, creating the necessary frameworks can be a challenge, but not an impossibility, for practitioners.

Acquaintance

The potential for acquaintance is highlighted in the third criterion (Allport et al., 1979). In this study, only a small group of children participated regularly in interethnic play (Zachrisen, 2013). Especially, several children with an ethnic majority background rarely or never attended interethnic play arenas. Play in early childhood is described as an essential way by which children exist or live together and through which they get to know each other. According to Hännikäinen (2001), playful actions can manifest the nature of the relationships among children and the feeling of togetherness. Standing outside interethnic play provides fewer opportunities to get to know children from other backgrounds.

In this study, some of the children from ethnic minorities were less visible in the group than many of the children from the ethnic majority. When the educational environment and the playground are dominated by the majority language and culture, it can be difficult for children from an ethnic minority background to be noticed and appear as attractive and skilled playmates for the other children. Lidén (2001) studied life in two diverse classes in Oslo (children in the second class). She maintained that the differences in position are not based on external symbols, such as clothing or language skills, but on the lack of certain knowledge that seems to be common in the majority group. This implies that children from minority backgrounds do not exhibit the same (obvious) knowledge as the others.

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How can educators create a pedagogic environment in which each child is visible and appears as an interesting and knowledgeable mate? One important condition is to acknowledge children as culturally situated participants, without essentializing their backgrounds by making cultural backgrounds something fixed. Instead, children's backgrounds should be highlighted as complex, positive and recognizable images anchored in the children's concrete and everyday life (Banks, 2009). Children (and adults) belong to different social and cultural groups and are distinctive, unique individuals with special experiences and skills. Making children visible to their peers can also be about highlighting a child's special interest and competencies: creativity, physical competencies, musicality or knowledge of insects or dinosaurs. When children's *funds of knowledge* are integrated in the preschool's pedagogical practice (Moll, Amanti, Neff & Gonzalez, 1992), this knowledge can be a foundation on which the children can build their common play. Although children have to be acknowledged as culturally situated participants, they are also co-creators of a unique peer culture in preschool (a set of routines, artifacts, values and concerns that children can engage in with their playmates; Corsaro, 2003).

Authority support

The fourth criterion is the support of the authorities, law or customs (Allport et al., 1979; Pettigrew & Tropp, 2006). What happens at other levels of society affects children's encounters in preschool: for example, political decisions and attitudes towards life in a multicultural society, legislation in the larger society, housing policies in the municipality or attitudes towards values of inclusion and ethnic diversity by the management of the preschool, or at the micro level, practitioners' attitudes and actions in the preschool at large (Derman-Sparks & Ramsey, 1993).

Therefore, practitioners need to adopt a reflective approach to their work with children and their families, by interrogating their own values towards different ethnic groups and ethnic diversity in society. They need a discursive space that allows them to reflect upon the values they "take for granted" in their educational practice and which knowledge, values and perspectives are inherent in the pedagogical environment and the experiences they provide to the children. According to Erickson (2010), cultural hegemony can be described as a taken-for-granted attitude to what exists and happens. Questions to reflect on include the following: which values, norms, perspectives, rules of conduct and views on how children should behave are integrated in our preschool practice – in our selected activities, in our forms of communication and cooperation, in our methods and chosen materials? How can these choices affect children's opportunities to build interethnic friendships?

Parental support

As an extended perspective, a fifth criterion can be added (Zachrisen, 2013). This criterion emphasizes parents and their involvement in preschool. For example, parents may support children's cross-ethnic friendships by being aware of how other

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children and their parents are being described or mentioned at home, how they support and value these friendships and how they relate to cross-ethnic classmates in connection with birthday parties, play after school and so forth. Parental support and cooperation in creating a more diverse and inclusive pedagogical environment in preschool can provide their children with better opportunities for establishing and maintaining interethnic bonds and friendships. The forms of cooperation that are established between practitioners and parents need to promote equality and symmetry. As stated in the following summary, adults' attitudes may have a great influence on children's attitudes.

Summary

Belonging is a human right – not an individual concern for each child, but an obligation incumbent on the preschool as a pedagogical institution. In an ethnically diverse democracy, which wants all children to feel welcomed in the preschool and part of a collective, children's right to belong has to be an important theme in the daily encounters.

The aim of this chapter has been to discuss conditions for belonging among children in an ethnically diverse preschool group. Important conditions for experiencing belonging are shared involvement in a respectful interaction with freedom for individual expression. Regarding the two observations, the most favourable conditions for experiencing belonging across ethnic boundaries seem to appear in the last part of the *Collecting leaves* play. In this interaction, the children perform with equal influence and a high degree of reciprocity. In *The right to jump* play, the opportunities for experiencing belonging seem greater among the three children from ethnic minority backgrounds than among all five children. However, the opportunity to experience belonging among all seems to increase as the influence in the play becomes more equal and the space for some individual expression expand.

Power and agency are interrelated. Maintaining a following position with a low degree of influence provides limited opportunities for exhibiting one's skills and knowledge and correspondingly be recognized for one's competencies by playmates. This situation can develop into a vicious circle. Limited occasions to exhibit one's skills and knowledge and present oneself as an interesting playmate can contribute to maintaining a low position in the playground. In turn, a low position in the playground gives less opportunity to exhibit one's skills and knowledge.

Play can be seen as alternating between two extremes on a scale. Sometimes, competition and conflict dominate the interaction, and other times, cooperation and immersion in deep, pleasant experiences take over (Åm, 1989). When the degree of immersion increases and the play itself takes hold, opportunities for experiencing belonging with playmates also increase. When this situation occurs, children's different ethnic backgrounds appear to be less important for the interaction.

Encounters with peers in educational institutions create favorable conditions for establishing and maintaining friendship and good relations and belonging as

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well as for being ignored, excluded and disapproved of. Experiences of inclusion and exclusion in childhood can influence positions in adulthood in various ways (Pollock & Reken, 2010). According to Pollock and Reken (2010), rootlessness and restlessness are characteristics common to many children and adults from cross-cultural backgrounds. An early childhood practitioner's ability to create opportunities for friendship and experiences with belonging among playmates in preschool is very important. A fundamental principle in a democratic educational institution has to be the valuing of diversity within the collective. Giving children the right to belong also implies giving them a right to their diversity. They are warmly welcomed into the collective as equal, respected members who will enrich the life of the collectives through their commonness and their uniqueness.

Policies for the inclusion and participation of all citizens are guarantees of social cohesion, the vitality of civil society and peace. (. .) Cultural diversity widens the range of options open to everyone; it is one of the roots of development, understood not simply in terms of economic growth, but also as a means to achieve a more satisfactory intellectual, emotional, moral and spiritual existence.

(UNESCO, 2001, cited from art. 2 and 3)

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8

CHILDREN, FAMILIES AND TECHNOLOGIES

Introduction

In this chapter we turn to the everyday experiences of children and their families in the digital age. We will consider research findings about the ways in which children's experiences are shaped by family values and attitudes and their family's cultural practices. We explore the social and cultural context in which young children are growing up and encountering digital technologies and new media, including the ways in which their relationships with siblings and peers make a difference to their experiences. We look too at the evidence about children's own perspectives on their digital encounters. A cultural-historical theoretical framework, along with a critical perspective on the roles and purposes of digital technologies helps us to conceptualise children's experiences in the digital age. We acknowledge the agency of young children and their purposeful engagement in digital activities that amplify the ways in which they can act to pursue their interests and enhance their development as members of a family and peer culture.

At home in the digital age

The homes in which children are growing up in the digital age offer an array of opportunities for entertainment, fun, creating, learning and communicating that were not available to previous generations and which continue to evolve with technological knowledge innovations. The early 21st-century dependence on desktop computers with games loaded on to the hardware and hand-held games consoles (see Plowman & Stephen, 2005) has been widely replaced within 10 years by the use of laptops, tablets, smartphones and activities accessed via apps, downloaded from the internet or played online (Marsh *et al.*, 2015). Tablet computers have made a difference to young children's encounters with digital technologies.

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Their physical scale, portability and capacity to be used in different locations and the direct relationship between screen and user action they offer has overcome the restrictions previously imposed by the size of devices and the forms of connectivity they offered. Tablets remove some of the difficulties which desktop computers and laptops could present for the youngest users who sometimes struggled to manage cursor, mouse and keypad interface options via traditional GUIs. Instead tablets operate via touchable icons via a new form of user interface known as Natural User Interface (NUIs) (Jayemanne & Nansen, 2016). Kay's understanding of how children learn and make use of knowledge has become embedded in the everyday digital life of preschool children and their families.

As our review of the data about young children's access to digital technologies in Chapter 6 made clear, contemporary homes in post-industrial countries typically offer a rich array of digital technologies. However, beyond the kind of educational resources such as those marketed by VTech or Leapster, most children in their early years are not autonomous owners of the range of technologies to which they have access at home or in preschool (Marsh *et al.*, 2015; Ofcom, 2016). Livingstone, Marsh, Plowman, Ottovordemgentschenfelde, and Fletcher-Watson (2015) found that parents were widely considered by children to be the owners of the smartphones in their homes, although when children asked to make use of a parent's smartphone it was typically made available to them. Laptops and tablets were thought of as shared household or family resources, part of the material culture of everyday life in the digital age. The objects that make up that material culture reflect the cultural evolution of technologies over time. For instance, Livingstone *et al.* (2015) argue that the shift among young children to playing games on a tablet computer has been responsible for the decline in use of games consoles. They also associate the use of portable devices to watch television and video with the reduction noted in the number of young children who have television in their bedrooms, a trend also noted in the USA Zero to Eight survey in 2013 (Common Sense Media, 2013).

Not only are parents influential as providers of physical digital resources at home, survey evidence from across Europe suggests that they are important mediators of engagement with these resources. Although there was some evidence of children around six years old browsing for and downloading free apps, deciding on which apps to acquire is more typically the role of parents (Livingstone *et al.*, 2015). The TAP survey (Marsh *et al.*, 2015) found that on most occasions (62 per cent) when young children engaged with a tablet it was because their parent had suggested this activity. Only 16 per cent of tablet use was considered to be at the sole request of a child. Both Marsh *et al.* and Livingstone *et al.* reported that parents' reasons for suggesting that their child make use of a tablet or for agreeing to a request were often a pragmatic response to social circumstances. Engaging with a tablet computer was seen as an agreeable way of passing the time, perhaps if the child had woken early, parents were busy with domestic activities or children needed to be occupied during a journey or while they waited in a queue. Among the respondents to a survey carried out in Estonia with parents who make their tablets and smartphones

available to their 0–3 year olds, 97 per cent reported using their portable devices with their child at home and 29 per cent during car journeys (Nevski & Siibak, 2016). This survey found a more even balance between adult- and child-initiated engagement with portable devices (47 per cent, and 44 per cent respectively), perhaps reflecting the different ways in which the youngest children spend their time.

Despite their dependence on others to make digital resources available to them, young children are keen to claim ownership or assert rights of access, giving us insights into their enthusiasm for the activities ownership can confer and, perhaps more importantly, the desirable practical status which they associate with possession of a tablet or a smartphone in daily life. This characterisation of new technologies as desirable objects, typically owned by parents or older siblings, has been an ongoing feature of young children's everyday experience with technologies for some time. Research by Stephen, McPake, Plowman, and Berch-Heyman (2008) in which home technology tours were conducted with children, established that children were keen to claim ownership, or at least shared access, to resources such as hand-held games consoles that were used by their older siblings but which the researchers' observations (and the children's comments) suggested they were not yet able to use effectively. The JRC report (Chaudron, 2015) also suggests that children express a preference for technological devices which they do not own but would like to possess. They concluded that the device then takes on the 'magical' character of an object of high desire, conferring digital technologies with positive cultural value in their social setting.

Family values and attitudes

Throughout this book we have considered the evolution and enactment of the digital age as a cultural phenomenon. Young children experience the digital age first through the immediate social and cultural environment of their family, the perspectives and expectations that their parents and siblings hold about digital technologies and the ways in which technologies are embedded in the 'ordinary' culture of family life (Williams, 1958). Livingstone *et al.* (2015) argue that their data suggests that, although digital technologies have a significant presence in the everyday lives of most of the families who participated in their study, 'aspects of family philosophy or style' (p. 28) made a difference to the particular ways in which family members engaged with digital resources and activities.

Starting from a sociocultural theoretical position, Hedegaard (2009) argues that the social context of learning also includes the cultural values of the institutions with which individuals interact, including their families. The attitude of parents towards the relative value or otherwise of engaging with technologies is then a critical influence on early digital experiences. It makes a difference to parents' purchasing decisions, the ways in which young children are encouraged to learn, experience leisure, and the ways in which parents model life in the digital age. The three theories about the relationship between people and technology that we outlined first

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in Chapter 1 can be seen to be present at the micro-level in families. Parents may take a technological determinist view, seeing the technology as driving change, which they either accept or resist. Others will focus on the substantive position, being concerned only with what technology can help them to achieve and some may adopt a more critical perspective, questioning the purposes of technological advances and evaluating the outcomes of encounters with digital devices and programmes.

These perspectives on technology interact with socio-economic factors and expectations about ‘good’ or ‘proper’ parenting and appropriate or beneficial activities for young children to create the local culture of the digital age that is experienced in the family. These ethnotheories (Plowman, McPake, & Stephen, 2008; Plowman, Stevenson, McPake, Stephen, & Adey, 2011) shape children’s access to specific digital devices and to the particular content with which they interact. Every family will have its own definition of suitable content for books and films and this judgement can be extended to the content of digital games, DVDs and apps. Parents have a preference for free apps but make decisions about which ones to download on three main criteria: a judgement about how much fun the activity will give their child, how easy an app is for a young child to use, and the presence of educational features, declared educational outcomes or the inclusion of educational topics such as healthy eating or caring for the environment (Marsh *et al.*, 2015). Livingstone *et al.* (2015) also found that parents talked about selecting apps that they viewed as educational, particularly for preschool children but the activities they talked about when they described ‘good parenting’ typically did not involve digital resources or were based on broadcast media such as shared television watching.

As we discussed in Chapter 7, social commentary and media reporting raises doubts and criticisms about the benefits to children of engaging with digital technologies and often presents arguments that seem to suggest that children should be ‘protected’ from the digital age and that good parenting attends to traditional or non-digital pastimes at home. However, research findings suggest that children are growing up in homes where parents have more varied or nuanced perspectives. A survey of US parents with children aged from two to seven years old revealed ‘very positive’ attitudes towards the role that technologies played in the lives of young children, leading the authors of this study to suggest that the scepticism about the potential benefits present in earlier studies (e.g. Rideout, Vanderwater, & Wartella, 2003) may be in decline as digital devices become an integral part of the lives of parents (Vittrup, Snider, Rose, & Rippy, 2016). Vittrup *et al.* (2016) also found that parents disagreed with the American Academy of Pediatrics’ guidance that children under the age of two should not be exposed to any screen time. Only 11 per cent of participating parents believed claims that computers were associated with long-term physical, emotional or intellectual damage. On the contrary, the majority agreed with a statement suggesting that familiarity with digital devices at a young age was important for future success in the workplace. These parents were relaxed about making use of technologies to ‘occupy’ a child while adults attended to important tasks and the majority reported doing this at home. In Estonia, Nevski,

and Siibak (2016) found that among those parents who allowed their child under three years of age to have access to smart technologies digital activities (particularly for watching videos and cartoons), they valued the potential of these devices to entertain their child as well as the apparent educational potential opportunities involved.

A recent study across six European countries and Russia found that parents of children under eight years old were alert to anxieties about the dangers of physical inactivity and passivity but expressed less concern about risks associated with access to the internet (Chaudron, 2015). Drawing on European research, Holloway, Green, and Livingstone (2013) suggest that parents are less concerned about young children's access to the internet than older children's potentially worrying encounters with inappropriate content. Evidence from Scotland suggested that parents were aware of negative ideas about children's engagement with technologies through their exposure to the media and their interactions with family and friends (Plowman *et al.*, 2008). This longitudinal qualitative study of 24 case study families carried out by Plowman *et al.* found that parents' responses to statements about the benefits or drawbacks of young children's engagement with technologies were typically characterised by ambiguity and indecision. Only one quarter of the case study parents agreed with the statement 'Using some kinds of technology can be damaging to children's health and development'. The remaining three quarters of parents responded by referring to things which they had read or heard about the possible negative outcomes of time spent with digital devices. They mentioned concerns about the impact on physical development if children's gross motor activity was reduced in favour of time with technologies and were concerned too about the consequences of the lack of social interaction if technologies were used over extended periods and the danger of access to inappropriate content.

Nevertheless, Plowman *et al.* (2008) concluded that engaging with technologies was not perceived by parents to be the threat that some commentators, researchers and advisors claim. Parents' awareness of questions about the outcome of time spent with digital technologies did not deter the families participating in the Plowman *et al.* (2008) study from offering children some access to technologies at home. The research team found that while parents had concerns about children's use of technology in general, each family was confident that their decisions about which technologies were available and under what circumstances in their home mitigated any negative outcomes. With only one exception, participants agreed with the statement 'I think that we have got the use of new technologies right for our child'. This judgement seemed to be based on the decisions they made about how to regulate their child's use of technologies and their efforts to ensure that their youngsters engaged in a varied range of play opportunities at home to achieve a balanced diet of indoor and outdoor pursuits, individual and shared activities. Some families restricted the length of time each day that their young child could spend using a computer or games console. Time spent watching television was monitored too, often limited to times of day when the content was considered to be appropriate or when this activity was a good fit with family schedules.

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The picture which emerges from the Plowman *et al.* (2008) study is one in which parents are aware of the debate in the popular media (see Chapter 7) about the potential negative outcomes of engagement with sustained use of digital technologies at home but are also confident that they have arranged their family time and access to activities and resources in a way which they feel minimises the risks. In Estonia too there was evidence of parents taking a hands-on approach to mediating their young child's use of the family's smart technologies by restricting use, co-using and supervision (Nevski & Siibak, 2016). The JRC study (Chaudron, 2015) found that parents across six European countries and Russia attempted to balance the benefits and risks of digital technologies by establishing family rules that restrict the time that can be spent on screen-based activities, limit the games and videos available and enforce passwords.

However, the evidence gathered by Marsh *et al.* (2015) suggests parents' claims about safeguarding their child by sharing their digital activities may be illusory. They argue that while the parents of young children surveyed said that they used apps along with their child, their case study evidence from children aged six months to four years old suggests that co-use was largely restricted to periods when a child was being introduced to a new app and in response to specific requests. They found that in practice children 'actively resisted' parental involvement and that close supervision was a more appropriate description of parents' activities than co-use. The pan-European study reported by JRC (Chaudron, 2015) also found that children's practice is to use digital technologies alone rather than with others. However, they point to an interesting difference in Finland where digital activities are more often shared with family and friends. Activities perceived as family or social pursuits are more likely to be traditional such as shared viewing of specific television programmes, playing board games or going on outings.

Research evidence suggests then that for most parents engaging with technologies is a part of everyday living for themselves and their children and they approach this element of contemporary life as they do other elements such as travel and health, with a concern to minimise the risks and maximise the opportunities, especially in this case the opportunities to support their children's learning with technologies. When parents perceive digital technologies as embedded in everyday life they view them and act towards them as part of the cultural process of learning, neither inherently good or bad, but as cultural tools that they teach their children to use safely and appropriately just as they themselves learned to use older technologies such as phones and televisions.

Family practices

A key finding of the qualitative exploration of the experiences of children and families with digital technologies across seven countries reported by the JRC (Chaudron, 2015) was that '[d]igital technologies are an important (but not dominant) part of children's lives' (p. 7). The researchers point out that children enjoy non-digital activities as well as playing games on smartphones, tablets and computers and

watching videos. This finding endorses the conclusion of an earlier study entitled 'Young Children Learning with Toys and Technology' (2008–2011) and reported in a series of articles by Plowman and Stephen (e.g. Plowman *et al.*, 2011; Stephen, Stevenson, & Adey, 2013). In that project the researchers drew on the Vygotskian cultural-historical tradition which sees learning and development as mediated through interactions with others and the social and cultural circumstances in which a child is growing up (Hedegaard, 2009; Rogoff, 2003; Schaffer, 2004). In order to explore the cultural context of family homes the project was designed to attend to the typical activities and practices at home, along with the resources, relationships and local and temporal circumstances which constitute a family's cultural setting (Tudge, Freitas, & Doucet, 2009; Weisner, 2002). Focusing on the everyday experiences with digital technologies of three to five year olds, the researchers examined: 1. the resources available in each home; and 2. the family practices around the use of these resources – most notably the ways in which children were introduced to the technologies and were supported to use them at home.

In order to explore digital resources and associated family practices the study employed a variety of methods over the 15 months that case study families participated in the study (Stephen *et al.*, 2013). An audit of the toys and technologies was completed in the home of each of the 14 participating families, a series of interviews was conducted with parents, structured conversations held with children and mobile phone diaries kept to illustrate 'typical' days. The data collected revealed plentiful supplies of traditional resources for indoor and outdoor activities, individual and group games, props for pretend play and materials for creative endeavours, as well as a range of technologies for leisure, work and education for all the family members (Stephen, 2011). Perhaps the most remarkable finding from the toy audits was the sheer quantity of traditional toys and playthings available to children in these family homes. This finding was evident regardless of the socio-economic circumstances of the families taking part.

In these homes, digital technologies had not 'taken over' traditional activities. While the technology was evident in the form of games consoles, access to apps, laptops, interactive televisions, mobile phones and interactive educational toys, these did not supplant traditional toys and activities such as cars, construction sets, dolls and dolls houses, soft toys, farm sets, train sets, board games, balls, climbing frames, tents, dressing up clothes, crayons and paints and craft resources and much more. In most households in that study traditional toys outnumbered those with technological features by three to one. Typically, about 10 per cent of any family's toys and playthings could be categorised as technological, although this rose to 33 per cent in one family. In line with the thinking we examined in Chapter 4 (e.g. Kay, 2013; Lankshear & Knobel, 2012) there was a mix of technological and traditional resources in each home. This mix of resources suggests that children in these homes were well placed to blend the digital and non-digital in their play. These empirical findings complement the arguments of scholars such as Caldwell (2000) that new technologies sink into the everyday over time. As this occurs, new forms of play and learning become possible and co-evolve as children and their families engage with digital devices.

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Stephen *et al.*'s (2013) investigation of family practices when engaging with technologies, in particular the detailed videos recorded by four case study families, established that parents engaged in the same range of supportive practices as the researchers had previously observed employed by practitioners in preschool play-rooms. They found that as parents introduced their child to a new technology or supervised the use of one already present in their home they employed multiple practices for supporting children's learning. Parents demonstrated and modelled how to use the technologies, explained and instructed, offered feedback and monitored progress, prompted responses and actions and shared children's pleasure and success in the games and activities in which they were engaged. More recent survey evidence reaffirmed that young children do not engage with digital technologies in a social vacuum. Parents and siblings engaged with them in these activities supporting the development of their operational skills, joining in games and searching for appropriate sources or activities, for instance, finding rhymes to learn together or creating a tune or video via an app (Marsh *et al.*, 2015). Indeed, over 60 per cent of parents said that using the tablet was their decision rather than their child's.

Stephen *et al.* (2013) went on to argue that while their analysis of the video and interview data suggests that technology use by young children was supported by parents employing practices from a common repertoire, each child's experience was different because of the particular nature of the cultural and social context of each family. They suggested that key elements of the family practices depended on parents' perspectives on technology as an educative tool, parents' preferred ways of supporting their child's learning and the nature of family relationships and interactions. For instance, the extent to which parents chose to be directly involved in their child's learning activities, whether digital or involving more traditional resources, made a difference to family practices with technology. In two households parents felt that children learn and develop their competencies through solo exploration. The boys growing up in each of these households were only offered help if they became very frustrated or unhappy with their technological encounters. In contrast, the girl growing up in another of the case study homes was only given access to a new technological or a traditional resource when her mother was satisfied that she was cognitively ready for it and after they had been through a careful introduction to the functions of the resource or the way to play a game. In a family keen to introduce their preschool child to reading, a commercial interactive device marketed as enhancing early reading skills was a welcome resource incorporated into family practices to support literacy. However, for those parents who thought that reading was the responsibility of the school or best left to the expertise of teachers, devices to support early reading offered by the researchers were less valued and little used.

Everyday family practices, for example, about pre-bedtime activities, the ways in which parents use the time available to them after work, at weekends or between domestic tasks, and the age range of the children in the family all influenced the experiences offered to the young children who were the focus of the case studies in the Plowman *et al.* (2008) project. Growing up in a single parent household with a

mother who worked as a teacher and was studying for a further degree meant that one girl was familiar with a computer as a work tool and the Wii as a resource for family fun when she and her mother and brother developed their football skills during the time set aside each day for the family to do things together. On the other hand, with two younger siblings, one four year old was used to having to wait until his brother and sister were asleep before he could use the games console and other technologies in his home and understood these resources had to be protected from potential damage from inappropriate handling.

Competitive interactions were encouraged in some families while collaboration was favoured in other case study households. Playing a game on the computer or Wii, watching a DVD or playing with a technological pet might be suggested in some of the participating families but in others children were more likely to be encouraged to paint, create, ride a bike or offered ideas for pretend play. Across the qualitative studies describing children's experiences with technologies in particular contexts we have discussed in this book there were examples of digital devices being used when children had to wait or parents were occupied by other tasks. Even in the avowedly 'low tech' family participating in the study reported by Livingstone *et al.* (2015) the children were allowed to make use of their limited digital technologies when they were bored or unable to go outside. Marsh *et al.* (2015) found that the most popular time of day for children 0 to eight years old to engage in digital activities was between 4pm and 6pm on weekdays, a time when parents are likely to be cooking or busy with chores.

The findings from the 'Young Children Growing Up With Toys and Technology at Home' project (Plowman, Stevenson, Stephen, & McPake, 2012; Stephen *et al.*, 2013) discussed here make clear the highly contextual nature of each child's play and learning experiences with the technologies to which they have access at home. Livingstone *et al.*'s (2015) study offers further evidence that family context matters; they concluded that the resources owned and their locations in the home, along with 'family dynamics, habits and rules' (p. 24) influenced the encounters that children have with digital technologies. Selwyn's (2010) notion of the 'state of the actual' – conducted from a critical perspective on technologies, is informative here as it points to understanding how and why young children are using technologies within the family. Parental views about the educative potential of digital resources, the range of practices supporting children learning to use technologies in the family, and the routine practices through which family life is enacted in the home all contribute to young children's learning with technologies in the digital age.

Sibling influences

While we have thus far concentrated on the parental aspect of the family in comprising young children's engagements with digital technologies, we now pay some attention to the role of siblings in technology use by young children. As Holloway *et al.* (2013) argue, young children's digital experiences can only be understood by paying holistic attention to the family sociocultural practices, and that must include

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the behaviours of siblings. Brothers and sisters influence young children's encounters with digital technologies, as with many other aspects of family life. This influence was evident in the Plowman *et al.* (2008) study which established, for example, that one five year old's intense interest in online sports games was sparked by watching his older siblings viewing sports news on a dedicated website. Livingstone *et al.* (2015) also relate the particular digital experiences of younger children to the interests and activities of older siblings. Among the examples of sibling influences in their data were two six-year-old girls whose television watching and music listening was shaped by the choices of their older brother and sister. The twins showed little interest in a football game which their brother played on a games console but were keen on some games which their sister played with them, though they lost interest in these when their sister stopped using the games console.

Younger siblings inherit digital and traditional toys and resources from older siblings as well as receiving new technologies, toys and games as gifts given to them personally and in some instances the youngest children are offered non-functioning versions of the kind of resources they see their older brothers and sisters engaging with. Younger siblings typically have access to (or are at least aware of) more sophisticated technologies or resources intended for older children at a younger age than first-born children. Livingstone *et al.* (2015) give the example of a six-year-old girl who enjoyed games found for her by her 13-year-old sister but who found the games which her 16-year-old brother chose for himself scary. A six year old in another of their case study families was described as spending 'a lot of time' engaging with her brother's Facebook page, facilitated by him. There are further examples of sibling influences in the cases included in the cross-Europe study published by JRC (Chaudron, 2015). These include younger siblings beginning to watch television earlier than first-born children and watching or participating in digital games designed for older children, sometimes to the consternation of their parents. Of course the corollary of this is that the digital experiences of first-born children can be limited by the presence of younger children in the family if parents restrict access to what are perceived to be expensive or fragile resources to times when the youngest children are absent or asleep (Stephen *et al.*, 2013).

Such evidence suggests that not only do older brothers and sisters offer younger siblings the advantage of growing up in a family where the technological resources are often in advance of what might be considered age appropriate, they identify games likely to be of interest, facilitate access to the internet, share their own tastes and interests and are also a source of knowledge about the attractions and pitfalls of past and cutting-edge forms of digital engagement. Verenikina and Kervin (2011) describe older siblings, along with parents, as 'technical expert[s]' and argue that data from their study of three and four year olds engaging with iPads suggests that, even if fleeting, this technical support can shape and extend young children's imaginative play with tablet computers. The EU Joint Research Centre report (Chaudron, 2015) argues that older siblings are a source of protection from the risks associated with the internet for younger family members, although Livingstone *et al.* (2015), in the UK contribution to this report, also include examples of parents

expressing some anxiety about the content of games or websites which their younger children become aware of through the activities of older siblings. However, it is worthy of note that some older siblings would have begun their engagement with digital technologies before the introduction of the iPad in 2010. The implications of this ‘generational leap’ are not evident in the research literature but are ripe for further research. What is clear is that a ‘state of the actual’ perspective reveals siblings sharing experiences around digital encounters as they do in other areas of life.

Stevens, Satwicz, and McCarthy’s (2008) ethnographic study of older (9–15 years) siblings playing video games together describes learning and teaching each other as they play as a ‘natural part’ of this shared cultural activity which is ‘quite tangled up with other cultural practices, which include relations with siblings and parents’ (p. 43). In the Plowman *et al.* (2008) study, older siblings were observed attuning software to the needs of their brothers or sisters, for instance setting an appropriate level of difficulty for a game, advising on ways of improving a score, navigating around a set of options or manipulating controls and quietly correcting mistakes. But this study also showed less positive interactions between siblings taking place when they were in competition in digital activities such as sports on the Wii. Younger children are most likely to be at a disadvantage when competing at ‘playing tennis’ or ‘bowling’ on the Wii just as they would be on a tennis court or bowling alley. As digital technologies are embedded in everyday family life, or ‘hunkered down’ to use Stevens *et al.*’s (2008) phrase to describe the place of gaming devices in the lives of older children, so they are involved in the pleasures and benefits, tensions and conflicts of family life. This is not to suggest that it is the technologies that ‘determine’ these positive or negative outcomes. Rather it is the result of the dynamics of family life, of the physical, social and emotional results of interactions between siblings in the cultural practices of their homes (e.g. about bed-times, eating habits or material possessions). Family life in the digital era involves sibling relationships about digital and non-digital activities and opportunities.

Peers and digital technologies

In the preceding sections of this chapter, we have considered young children’s engagement with digital technologies in the immediate environment of their family. We have presented evidence to support our argument that within the family context, digital technological engagement is influenced by parental values and attitudes towards technologies, family resources and practices pertaining to technologies in the home and the consequent access and forms of social negotiation involved in technology use between siblings. In this section, we now turn our attention to children’s relationships with their peers and how, within the contexts of these relationships, children experience their engagements with technologies. We begin from the position that digital technologies and the kinds of new media forms which they afford are an integral feature of the peer culture of young children. As Marsh (2005) argues, evidence from studies considering a range of forms of engagement

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with the products of the digital age makes clear the potency and value of digital engagement with the social and cultural lives of children.

Published studies of children engaging with peers in digital activities are typically carried out in group educational settings rather than in family homes so to explore this form of social and cultural behaviour we turn now to research in early education environments. A number of studies in the late 1990s and early years of the 21st century described children as collaborating on tasks and engaged in positive, constructive peer relationships around desktop computers (e.g. Clements, Nastasi, & Swaminathan, 1993; Siraj-Blatchford & Siraj-Blatchford, 2002). The benefits that new technologies offer for developing collaboration and shared learning opportunities have become part of the familiar justification for their use in early education settings (e.g. Kankaanranta & Kangalasso, 2003; Ljung-Djärf, 2008; Siraj-Blatchford & Siraj-Blatchford, 2006). However, the evidence for the impact of encounters with digital technologies on children's behaviours appears to be more mixed.

In 2002 Brooker and Siraj-Blatchford identified a variety of constructive and collaborative interactions between children aged from three to four years old as they engaged with a computer, and with one program in particular in a nursery setting. These interactions included support for language development through shared talk and vocabulary; pro-social behaviour, assisted performance (in which a more competent child helped another); collaboration (with children tutoring each other); and off-screen play behaviour prompted by on-screen action. A change in social behaviour patterns over time, moving from independent user to a more integrated way of working with a computer and other children was also identified by Chung and Walsh (2006). On the other hand, Stephen and Plowman (2003) in an observational study of seven varied preschool settings found no clear evidence of collaboration occurring between young children as they used technologies together in their preschool settings. They found that although children would gather around a desktop computer it was the child who was seated in front of the screen who dominated the play while others came to and went from the group of observers. Their observations suggested that when a child asked a peer for help it was just as likely that the more competent player would take over the mouse and begin to play for themselves as it was that two or more children would solve the problem together. Turning to digital activities at home, Holloway *et al.* (2013) point to the kind of negative personal encounters that can occur when young children engage with others online and to the distress that they can experience when friends exclude them from a game, interfere with their online profile, or the actions of other players results in lost rewards or a spoilt game.

It is our contention that these studies should be seen not as presenting conflicting findings about the ways in which technologies promote or determine behavioural outcomes (collaboration and shared support for exploration and learning in this case) but as instances which illustrate how the contexts in which children engage with digital activities make a difference to the nature of their experiences. That friends sometimes support each other in play but on other occasions compete for access to a resource, can explore excitedly together or seek to maintain solo use

of a plaything or activity will be no surprise to adults familiar with the social behaviours of children in the early years. The evidence about ways in which children engage with digital technologies in social situations suggests that they respond to this kind of resource as they would to traditional artefacts and activities. Some material resources afford more social engagement. For example, Brooker and Siraj-Blatchford (2002) found that it was only one of the four computer games available in the playroom which supported the kind of collaborative behaviours which they report. Kutnick, Brighi, and Colwell (2016) draw attention to the ways in which the different social contexts for learning are created in educational settings and how these contexts influence who is involved in an activity and the kind of activity with which groups of children engage. They found that groups which were practitioner-orientated were more likely to be inclusive, be made up of boys and girls and be engaged in more cognitively challenging activities. Child-orientated groups are typically more gendered and exclusive and, in the case of boys in particular, engaged in activities that are less cognitively demanding. Such contextual differences reinforce the need for a critical perspective on encounters with digital technologies, suggesting again that attention be paid to the 'state of the actual' to best understanding what and how children are playing and learning with technologies in the digital age.

Ljung-Djärf's (2008) exploration of the nature of social interactions occurring between peers when using digital technologies mirrors the critical perspective advocated by Selwyn (2010). Ljung-Djärf was concerned by studies that identified collaborative behaviour between children without paying attention to the details of the circumstances in which this collaboration occurred. She set out to explore the forms of interaction that could be observed around computer activity in preschool settings. Starting from a theoretical position which sees episodes of social interaction as dynamic processes in which individuals are given or adopt positions (Harré & van Langenhove, 1999), she argued that peers gathered around a desktop computer or other device take up roles that are relational and intentional. Her analysis of 13 hours of video recordings of the behaviour of three to six year olds engaging with the computer in their preschool setting found that they adopted three kinds of positions: the owner (in charge of the mouse and keyboard); the participant (allowed to make suggestions and support the owner) and the spectator (having no active part in the activity and kept on the edge of the group). This is an important contribution to our understanding which does not deny that collaboration may be possible between young children as they engage with digital technologies but which, starting from a concern with the 'state of the actual' 'provide[s] a contrast to the sometimes unproblematic picture of children's cooperation around the computer as something more or less obvious' (Ljung-Djärf, 2008, p. 69).

Likewise, a more recent study conducted by Arnott (2016) identified the nature of children's social engagements during technology use. She argued that children in an early learning setting with access to technologies formed evolving 'clusters' into which children readily moved in and out. Clusters comprised three main types of social engagement, including: 1) pro-social peer-driven; 2) anti-social, and, 3) task

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driven engagement. Like Ljung-Djärf (2008), Arnott's findings suggest that technologies neither promote nor restrict particular forms of social interaction amongst peers. Instead, in common with the line of argument we have taken in this book, technologies themselves are not invested with the potential to cause any type of particular relationship between children in a social setting. Rather, the relationships interact with the dynamics of the technological activity. As children engage in digital activities they participate in a range of social behaviours that will be commonly seen in other areas of the curriculum – sometimes they engage in pro-social sharing behaviours and sometimes they are task orientated and at other times they are less interested in being socially helpful.

These findings remind us that children's experiences with digital technologies will be influenced by their social relationships and the positions which they are given or choose to adopt with regard to peers and to the technologies. Furthermore, as Ljung-Djärf (2008) points out, our current understanding about the role of social relationships is derived largely from engagement with resources that were designed for one user, had one input device and which addressed instructions and feedback to one, undifferentiated player. Given recent transformations in cultural knowledge informing current technological innovations (such as touchscreens, IoT and semantic web) it seems increased social differentiation may be afforded – especially as NUIs come more and more to define human relationships with technologies for young children. A more nuanced understanding of contemporary engagement with digital technologies is already hinted at by the conclusion of the JRC cross-Europe study (Chaudron, 2015) which found that children up to eight years old engaged with digital resources in an individual manner, whether gaming, gathering information or involved in creative digital activities. Some instances of playing digital games within the family were reported but for the most part collaborative engagement was through online communication such as Skype. Further critically positioned research is required on the nature of social behaviours and actions when children engage with peers at home as well as in educational settings – while making use of technologies designed to be used simultaneously, by multiple players and/or as a specifically group activity (for instance, working with roammers, problem-solving tasks or information gathering projects).

Children's perspectives on digital technologies

Children's perspectives on technologies intersect with their social engagement in any given developmental niche. Thus far we have considered technologies in family life and the role of social interactions with peers around using technologies. Children themselves within these social contexts are also actively involved in their own play and learning. They make choices about their activities and act to achieve their own desires (Corsaro, 2014; James & James, 2004).

Writing at the beginning of the 21st century, Prensky (2001) used the term 'digital natives' to distinguish between those children who have grown up with digital technologies and those adults who have experienced technologies later in life

– the so called ‘digital immigrants’. Digital natives has become a recurring trope in early childhood education. It is frequently drawn upon in accounts of young children’s engagement with newer technologies. For example, in an article posted to the popular parenting website *Essential Kids* Hawkins and Schmidt (2008) deploy the digital native description to suggest that young children have an apparently natural affinity with the internet as a source of information. In some respects the digital natives concept can be appealing. It appears that young children are growing up in households in the digital era where technologies are a feature of daily life. However, as we have consistently argued in this book, a cultural and critical perspective suggests that young children’s encounters with digital technologies are culturally historically derived and consistently shaped by social practices. Furthermore, as we will discuss below, not all children are confident users of new technologies. Some children approach encounters with computer games, the Wii or interactive toys with timidity while other children choose to spend their time on other forms of activity. In these circumstances any universal application of the term digital native to young children seems ineffective for engaging teachers and researchers in how best to understand young children’s play and learning in the digital age.

The 2008 study by Plowman, McPake, and Stephen was the first of its kind to examine young children’s perspectives on the nature of their engagement with digital technologies. In this study it was reported that the four and five year olds saw their everyday digital activities at home as leisure, fun or play activity rather than ‘educational work’; something they engaged in ‘because of’ rather than ‘in order to’ (Maddock, 2006). Just under a decade later, in 2015 Chaudron’s JRC report on children’s digital activities across seven countries concluded that ‘Children love digital technologies’ but went on to note with apparent surprise ‘the little use of digital technology made [sic] to support explicitly learning or education’ (p. 18). This expectation that technology will be employed for learning (though confounded by the state of the actual observed), suggests a presumption of technological potential on the part of the researchers. This is a standpoint we have considered unhelpful in promoting new thinking about what and how children are playing and learning with technologies because it places the responsibility for an outcome from the technology use onto the technology rather than explicitly considering human relationships with technology as enacted in the culturally historical derived situation in which it occurs. For example, the older children in the sample engaged in Chaudron’s (2015) JRC study (seven and eight year olds) talked explicitly about engaging with tablets as leisure time. Across all ages the most popular practices afforded by digital technologies, included watching television and videos, listening to music, playing games and creating virtual worlds. If the children understand their technological engagement as leisure time it should not really be surprising that evidence in the JRC report (Chaudron, 2015) did not point to explicit learning or education. An adult engaged in leisure time is likewise not assumed to always be involved in education. Interestingly, references to digital leisure point to the notion of ‘engagement for the sake of engagement’ first promoted by Alan Kay (1972) in

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the initial design of his DynaBook. It was succinctly described by a teenage participant in the study of gaming by Stevens *et al.* (2008) as ‘[i]t’s what we do’ (p. 63) – an expression of autotelic cultural activity.

Stephen *et al.* (2008) found that four and five year olds did not see making use of digital resources as something they will grow out of in time, but rather as something with which they would make progress over time to adult levels of proficiency and independent use. This suggests that gaining independent access or ownership of highly used technologies will be as much an expectation for children in the digital age as growing up was once characterised by previous generations as owning a television or telephone. Young children in the Stephen *et al.* (2008) study expressed a sense of developmental progression through activities associated with digital technologies in the same way as they anticipated other milestones such as moving from preschool to primary school, riding a bicycle without stabilisers [training wheels] or being able to read independently. They talked about growing too old for some games and had age-related expectations about the capacity to make use of some technologies, although it was not possible to tell if these judgements are the result of ‘received wisdom’ or personal experience. For instance, one child was clear that a five year old should be able to use a mobile phone. Another child in the same study, talking about using a remote control car, told the researchers that ‘at his age he is able to do that’. On the other hand, a third child suggested that a five year old would become able to write texts and take photographs on a phone when he was older but could make use of it to play games now following a demonstration (Stephen *et al.*, 2008). Although the children were reluctant to admit to ‘getting stuck’ with digital activities when they mentioned learning how to use digital resources they referred to their parents, a response that seems to locate technology use as part of the shared, everyday family practices of four and five year olds. Here, the children did not view themselves as digital natives, instead describing a gradual enculturation with their use of technologies over time and in relationships with adults.

The ways in which parents view the digital activities of young children endorses this understanding of technologies as part of the cultural practices of home and family life. Plowman *et al.* (2012) report that parents noted and were able to describe new features of their child’s engagement with technologies at home, but did not perceive these as explicit examples of learning with technology. For instance, parents talked about noticing that their child could now navigate an on-screen guide to find a favourite television programme, pause or slow down the playing of a DVD or use appropriate technical terms. An analysis of parents’ responses to a series of statements about the use of new technologies at home revealed that most parents did not explicitly set out to introduce their three or four year olds to digital devices (Plowman *et al.*, 2008). Children became familiar with and able to engage with the devices in their home, just as they did ‘older’ technology such as switching on lights or plugging in and switching on appliances. Plowman *et al.* (2008) suggest that children learned how to operate digital technologies through a combination of culturally acquired practices including observation and copying, trial and error and

demonstration and instruction. These combinations were frequently referred to by parents as children ‘just picking it up’.

Plowman *et al.* (2012) suggest a four-part framework for understanding the kinds of learning associated with digital technologies which includes a change in participation in family life, although they are careful to stress that they are not suggesting any direct or exclusive relationship between engaging with a specific technology and a learning outcome. Their argument is that experiences with interactive technologies can support or provide opportunities for learning. The first three forms of learning were originally identified in studies of young children’s experiences with digital technologies in the playroom (Stephen & Plowman, 2008): acquiring operational skills, extending knowledge and understanding of the world (e.g. about people, places and living things as well as literacy and mathematics), and developing dispositions to learn (including building self-confidence and persistence). However, when the research team turned to the evidence from their investigations about young children’s encounters with digital technologies at home it became clear that a fourth form of learning should be added to the framework to encompass the children’s developing understanding of the use of these devices for social and cultural purposes e.g. sharing photographs on a mobile phone, talking to relatives on Skype, shopping online. Furthermore, as Plowman *et al.* (2012) point out, these social and cultural uses were not necessarily those that might be thought of as of particular interest to preschool children but they were forms of engagement that were part of their everyday home life and valued by their family. The understanding about how children learn which underpinned Kay’s thinking as he developed his prototype DynaBook (see Chapter 4) is echoed in Plowman *et al.*’s (2012) conclusion that young children learn to engage with digital devices by watching what others around them do, trying things out and ‘by wanting to do the things that technologies make possible’ (p. 36).

Individual interests, preferences and evaluations

Some children’s digital practices with technologies reflect already-established interests they have in particular topics or activities. This could involve following an individual interest, or a shared family enthusiasm, perhaps for a particular kind of sport or hobby. Typically, it involves children blending a mix of digital and non-digital activities such as playing online games featuring the child’s interest, watching appropriate videos, taking part in hands-on physical experiences and attending events, exploring and seeking out information via the World Wide Web, collecting models, taking and curating digital photographs and reading books featuring appropriate contexts, plots or characters. Marsh *et al.* (2015) illustrate the influence of individual and family interests and the blending of digital and non-digital activities with the example of a four-year-old girl whose father was fascinated by and knowledgeable about dinosaurs. The child was introduced to, and enjoyed using a range of dinosaur-related apps, games and children’s television, as well as looking at books and owning some model dinosaurs. Livingstone *et al.* (2015) report how a seven

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year old was described by her father as continuing her interest in viewing natural history programmes on television by focusing on taking photographs of ‘natural objects and wildlife’ (p. 25).

Further examples come from Stephen *et al.* (2008). For instance, four-year-old Kenneth’s interest in cars influenced the television he chose to watch and the outings to car shows selected for him by his parents. He was keen to talk about cars and show the researchers his collection of toy cars and made use of the family’s digital resources for games involving cars and taking and storing photographs of cars. Another child, Colin, also aged four years, experienced a family trip to Australia from Scotland. Colin engaged in digital communication with his Australian relatives which consequently shaped the range of digital practices with which he engaged, such as taking photographs, using the webcam and adding emoticons to family emails. In these examples, the concept of amplification evident in the work of both Kay (1972) and Masuda (1980) suggests the use of technologies for the extension of processes and practices beyond what would not typically be available without the digital. Digital experiences extended the range of opportunities available for young children to communicate, learn about the world, curate memories and information and develop confidence in their own knowledge and their ability to share this with others. Notably, as we considered in Chapter 5 with respect to digital play, such amplification did not necessarily preclude the children’s engagement in other available activities and/or resources.

While research suggests that young children engage in multiple practices using digital technologies, it is important to remember that these practices reflect the use of technologies by children participating in culturally historically derived social context. As Lankshear and Knobel (2012) explain, practices become embedded over time as new technologies move beyond the ‘peak curve’ of interest (Caldwell, 2000). This suggests that not all practices will be of interest to all children at all times. For example, as children grow, the kind of apps with which they engage change. Perhaps influenced by parental choice, educational apps are used more by preschool children than those in the 6–7 age range who favour apps that assist with creative activities and online factual and instructional videos accessed via YouTube (Marsh *et al.*, 2015). Some children are more enthusiastic users of technologies over others (just as some children have always enjoyed traditional art and craft activities over active outdoor play). Stephen *et al.* (2013) described one participant in their study as a digital enthusiast. This four-year-old boy was frequently and intensely involved in games on the Wii and on a games console. Another four-year-old participant enjoyed digital games when these were made available to him but a third participant, four-year-old Kelly, was not really interested in the overt use of technologies, despite growing up in a home where there were several computers, a Wii and a games console. Her father worked in the computer industry and her brother was a keen digital games player but Kelly had to be persuaded to join in family time with the Wii or other digital games. Kelly’s preference was for imaginative play with dolls and soft toys. When the research team supplied a technological toy ‘puppy’ and invited Kelly to engage with it as she wished, the video evidence

showed that when she did make use of the ‘puppy’ she incorporated it into her imaginative play with its ‘voice’ switched off so that it functioned as a traditional soft toy.

So far we have discussed children’s practices with digital technologies as positive experiences, a rewarding feature of their participation in the culture of their family and as experiences which amplify their ways of engaging with the world and provide opportunities for learning. However, encounters with both traditional toys and new technologies can be a source of displeasure when the activity is experienced by the child as too difficult or they associate negative emotions with a particular plaything or resource. Stephen *et al.* (2008) found that children growing up in the digital age were able to distinguish between toys, playthings and activities they enjoyed using and others that they liked less and that they extended this discriminating evaluation to technological resources as well as more traditional equipment and activities. For example, they found that a fall from a bicycle or swing, controls on a digital resource that were difficult to manage, struggling with reading and a digital game that took too long to complete were all negatively evaluated by the four and five year olds participating in their longitudinal study. Some traditional activities (e.g. swimming and reading) were described by the young participants as ‘too hard’ but they were more likely to apply this label to technological activities which gave them displeasure. In some instances the source of dissatisfaction lay with operational difficulties such as managing a remote control or manipulating two forms of control at once (circumstances alleviated in some cases by the advent of tablet computing), but in other cases the problem arose from the substantive activity involved. Some children could not interpret the implications of their score, did not understand the audio instructions or did not know enough about a sport they were playing on the Wii to make sense of the competitive process or make improvements in their skills.

Marsh *et al.* (2015) also found evidence that the content of games was not always appropriate and productive for young children and suggested that ‘there are many examples of ways in which apps could be improved to enhance the experience for young children’ (p. 44). They described children’s encounters with an app that they could not use in the way intended by the designers as reducing the child’s engagement to random movements of the objects on the screen. In another example they give an account of an observation during which a young boy failed to complete a jigsaw on screen because the fit of the virtual pieces made no allowance for even a minimal margin of error. Frustrated and unable to continue, the child they observed abandoned the game. Among the UK children in the study by Livingstone *et al.* (2015) young players reported waiting for a game to load as a source of dissatisfaction. One child, who the researchers characterised as ‘highly reward-driven’, rapidly became bored with games that took what appeared to him to be a long time to complete and with others that did not provide sufficiently rewarding feedback. Games marketed as ‘educational’ were not always well received by the children for whom they were purchased. Livingstone *et al.* (2015) give an example of a six-year-old girl who quickly became bored with the educational games her mother tried to

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play with her on the laptop. She favoured what the researchers describe as more 'entertainment-focused' digital activities such as accessing her older sibling's Facebook page and discovering photographs of herself on Facebook.

This evidence suggests that young children are discriminating users of digital technologies, sometimes to the surprise of their parents who claim that their child enjoys and is a capable user of any appropriate resource and, on some occasions, even users of digital devices that might be expected to make demands beyond their current competencies. Stephen *et al.* (2008) found that four and five year olds extended their willingness to discriminate between digital technologies and activities beyond evaluating the resource to considering their own level of competency. In the course of structured conversations with a researcher with whom they had become familiar, the participants were invited to indicate which technologies they were good at using by placing star stickers on a visual array of digital resources (at a time before the widespread uptake of iPads and other forms of tablet computing). The children indicated that they were good at using games consoles, computers, LeapPads, televisions and remote control cars. However, their judgements about their competency with computers suggested that the children were less confident in their encounters with this resource than the more positive evaluations by their parents would suggest. The children's discriminating comments extended beyond particular technologies to specific games and they were not afraid to criticise the games that were available to them. Marsh's (2010) study of six and seven year olds playing in online virtual worlds also found children making distinct choices about the kinds of activities they wished to engage with in the virtual world and willing to point to negative features of the programming. For instance, she described one child's frustration with a requirement that the game designers had built into the program in order to encourage children to return frequently to the game site and with the restrictions built in to the options available to her for dressing an avatar.

In this discussion of young children's perspectives on digital technologies we have suggested that the digital natives trope is not entirely helpful for forward thinking about what and how young children are playing and learning with technologies in the digital age. Rather, research indicates that children are discriminating and aware users of technologies and that their decisions about technology use are shaped by the cultural tools (e.g. physical limitations of hardware and/or frustrations with software) to which they have access. Digital technologies are an everyday feature of family life and children are supported by parents and other family members to become participants in these practices. Through imitation, demonstration and sometimes direct instruction and trial and error, young children learn to do what it is they want to do with technologies.

Conclusion

In this chapter we have argued that for children growing up in the digital age engagement with digital technologies is a ubiquitous feature of everyday family life,

happening in the particular sociocultural context of their home and their relationships with their parents, siblings and peers. A state of the actual perspective suggests that children are supported in their engagement with digital technologies through interactions with parents, siblings and peers, although neither these encounters nor any changes in behaviours and actions that follow are necessarily thought of as educational. Rather, children are seen as becoming increasingly competent participants in digital aspects of family life, learning to do what they want to be able to do, in the same way as their developing competence with non-digital features of family life is noted with satisfaction by family members. Just as we have argued that encounters with digital technologies do not determine particular outcomes, so too the presence of digital technologies in everyday life does not determine a child's interest in or feeling of confidence with these resources.

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6

PEDAGOGIC DOCUMENTATION

Uncovering solidary learning

Júlia Formosinho

Introduction to the chapter

This chapter aims at analysing the role of pedagogic documentation in participative pedagogies and its relationship with assessment and evaluation, using examples mainly from the Pedagogy-in-Participation approach (Oliveira-Formosinho and Formosinho, 2012).¹

The *first section* focuses on the identification of the ethos of participatory pedagogies and its implication on the new roles and relationships between children and educators. These new roles and relationships do not wash out teachers' voice and educational intentionalities but make teaching a much more complex activity since the flow of the educational process is less predictable. As pedagogic documentation reveals children's learning in a specific pedagogic context, it sits at the heart of the enactment of learning-teaching processes.

The *second section* presents the professional journey inside the Pedagogy-in-Participation approach that has been building a *praxis* of documentation which serves learning and evaluation. This approach to documentation has evolved through two sources: theoretical dialogues and the ongoing experiential practices debated in the Childhood Association learning community through context based professional learning journeys. In this second part we will reflect on the epistemological consequences of this journey focused on a new understanding of the complexity of the educational process and of children's learning.

The *third section* shows pedagogic documentation as a study of children's learning processes and achievements that give support to evaluation. This section ends with a brief presentation of Andreia's classroom as an inspiration for how to develop individual and collective documentation as a basis for assessment and evaluation that will be continued in Chapter 8.

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The *fourth section* develops the pedagogic concept of *solidary learning* which has been gradually built by the Childhood Association professional journey and is now embodied in the Pedagogy-in-Participation approach. *Solidary learning* is presented as the harmonisation of children's voices and teachers' voices, of children's purposes and educational intentionalities to be reflected through pedagogic documentation.

The ethos of participative pedagogies

Observing, listening and answering to children

Traditional childhood pedagogy departs from a well-organised subject matter, if possible presented in a pleasant form. This predefined knowledge commanded the teaching and the methodology would facilitate the learning, meaning the appropriation of the desired knowledge by the students. The deconstruction of this simplistic thinking has been a great inheritance of twentieth century childhood pedagogy (Oliveira-Formosinho et al., 2007). This deconstruction raises new questions about the role of the children in the educational process, about the part of children's voices in the co-construction of knowledge, and about the collaboration between children and educators in daily life and learning in the early childhood classrooms.

A revisit of *Experience and Education* published by Dewey in 1938 is enlightening to understand this:

The main purpose or objective [of education] is to prepare the young for future responsibilities and for success in life, by means of acquisition of the organised bodies of information and prepared forms of skill which comprehend the material of instruction. Since the subject matter as well as standards of proper conduct are handed down from the past, the attitude of pupils must, upon the whole, be one of docility, receptivity, and obedience. Books, especially textbooks, are the chief representatives of the lore and wisdom of the past, while teachers are the organs through which pupils are brought into effective connection with the material. Teachers are the agents through which knowledge and skills are communicated and rules of conduct enforced.

[...] When the implied criticism is made explicit it reads somewhat as follows: The traditional scheme is, in essence, one of imposition from above and from outside. It imposes adult standards, subject matter, and methods upon those who are only growing slowly towards maturity. The gap is so great that the required subject matter, the methods of learning and of behaving are foreign to the existing capacities of the young. They are beyond the reach of the experience the young learners already possess. Consequently, they must be imposed; even though good teachers will use devices of art to cover up the imposition so as to relieve it of obviously brutal features.

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But the gulf between the mature or adult products and the experience and abilities of the young is so wide that the very situation forbids much active participation by pupils in the development of what is taught . . . Learning here means acquisition of what already is incorporated in books and in the heads of the elders. Moreover, that which is taught is thought of as essentially static. It is taught as a finished product, with little regard either to the ways in which it was originally built up or to changes that will surely occur in the future. It is to a large extent the cultural product of societies that assumed the future would be much like the past, and yet it is used as educational food in a society where change is the rule, not the exception.

If one attempts to formulate the philosophy of education implicit in the practices of the new education, we may, I think, discover certain common principles amid the variety of progressive schools now existing. To imposition from above is opposed expression and cultivation of individuality; to external discipline is opposed free activity; to learning from texts and teachers, learning through experience; to acquisition of isolated skills and techniques by drill, is opposed acquisition of them as means of attaining ends which make direct vital appeal; to preparation for a more or less remote future is opposed making the most of the opportunities of present life; to static aims and materials is opposed acquaintance with a changing world.

(Dewey, 1997, pp. 18–20)

All this means a Copernican revolution in pedagogy. This ‘revolution’ did not swap over the child’s and the teacher’s places and roles, rather it brought together their action for joint thinking, collaborative planning, shared decision making, sustained action and reflection, and integrated evaluation. The interconnected realities of learning and teaching stand on a theory of education that, in turn, stands on a theory of knowledge. Participatory pedagogies assume that knowledge is a co-construction in contextual action and that pedagogical praxis is the co-construction of educational processes and achievements through participative methods. At this level we stand *on the shoulders of giants*, the giants who developed the co-constructivism: Berger and Luckman, 1966; Vygotsky, 1978; Wertsch, 1985, 1991; and Rogoff, 1990. They hold that knowledge is gradually co-constructed through exploration, communication, negotiation and meaning making which calls for a non-traditional epistemology, for a complex epistemology (Morin, 2008).

It is very important that all children, very young children and older children, participate in the ‘revolutionary’ process of the re-creation of their role as subjects considering the educational reality as a permanent process of humanisation and democratisation. This is the core of the Copernican revolution in early years teaching and learning. The right of children to learning that is seen as a cultural democratic lived experience challenges educators to be deep thinkers about children’s identities and minds and about their own identity and roles. Pedagogic documentation helps the professionals to be reflexive and have agency at these levels. The right of children to learning challenges educators also about the type of relationships between these

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identities, about how to use their knowledge (power) to scaffold children's thinking processes, and about the suspension of the power of their knowledge in order to create for each child and for the group a space for the exercise of their own powers.

Participatory pedagogies create an educational participative ethos that grants interactive space for all actors involved in the learning-teaching situations (Oliveira-Formosinho, 2007). For Paulo Freire, teachers and students are people that became each other's students by listening to each other's voices, to each other's perspectives and so communicating and developing a better understanding to *name the world*. Freire (1970) speaks about helping the student to stop being a silent student and venturing 'to tell the world' and to be active in the learning processes. Freire inspires us to practise an educational approach that challenges the learners to actively think, listen, speak, communicate to *name the world*, to give it meaning.

If traditionally the concern was centred on children's study of facts and their memorisation and reproduction, in participatory pedagogies we are concerned with the study of how to study and how the study of study moves us to understand the modes of meaning making through joint activity. Documentation serves this reflexive journey. Communicative processes can be critically analysed and reflexively negotiated to reconcile the roles of children and teachers in the heart of the learning process. The central *ethos* of participative pedagogies is the daily praxis of observing, listening and answering to children, supported in the critical processes of documenting educational situations and learning.

The image of the child in participatory pedagogies: the search for meaning

We started this chapter in Dewey's company, raising questions – why in traditional pedagogy is subject matter the centre of children learning? Why is the teacher the sole speaker? Why . . .? Why . . .? To answer these questions we need a deep reflection about the nature of the child, which include the expectation we hold for a child either as a person or as a learner. This is related to the adopted theory of education that conceptualises the answers to what is education and what is a school, what is learning and what is teaching, what is documentation and what is assessment and evaluation.

Traditional transmissive pedagogy says chiefly what the child is not; what she does not yet have; what she cannot yet do. That means that right from the beginning it is predefined, in adult terms, what she will be because of what adults will do to her and with her. Participatory pedagogies understand the image of the child through his/her actual identity: what she is, what she feels, what she thinks, what she has, what she does, what she has already learned.

For participatory pedagogies this child is a subject of life and learning, both as an individual subject and a social subject, a person and a citizen, both as user and creator of cultural artefacts. This child is an autonomous and cooperative competent individual with rights and duties, reflexive and critical, active and participative that relates to the world and to persons, things and knowledge. This child thinks, feels and questions, accepts and rejects, says yes and no; she has a relational identity that

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participates where she belongs with the expectation of respecting and of being respected. This child, using Malaguzzi's concept, expresses herself with one hundred languages (Malaguzzi, 1998).

When societies speak about very young babies they tend to conceptualise them as a non-yet being. Participatory pedagogies like to say that even babies are curious beings, willing to experience and to explore the world, nature, the objects, persons with intelligent senses and sensitive intelligences (Oliveira-Formosinho and Formosinho, 2012) and have the ability to communicate and share their explorations and experiences through communicative processes that create knowledge and meaning right from the beginning. Documentation helps to understand this precocious agency of children.

Is this an easy child for a traditional culture and for transmissive education? This child brings surprises to the process of education, creates emergent situations and poses unpredictable questions, sometimes creates problems . . . This child asks from the educators the ability and will to deal with the novelty, the unknown, the not planned . . . This child has very interesting things to say to us if we want to listen to what she wants to say and not to what we want her to say . . . If we as professionals learn to enjoy being caught by surprise with emergent topics, themes, issues, questions and learn to engage in shared and negotiated learning journeys with children we will contribute for empowered citizens, persons, learners.

In participatory pedagogies education becomes a complex challenge, a rewarding civic enterprise that cannot be accomplished only with pre-designed objectives and activities. The flow of this type of processes is less predictable; this does not mean to say that it is a chaotic process but rather to say it is a non-linear, non-fully programmed process. It encompasses the complexity of bringing together competent children with competent teachers both having the right to express purposes for the educational situations, activities and projects. It encompasses the challenges of communication, negotiation for the set up of compromises for the planning of educational experience and its development in action. It involves shared reflection and evaluation on the basis of documented experiential learning.

The harmonisation of children's purposes and educators' intentionalities

Participatory pedagogies develop a specific understanding of the image of the child as a competent co-constructor with competent peers and competent teachers negotiating through communicative processes her/his participation in learning and learning how to learn. But children's purposes do not wash out the educational intentionalities and teachers' voice. Documentation does not only reveal children's learning, it reveals children's learning in a specific pedagogic context under a specific pedagogy, meaning it also reveals the teaching. Pedagogic documentation sits at the heart of the enactment of learning-teaching processes thus implying a clear understanding of educational aims, curriculum content, and pedagogy (Malaguzzi, 1998; Rinaldi, 2012).

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The harmonisation of children's purposes and educators' intentionalities in Pedagogy-in-Participation: the axes of educational intentionalities

Figure 6.1 shows Pedagogy-in-Participation axes of educational intentionalities that challenge professional imagination and creativity to prioritise the need to answer the child, not rendering her silent by asserting the 'truth'.

We conceptualise pedagogy as a process to cultivate humanity through education, to cultivate the relational holistic *being* in context(s) and culture(s), the *competent* learner in communication, dialogue and participation, the *meaning maker* in progress with well-being, the *learner* dealing with the vicissitudes of the narratives about experiential learning as a way to order experience and construct knowing and knowledge, meaning for learning (Bruner, 1990).

Our educational axes constitute anchors to think about education as an important open window for the promotion of humanity and democracy (Dewey, 1916), to create meaning for the educational process integrating being, learning and narrating, so that learning becomes a door to culture, democracy and humanity.

The educational environment created with children and for children encompasses educational intentionalities; these intentionalities are ample enough to be inclusive, clear enough to orient and inspire processes of interactive learning and teaching. These educational intentionalities are to be negotiated between children and educators in an interpersonal social context, since they constitute anchors for the think-do-reflect pedagogic cycle. They are oriented to support:

1. the plural relational identities' development;
2. the feelings of belonging and the participation in life and learning;
3. the learning identities in communicative explorations of the world, nature, persons and knowledge through intelligent senses and sensitive intelligences;
4. the narration of learning with one hundred languages developing meaning for learning;
5. children's awareness and understanding of themselves as persons and learners.

The professional journey inside the Pedagogy-in-Participation approach to build a praxis of documentation

Two sources for the development of a praxis of documentation

Our praxis of pedagogic documentation is located in time, place and culture, is informed by paradigmatic issues (how we see and make sense of the world and of nature and people, relationships and knowledge), by a theory of education that stands on a theory of knowledge, by the specific pedagogic approach adopted and by the official curricular guidelines (Ministério da Educação, 1997).

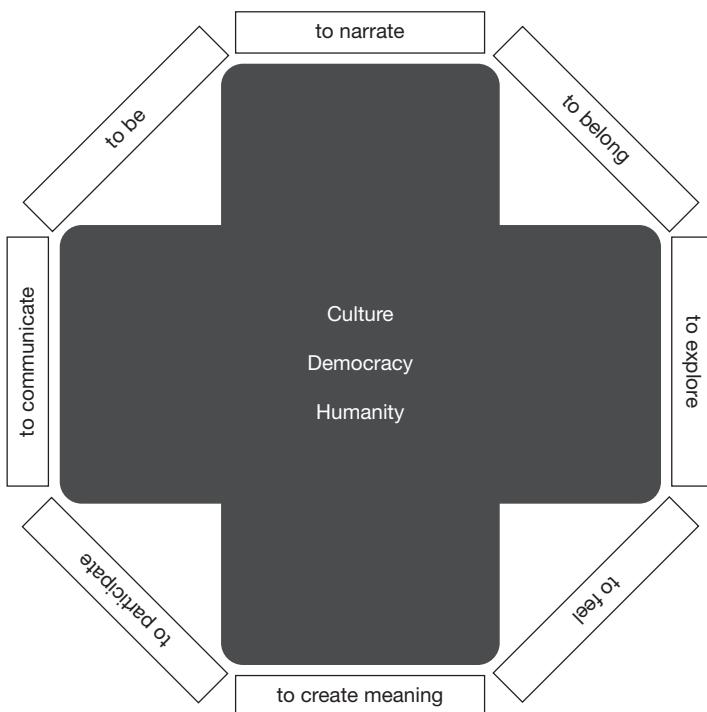


FIGURE 6.1 Axes of educational intentionality

Our own approach (Pedagogy-in-Participation approach to documentation) has evolved through two important sources – the multiple theoretical dialogues developed over time and the ongoing experiential practices debated in the Childhood Association learning community. Since the early 1990s when Pedagogy-in-Participation started to be developed (Formosinho, 1987, 2007; Oliveira-Formosinho, 1987, 1992, 2001) we ventured into experiential learning in the doing of documentation that supported the creation of professional practical knowledge (Bourdieu, 1990, 1998; Dunne, 1993).

In regard to the theoretical dialogues, the Childhood Association community has been open to other communities such as Reggio Emilia (Malaguzzi, 1998; Rinaldi, 2012), Pen Green (Whalley, 2001; Mairs and Pen Green Team, 2013), CREC (Pascal and Bertram, 2009), Carr and Lee learning stories (Carr and Lee, 2012), Fleet and colleagues' conversations about documentation (Fleet et al., 2012).

Pre-school professionals have always conducted some kind of documentation – children's books, classroom books, children's learning books. But today's theories and concepts about pedagogic documentation benefit from the dialogues around paradigms of research methodology of the last five decades of the twentieth century (Azevedo, 2009) as well as the end of the nineteenth century and all twentieth century debates around the ethos of participatory pedagogies.²

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Right from the beginning of our venture in developing pedagogic documentation it became obvious that the challenge of this praxis comes from being affiliated to the family of participatory pedagogies. The child is not a silent child but a person that needs to have space and time to name the world, that needs space and time to show competence in a documentation process where communication is central (Emilson and Samuelson, 2014). Similarly, families are not silent but rather are educational actors with space, time and voice to tell the world of their children's learning.

In Pedagogy-in-Participation we learned that praxis of documentation is a process that weaves together theories, practices and beliefs;³ it is action grounded in theories, ethics and experimentation. Documentation as a way to uncover children's and teachers' learning needs theoretical and conceptual clarification as well as clarification at the level of *techne*, that is, of the how to do it.

The Childhood Association learning community (which includes pre-school teachers and university teachers, trainers and researchers, supervisors and practitioners) jointly debated how to do documentation as a generative mode of creating information about children's learning and to raise awareness about praxis. We did not want to enter a nominalistic mode of venturing change – the mode that changes the name without creating the substance, often just renaming a pre-existing reality with a new word. Educational change does not happen that way . . . it needs the fusion between rigorous thinking and rigorous doing.

The debates in the Childhood Association learning community tried to answer many questions asked about the daily documentation praxis – *What is in it for the children? What is in it for me? What is in it for the families? Is it so beneficial? It gives me information about the ongoing processes but can it help me in being accountable about outcomes? How can I use techniques to make my doing feasible? How can I interact with children and densely document the interaction? How can I at the same time do and document the doing? How does documentation enable me to evaluate each child's progress in learning?*

The journey through a context based learning

These and other questions were addressed through a specific approach to staff development. We learned long ago that any pedagogic strategy can be generative or degenerative depending on the way we bring it from the world of thinking to the world of doing. One of the challenges for our learning community (Oliveira-Formosinho and Formosinho, 2001) was that of creating participatory learning situations for teachers in a situated mode – contextual staff development – that allows us to recreate new meanings in action (Oliveira-Formosinho, 1998). As experiential learning is important for children and for teachers alike, this process of creating participatory learning situations is an experiential, critical, reflexive approach to professional learning; experiential learning needs to be scaffolded either with children or with adults. These are levels of pedagogic isomorphism that highlight the proximity between children's and teachers' learning modes (Formosinho and Oliveira-Formosinho, 2005).

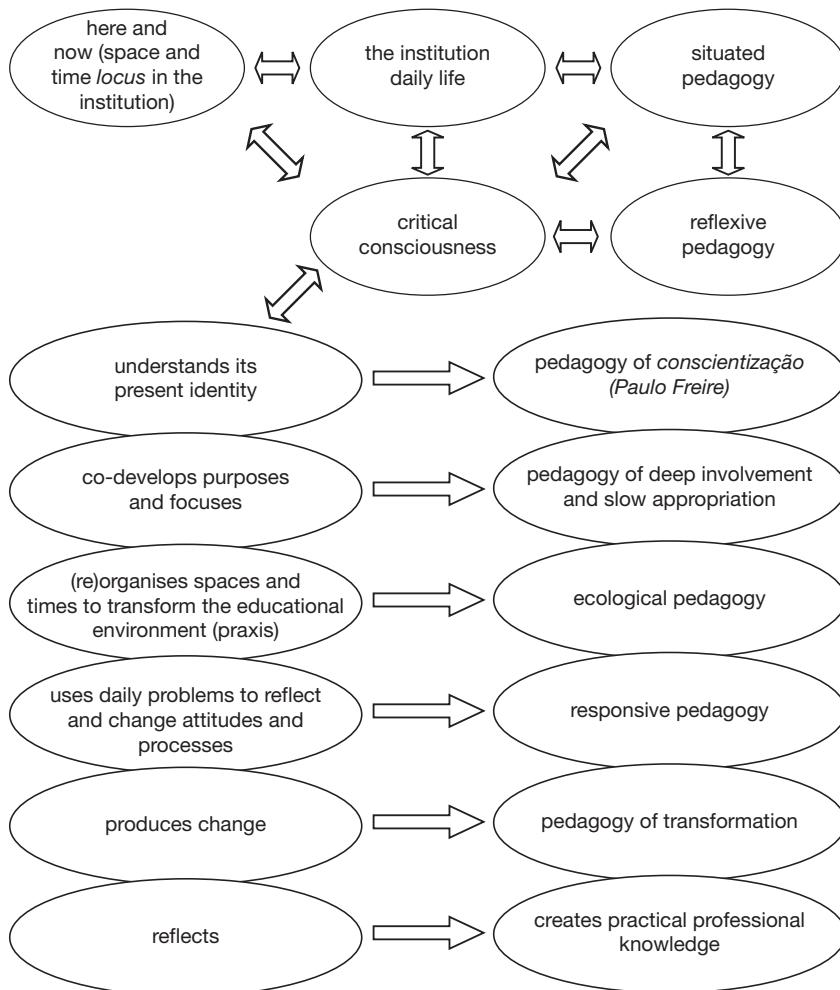
**FIGURE 6.2** Contextual/situated staff development

Figure 6.2 presents in an iconic mode our understanding of contextual staff development (Oliveira-Formosinho, 1998) that developed from dialogues with other approaches that search for professional learning in reflexive mode such as the Modern School Movement (Niza, 2012; Folque, 2008), some Italian approaches (Malaguzzi, 1998) and situated learning (Lave and Wenger, 1991).

The specific process of collaboratively scaffolding teachers' learning around documentation allows us a brief look at *contextual professional learning* that is situated in spaces and time, and has resonance for teachers' classrooms and early childhood centres. Contextual professional learning starts with the creation of awareness and critical consciousness about a specific theme – for instance, about what is assessment

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of children against a measurable set of outcomes in a fixed point in time to check for readiness for the next stage. It supports the understanding of the present professional identity as a step to develop new understandings. So the deconstruction process supports the further experimentation in creating alternative possibilities – the thinking and doing of participatory documentation and evaluation, the creation of meaning about the nature of pedagogic documentation and pedagogic assessment and evaluation. All this calls for new meanings about the human being – the child, the learner, the teacher – supported and sustained in experiential learning around the challenge of how to document daily life in the classroom. This responsive pedagogy produces contextual change, reconstructs praxis and creates professional knowledge (Oliveira-Formosinho, 1998, 2014).

The collective professional learning journey that Childhood Association has undertaken using its approach of contextual staff development has been developed over the last two decades and researched, mostly, in the format of case studies (Oliveira-Formosinho, 1998; Azevedo, 2009; Araújo, 2011; Parente, 2004; Lino, 2005; Craveiro, 2007; Vieira, 2010; Novo, 2010; Pires, 2013, Azevedo and Sousa, 2010; Machado, 2014). Each of these case studies has idiosyncratic characteristics but also shared salencies. Both allow us to create awareness about key issues such as:

1. the nature of persons and knowledge;
2. the psychological nature of children;
3. the need of childhood pedagogy to be conceptualised as appropriate to children's nature and identity;
4. the relationships between teaching and learning;
5. relationships between documentation and assessment;
6. the support to experiential learning in the doing of documentation;
7. the importance of sharing documentation with families.

We enter now, until the end of the chapter, into the details identified by praxiological case studies that sustain our actual approach to pedagogic documentation. At first our learning community created awareness about the fact that, as all knowledge is provisional, knowledge about documentation and evaluation is also provisional. We assumed that the knowledge we were creating about pedagogic documentation would not be definitive, rather it would be subject to error and would undergo developmental processes (as it did). We consider it work-in-progress that benefits from being shared and submitted to our professional peers because for us that is the way to reconstruct praxis that seeks to better serve children and families.

This set of case studies contributes to our search for pertinent pedagogic knowledge about assessment and evaluation that acknowledge the complexity of the child. Our learning community created awareness about the need of research, teaching and evaluation of children to acknowledge and celebrate complexity. This requires departing from an integrated vision of education and of creating integrated

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liberating educational questions, answers and situations. Accepting error in these processes is a pedagogy that knows that we do not own the truth, we only search for it.

We debated the relationship of the children with their contexts (Bronfenbrenner, 2004, 2006), since psychological processes are interdependent with their contexts. Relationships between people and contexts are bidirectional, transitional and interactive (Valsiner and Winegar, 2000); multidimensional human beings, holistic, psychological beings live in contexts. Any relevant pedagogic knowledge knows that context is the scenario.

Pedagogic documentation as a study of children's learning processes and achievements to support assessment and evaluation

As seen, our current approach to documentation comes from a long journey. In the search for novel integrated ways of pedagogic evaluation, we confronted the complexity of assessing and evaluating multidimensional holistic learners in specific pedagogic situations.

Assessment and evaluation are based on documentation of the learning

Assessment and evaluation is an integrated process interwoven with teaching and learning through pedagogic documentation (see Figure 6.3). Pedagogic documentation should be able to:

- reveal teaching and learning processes;
- see the learning-in-the-making;
- see the teaching-in-the-making;
- create information for learning about situated learning (of children and teachers);
- reveal outcomes connected with the learning processes.

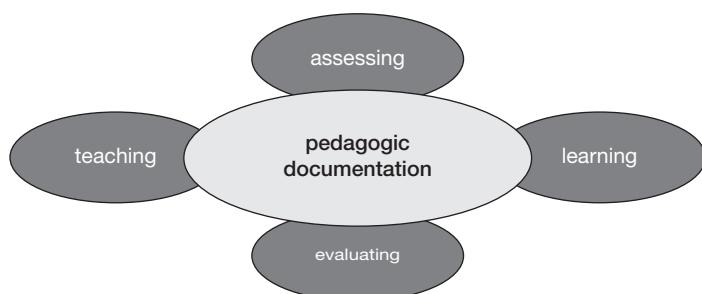


FIGURE 6.3 Pedagogic documentation

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axis one: learning through living democratic participatory processes

axis two: learning through experimenting respect for one's own identity

axis three: learning through a solidary encounter of children and teachers

axis four: melody of voices that contribute to information gathering and ethical evaluative judgments

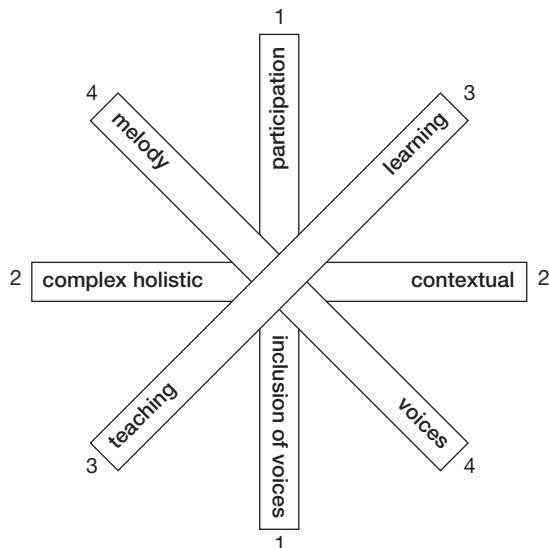


FIGURE 6.4 Pedagogy-in-Participation anchors for evaluation

As explained our approach to documentation has evolved through learning journeys around theoretical dialogues and ongoing experiential praxis. So Pedagogy-in-Participation anchors for evaluation (see Figure 6.4) come upstream from our world vision and epistemological approach (see axes 1 and 2) and downstream from our theory of education in action (see axes 3 and 4).

These anchors helped us to clarify that the Pedagogy-in-Participation holistic approach to assessment and evaluation is:

- **participatory** because it includes a melody of voices that contribute to information gathering about learning that give raise to evaluative judgments;
- **multidimensional** because human beings are multidimensional (physical, biological, psychological, cultural, social, historical);
- **holistic** because the psychological nature of the child is holistic and children are the subject and not the object of evaluation;⁴
- **contextual** because the historical nature of human beings is situated in time, space and cultures;
- **connected to teaching** because teaching processes are the pedagogic context for learning;
- **intersubjective and local** because it is sustained in multiple voices (children, parents, teachers) and in the learning context where the teacher is the choir-master harmonising the voices.



FIGURE 6.5 Attunement in the revisititation of documentation

Pedagogic documentation in Pedagogy-in-Participation journey: the voice of Tiago

I have experienced and thus learned that giving voice to children to explain their pedagogic experience is more illuminating than all other possible discourses. So we are going to listen to Tiago speaking with Andreia (the teacher) about his educational context: the pedagogic spaces (workshops, areas), the pedagogic times (the daily routine as a succession of rhythms) and his overview about life and learning in the classroom as well as about documentation (see Figure 6.5).

We sing songs . . . Look at our portfolios . . . Read stories and play music.
We build houses, savannahs, farms . . . We travel to many places: the beach, the savannah, the zoological park . . . We make puzzles, separate objects, count and write. . . I observe small things with a magnifying glass.

We draw with many materials . . . We paint . . . We build objects with clay and other materials.

Tiago's description of pedagogical times of Andreia's classroom:

Welcome time: We sing the good morning song . . . Talk about what we'll do throughout the day.

Planning time: We plan for the workshop we want to go to finish and start works and to continue working in the project work.

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Activities and/or projects: We go to the workshops . . . We work together or alone.

Reflection time: We say to colleagues and to Andreia and Maria [*assistant*] what we've been doing and they write what we say.

Playground time: I go outside and play with my friends . . . Catch seeds and leaves . . . See animals climbing trees . . . I also talk to my girlfriend.

Intercultural time: We tell stories, do games, dramatise stories . . . Parents come to help us in the project works.

Moment of small group work: We work on what we planned to research . . . Each group working in different things.

Council: We talk together about what we've been doing . . . Andreia shows us the documentation she did and we plan with her what to do next.

Tiago's overview about life and learning in the classroom when revisiting his learning portfolio:

These are my classmates. Some of them are my colleagues since we were babies . . . Others joined our school later . . . Others were already here at school but in other rooms.

Andreia chats with us, listens to us and writes what we're doing and what we want to do and to research. She also researches the things that she doesn't know. Sometimes also learns with us.

Andreia makes our portfolios with us: puts the photos of what we're doing. But we select the most important things. She also puts in our families.

She documents . . . Puts in the walls what we're learning and what we want to learn.

In order to plan the week's activities, Andreia projects on the wall documentation of what we were doing throughout the week, we talk and we decide what we want to learn next.

Families also help us to research the things we want to learn.

According to Tiago, 'Andreia shows us the documentation she did and we plan with her what to do next . . . puts in the walls (through documentation) what we're learning and what we want to learn'.

There is a '*we-ness*', in Christine Pascal's non-standard English terminology. It is not 'you and me', nor 'us' and 'them', but a pronoun which says we are together, jointly and individually, in the first person plural. That '*we-ness*' is visible in this classroom, which is a social *niche* for the development of individual plural identities. Tiago refers specifically to how this learning community plans: 'In order to plan the week's activities, Andreia projects on the wall documentation of what we were doing throughout the week, we talk and we decide what we want to learn next.'

Pedagogic documentation

How does this learning community achieve this ‘we-ness’ in planning? Andreia documents and edits the documentation. The sharing of edited documentation (in council time) allows conversations between Andreia and her children as a revisit of learning and as negotiations for further learning that allow *compromises* and shared decisions for the next week’s educational planning that will sustain another cycle of activity development that in turn will allow us to see again children in action and documentation-in-the-making. We are at the heart of what we call lived *solidary planning*.

Building the concept of solidary learning: from solidary planning to solidary learning

Solidary planning

Figure 6.6 represents our imagistic mode of giving meaning to the concept of *solidary planning* since participative pedagogies need to promote joint planning of educational activities and shared intentions for the development of action. The novel

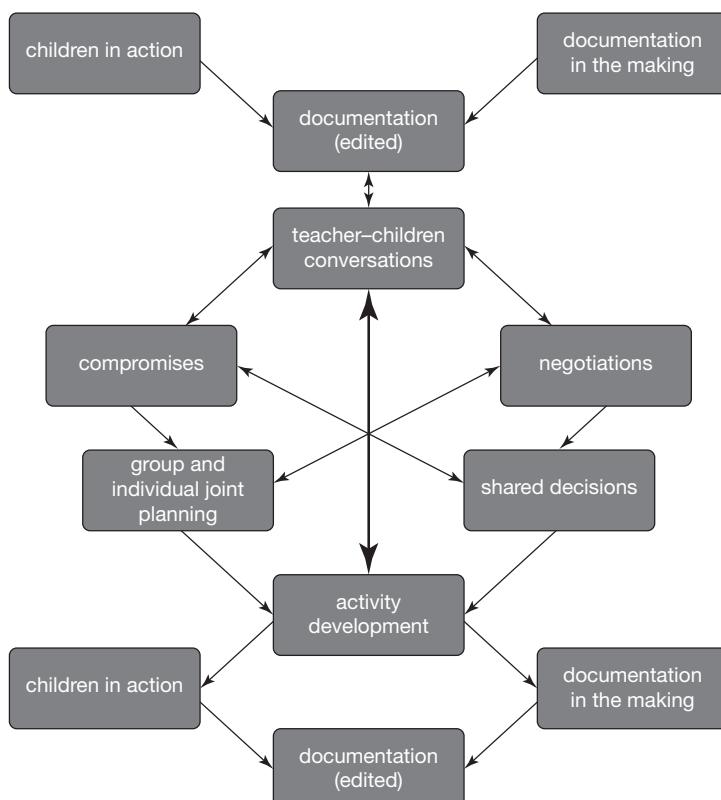


FIGURE 6.6 Solidary planning

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ways for documentation and evaluation should be connected with the decision making processes of negotiated educational planning.

Monitoring solidary learning

Andreia's civic duty towards her children and families challenges her to discover multiple forms of uncovering learning, to monitor the progress of learning. She starts a companionable professional journey of triangulation of instruments, times and voices to see, understand and show her children's learning. She is challenged by children and parents to make these processes of uncovering solidary learning visible, shared and public. For that purpose she develops the individual learning journeys of each child organised in a portfolio and at the same time develops her professional portfolio. These portfolios support her in the acknowledgement and celebration of learning and in the visibility of individual and collective progress in learning. In this classroom the first purpose that assessment of learning serves is the contribution for further learning through systematic critical reflections about solidary learning as shown in Figure 6.7.

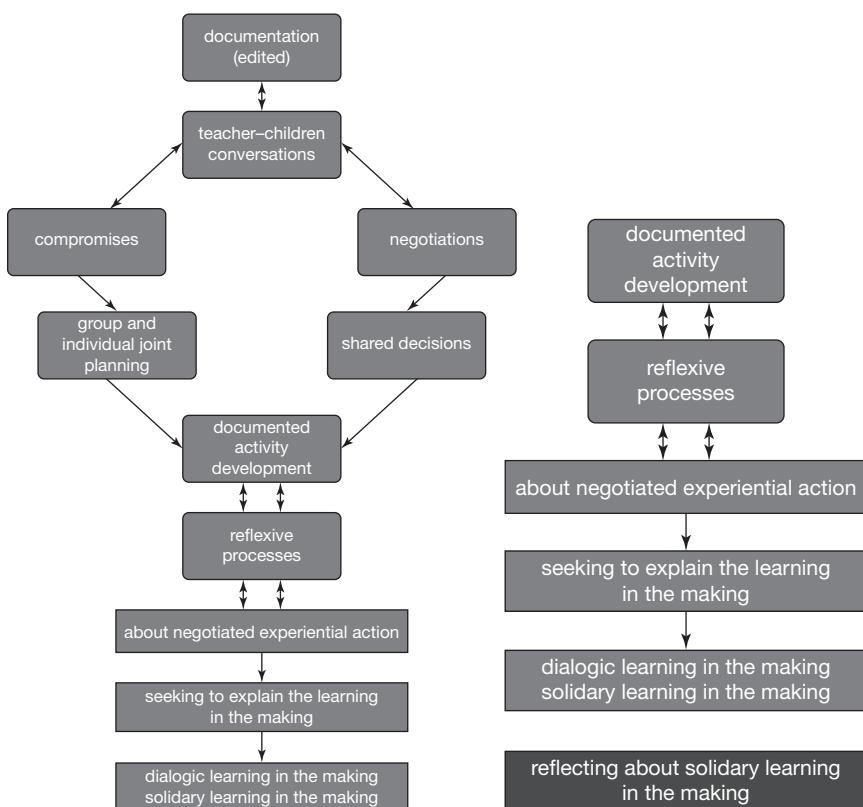


FIGURE 6.7 Monitoring solidary learning through professional reflection

Uncovering learning: documenting, assessing and evaluating solidary learning

Documentation of learning developed over time concerning each child (individual portfolio) and concerning the group constitutes information amenable to various analyses through the use of plural modes in order to uncover learning (see Figure 6.8):

1. Pedagogy-in-Participation pedagogic axes and learning areas;
2. the official curricular areas;
3. narratives of children, parents and teachers;
4. different types of symbolisations;
5. pedagogic instruments of observation.

Documentation of learning developed overtime is an open resource that can be questioned through various means to assess and evaluate learning. In our experiential learning journey on documentation we often questioned: How to

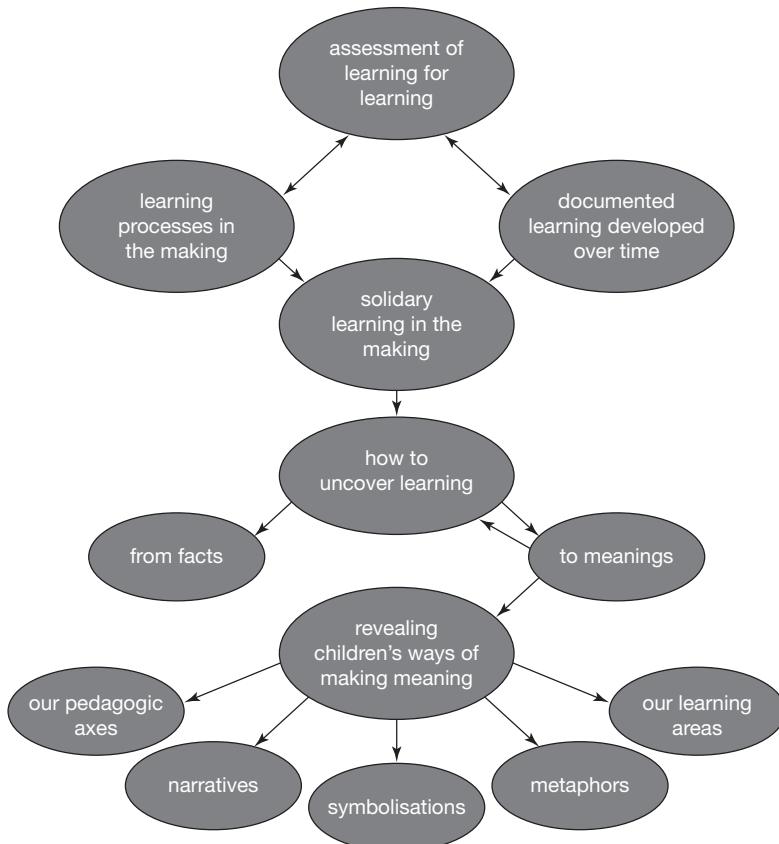
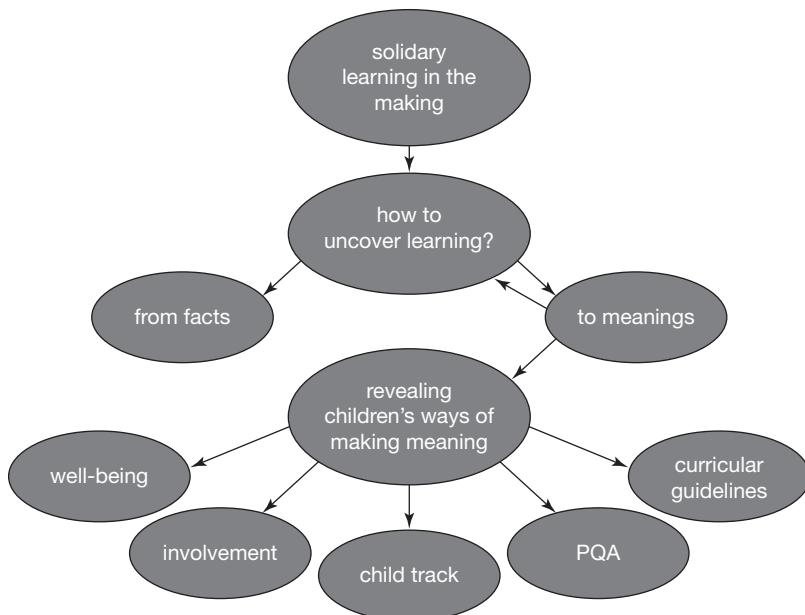


FIGURE 6.8 Uncovering learning for further learning

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**FIGURE 6.9** Uncovering solidary learning

uncover learning (see Figure 6.9)? How to identify, understand and show individual and collective progress in learning? How to assess learning to promote further learning? For that purpose we also use what we call *pedagogic instruments of observation* such as Ferre Laevers' well-being (2005) and involvement (1994), Bertram and Pascal's child track (2004, 2006).

These evaluative processes involve people attached to the pedagogic context, the pedagogic processes, and the pedagogic outcomes – children, teachers, parents. They involve processes that require from these actors the willingness to see, listen, observe, discuss, converse, analyse and interpret. These evaluative processes require that professionals put their attachment to the learning-teaching situation at the service of children and families, and at the service of assessment and evaluation.

Documented action sustained in joint thinking through processes of shared planning, doing and reflecting is pregnant with possibilities to uncover children's learning – that is to reveal learning and to document, assess and evaluate learning. Doing this over time will enable us to understand progress in learning. Doing this over time requires the active involvement of the central actors in the evaluative process and through their participation to build solidary evaluation.

In an inclusive approach, we speak of doing the documentation and evaluation with all the participants and not to them. Evaluation, through documentation, is conducted by multiple voices that undertake conversations; evaluation is scrutinised by plural voices in diverse circumstances. Revealing solidary learning implies the triangulation of all voices that have the democratic right to participate, thus

enabling them to feel that they belong to a process of evaluation traditionally seen as an arena of power only for externals and/or professionals.

Solidary learning strives to create space for children's competence and participation

We want to finish this chapter with the exploration of the concept of solidary learning. The brief illustration that we gave about Andreia's classroom (to be followed in Chapter 8), through Tiago's voice, speaks about the lived 'we-ness' of the connected pedagogic processes: planning, acting, documenting and reflecting, assessing, evaluating. This implies a solidary authorship of pedagogic praxis. We are looking at various layers that interactively contribute to what we call solidary learning.

We revisited conceptions of learning hoping to clarify our understanding of children's learning. We came to the understanding of children's learning as dialogic learning, meaning that two apparently independent people (child and teacher) with two apparently independent roles (learning and teaching) enter in interdependency through communication, interaction and negotiation and grant together the essential role of co-construction of knowledge, knowing, meaning and learning. It is the encounter of children and teachers in their common learning purpose (once looked at as separated and even opposite) that produces a new positive order and a productive role in the universe of childhood pedagogy. It produces a kind of union, simultaneously complex and simple, between two previously opposing logics – the logic of the teacher (once the owner of knowledge) and the logic of the child (once the mere depository of that knowledge).

It hopes for a complementary association between different stances for the existence, development and functioning of learning. Instead of separation and isolation of the different contributions of children and teachers, we undertake a search for relationships, communication, cooperation and respect of differences at the levels of knowledge, feelings and intents. This requires the creation of a new understanding of differences and a new praxis of bringing them together for the sake of children's rights to be participants and of teachers' civic duties of promoting that participation. It requires a deep understanding of – using Dewey's (1897) terminology – *children's powers* that show teachers' democratic powers and processes.

The previously presented example of solidary planning reveals that this professional's know-how is sustained by an ethical stance – the intentional suspension of the teacher's voice, power and knowledge for the creation of children's rights to participate in educational planning, for the creation of a balanced power space for two voices. Solidary learning strives to create space for children's competence and participation because awareness has been created about their hundred languages and multiple intelligences as well as about their rights to play an active part in the learning-teaching process. The knowing about how to do this is a constant challenge that pedagogic documentation has the power to reveal. Developing solidary learning is liberating for children and educators and promising for democratic societies.

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Notes

1. Chapter 2 of this book makes a detailed presentation of Pedagogy-in-Participation.
2. See Chapter 1 of this book.
3. See the concept of *pedagogical praxis* (Formosinho and Oliveira-Formosinho, 2012).
4. Inspired in Morin and Giddens we can say that pedagogy must be appropriate to its subject.

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Evaluating innovation and navigating unseen boundaries: systems, processes and people

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ABSTRACT

This paper illustrates an evaluation model emerging from Australian research. With reference to a range of contexts, its usefulness is demonstrated through application to two professional development initiatives designed to improve continuity of learning in the context of the transition to school. The model reconceptualises approaches to considering and reporting educational change. Responding to an Australian state government's recognition that aspects of the transition to school process necessitated changed dialogue between teachers and educators in prior to school and the formal school sector, the research team facilitated two eight-month multi-site explorations of core concepts, philosophies and practices. Ethics protocols were followed throughout the collaborative project. While this research acknowledges Wenger's (2009. 'Social learning capability: Four essays on innovation and learning in social systems.' *Social Innovation, Sociedade e Trabalho*. Booklets 12 – separate supplement, MTSS/GEP & EQUAL Portugal, Lisbon.) claim that 'social learning capability' is 'the most fundamental aspect of the communities of practice approach' [Omidvar, O., and R. Kislov. 2014. 'The evolution of the communities of practice approach: Toward knowledgeability in a landscape of practice- An interview with Etienne Wenger-Trayner.' *Journal of Management Inquiry* 23: 266–275., p.268], experience in this cross-sector initiative suggests that the intersections of relationship, facilitative infrastructure and 'spirals of engagement' [Fleet, A., and C. Patterson. 2001. 'Professional growth reconceptualised: Early childhood staff searching for meaning.' *Early Childhood Research and Practice* 3 (2), ERIC Number: ED458042.] are also key in educational change, and should thus be visible in an evaluation model.

KEYWORDS

Educational change;
innovation evaluation;
communities of practice;
professional development;
transition to school

Introduction

This research reconceptualises approaches to evaluating and reporting educational change using the vehicle of a transition to school initiative. It proposes a multi-faceted model that was developed in a particular Australian circumstance but which can be seen to be applicable in multiple evaluation contexts. Responding to the Victorian state government's recognition that aspects of the transition process would benefit from enhanced dialogue



between teachers and educators in prior to school settings and the school sector, the research team facilitated an eight-month multi-site exploration of core concepts, philosophies and practices related to transition to school processes, with a focus on improving continuity of learning for the state's school entrants. Ethics protocols were followed throughout the collaborative project. The model which is the focus of this paper both emerged from the data in these studies and evolved to encapsulate the evaluation. The model evolved from the study as a way to represent the complexity of the field of study; its origins are grounded in the data (it emerges from the experience of the data), but simultaneously it became a vehicle for interpretation.

Philosophical underpinnings

The work in this paper is grounded within a philosophical paradigm which:

- Values the adult learner engaged in communities of learners over time
- Foregrounds the voices of children in issues that concern them ([UN 1989](#))
- Prioritises relationships in educational endeavours
- Pursues outcomes in responsive, flexible and cyclical ways
- Seeks richly complex layers of interpretation rather than linear simplicity in educational evaluation.

This complexity may be seen as emerging from a range of sources, generally under the umbrella of 'social constructivism'. Informally, these approaches might be conceptualised as 'multi-faceted systemic interactionism'. For example, in an interview with Omidvar and Kislov ([2014](#)), Wenger-Traynor, coming from an intersection of computer science and anthropology and positioning himself as a social learning theorist, notes that social or learning theory alone does not account for the evolving conceptualisation he brings to the construct of 'communities of practice' (which he evolved in collaboration with Lave, 1991) under the rubric of 'situated learning' and 'social learning capability' ([2009](#)). Wenger-Traynor states that conceptions of his work have shifted to a focus more on 'multiple communities and systems of practice ... there is also an emphasis on learning capability as a characterization of those systems and the relationships that exist within those systems' (Omidvar and Kislov [2014](#), 270).

Further, recognising Fullan's ([1999, 2000, 2001, 2005, 2007, 2008](#)) theories of change (e.g. the importance of time and recognition of multiple influences), change leadership and implications from related research, potential for an innovative conceptualisation of educational change processes has evolved. Experience in this cross-sector initiative suggests that the intersections of relationship, facilitative infrastructure and 'spirals of engagement' (Fleet and Patterson [2001](#)) are key in educational change.

The Australian educational context

In schools and prior to school settings there are national systems that are overseen by a relevant authority in each state and territory. The National Quality Framework (ACECQA [n.d.](#)) is the national system for the regulation and quality assessment of prior to school services which is also accompanied by a regulatory authority in each



state and territory. Australian schools come under a national system which includes the requirement to implement the Australian Curriculum (Foundation – Year 10)(ACARA n.d.). Relevant authorities in each state and territory make decisions about the implementation of the Australian curriculum in their schools according to regional priorities.

The example: why focus on transition?

In Australia, transition to school has been afforded growing attention in the past 10 years due to the increasing body of evidence demonstrating the importance of this period in the lives of young children and their families. Research shows that children's transition to school experience can impact on their social connections and their academic adjustment in the new educational setting (Dockett and Perry 2007; Dunlop and Fabian 2007; Organisation for Economic Co-operation and Development 2006), thus impacting on children's wellbeing and longer-term school achievement.

Previously transition to school has been considered in the realm of readiness for school, with children deemed as more or less ready for school in relation to their age and development (Farra, Goldfield, and Moore 2007). Dockett and Perry (2009), however, describe school readiness as 'contested and controversial' (p.20). They argue readiness means different things to different people. More recently, the notion of readiness has been extended to include all key stakeholders. This includes children, families, teachers and educators in prior to school settings and in schools, as well as the broader community (Farra, Goldfield, and Moore 2007).

Rethinking transition to school within this broader context aligns with Bronfenbrenner's ecological systems model (1979 & 1986 as cited in Bronfenbrenner and Morris 2006). This model recognises the layers of influence impacting on a child, beginning with their immediate family and extending out to people and organisations within the child's immediate experience, as well as the interactions between them. This includes teachers and educators in prior to school settings and schools (Dunlop & Fabian, 2002, cited in Dockett and Perry 2006; Smith et al. 2010). The work of Rimm-Kaufman and Pianta (2000) builds on Bronfenbrenner's work and highlights the significance of relational factors that can positively and negatively impact transition to school. Further, the acknowledgement of context and the fluidity of relationships over time also come into play). These can impact on children's relationships in school (see for example Joerdens 2014). Understanding contexts enables recognising differences in the supports required for different communities. The Secretariat of Aboriginal and Islander Child Care (SNAICC) report (2013) identified the need for transition to school processes that would provide security, foster inclusion into school communities and increase opportunities for children's success at school. The report acknowledged,

Evidence demonstrates that Aboriginal and Torres Strait Islander children and families can face particular challenges through the transition process, largely due to higher levels of disadvantage, lower participation in early childhood services, and a lack of cultural competence within many mainstream schools. (p.41)

Teacher knowledge and beliefs about processes for transitions and educational experiences in the opposite educational setting can impact on opportunities afforded to children in each of these spaces (Petriwskyj 2013). Myths and misconceptions about expectations



can create barriers to effective transition to school processes (Dockett and Perry 2007). Conversely, shared knowledge and shared understanding of pedagogy and curricula enables teachers to provide environments where a flow of learning is more likely to occur. Furthermore, ongoing, sustainable relationships allow for conversations about children's continuity of learning (Dockett and Perry 2014; Margetts and Kienig 2013).

Children's continuity of learning is bolstered through a shared understanding that the education afforded to children is built on their existing knowledge. In achieving this, teachers and educators across educational settings must commit to work outside of their traditional boundaries and work in collaboration with other professionals. A commitment to dialogue and a deeper understanding of sites of education (prior to school settings and schools) is critical. Prior to school teachers and educators must remain open and curious to understand the ways in which teaching and learning take place in school settings. Conversely, school teachers and leaders must remain committed to understanding the ways in which teaching and learning takes place in prior to school settings.

The role of professional growth in educational change: background for the initiative

Having set the Australian context and established the importance of the processes associated with transition to school, we turn to the role of professional development alongside two educational change initiatives. This information is provided to enable readers to visualise the locus of the subsequent situated model for evaluating educational change.

Ongoing professional learning across the education sector is recognised as a core component of professional practice (Edwards and Nuttal 2009; Groundwater-Smith and Campbell 2009). It is particularly valuable when supporting teachers and educators who are working with young children and their families across the potentially complex juncture between the prior to school and beginning to school experience – that period known as ‘the transition to school’. Given the importance of the early years and the potential for either positive or negative transition to school experiences, scaffolded support for both families and teachers and educators can yield rich benefits for children and the adults responsible for them.

Desimone's conceptual paper (2009, 183) suggests that the *critical features* of Professional Development (PD), rather than the *type/structure* are core to effectiveness. While not definitive, there is clear evidence that the characteristics of PD that increase teacher knowledge and skills while assisting in improving practice and contributing to student outcomes relate to: content focus, active learning, coherence, duration, and collective participation. These key characteristics of effective professional development can be mapped against the components of the illustrative initiatives as follows:

Fuligni et al. (2009) also note the importance of each setting's context in exploring the associations between professional development and the beliefs and practices of teachers and educators. These findings reflect what is widely known about characteristics of adult learning. As Helterbarn and Fennimore stated (2004):

It does not make sense to spend time and resources on professional educational opportunities unless they are viewed by the recipients as being important and helpful ... professional development must help teachers to make sense of the increasing demands of accountability and to



respond to those demands in ways that truly support the growth and learning of children. Such an effort is particularly important for those who teach very young children (p.267).

Foreshadowing Desimone's evidence-based recommendations (2009), they then continue: 'It would appear then that excellent professional development must recognize and strengthen authentic teacher voice while linking that voice to genuine opportunities to improve practice in areas of genuine importance and interest' (p.268). These areas would thus seem to be germane to any evaluation exercise.

Methodology

The following situated learning model of educational change was developed out of the first transition to school professional development initiative (Figure 1). It was then useful in conceptualising and interpreting the second professional development initiative designed to improve continuity of learning in the context of transition to school (Figure 2). Both initiatives were funded by the Victorian Department of Education and Training (DET) and conducted in Victoria, Australia. These initiatives built on previous work undertaken by the Victorian DET that identified the importance of reciprocal visits and joint professional learning in supporting a positive transition to school for children and families (Astbury 2009). The situated learning model of educational change (Fleet et al. 2015) was developed by the research team to be used as an evaluation framework, incorporating elements of the relational agency framework (Edwards 2012) as required by the state funding body. From these perspectives, professionals are viewed to possess relational agency when they are able to see others' perspectives, to work together to build common knowledge, develop shared goals, and to understand and subscribe to strategies to ensure effective implementation for achieving the goals.

A case study design was employed in both projects. Case study methodology allows for an in-depth study of the phenomenon (Yin 2009, 2011); in this instance the inter-

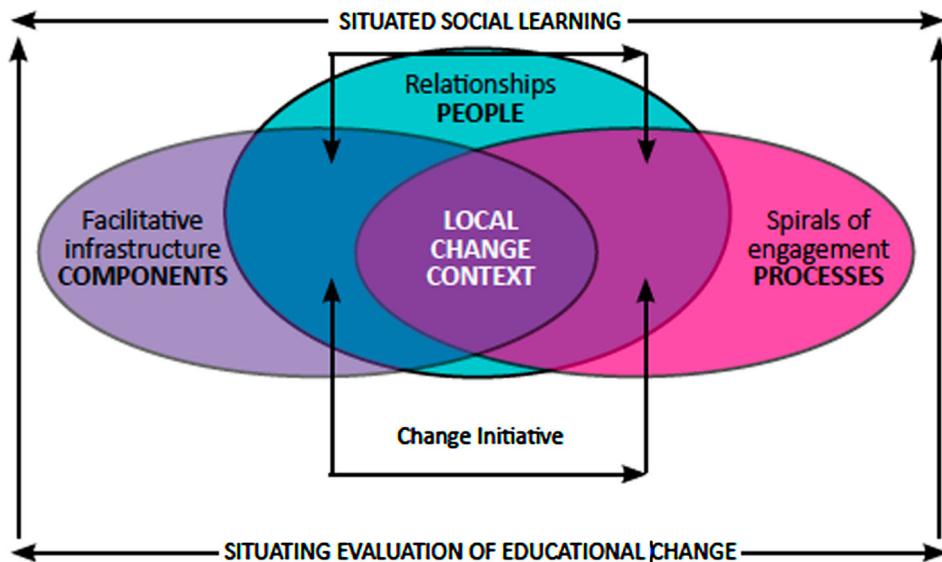


Figure 1. Situated model for evaluating educational change: General applicability (Fleet et al. 2015).

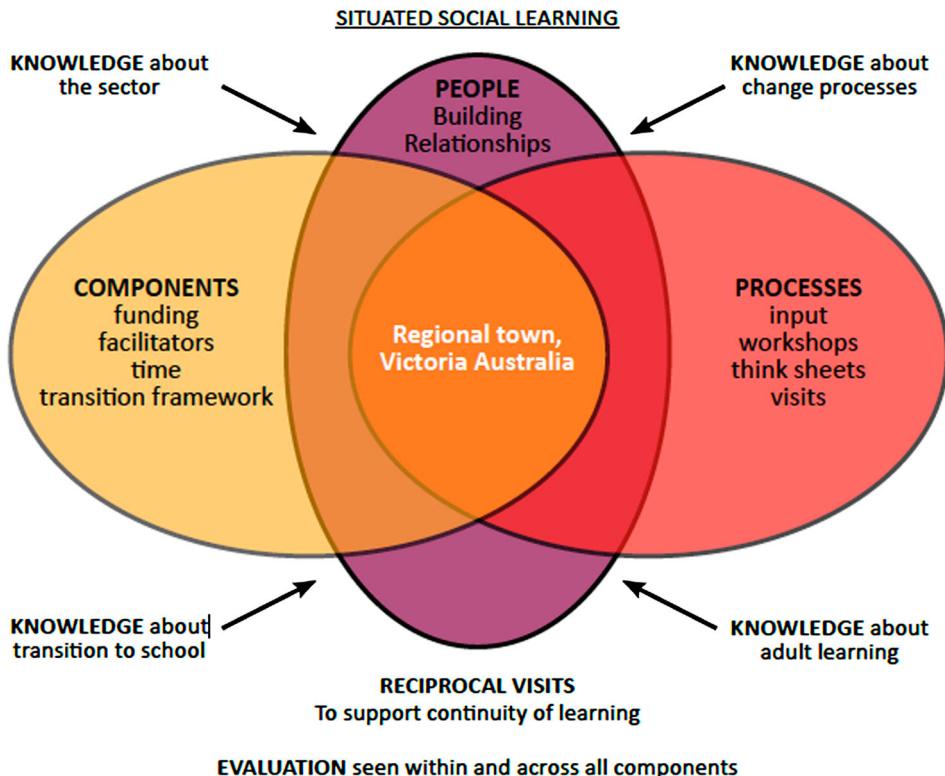


Figure 2. Situated learning model of educational change: Fostering reciprocal visits to support Koorie children and families entering school (Fleet et al. 2015).

relationships occurring during transition to school processes, within the specific community context. Ethics protocols were approved through Macquarie University and the Victorian DET. While there were institutional-based (school and prior to school settings) requirements for participating in the professional development and relationship-building components of the initiatives, participants could elect whether they chose to be involved in the associated research. All participants elected to be involved in both components.

Qualitative methodology was used for data collection, incorporating reflection sheets completed by participants, final evaluation questionnaires and reflective journals maintained by the project team. Data were analysed to identify key themes and processes that would refine the development of the evaluation framework and thereby contribute findings for the study.

The initial project was undertaken by Semann and Slattery and the Institute of Early Childhood, Macquarie University from October 2014 through June 2015 (Semann et al. 2015). Focus sites included a regional Victorian city and a high growth area in an outer suburb of Melbourne, Victoria. The project was facilitated by two external facilitators in each site through eight half-day professional gatherings once a month over eight months, attended by the prior to school and school teachers and some executive and support staff. Each session provided opportunities for participants to develop an understanding of their counterparts' experiences, e.g. sharing of curriculum frameworks, documentation requirements, working with families, processes for transition to school and



children's voices in the transition to school. In addition, the 21 participants took part in reciprocal visits to different educational settings. Eleven people participated in one site, including five teachers from prior to school settings and six from schools. Participants in the other site included four teachers from prior to school settings and six from schools.

The second project was facilitated by Semann and Slattery, the Institute of Early Childhood Macquarie University and the Boon Wurrung Foundation between October 2015 and May 2016 (Semann et al. 2016). In this instance, two Victorian regional sites were selected due to the high numbers of Koorie children and families in these areas, one a regional town and one a regional city. The project team replicated the approach taken in the initial project, with some differences. In this instance, the project was facilitated by three external facilitators, including a senior Aboriginal leader, through six half-day professional gatherings held once a month over six months. Participants ($n = 44$) also took part in reciprocal visits to different educational settings. Twenty-one people attended in one site, including eight teachers from prior to school settings and eight from schools, as well as five Koorie Engagement Support Officers (KESOs) and Koorie Preschool Assistants (KPSAs). Twenty-three people attended in the other site, including three from prior to school settings and eight from schools, as well as five KESOs and KPSAs. In this site, seven people from two additional services were invited to join the project due to their significant role within the community in providing support, information and advice to Koorie people and their families.

The initiatives were found to strengthen relationships and resulted in more open communication between teachers and educators in prior to school settings and in schools. They also supported greater knowledge of and respect for pedagogical practice across educational settings, resulting in increased understanding of the continuity of children's learning.

An additional feature of the second project was the provision of joint professional development open to local communities as well as schools and prior to school services. Three professional development sessions were held in both sites and attended by a total of 159 people. Topic areas (e.g. Strengthening community connections; Embedding Aboriginal perspectives, Mathematical understandings for young children) were informed by participant responses to initial reflection sheets and conversations in early professional gatherings.

Internationally, professional development is being seen increasingly in the frame of 'Professional Learning' (Groundwater-Smith and Campbell 2009) and is often associated with generating educational change (Fleet and Patterson 2009; Semann et al. 2015). It is clear that single-session interventions have limited value in engaging hearts and minds in educational priorities or changing professional practices. The innovations described here moved beyond a single session model, strengthening possibilities for the state-funded programme to progress its goals and improve transition to school practices. The strategies used reflect principles of adult learning, including the importance of active engagement with personally valuable content over time. Opportunities to contribute to these processes encourages participant agency, which is crucial in effecting educational change. The accompanying evaluation component enabled the project team to provide the funding body with participant feedback on the degree of success of this strategy. Funding could be determined as a limitation to these initiatives. The availability of



funding ensures ‘buy in’ through releasing teachers to attend sessions. This factor is acknowledged in the model through the section on ‘infrastructure components’.

Evaluating educational change

Evaluations of educational change initiatives lend themselves to a form of situated/integrated evaluation for several reasons. First, they allow those leading and participating in change to track the movement of such initiatives in order to identify successes and challenges. Secondly, the introduction of evaluation makes it possible for change agents to share with others not necessarily involved directly with the process of change, the lessons learned which others might draw from for their own benefits in order to inform localised change initiatives. In undertaking such evaluations, Wilkes and Bligh (1999) suggest that educational evaluation is ‘a systematic appraisal of the quality of teaching and learning’ (p.1269). Further, it is suggested that in undertaking the evaluation of educational change initiatives it is worthwhile differentiating between monitoring, evaluating and assessing such initiatives. Wilkes and Bligh (1999) suggest that monitoring is centred on the gathering and recording of data, assessment refers to the quality measures related to the determination of performance, and evaluation applies during the monitoring process ‘to place a value on an activity’ (p.1269).

Inherent in evaluating educational change is the cycle of:

- (1) identifying the activity being evaluated
- (2) collecting and assessing evaluation data
- (3) reflecting on and analysing the data collected and
- (4) planning and preparing for further action.

Much akin to the cycle of practitioner inquiry (see Fleet, DeGioia, and Patterson 2017), this process of evaluation ensures that evaluation leads to further action. Moreover, the tools by which the evaluation can take place are diverse and the choice of suitability will vary across educational sites. Such tools may include questionnaires, focus groups, self-assessment, peer assessment, practitioner inquiry projects, and qualitative assessments to name but a few.

As explained above, this model for evaluating educational change initiatives was developed following a transition to school consultancy (Semann et al. 2015), and subsequently shared with the international community (Fleet et al. 2015). A second study provided an opportunity to affirm the relevance of this conceptualisation through application to the evaluation of another change initiative. The focus for this second consultancy was the fostering of reciprocal visits across the prior to school/school border in order to support the effective transition to school (particularly) for Koorie children and their families. The situated learning model for evaluating educational change (see Figure 1) (Fleet et al. 2015) was deemed a useful vehicle for consolidating and discussing the findings from this study, as represented in Figure 2. Key elements are presented below, as an illustrative example of the model in use. The following link connects to a page on the Department’s website that includes all of their research about transition to school, including both of the reciprocal visits projects. <http://www.education.vic.gov.au/about/research/Pages/transitionresearch.aspx>

**Table 1.** Application of Desimone (2009) to illustrative examples.

Core features for PD effectiveness (Desimone 2009)	Aspects reflected in these initiatives
Content focus	Children's effective transition to school is of interest/relevance to all participants
Active learning	Workshop structure included hands-on consideration of elements in transition resources
Coherence (with teacher knowledge and beliefs)	Designed to enable participants with diverse perspectives to engage with the processes offered
Duration	As departmental focus had been on transition, these two projects both had cyclical components over approximately eight months each
Collective participation	Linking of prior to school and prior to school teachers and educators enabled engagement from previously siloed sectors

The elements of the model can be seen to incorporate the key characteristics identified by Desimone (2009) as central to professional development as indicated in Table 1: i.e. Content is evidenced in the Knowledges, Active learning is evidenced in the Processes, Coherence is made visible through the intersection of elements. Duration is identified as a key Component, and Collective participation is a central feature of the Situated Learning Model.

As highlighted by Fullan (2012), ‘... systems have gone overboard on assessment as a solution’. In contrast, this model has multiple pieces of key information to assist providers, funders, and participants, reminding all stakeholders that professional learning takes place in social contexts. In discussing Communities of Practice, Omidvar and Kislov (2014, 266) note that learning ‘is seen as a collective, relational, and social process’. Relationships among the people involved become critical (Edwards 2005, 2012). The highlighting of processes enables recognition of cyclical responsive engagement (Fleet and Patterson 2001, 2009), with the ability to incorporate feedback from participants as the project unfolded rather than being dependent on a predetermined transmitted programme to achieve project goals. This participatory pedagogy and consequent approach to evaluation reflects the well-grounded work of Formosinho and Pascal (2016, pxxiv):

local, situated participatory pedagogies in action require professional journeys on assessment and evaluation that allow the central actors (teachers, children, parents) to be empowered in the processes of quality development and pedagogic evaluation, giving them voice in matters that concern them . . .

This expanded model incorporates the pieces specific to the second project context being used for illustration. It specifies the knowledges necessary for contributing to, learning from and evaluating the initiative, as well as particular items present in the contributing elements. This provides specific examples of the components and processes embedded in the Reciprocal Visits project. Should an initiative be seen as less than successful, lack of knowledge in one of the ‘feeder areas’ may well be identified as a contributing factor.

In a related context, the model has since been used by one of the authors to evaluate and report on a pilot project for a local council in Victoria (report not available to the public). In this example, the change initiative was building the capacity of educators to support the inclusion of children with complex needs in selected kindergartens through a targeted professional learning programme facilitated over five months, and some of the subsections of the model were adapted accordingly (i.e. the necessary Knowledges to be foundational in that project). The Situated Learning Model provided a useful evaluation and reporting



frame that was informative and valued by the client. Further use of this model would enable generalizability and strengthen the applicability of the model to different situations.

Incorporating the situated learning model

Following ([Table 2](#)) is a tabular representation of data collected for the evaluation reports as applicable to both initiatives, using the Situated Learning Model as the reference point. It offers a short-hand or summary of key elements. It is essential to acknowledge that no piece can be evaluated in isolation from each of the others as they intersect to represent the rich complexity of change initiatives. An evaluation report can deal with these elements in narrative form, using summative graphs and tables where appropriate, with illustrative cases and vignettes for layering depth and experiential learning. Details are available, for example, on the report's websites:

Supporting reciprocal visits for transition to school (Koorie focus) <http://www.education.vic.gov.au/Documents/childhood/professionals/learning/Transition%20to%20School%20%20Supporting%20Reciprocal%20Visits%20Koorie%20focus.pdf>

Supporting reciprocal visits for transition to school <http://www.education.vic.gov.au/Documents/about/research/transpositivestarttoschool.PDF>

These reports make visible the knowledges that were evidenced in these change initiatives (as indicated in [Table 2](#)), as well as the key elements, under the headings of Infrastructure, People, Processes, and the Situated social learning as enacted through reciprocal visits across settings.

The pieces in [Table 2](#) provide building blocks for multi-layered evaluation applicable to each element, including assessment of the presence or absence of each. Given this frame, evaluation needs to address all pieces of the model through multiple modalities and methodologies as demonstrated (for example) through:

- Facilitator reflective journals
- Participant surveys
- Records of participation
- Participant learning presentations
- Facilitated website video of change

in order to demonstrate the:

Table 2. Representation of nature of knowledges and elements in the Situated Learning Model.

Knowledges		
	About the sector About change processes About adult learning About transition to school	Shared across areas of responsibility Made explicit through project experiences Used to shape initiatives Exchanged between facilitators and participants
Elements		
Infrastructure components	Funding Facilitators Time Resources	Essential to enable participation To scaffold processes Enabling processing of new ideas Supporting learning
People Processes	Building relationships Input Workshops	Agency of participants and multiple stakeholders Participant feedback re content Think sheets prompting learning
Situated social learning	Reciprocal visits	Contextualised pedagogy



- Nature of engagement of participants
- Benefits to children and their families
- Usefulness to sector, and
- Satisfaction to funding body

Through the lens of situated social learning, this multi-layered approach to evaluation enables complexity to become visible rather than being overly simplified through single or narrow measures (e.g. for school achievement).

Discussion and implications

In a consideration of current philosophies of education, Margonis (2012) referred to the ‘orchestration of a dynamic intersubjective context’ and called on the sector to view ‘educational events as social’ (rather than individual) events (p.5). This orientation led him to promote a relational philosophy of education, which is evidenced in this study. As we have known since last century (Fullan 1999, 59), ‘Valuing reciprocity is of critical importance’; thus demonstrations of reciprocity should be evidenced in any evaluation report.

The Situated Learning model was designed as part of a reconceptualisation of evaluating and reporting educational change using the vehicle of transition to school initiatives. Consideration of this representation can also assist at the stage of project design, as key components and intersections are foregrounded. Findings that arise from the use of the model and a consideration of the points raised here include:

- the importance of professional learning/professional development (PD) and the key features / components of effective PD to promote positive change
- the importance of evaluation in designing educational change initiatives
- the interrelatedness and/or intersection of the key components of the model (as opposed to viewing them in isolation) and the impact on outcomes
- the voice/agency of the learner (participant) in evaluating educational change initiatives
- the potential application of the model across educational contexts.

Broadly, this Situated Model for Evaluating Educational Change ('Situated Learning Model') highlights the intersections of People, Processes, and Facilitative infrastructure components, considering situated social learning, potentially through spirals of engagement. Such intersections are dependent, however, on the foundational and/or incorporated knowledges related to the local context and focus of the change initiative, as well as knowledge regarding adult learning, and potentially, of change processes themselves.

Things that are “certain” on paper mask a more complex reality, and higher standards and increased accountability simply generate more paper; they do not address the fact that we do not all do and see things in the same way. (Lubbeck 1998, 290)

Some of these complexities can be seen as provocations throughout the processes of educational change which are made more visible through the interwoven elements of this model. These provocations can be demonstrated through this evaluation process to have practical applicability for both policy development and pedagogical initiatives.

Disclosure statement

No potential conflict of interest was reported by the authors.

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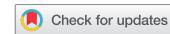
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Toddlers' social competence, play, movement skills and well-being: an analysis of their relationship based on authentic assessment in kindergarten

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ABSTRACT

This article explores the relationship between toddlers' (age: 30–33 months) well-being (WB), play (PL), social-emotional competence (SC) and movement skills (MS). Two hypotheses were put forward for testing: (1) there is a significant positive correlation between WB, PL, SC and MS, and (2) toddlers' WB can be predicted from their PL, SC and MS. The participants were 1084 children. The Early Years Movement Skills Checklist, and three categories from the observation material 'Alle Med' were used to assess WB, PL and SC. The results confirm the first hypothesis and partly the second. A strong positive correlation between SC, PL and WB may reflect how interwoven these variables are, and that observed play competence becomes important in the judgement of toddlers' social competence and well-being. Totally, 73% of the variance in WB was explained by the predictor variables PL and SC, while MS did not emerge as a unique predictor indicating that toddlers' well-being is primarily dependent on observation of children's play and social-emotional competence.

KEYWORDS

Toddler; movement skills; social-emotional competence; play; well-being

Kindergartens in Norway are for children aged 0–5 and are a part of the national education system. Children in Norway start compulsory education at the age of six. The Ministry of Education and Research is responsible for providing a curriculum plan containing the content and tasks to be covered by kindergartens. The aim of the National Curriculum is to give teachers and other staff a binding framework for planning, implementing and assessing the activities carried out at kindergartens (Ministry of Education and Research 2011). One of the characteristics of the Norwegian kindergarten tradition is a holistic approach where movement, social competence, play and well-being are a major part of the pedagogical work (Jensen 2009). According to the National Curriculum, these skills are important for children's development and are gained through children's relations with each other and with kindergarten staff.

Movement skills, social-emotional competence, play and well-being are explored in the longitudinal research project 'The Stavanger Project – the learning child', and in the present study, we will explore the relationship between these variables among toddlers'



at the age of 30–33 months. Furthermore, we want to test if the variables movement skills, social competence and play can explain any variance in well-being.

Theoretical background

A literature search reveals that little research has been conducted on the connections between movement skills, social competence, play and well-being in kindergartens. The National Curriculum for kindergartens in Norway (Ministry of Education and Research 2011) states, however, that social and emotional competence, play and movement skills are developed through action and experiences in everyday activities.

According to Ogden (2009), there are many definitions concerning social competence, but no single definition has received universal acceptance. Vedeler (2007) claims that social competence deals with how individuals define and solve problems and interpersonal relationships. Holopainen et al. (2012) describe social competence as the ability to positively maintain social outcomes and peer relationships, and Bilenberg (1999) points out that a lack of friendships is one of the most important signals of which parents and kindergarten teachers should be aware. The contact that toddlers have with each other often starts with body language and bodily activities, and this is important for developing social competence (Ministry of Education and Research 2011). The curriculum emphasises that toddlers express their views through body language and different emotional expressions, such as mimicry and gestures. Toddlers' way of exploring their surroundings is primarily through their bodies. Through bodily exploration and interaction with their surroundings, toddlers are provided with information on which they base their perceptions of themselves and the world (Løkken 2000; Thelen 2000). According to Lindsey (2014), rough-and-tumble play emerges at the age of 2 and has been mostly observed in toddlers' free-time play (Humphreys and Smith 1984). Humphreys and Smith distinguish vigorous play from rough-and-tumble play; while the former involves solitary play, rough-and-tumble play, such as playful boxing, wrestling and grabbing, and chasing in order to catch one another, is social (Løkken 2000; Pellegrini, Dupuis, and Smith 2006). According to Piaget (1962), assimilation and accommodation require an active child, because problem-solving skills cannot be taught; they must be discovered. Assimilation and accommodation are two ways of making sense of information. Children's play is an expression or reflection of assimilation; the child is consolidating skills that have already been acquired. Accommodation is learning through altering the child's pre-existing ideas to deal with new information; it changes the child's thinking and thoughts.

Piaget claims that pretence or symbolic play becomes increasingly social. Musatti and Panni (1981) define social play as complex interaction sequences of some duration during which children engage in 'gross motor activities'. Furthermore, they divide social play into two main types: playing around large elements and global corporeal exchange. Playing around large elements involves imitative interaction among several children communicating by laughing, gazing and vocalising (Stambak et al. 1979; Musatti and Panni 1981), repetitions (Musatti and Panni 1981), routines (Molinari 1990) and personal 'notes' (Maisonneuve, Stambak, and Barrière 1983). Typical behaviour for global corporeal exchange as a playful process is toddlers running from one side of the room to the other, one by one or in groups, with only small adjustments each time (Musatti and Panni 1981). Vandell and Mueller (1980) argue that by the age of 12 months, toddlers



will be able to offer and receive toys and laugh and smile at their peers, and they will imitate their peers' activities.

Moser and Reikerås (2014) argue that toddlers' corporeal exploration requires a minimum level of appropriate motor competency and skills to ensure meaningful interaction and experience. The period from 2 to 7 years of age is generally recognised as a time when a number of fundamental movement skills are acquired, leading to the development of a large repertoire of various movement skills (Chambers and Sugden 2006), a process that is strongly influenced by opportunities for practice (Gallahue and Ozmun 2006). Bar-Haim and Bart (2006) point out that although children's motor abilities are a rather obvious background factor in the development of social participation, they have been relatively neglected in research literature. The research that has been done on movement skills in relation to social-emotional adjustment has, according to Bart, Hajami, and Bar-Haim (2007), primarily been done in clinical populations. Several studies indicate that children with severe coordination problems have poorer social functioning than their peers (Schoemaker and Kalverboer 1994; Smyth and Anderson 2000; Dewey et al. 2002). However, Bar-Haim and Bart (2006) found that even in a normal population, a mild and non-clinical deficiency in motor function may be associated with a significant reduction in social engagement.

Smyth and Anderson (2000) point out that poor motor ability makes the physical activity associated with social engagement more demanding, and may reduce a child's capacity to deal with the social environment. When toddlers interact with each other in rough-and-tumble play, for example, they form a basis for learning, social competence and well-being. In this kind of play, children will be challenged to master the balance between self-assertion and seeing the needs of others, and to regulate their own and others' feelings (Storli and Moser 2014).

Several studies document the importance of well-being as a component of learning and play (Guérin 2012; Mashford-Scott, Church, and Tayler 2012; Kennedy-Behr, Rodger, and Mickan 2015). Mashford-Scott, Church, and Tayler (2012) state that well-being is a necessary precondition for toddlers' early learning, and learning itself contributes to well-being; according to Kennedy-Behr, Rodger, and Mickan (2015), engagement in play is intuitively associated with well-being for young children. Learning and play are an important part of the National Curriculum for kindergartens in Norway (Ministry of Education and Research 2011). This is further emphasised by the Kindergarten Act § 1. The Act underlines children's need for well-being and joy in play and learning. Well-being is a broad concept that includes the social, emotional and physical domains (Guérin 2012). Kennedy-Behr, Rodger, and Mickan (2015) argue that during children's play, skills develop; these skills can be linked with physical, social and emotional well-being. They point out that functional measures focus on what a child can or cannot do. Well-being, however, is a subjective measure that captures how the child and those in the child's environment feel about what the child can or cannot do. This means that well-being includes both children's feelings and how kindergarten staff interpret those feelings.

Seland, Sandseter, and Bratterud (2015) studied well-being among 1–3-year-olds in a Norwegian kindergarten and explored situations and contexts where toddlers express well-being and pleasure. This study shows that toddlers express well-being when they interact with peers and kindergarten staff, but also when they explore and play on their



own. Seland, Sandseter, and Bratterud (2015), therefore, argue that kindergarten staff have to create a pedagogical environment that gives toddlers opportunities to be in a group as well as alone, and allow toddlers to make their own choices.

A review of the literature reveals that we have insufficient knowledge about the relationship between toddlers' movement skills, social competence, play and well-being between 1 and 3 years of age. In this study, we expect to find that there is a mutual process of interaction between movement, social competence, play and well-being, and the following hypothesis is put forward for testing:

Hypothesis 1: There are positive and significant correlations between the variables (a) movement skills, (b) play, (c) social-emotional competence and (d) well-being at the age of 30–33 months.

As mentioned above, well-being covers the social, emotional and physical domains (Guérin 2012), and during children's play, skills associated with physical, social and emotional well-being develop (Kennedy-Behr, Rodger, and Mickan 2015). Based on this assumption, it should be expected that movement skills, play and social-emotional competence explain some variance in the variable well-being. More specifically, the following hypothesis is proposed for testing:

Hypothesis 2: Movement skills, play and social-emotional competence contribute significantly in predicting toddlers' well-being.

Method

The present study is part of the longitudinal, interdisciplinary Stavanger Project – The Learning Child, a collaboration between the National Centre for Reading Education and Research at the University of Stavanger, Norway, and the municipality of Stavanger. The study follows children from the age of 2.5–10 years and focuses on the development of language, mathematics, and social-emotional and motor behaviour, the relationship between these domains and their relation to reading, writing and arithmetic at school age.

Recruitment and participants

All public and private kindergartens in the Stavanger municipality were invited to participate in the study. The parents of children born between 1 July 2005 and 31 December 2007 in these kindergartens received oral and written information about the project. They were asked for written consent for their children to participate in the study. No criterion other than age was used for inclusion in the study. The participants were 1084 children: 530 girls and 554 boys, in 86 ECEC institutions. All the children had been enrolled before the age of 30 months.

Instruments

The observation material 'Alle Med' (Løge et al. 2006) was used to assess the children's social skills. It is designed for kindergarten children aged between 1 and 6 years and consists of 90 items divided into 5 different levels. In this project, the kindergarten teachers were asked only to complete the fields representing the four highest levels, which left



72 items. In the present study items from three sections are used: socio-emotional development, well-being and satisfaction, and the development of playing skills. The Play section includes items as ‘Active in make-believe play’ and ‘Engages in construction play’, while Well-being includes items like ‘Like to be together with other children’ and ‘Express joy when mastering’. The section ‘Social-emotional’ contains items such as ‘show empathy’ and ‘stand in line and, and wait for your turn’. All items were scored on a three-level scale:

Can do = 2: The child shows competence in almost all situations; Can partly do = 1: The child is beginning to show competence, either situationally or with help from staff; Cannot do yet = 0: Competence not yet observed by staff.

To strengthen the data and to make the data collection easier for the staff, a second booklet was developed for use in the project. It contained three examples and detailed descriptions of each of the observation items used in the project. A more detailed description of the ‘Alle Med’ material can be found in Meland, Kaltvedt, and Reikerås (2016). The Wilcoxon Signed Rank Test yielded a result of $Z = 1.365$, Asymp sig.2 tailed .172. Calculation of Cronbach’s alpha yielded a reliability score of .94, indicating good internal consistency (Løge 2015).

The children’s motor-life-skills were assessed by applying the Early Years Movement Skills Checklist (EYMSC, Chambers & Sugden 2002; 2006). Moser and Reikerås (2014) provided information about the translation and adaptation of the material to a Norwegian context. The material is divided into four sections as follows: Self-help skills (six items), Desk skills (five items), General classroom skills (five items) and Recreational and playground skills (seven items). A detailed description of each item and guidelines for scoring were developed (Iversen and Larsen 2007) to facilitate data collection for staff and thereby strengthen the comparability of the assessments and increase the reliability of the data collection.

The results of the EYMSC were initially coded as suggested by Chambers and Sugden. First, the teachers decided whether the child could or could not do the task. Thereafter, they confirmed their choice using two further subcategories: for children who could do the task, these subcategories were: Can do well (1) or Can just do (2); similarly, for children who could not do the task, the subcategories were: Almost (3) or Not close (4). During an initial data analysis, the response categories were reversed AND coded so that higher scores indicated more advanced skills (Not close = 1; Almost = 2; Can just do = 3; Can do well = 4).

Procedure and data collection

For each participating child, the necessary observation material including the more detailed descriptions of each item was forwarded to the participating kindergarten unit.

The children’s skills were systematically observed during play and everyday activities by the staff in the ECEC institutions over a period of 3 months to ensure that there was a variety of situations and occasions where the children could apply and express the motor-life-skills. The assessment period was from the age of 30 months to the day the child turned 33 months of age (2:9).

Data were collected in a gentle and non-intrusive way, in accordance with the concept of authentic assessment (Macy and Bagnato 2010; Bagnato et al. 2014). The



methodological approach is in line with the fundamental purposes of the national framework plan (Ministry of Education and Research 2011), which emphasises the importance of observations as a pedagogical tool in ECEC institutions.

Toddlers' interactions with their natural physical and social environments became the core objects of observation for providing important insights into the development of young children's skills (Vygotsky and Davydov 1997). Authentic assessment provides ecologically valid data and offers useful information about the children's functioning, strengths and weaknesses (Keilty, LaRocco, and Casell 2009).

To strengthen the reliability of the data collection, prior to the observation periods, staff at the participating ECEC institutions took part in a training course regarding young children's motor development and how to employ the observation scheme in everyday life in ECEC institutions. In addition, two staff members always observed each child independently before they scored the skill using the EYMSC system.

Data analysis

The Statistical Package for the Social Sciences (SPSS) version 21.0 (IBM Corporation 2013) was used for all statistical analysis. Two research assistants entered the data into an SPSS file. Alternately, one entered the data while the second controlled the results of the data input. Data were double entered for a randomly selected 10% of participants, revealing a concurrence of >95%. The results of this control procedure revealed good consistency between the data sets. Furthermore, one assistant carried out frequency analyses for all variables in the whole sample to check whether the values were within the range of possible values. The few deviations discovered during this control procedure were corrected in the data set.

The observations in 'Alle Med' and the EYMSC on an item level produced data on an ordinal scale. However, this study assumed that the section scores and the total scores would be processed on an interval scale level. Normal distribution and data on an interval scale level are prerequisites for applying parametric statistical procedures. According to Tabachnick and Fidell (2014), a visual assessment of the shape of the distribution is the preferred method for evaluating deviations from normality with regard to larger samples, as the standard error and skewness will decrease with an increase in N. Therefore, kurtosis and the skewness of the distribution of data were evaluated using Q-Q plots. These plots did not exhibit significant deviation from a normal distribution.

In the following analyses, descriptive statistics (mean; standard deviation) have been calculated for the sections and the total scores from 'Alle Med' and the EYMSC. A bivariate correlation analysis between all the main variables and a regression analysis with well-being as a dependent variable and play, social-emotional competence and motor skills as independent were completed.

Ethical considerations

Authentic assessment has an ethical implication in giving children the opportunity to expose their skills and competencies over time and in situations in which they are comfortable. Through this choice of methodology, it was confirmed that children experience participation as meaningful and rewarding.

**Table 1.** Descriptive statistics and bivariate correlation between well-being, play, social-emotional competence and movement skills.

	<i>N</i>	<i>M</i> (<i>SD</i>)	2	3	4
1. Well-being	1084	10.6 (4.6)	0.82**	0.81**	0.18**
2. Play	1084	9.5 (3.8)	–	0.81**	0.26**
3. Social–Emotional competence	1084	9.7 (3.9)		–	0.22**
4. Movement skills	1084	75.4 (8.8)			–

Note: * $p < .05$; ** $p < .01$.

Results

Table 1 displays means, standard deviations and bivariate correlations of the variables measured, and the results show high mean values (above the midpoint of the scale). In general, this result indicates that there are significant positive correlations between all four measured variables.

A regression analysis was performed to examine how much of the variance in well-being could be explained by the predictor variables movement skills, social–emotional competence and play. The results displayed in Table 2 show that 73% of the variance is explained by the three predictor variables. Based on the *B*-values and *p*-level, only social–emotional competence and play emerge as significant predictors.

Discussion

The Norwegian kindergarten tradition is based on a holistic approach where movement, social–emotional competence, play and well-being are essential parts of children’s development and care (Ministry of Education and Research 2011), and the purpose of the present study was to investigate the relationship between these variables. The following hypotheses were put forward for testing: at the age of 30–33 months, (a) there is a positive and significant correlation between the variables movement skills, play, social–emotional competence and well-being, and (b) movement skills, play and social–emotional competence contribute significantly in predicting toddlers’ well-being.

The results displayed in Table 1 reveal that there is a positive and significant correlation between all four variables, which confirms hypothesis 1. Based on the coefficient values (*r*), there seem to be especially strong correlations between social–emotional competence, play and well-being; furthermore, movement skills are significant in relation to all three variables, but to a lesser degree. The strong positive correlation between social–emotional competence, play and well-being may reflect the fact that play is a major part of the

Table 2. Regression analysis with well-being as a dependent variable and movement skills, play and social–emotional competence as independent predictors.

Variable	Well-being <i>B</i>
Movement skills	–0.04*
Play	0.48**
Social–emotional competence	0.43**
<i>R</i> ²	0.73
<i>F</i>	981.86**

Note: * $p < 0.05$; ** $p < .01$.



daily content in Norwegian kindergartens (Ministry of Education and Research 2011, Lovdata Act 1), which makes it a major part of the context where toddlers' social competence and well-being are developing and being measured.

When it comes to movement, the results revealed that the strongest coefficient value was related to play (0.26**). The EYMSC measures both gross and fine motor skills, and it is reasonable to believe that gross motor skills are more decisive with regard to social competence and play, indicating that a separate gross motor skill measurement may have shown higher correlation values. Unfortunately, we have not been able to identify a reliable and valid instrument to measure gross motor skills separately among toddlers.

Even though this study has a cross-sectional research design, and has no potential to explain cause and effect, there is reason to believe that broad and efficient developed motor skills may provide toddlers with opportunities to participate in play, and previous research on children with motor deficiencies exposes challenges with the children's inclusion in play (Moser and Reikerås 2014). It suggests that toddlers' corporeal exploration requires a minimum level of appropriate motor competency to ensure meaningful interaction and experience.

When toddlers play side by side, it may look like there is little contact between them and their motor competence is not especially significant. However, a prominent feature of toddlers' play is complex interaction sequences where they are engaged in gross motor activities and routines (Musatti and Panni 1981; Molinari 1990; Løkken 2000). This kind of interaction is imitative, and when several toddlers play together, they seem to reinforce the pleasure in the activity (Musatti and Panni 1981). The significant correlation between movement skills and play might support the assumption that toddlers' motor competence is more important than previously thought. In side-by-side play, some children have to be proactive and initiate gross motor movement that is impersonated. The meaning of the play might disappear if the children are not capable of mimicking the movement within an acceptable time, and this could lead to frustrating early movement experiences.

Toddlers' side-by-side play should be further explored with special attention paid to motor competence as both a prerequisite and an outcome. Among older children at kindergarten, some play activities presuppose motor competence for the children to be able to co-act (e.g. throwing and catching a ball), and future studies on these activities are warranted with the intention of explaining the significance of motor skills in play activities.

The results in Table 1 also show a weak but significant positive relationship between movement skills and social-emotional competence (0.18**), and this finding seems to be in line with previous research (Schoemaker and Kalverboer 1994; Smyth and Anderson 2000; Dewey et al. 2002), which admittedly was carried out among clinical populations (Bart, Hajami, and Bar-Haim 2007). However, in a normative population, some (Smyth and Anderson 2000; Bar-Haim and Bart 2006) argue that even a mild and non-clinical deficiency in motor function may be associated with a significant reduction in social engagement. The results of the present study support this assumption because a higher level of movement skills is associated with higher levels of social-emotional competence.

It is possible to understand movement skills as a necessary precondition that enables the child to participate in a play context where the child uses his body and at the same time participates in meaningful social interaction (Moser and Reikerås 2014). When corporal play requires more advanced social interaction, a motor skills deficiency is clearer and may prevent participation. Participating in simple ball activities, for example, requires



fundamental movement skills such as catching, kicking or throwing a ball. Like cognitive and linguistic competence, movement skills afford the child opportunities to become an interesting peer toddler, which leads to inclusion in the activity (play).

Interestingly, there seems to be an especially strong correlation between play and social-emotional competence (0.81^{**}). This finding seems to underpin Storli and Moser's (2014) assumption that through rough-and-tumble play, children are challenged to master the balance between self-assertion and seeing the needs of others. Greve (2009) argues that social competence and relationships develop over time in toddlers. Considering social-emotional competence and play from a perspective of time, there is reason to believe that there is a reciprocal relationship between the variables. Play is vital for developing social-emotional competence and social-emotional competence subsequently becomes a critical antecedent that gives the child an opportunity to either initiate or be invited into play or not. However, the present research design does not provide opportunities for further exploration of the relationship between these two variables.

The measurement of play is based upon a perception of a child who takes the initiative and is proactive in the context. This initiative is, however, also considered a fundamental precondition for developing motor skills and social competence, indicating that there might be latent personality dispositions explaining why the variables correlate strongly.

In kindergartens, it is important to design an environment where children's initiative is stimulated and followed up independently of domain. Social competence is developed in kindergarten through social interaction with peers and staff. Play has a value on its own, but at the same time, it has potential for developing, among others, social skills (Løkken 2000). Toddlers are involved in play where, for example, one child starts to run and others follow, hiding games and ritual greeting games (Løkken 2000). All these activities have incipient social learning elements, which implicitly follow the play activity, and play can be initiated spontaneously by the children themselves, or it can be the result of intentional pedagogical measures.

According to Lintunen and Kuusela (2007), social and emotional competence are individual characteristics, which become apparent in interaction with others. We seldom seem to improve this competence by applying a specific teaching method. It is suggested that learning social competence is often a result of an implicit learning process (Reber 1993), indicating that these skills are often learned unintentionally. In practical terms, this means that play may be initiated without any further justification. Every activity or game that has elements of co-acting and social interaction provides an opportunity for social-emotional learning, as well as an opportunity to analyse the child's social competence. Play sequences among toddlers may be considered as a stream of continuous actions where different social learning elements appear and disappear or emerge more or less clearly and allow pedagogical measures to facilitate social learning. In other words, social-emotional learning may become intentional during the play sequence and provide explicitly social learning elements. Preschool children typically engage in play (Larson and Verma 1999), and it is a fundamental childhood occupation primarily conducted together with other toddlers. The strong correlation between social-emotional competence and play might underpin this, and demonstrate how intertwined these variables are when toddlers' main activities are observed.

Well-being is considered a broad term and is defined as the 'ability to successfully, resiliently and innovatively participate in the routines and activities deemed significant by a



cultural community' (Weisner 1998). Well-being is an overarching goal in the Norwegian National Curriculum for kindergartens. A subjective measure of well-being is more general and related to the impression of a child's quality of life, while the functional measure is about what a child is or is not able to do. The results shown in [Table 1](#) show a strong correlation between observed well-being and social-emotional competence, and these findings seem to be in line with Seland, Sandseter, and Bratterud's ([2015](#)) findings showing that toddlers express well-being when they interact with peers and kindergarten staff.

Well-being is thought to be affected by participation in life roles. Kennedy-Behr, Rodger, and Mickan ([2015](#)) suggest that well-being covers subjective aspects such as feelings, and in the present study, kindergarten staff members' interpretation of those feelings. Our findings, as shown in [Table 2](#), show that the independent variables social-emotional competence, play and movement skills predict 73% of well-being. Based on the β values, play and social-emotional competence emerge as the only unique significant predictors while movement skills does not, indicates that the perception of toddlers' well-being is primarily dependent on observation of children's play and social competence. According to Rigby and Rodger ([2006](#)), being a 'player' or becoming a playmate is an important life role for young children, and previous research has shown that engagement in play is associated with children's well-being ([Ginsburg 2007](#); [Pellegrini, Dupuis, and Smith 2006](#)), underpinning the hypothesis that play is a significant predictor of well-being.

One conceptual characteristic of well-being is participation in activities considered important in the community, and the fact that social-emotional competence is a significant predictor of well-being is an expression of the fact that participation in activities in the kindergarten community presupposes social competence. Surprisingly movement skills did not emerge as a significant predictor in the model explaining the variance in well-being, even if there is a significant correlation between the variables. This finding is not readily understandable, but the children's age and a suppressing effect related to the other independent variables in the model are possible explanations. Considering that movement skills do not contribute to explain the variance in well-being may indicate that motor skills appear to be more functional and relate to what the child can and cannot do, and that the observers were able to distinguish this from their experiences of how the children feel about activities. The strong correlation between social-emotional competence, play and well-being may be an expression of a halo effect or a confirmation bias among the observers, where positive feelings in one area transfer to others ([Thorndike 1920](#)). The fact that movement skills did not emerge as a significant predictor strengthens the perception that this halo effect does not exist.

Limitations and strengths

Although the results of this study support a significant positive correlation between all the examined variables, and in addition show that, play and social competence predict well-being, there are several factors that might limit their generalisation. First, the correlation design of this study has limitations related to causality, and future research should have a longitudinal design. Furthermore, the reliability of the procedures for measuring the children's competencies may be called into question.

However, data obtained via authentic assessment seems to be increasingly required as the majority of current knowledge is based on standardised assessments or surveys on



reported behaviour (Downer et al. 2010). Several studies have documented the advantages of authentic assessment compared with standardised assessment (Macy and Bagnato 2010) and this approach has, therefore, become a recommended and accepted practice (Copple and Bredekamp 2009). By increasing staff awareness and competency regarding observational skills and understanding of developmental processes, the research strategy may have at least a two-fold outcome in addition to producing scientific data. The staff involvement may directly enhance quality in ECEC institutions, and responsibility for developing more scientific knowledge relevant to professional development may be assigned among kindergarten employees.

Conclusion and future direction

The results of the present study confirm hypothesis 1 and reveal that at the age of 30–33 months there is a significant positive relationship between the variables (a) movement skills, (b) play, (c) social competence and (d) well-being. Furthermore, hypothesis 2 was partly supported as movement skills did not contribute to the amount of variance, while play and social competence predict 73% of the variance in toddlers' well-being. Future research should direct attention towards how the social and physical environment can stimulate children's initiative and explain how play contributes to developing social-emotional and motor competencies.

From a practical pedagogical perspective, the significant positive relationship between the variables may mean that participation in, for example, toddler co-activities such as hiding or catching games may both facilitate social competence and stimulate motor skills. Analysing the individual child (possible constraints) and the potential in separate games or play considering the stimulating effect on fundamental motor and social skills seems to be a fundamental pedagogical consideration. During play activities, the educator should occasionally be able to regulate and adjust the activity in such a manner that it is inclusive and within the zone of proximal development (Vygotsky 1978) and, potentially, if any particular socio-emotional learning aspects emerge during the activity stream, exploit them.

Disclosure statement

No potential conflict of interest was reported by the authors.

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Sticking and tipping points: a case study of preschool education policy and practice in Astana, Kazakhstan

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ABSTRACT

This article presents a case study exploring how national guidance for kindergartens in Kazakhstan was interpreted in practice. Document analysis of the *State Education Standards of Preschool Upbringing and Education*, together with stakeholder interviews and observations of six Astana kindergarten settings, illustrates how competing perspectives on preparing children for school can both promote and limit opportunities for child-led activity in early education. The article considers postcolonial and neocolonial pasts and their potential to influence the present, identifying potential sticking points that may limit change processes. The article suggests processes for building locally grounded praxis in order to create tipping points where child-initiated pedagogy could become a more frequent feature of practice.

KEYWORDS

Kindergarten standards; neocolonial; Kazakhstan; modernity; change; quality

Introduction

This article examines the challenges of developing fluidity and cohesion in practice associated with a policy intended to change early years practice in Kazakhstan. It explores the influence of ‘traditional’ colonial and ‘modernising’ neocolonial pasts (Braidotti 2013) on present kindergarten practices in Astana, the capital of Kazakhstan. Policy change is notoriously complex to effect; Ball and Junemann (2012, 87) explore the significance and nature of the influence exerted by ‘boundary-spanners’ agents who act to span ‘structural holes’ in network systems. In this article, Gladwell’s analysis of the factors that generate a ‘tipping point’ as ‘the moment of critical mass, the threshold, the boiling point’ (Gladwell 2001, 12) is used to reflect on the importance of including localised processes in response to the advancement of national and international standards of quality in early educational practice. A review of Kazakhstan’s National Standards for Kindergarten Education and Upbringing (Ministry for Education 2012), a document intended to support change in preschool practice in Kazakhstan, forms the basis of a case study that illustrates the tensions policy makers and practitioners can experience between neocolonial, internationally recommended directions of change and the persistence of post-colonial pedagogical cultures. In this case study, pedagogical ideas shaped in a Soviet colonial past seem to resist more play-based kindergarten practices developed in other cultural



contexts. The Head of preschool programmes, in the Ministry of Education, summarised the Kazakh government's agenda: 'The priority for change is to move from a more school-like classroom environment to a more play based experience for children'. A kindergarten practitioner characterised her revised practice as involving less 'teaching from the front'. This article explores the nature, relevance and ethics of pedagogical change.

The context of Kazakhstan and Astana

Kazakhstan is the world's ninth largest nation by geographical area; however, with around 17 million people, it is one of the least densely populated (Bridges and Sagintayeva 2014). Kazakhstan gained independence from the former Union of Soviet Socialist Republics in 1991 and the two leading languages are Russian and Kazakh. The initial challenges of developing social infrastructure together with establishing new economic and political institutions continue to be tackled, with a growing sense of national identity and increasing affluence from the cultural and mineral wealth of the nation (Aitken 2012; Bridges and Sagintayeva 2014).

Astana, the modern capital of Kazakhstan, has a dramatic centre comprising contemporary glass and steel buildings fusing architectural styles reflecting its location at the geographical centre of a country that is at the crossroads of Europe and Central Asia.

Kazakhstan's capital it is becoming a well recognised conference centre for global dialogues between East and West, Europe and Asia, North and South, Islam and other world religions. (Aitken 2012, 186)

The modern city centre sits alongside a previous one with a more 'Soviet era' identity (Brummell 2011) surrounded by more suburban areas. The appearance of the people also conveys the diversity of the vast central Asian region; Kazakhstan comprising 138 national and ethnic groups (Aitken 2012). The interiors design of the buildings present a similar fusion of European and Central Asian forms with references to a more nomadic identity represented in textiles and art. In the capital of this Islamic State, religious identity is not immediately visible: mosques are not obvious or audible, many men and women may dress in 'westernised clothing' and are not segregated in public spaces. Music, film, entertainments, shopping malls, public swimming areas and pleasure parks are features of Astana (Brummell 2011). These observations are included to illustrate the cultural fusions influencing the pastpresent (King 2011) of a new national identity.

An overview of the context kindergarten preschool provision in Kazakhstan

In a 2014 interview, a former national Education Advisor described the former Soviet system where kindergartens were widespread, perceived to be of high quality and free to families. Following independence, there was a reduction in the availability of places and a perceived decline in the quality of provision (Aitken 2012). With increasing economic confidence, there is now a growing demand for preschool places particularly in the cities, where both parents are more likely to be in employment, and where families are eager for their children to be ready for school. Long waiting lists for kindergarten places means that parents put their children's names forward long before the children are ready to start and some may pay to have their child moved up the waiting list. Grandparents and extended families are significant in caring for children, particularly in rural



areas where parents have migrated into the city areas (Interview with Former National Education Policy Advisor (D))).

Under the Balpan (Little Chicks) initiative, provision expanded in partnership with private sector investment and the number of children attending preschool had increased from 40% in 2010 to 75% in 2013 (Bridges and Sagintayeva 2014) with the intention of offering a kindergarten place for all children aged three to six by 2020. There is a strong sense of kindergarten as a way of preparing children for school. This is manifest in increasing pressure to bring testing into place to assess children in preparation for starting school grades. The Kazakhstan National Preschool Standards (Ministry of Education 2002, 2008, 2012) maintain clear curriculum guidelines for each subject but also include directives to promote more child-centred pedagogies. This tension between a wider societal expectation that preschool will prepare children for school and maintaining a space for children's play in preschool is experienced in many countries (Moss et al. 2016).

An international preschool movement in favour of increased opportunities for child-led learning

In an increasingly interconnected world, the Organisation for Economic Cooperation and Development (OECD) is a powerful monitoring and lobbying group that is supported by 35 member countries. The OECD has done much to promote the expansion of early years services internationally over the last 20 years within and beyond its 35 core members (Yoshikawa 2016) including cooperation with partner countries such as Kazakhstan (OECD 2011). Central to the OECD policy approach is the use of research evidence that constructs high quality provision in relation to individual academic achievement and national economic development. The 'Starting Strong' series of reviews of international early years practice and research evidence (OECD 2012, 2015) has been particularly influential on governmental policies and practices for early years services (Yoshikawa 2016).

Starting Strong III offered a detailed review of the directions of travel for preschool development from case studies across 10 economically different countries (Taguma, Litjens, and Makowiecki 2012). Starting Strong III argued that 'children are more competent and creative across a range of cognitive areas when they are given the *choice* to engage in different well-organised and age-appropriate activities' (Taguma, Litjens, and Makowiecki 2012, 17). The core evidence used in the Starting Strong documents is drawn from longitudinal studies conducted in a number of different countries. Studies from the U.S.A. (Schweinhart et al. 2005), New Zealand (Wylie and Thompson 2003) and the U.K. (Sylva et al. 2010) are brought together in the Starting Strong reports (OECD 2015, 2012) to advocate that allowing children greater control of some of their preschool activities promotes personal responsibility and self-control. This evidence base suggests that positive social and intellectual benefits accrue in the primary education phase for children from preschool programmes that balance adult-led and child-led activities. The Starting Strong toolbox (OECD 2012) also identified skills and staff traits associated with facilitating high-quality services and outcomes;

- Good understanding of child development and learning;
- Ability to develop children's perspectives;



- Ability to praise, comfort, question and be responsive to children;
- Leadership skills, problem-solving and development of targeted lesson plans; and
- Good vocabulary and ability to elicit children's ideas.

(Taguma, Litjens, and Makowiecki 2012, 9)

Postcolonial perspectives

The adoption of international policy recommendations for preschool quality does not go unquestioned (Moss et al. 2016). Sahlberg (2015) expresses concerns that the evidence selected by policy makers to argue for change, relies too heavily on what may be measured, tested and compared in an international context. Such measures may lose sight of children's individual as well as human needs and understandings. Referring to 'cargo cults', Johnson (2000) was deeply critical of the importation of pedagogies divorced from the cultural understandings and experiences that had created them. Similarly, postcolonial thinkers draw attention to the way that earlier Nineteenth and Twentieth century national colonialisations aspired to bring European enlightenment to the world and continue to shape aspects of international development movements (Janz 2012; Braidotti 2013; Pacini-Ketchabaw and Taylor 2015). They emphasise the importance of considering people rather than homogenising countries as abstracted places that are then described by numerical data sets. They also emphasise the power of underlying assumptions of shared human aspiration and scientific justification that channel developments in particular directions. The idea of past-presents (King 2011) considers how present enactments draw from shared expectations of past performances. Local heritage and environment may lend greater authenticity (Somdahl-Sands and Finn 2015) to particular types of classroom performance because they resonate with past values. Pacini-Ketchabaw and Taylor (2015) argue in favour of local cultures being closely involved in embedding values into the curriculum. In their review of educational systems in Kazakhstan, Bridges, Kurakbayev, and Kambatyrav (2014) suggest that issues of relevance and timing should be explored through a sensitive and respectful cultural dialogue with practitioners. It is only through dialogic research about the reform of professional practice and cultural values that policy messages can be refined in terms of both content and delivery (McLaughlin et al. 2014).

This article explores why child-led learning pedagogy, as advocated in the Starting Strong series, might find it difficult to 'stick' in contexts where it is in competition with established models of adult-directed learning. Astana provides an interesting case study of the widespread pressures to control young children's learning (Moss et al. 2016), illuminating ways in which underlying modernising values associated with educational heritage might resist the idea of play as pedagogy.

The trickiness of modernising ideas

Modern, progressive and traditional are labels that are often used to position newer practice as a superior replacement for established practices in education; however, the early Twentieth century colonial templates for school education systems were quintessentially modernising structures. Giddens (1990) sought to break down the idea that there is direct linear progression from modernist organising principles towards post-modern accommodations



of individuals' agency in social structures. He pointed out that while individual experiences may be unique, they are still engaging with ideas, processes and structures that are profoundly shaped by the *values of modernity* embedded in society. Giddens (1990) identifies time–space distanciation as a key feature of modernity. This is the separation of more generalisable knowledge from localised physical experience and this is apparent in the school-based education systems founded in the late Nineteenth and early Twentieth Century that sought to prepare children to be functional in the institutions of contemporary society. A key perceived benefit of a 'modern education' was that the abstracted generalisable knowledge that it promoted enabled school graduates to be able to transfer and apply knowledge to different and changing contexts. Therefore, embedded in the values of many educational contexts is the concept of directing children's learning towards generalisable knowledge and paying less attention to local personal knowledge.

In addition to the hidden heritage of modernising concepts in education systems, post-colonial scholars also argue for a cautious approach to transferring practices across cultures. They suggest that pedagogic systems need to be understood in order to fit meaningfully within a local systems and structures that will inevitably be influenced by place (Pacini-Ketchabaw and Taylor 2015).

In the days of colonisation, discourses of racial hierarchy were specifically used to justify the acts of indigenous dispossession and white settlement as an inevitable and natural (social evolutionary) process. The assumed 'natural' superiority of the civilised and civilising white colonisers was dependent upon the stated 'primitiveness' and 'backwardness' of the colonised indigenous people. (Pacini-Ketchabaw and Taylor 2015, 12)

Such experiences are a part of the cultural heritage in Kazakhstan where more localised nations and cultures were assimilated through colonial institutions (Aitken 2012). Braidotti (2013), reviewing post-humanist perspectives, identifies concerns that although racial and cultural superiority is no longer promoted, social systems continue to be fundamentally biased towards adopting European enlightenment measures of success. She argues for new more locally grounded or at least more dialogic exchanges of ideas in order to realise meaningful equitable and sustainable development (Braidotti 2013). Modern economic institutions, such as the OECD, are committed to the belief that children need to be prepared for the codes and practices of the 'western' 'modernising' process of education (Braidotti 2013). Promoting play-based, child-centred methods may not resonate with the modernising vision of many policy makers because it competes with underlying expectations that children need to be prepared for schools. This discussion is introduced to help explain how early educational institutions seeking to provide individualised play-based experiences may still be drawn to practices that focus on an underlying modernist discourse of preparing children for school. The case study that follows seeks to expose and unsettle the othering binary of traditional and progressive methods in order to create a space where new practices are more likely to evolve.

The stickiness of ideas

The tensions between global economic forces and national politics and culture are highlighted by Ball, Goodson, and Maguire (2007). As in Ball (1990), attention is drawn to the layers in the cycle of policy implementation, politicians, bureaucrats and professionals; they point to the mismatch between national policy that is in discourse with the



international arena and the realisation of policy through local politics and cultural practices. Tharp and Gallimore (1988) exemplify and discuss this phenomenon through the context of the failure of particular curricular changes to influence practice in the U.S.A. because of what they identified as a strong-shared cultural construction of what 'school' is as well as the roles and rules for those involved in educational exchange. They argued that only through a process of consistent challenge of the conceptions of traditional interactive processes will change come about. Ball and Junemann (2012) illustrate the importance of organisations and individuals acting as connectors across institutions in implementing policy change.

Malcom Gladwell's analysis of tipping points is used here as a way to explore the threshold of stickiness/fluidity where colonial and neocolonial pasts need to be acknowledged as part of a process for developing locally relevant practices in the present. Gladwell (2001) points out that in many fields of social activity it often takes several attempts to get a message into a form that flies and therefore there is an important role for participant engagement, surveys and research dialogues to monitor the development and adoption of ideas. Gladwell (2001) offers many examples of how some ideas stick in the mind relative to others by virtue of relatively small changes in the way they are presented. Key elements of successful ideas are demonstrated messages that fit into a clear narrative, messages that are relevant and accessible to the audience, and messages with which the audience can identify and engage.

Gladwell (2001) identified three factors that help social phenomena reach a tipping point of popular take-up:

- (1) ***The stickiness, appeal or power of the idea itself.*** Gladwell (2001) suggests that what helps ideas stick in people's minds is where they are in small transparently meaningful units, which are free of confusion and presented in such a way that help people to act upon the information offered.
- (2) ***The number, power and connectedness of the key individuals spreading an idea.*** Gladwell's (2001) analysis of the social transmission of ideas is helpful in reminding us that while a small number of authoritative and influential people can be very effective in transmitting ideas, there needs to be a number of smaller working communities or cells into which ideas can be transmitted in order to take root.
- (3) ***The circumstances of the context in which the idea is operating.*** Gladwell's examples are helpful because they illustrate that in many cases it takes time and tinkering with these elements to get the ideas to take off. It is important to understand that context, the material resources and environmental tipping points are things that can be changed. In the context of early years' education, the signals presented by structures and relationships in preschool environments to children, parents and practitioners can be amended to make ideas more accessible.

These categories are elaborated upon and used to structure the findings that follow.

Methods

The following case study comprises document analyses of Kazakhstan's 2001, 2008 and 2012 'State Education Standards of Preschool Upbringing and Education', together with



kindergarten observations and stakeholder interviews considering progression towards these standards. A qualitative contents analysis (Elo et al. 2014; Robson and McCartan 2016) of the standards documents initially mapped aspects of policy deductively against categories identified in Starting Strong documents relating to quality enhancements. These elements were then used to inform interview protocols and analysis including further inductive document review against emerging themes of continuity, change and challenge to pedagogical practices. This dialectic between documents, observations and interview data facilitated insights into the relevance and interpretation of policy in context (Elo et al. 2014). An outline schedule of questions focusing on exploring how the national standards were influencing practice and training was agreed by the research team. Eleven semi-structured interviews were conducted in the preferred language of the interviewees, either Russian or Kazakh. Questions and answers were translated by the two researchers from Nazarbayev University directly in the sessions to support the researcher from Manchester Metropolitan University. Each researcher took notes during the interviews, which were then drawn together in post interview meetings soon after the interviews took place in order to develop a consolidated record of the interviews and identify topics to follow up in subsequent interviews. This methodology developed to respect the rights of two of the initial interviewees who declined to be audio recorded (Hamilton and Corbett-Whittier 2012).

Semi-structured interviews were conducted with two Ministry of Education policy makers and two training leaders with a responsibility for coordinating initiatives at a national and local region level. Interviews were also held with three headteachers from Astana kindergartens. Semi-structured interviews were also conducted with the directors and staff as part of visits to six kindergartens. These were in different areas of the city of Astana and reflected a range of approaches to teaching and learning. Three state kindergartens were visited as recommended by the Republican Centre for Preschools as positive and varied kindergarten environments. Three private settings were also visited as recommended by the Astana city Kindergarten directorate as positive and varied examples kindergartens; one in a privately owned building, two operating in rented accommodation. All the participants were contacted in advance of the visits by Nazarbayev University to explain the nature of the visits, rather than by government officials. Participants' anonymity and the right to withdraw or not answer questions were reasserted at the beginning of each interview (Table 1).

Ethical processes were overseen by Nazarbayev University. Photographs of the pre-school environments were taken with the permission of staff to help detail and analyse observations from learning walks exploring the resources and methods employed in the

Table 1. A summary of interviews.

Minister for Education (A)									
National Director for Early Education (B)		National Director for in-service training (C)							
Former national education policy advisor (D)									
An Astana District training officer together with 3 Kindergarten Headteachers/Trainers (E)									
State Kindergarten (F)	State Kindergarten (G)	State Kindergarten (H)	Private Kindergarten (I)	Private Kindergarten (J) (established with a state capital grant)	Private Kindergarten (K) (Montessori)				



settings (Hryniwicz 2016). Care was taken not to store or use images identifying children. The numbers of the kindergartens, the identities of respondents and the photographs, have not been used in reporting on the visits, and attribution of comments have been anonymised for ethical reasons (Harcourt, Perry, and Waller 2011). The aim of the data collection process was to assess the nature of the kindergarten learning environments and to ask staff about the influence of the national standards on their teaching, including how pre-service and in-service training supported the application of the standards to practice.

Findings and analysis

The relative stickiness of ideas in policy and practice

The director for preschool education at the Ministry of Education (B) identified a vision for change that corresponded with the OECDs recommendations for a balance of child-led and adult-initiated pedagogies.

The priority for change is to move from a more school-like classroom environment to a more play based experience for children. Preschool should be a transformative space for children including outdoor play, and sport. Outdoor play should take place outside on daily basis and children should be taken out into the real world environment to learn. Lessons should not be holding children in the classroom. Good teachers should be caring and able to make the children laugh. (Interview B)

Interviews with two of those involved in a working party tasked by the Ministry of Education with developing a revised standards document to supersede the 2012 version, suggested that the group wanted the revised standards to reflect more strongly the idea that children should have more opportunities to choose and play (Interviews C and J). They hoped that the next iteration of the standards would match what they observed to be Kazakh children's increased confidence and understanding. This they associated with children having greater access to ideas knowledge through the media revolution in the country and parenting styles that promote autonomy. The kindergarten staff interviewed in each setting also expressed a desire to follow children's interests and promote children's learning through play.

While the stated aims of the standards documentation, practitioners, policy makers and trainers suggested a commitment to emerging social changes in attitudes to childhood and child-focused pedagogy, the interviews and observations also suggested the stickiness of existing pedagogical practices. The participation of children in activities was evident in the classroom sessions observed, but with the exception of one of the preschools, the children were always observed participating in whole class activity in the indoor classroom environments: free play was observed in the kindergartens' outdoor environments. Each kindergarten director interviewed was very explicit that they followed the standards documents and the supporting curriculum as set out in policy and in the prescribed textbooks. The perceived need to follow a set subject curriculum meant that an adult-led curriculum accounted for much of the content of the children's day. English, Music, dance, sports in at least two of the settings were taught each in a different specialist room by a specialist teacher. In the subject sessions, there was usually one adult teacher in charge of a group of 24 leading with another assistant supporting the activity (Interviews F, G, H, I, J and K).



A group of Kindergarten directors and trainers from the Astana city authority (Interview E) confirmed the continuing influence of class-based subject-focused lessons in practitioners' interpretations of the national standards:

Learning is mostly in classes with each centre following a set timetable programme for each subject as described by the books identified in the standards.

Section three of the 2012 standards set out the expectation that children would engage with the prescribed curriculum for 24 hours of teaching per week. The 2008 and 2001 versions of the preschool standards (still in force) defined the balance of subject hours for different age groups. The senior age group were recommended to receive 14.5 hours of identified subjects plus 1.5 hours for language development depending based around children interests and play.

The continuing identification of recommended maximum times for different subjects seems to sustain a subject-focused lessons rather than facilitate a more integrated approach to learning. The language of the standards documents frequently emphasised the teacher delivering learning rather than children exploring learning. Interviews revealed that regular inspections of settings against the National Standards do promote that the idea of children being active participants, but also mean that kindergarten practitioners feel the need to demonstrate they are delivering the required hours of subject content (Interviews E, F, H, I and J). The Kindergarten headteachers in interviews G and J indicated alternative more flexible interpretations of an integrated play curriculum for parts of the kindergarten day but still acknowledged the pressure to demonstrate some specific content periods.

Gladwell's analysis of stickiness arguing for ideas to be expressed simply and explicitly is very helpful. One of the Kindergarten teachers summarised what she was doing as 'less teaching from the front': this might resonate clearly with a wide range of stakeholders.

Acknowledging the influence of colonial traditions of 'teaching from the front' together with questioning the relevance and pragmatics of neocolonial practices from other countries is an important base from which to formulate a locally relevant kindergarten offer. This would require further dialogues, where stakeholders could explore the continuing momentum of existing methods and the prevailing view of how much learning is to be experienced in a group led by a practitioner. This could help in developing distinct clear and less-conflicting messages to practitioners incorporated into the national standards, pre-service and in-service training. Local institutions could then develop pedagogy that makes sense in the context to the kindergarten environments and the communities they support.

The circumstances of the context in which the idea is operating

The literature review drew attention to the influence that 'place' can exert on the adoption of ideas (Gladwell 2001; Rogoff 2003; Pacini-Ketchabaw and Taylor 2015). The visits to the state and private kindergartens suggested many similarities between the layouts and practice environments that might help to support the persistence of adult-led pedagogy and resist the adoption of alternative practice.

The Kindergartens operated in two-storey buildings surrounded by sufficient land to offer plenty of outdoor play space. The buildings featured very similar layouts, with



suites of rooms for different age groups and some subject-specific rooms. Each suite comprised a larger base room, with a connecting dormitory room containing sufficient beds for each child. Each kindergarten's day was from eight am to six pm, with a lunch break around 12.30 pm followed by a sleep period of one to two hours. The fabric of buildings and layout of the rooms themselves potentially offer sufficient space for child-led activities to be possible. There is space for a variety of games and role-play areas to be offered simultaneously and the rearrangement of desks, chairs and floor surfaces would all permit more play-based activity. None of the rooms had direct access to outdoor play areas so children so the development of free-flow inside/outside activity was not possible without adaptations, but such a change could be accommodated but would be limited by the extremes of summer and winter temperatures.

One privately managed centre (F) demonstrated a marked contrast in the style of teaching and learning. The leader of this centre had studied at the Montessori Institute in Moscow. In the mornings, the desks were moved to open up more floor space and the children experienced an extended period of play-based activity where they were free to choose from a variety of painting, drawing, role-play and other structured educational toys in the setting. The leader explained that it had been quite a challenge to find the play equipment and it had been imported at a relatively high cost. The leader said that the children enjoyed the morning sessions and that in the afternoons they experienced the more traditional 'teaching from the front'. They had quite a few children transfer from other more traditional preschools who found it hard to choose for themselves at first. She believed that learning to manage their own activity and learning was a key benefit of this approach. This suggests that the wider social environment, at least in the Astana area, might also be supportive of a shift in the established dominant kindergarten pedagogy.

The number, power and connectedness of the key individuals spreading an idea

The interviewees represent some of the key agents engaged with addressing the 'structural hole' (Ball and Junemann 2012) creating a new vision of child-centred pedagogy. Six of those interviewed were involved in the development of a revised standard as a first step to making a revised vision of pedagogy more visible. One problem commonly identified in the interviews with both policy makers and practitioners in Astana was the limited experience of preschool leaders and trainers.

Following international trends for modernisation is a problem because there is very limited experience of these approaches in the country. (National training director)

According to 2013 data, only 57% of preschool teachers had attended higher education a factor that may impede shared understandings of debates at a higher pedagogic level (Fimyar, Yankavets, and Bridges 2014). The identification and development of preschool advocates from within Kazakhstan could be an important step in developing investment in a group of people with the skills to share a vision of practice.

Gladwell's analysis of the significance of the right people and social structures in supporting change highlights that it is not always the best practitioners or external experts who have the most influence, but rather those who are skilled at bringing people together, picking up, nurturing and sustaining contacts. Careful thought should be given to the selection of key trainers at a regional level and the potential of developing model



kindergarten centres. Practice innovators need to have job descriptions, which allow them to visit and network within local regions. They may also need to develop additional skills for training such as communication skills in digital media and other languages to enhance their capacity to act as go-betweens linking ideas and practice.

To address Jonson's concerns about the parachuting in of pedagogical practices, the development of centres of good practice could be very helpful. Practice innovators based in model centres could support others from a position of informed authority about how their pedagogy came into existence and how it fits with children's and parents' expectations. Organisations such as the existing 'Orleu' in-service teacher training institute that supports professional development across Kazakhstan could provide such a network through investment in skilled 'social connectors'. The Director of the Orleu recognised her role in creating such a network based not just in a central team located but drawn from local networks connected to a variety of cultural contexts.

Conclusion

Postcolonial perspectives (Braidotti 2013) can be helpful in alerting us to the unconscious continuance of past ideologies into new practices because they illuminate how the modernist foundations of education continue to shape emerging policy and practice. Most practitioners, policy makers and parents have been shaped by a subject-based pedagogy with the potential to establish a value system that finds it challenging to adopt a more integrated or process orientated pedagogy. Thus, while there is little research evidence confirming that a preschool pedagogy echoing school subjects is an effective preparation for school (OECD 2012), it may still feel to many adults like the right thing to do.

The interviews with practitioners in Astana revealed a commitment to active learning and play but a strong pull towards the idea of a subject-based curriculum. Recognising the strength of this underlying discourse is important because it suggests that any change will need to either challenge the validity of this discourse or show how revised practices compliment it. The subject-based nature of schooling that is embodied in the buildings and curriculum expectations frame the kindergarten day in the minds of practitioners, parents and children. The Astana case study suggests the power of the idea of modernity over education to organise, compartmentalise, institutionalise, order and control learning. Thus, the past continues to exert a powerful sway on what societies believe preschool should prepare children for. Recognising the strength of this underlying discourse is important because it suggests that any change will need to either challenge the validity of this discourse or show how revised practices compliment it. It may therefore be helpful to stop referring to 'traditional and modern approaches' in the debate about the place for play and child-led learning in early education. Characterising change in this way is unhelpful because it puts individuals into a binary where they have to position themselves as one thing or another. Societies might be more comfortable with a blended spectrum of experiences of adult and child-led activities preparing children for school and life.

Gladwell's analysis of tipping points draws attention to the need to ground pedagogy in values that make sense and feel right to practitioners, parents, children and wider society. However, this may favour the deeply embedded sense of subject that many adults take away from their experience of education. To emphasise school readiness in policy



documents may undermine more play-based, child-initiated pedagogy. While it is possible to argue for kindergarten to be a separate phase from education, it may be more helpful to argue for Kindergarten being a broader preparation for lifelong wellbeing. A tipping point towards more child-initiated practice might require people to be convinced that change with complement existing subject knowledge. A vision of upbringing more committed to ecological, health concerns and creativity is appeal to many.

The children in the Astana settings visited appeared to be comfortable, alert and eager to participate in the activities that comprised their day. They worked enthusiastically together in large groups, took turns, listened to each other's conversations. There were opportunities for them to engage with play resources between lessons and they were free to engage with outdoor play spaces at several points through the day. In these more playful spaces, staff engaged in informal conversations with the children and admired the children's play. This paper has tried to convey the enthusiasm of the practitioners, leaders, trainers and policy makers, for developing the opportunities for more child-led activity, together with the desire within the system to reduce the dominance of whole class teaching. Policy makers and practitioners both made reference to a sense of changing expectations for children and childhood and this is perhaps an important starting to reflect on what a new nation aspires to for its children not just in schooling but for their lifelong wellbeing. Upbringing (Vospitaniye) was a term that kept coming up in the Astana interviews and which features in the title of the standards document the State Education Standards of Preschool Upbringing and Education. If school-based education is deeply rooted in 'modern' social structures, then the concept of 'upbringing' is perhaps more flexible, being associated not just with school but with wider social institutions such as the media as well as with home, family, friends and community. Upbringing is perhaps more open to suggesting a blending of traditional and modern influences it is suggestive of introducing children to more contemporary technologies and thinking but also to promoting a sense of place, community and belonging. It may, therefore, be a helpful foundation from which to build towards a sustainable tipping point.

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