



First 1000 Days



There is a critical window of opportunity to shape better, healthier futures for children within the 1,000 days from conception to age two years old.

The fundamentals of a child's development are set during the crucial first 1000 days of life, which span from conception to age 2 (House of Commons, 2019).

- A baby's health and wellbeing may be affected for the rest of their life by the events in the first 1,000 days of their existence.
- Babies that face stress, trauma, poverty, and violence throughout their first 1000 days may suffer long-term adverse outcomes.
- It is important to provide a baby with good nutrition, safety and security and a loving home environment, especially during the first 1000 days.

Within the first 1000 days a baby will need:

- [healthy food](#)
- loving relationships
- safety and security
- time to [play](#) and explore
- a healthy environment - including in the womb

(Pregnancy, Birth and Baby, 2022)

A Baby's Brain Development

The brain of a baby begins to develop in the womb.

First trimester - The nerve connections that allow a baby to move around in the womb are created.

Second trimester - More brain tissue and nerve connections are created.

Third trimester - The cerebral cortex begins to replace the brain stem, laying the groundwork for a baby to learn in the future (Guy-Evans, 2021).

Nutrition during pregnancy



After a woman becomes pregnant, her unborn child is significantly impacted by her lifestyle and health. Poor nutrition at this time may change a baby's body structure and function in a way that

increases the risk of future health issues because pregnancy is a time of rapid growth and development.

According to studies, the effects of inadequate nutrition during pregnancy last for decades to come for both the mother and the unborn child. The greatest strategy is to avoid issues from occurring. Eating a healthy, varied diet in pregnancy will help to get most of the vitamins and minerals they need, however there are certain supplements which pregnant women are encouraged to take.

National Childbirth Trust (2018) advises pregnant women to take more vitamin D and folic acid while pregnant and to stay away from vitamin A (retinol). Aim for 400 mg of folic acid and 10 mcg of vitamin D. As it can aid in the prevention of neural tube disorders like spina bifida, folic acid is crucial during pregnancy.

Calcium and phosphate levels are controlled by vitamin D in the body. These nutrients maintain the health of bones, teeth, and muscles. Vitamin D can be found in foods like oily fish (salmon, mackerel, herring and sardines), eggs and red meat.

A mother's mental health



The mother's mental health both during and after giving birth influences the baby. The likelihood of the baby experiencing anxiety increases if the mother is stressed or anxious during pregnancy. Poor emotional and social support as well as socioeconomic deprivation are strongly correlated with maternal mental health.

National Health Service (2011) states the one in six mothers have mental illness during or after pregnancy. A baby's attempts to interact with depressed mothers may be met with decreased receptivity, which in turn affects how a baby bonds with their mother. The brain and a child's social and emotional skills both develop significantly throughout the first few years of life. Poor developmental and behavioural consequences for the child can result from the failure to forge a strong and dependable relationship with at least one primary carer.

It is common to have ups and downs during pregnancy, however some women may experience mental health issues for the first time during pregnancy. During antenatal appointments with a midwife, women are asked about their wellbeing and if they feel they need any further support.

Without support parents and infants may experience persistent mental health problems, and when pregnant, previous mental health issues are more likely to recur.

Advice given to pregnant mothers by NHS Inform (2020) to maintain mental wellness includes:

- conversing with others about how they are feeling – admitting that they are having difficulty is okay; and do not be reluctant to seek assistance.
- Set attainable objectives and go slowly enough to track their progress along the way.
- eat regularly and healthily and get a decent night's sleep. Everyone feels better when they get enough sleep, eat healthily, and engage in healthy physical activity. Being outside and active is also good for your mental health.

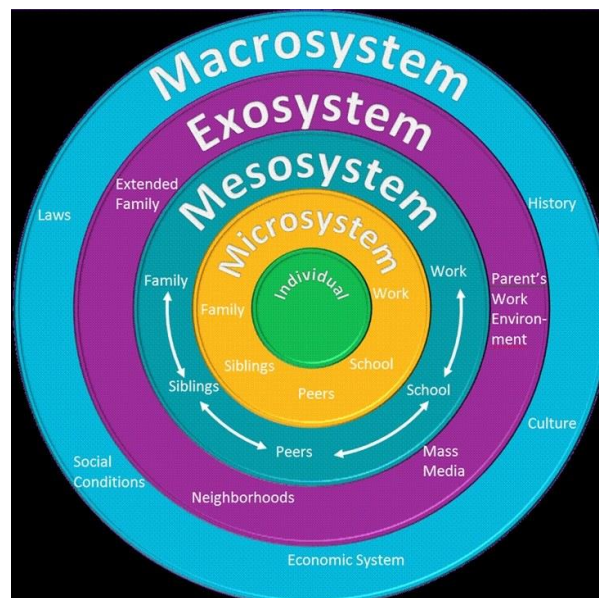
Every opportunity is a learning opportunity



Young children interact with many people throughout their lives, so giving them the chance to establish respectful relationships with close adults is essential. Respectful practitioners will ensure that all children are included; not just those that are capable, clean, pretty, obliging, and easy to work with. They will respect them regardless of their language, culture, family, needs, and their very essence (Nutbrown, 1996).

In the first few years of life, a child's brain creates 1 million new neural connections every single second. Their brain growth depends on having helpful, stimulating interactions with their parents and other adults. It goes beyond simply singing or talking to a child. When a practitioner and a child engage with one another, the brain is being built. It involves following their lead and responding to their cues. This is a nurturing experience in which trust is formed.

Nearly all a baby's needs are met by their carers. Thus, a child's health is greatly impacted by the way that parents and practitioners engage with babies (Cherry, 2022). Erikson's theory of Trust vs. Mistrust states that children who develop trust in their caregivers from an early age will be more inclined trust others throughout their lives. Responding to a baby's attempts to communicate is the main strategy to gain their trust. Babies use nonverbal cues to constantly communicate their thoughts and feelings because they are unable to use words to do so. When close relationships are made between a child and practitioner, a practitioner will learn how to respond to these cues and meet the needs of each child.



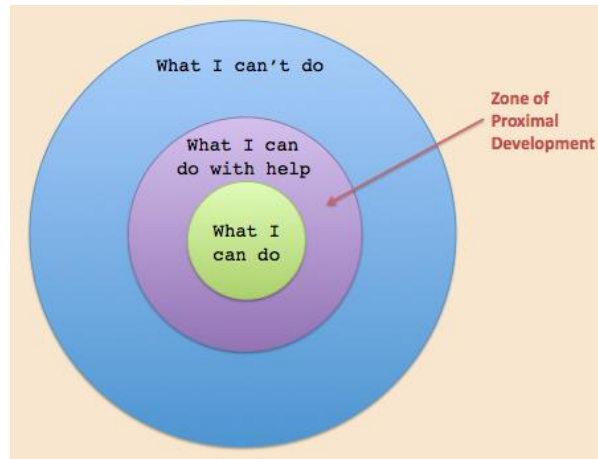
With respectful care there is an opportunity for important one to one time during caring routines to engage with a child. This could be when feeding a child, getting them to sleep, or changing their nappy. During these times it is important for a practitioner to give the child their full attention, eye contact, and talk and sing to them. This can be difficult as settings are busy, however this is a meaningful learning opportunity.

The ecological theory of Bronfenbrenner (1977) looks at how a baby develops in response to the different relationships that make up their environment. According to Bronfenbrenner's theory, the environment influences a child's development at many different "layers" or levels. These layers are:

- The child's immediate environment, or microsystem, is where they spend most of their time and form enduring ties and interactions. A child will feel assured, secure, and safe.
- Effective communication between a child's parents and the environment is a component of the mesosystem, which is a system of microsystems. This also encompasses the environment, the school, the extended family, friends, and the neighbourhood.
- The exosystem is made up of official and informal social structures such as the media, neighbours, and parents' place of employment that don't directly affect the child but have an indirect effect on one of the microsystems because they have an impact on that microsystem.
- Macrosystems are the cultural elements that might affect a child's development, such as social class, money, poverty, and ethnicity.

- All environmental changes that occur over a lifetime and affect development, such as key life transitions and historical events, are referred to as chronosystems.

The five systems are interrelated, so how one system affects a child's development relies on how it works with the others.



Over the past two decades the UK Government has and other countries around the world have recognised the importance of quality care and education for children under three years of age. With these changes in place, it creates new responsibilities for practitioners working with babies and young children. The role of a practitioner is key to a child's development within a setting as children learn through their interaction with other children and adults – known as the social exchange. Vygotsky (1980) was convinced that from a child's first day of life, learning and growth are linked. The same two key elements that contribute to a child's organic growth, namely the biological and the social, also have an impact on development.

Drew (2023) states that in New Zealand the Maori word for "woven mat" is Te Whàriki. It serves as a metaphor for how their curriculum's five principles and four strands intersect to produce a comprehensive early childhood educational experience. This curriculum includes a holistic view of development which emphasises that education is about more than merely learning new things. Holistic learning emphasises the value of all forms of education, including cognitive (hinengaro), physical (tinana), emotional (whatumanawa), and spiritual (wairua). Additionally, social and cultural aspects of learning should be taken into account.

Cognitive, physical, emotional, and other components of learning are not seen as separate things in a holistic approach. Instead, it views them as interwoven and linked. As a result, it is possible to teach them while also interacting with them.

Each child is an individual with specific needs. Only those with the proper training can fulfil some of these requirements, but anyone with the sufficient knowledge and dedication can fulfil the majority. Understanding the skills of various organisations and specialists is crucial. Collaboration between settings and families must be successful for the benefit of children and their families.

A key contribution to introduce the understanding of the role of the practitioner in children's learning is Vygotsky's zone of proximal development which believes that an adult can help a child communicate and learn within the limits of what they currently understand. It is also foundation of

current pedagogy, where children are placed in small groups within governed ratio's and observed by practitioners to future plan for the children in their care, and how they can interact, and when to interact with the children during their play and ventures.

These plans are put in place to ensure each child's needs are being met and their development taken further. During these observations practitioners can see where a child is developmentally and how they can support them to further develop their skills.

Developmental milestones (HSE, 2018)

Physical – rolling over, crawling, walking

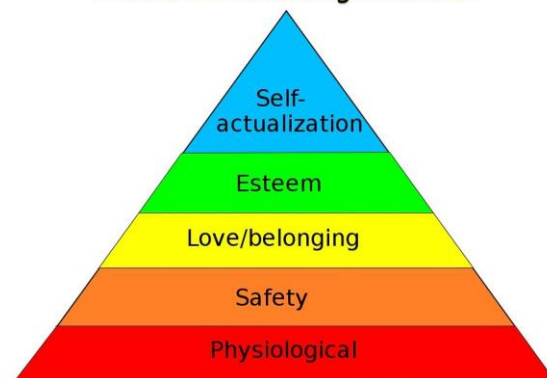
Communication – babbling, talking, listening

Fine and gross motor skills

Problem solving skills



Maslow's hierarchy of needs



https://en.wikipedia.org/wiki/Maslow%27s_hierarchy_of_needs

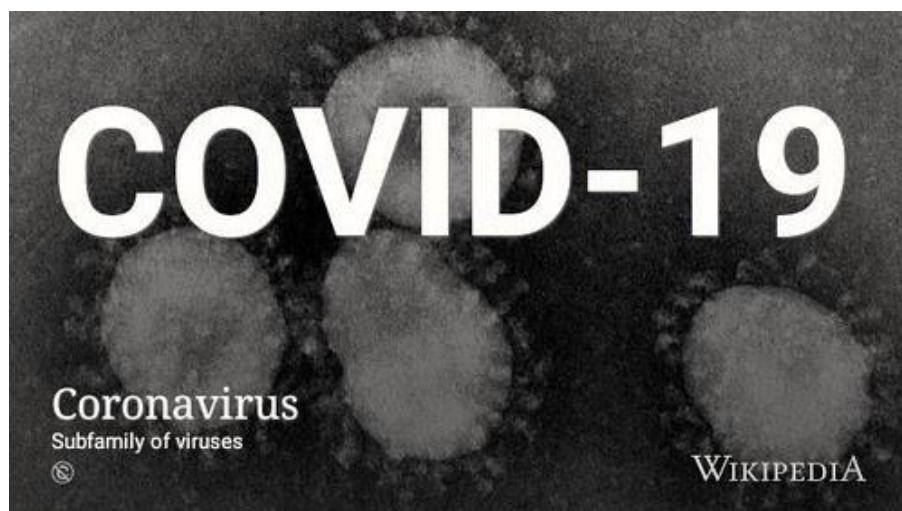
According to Lindon (2012), professionals working with children need to be familiar with a variety of child development theories. These theories can then be put into practise, assisting professionals in providing children with the greatest possible care to fulfil their needs and promote each child's development.

A five-tiered model of human needs is part of the psychological theory of motivation known as Maslow's hierarchy of needs. This idea is typically represented as pyramidal levels. The hierarchy of needs is as follows: physiological (food, clothing, warmth), safety (security, social stability), love and belonging (friendship), esteem, and self-actualization. Adults must tend to the basic demands lower down the hierarchy before addressing those higher up.

The hierarchy of needs theory of Maslow (1962) has had a substantial influence on settings and instruction in schools. Maslow (1970a) approaches education and learning holistically as opposed to restricting behaviour to a response to the environment.

Practitioners and settings should change their methods and put assistance in place to ensure that all children have the chance to meet their physiological and psychological requirements before being expected to be motivated to learn and grow (TES, 2019). According to attachment theory, it is essential for children to have a stable relationship with the adults who are looking after and educating them, in addition to addressing their physical and safety requirements as described by Maslow.

Impact of the Covid pandemic on children's development



Nursery practitioners frequently face difficulties, such as a lack of support and training, especially regarding how to address the mental health needs of young children (Nelinger et al 2021). The Covid-19 pandemic has continued to affect children's development. A study was completed by Ofsted and in December 2021 completed a briefing highlighting the development areas affected:

Communication and language

Many settings saw delays in children's speech and language development, which has continued to influence children's communication and language development. More referrals for outside assistance are being made by providers than before the pandemic, and the wait time for this specialised assistance is increasing. To make up for this, carers made sure that children were learning in a language-rich setting with a focus on expanding vocabulary and improving speech.

Personal, social, and emotional development

Some children are lacking confidence when participating in group activities, which has continued to have a detrimental impact on the personal, social, and emotional development of children. After a while of routinely attending settings, even some older children who wouldn't typically be unsettled when their parents dropped them off remained anxious. As a result, as Covid restrictions have been lifted, settings have concentrated on encouraging children to express their emotions and created more opportunities for children to socialise in bigger groups and away from their 'bubbles'.

Physical development

Some settings are still observing delays in babies' physical development. To assist in the development of their gross motor skills, many practitioners have increased the amount of time children and babies spend engaging in physical activities both inside and outside.

Not only has the pandemic influenced children's development, but it has also impacted settings. The childcare sector is in a more difficult financial position because of settings' income fluctuations, reports of unpredictable demand and sustainability issues, as well as previously unknown difficulties in worker recruitment and retention (Coram Family and Childcare, 2022).

Environment



According to studies, there are two crucial components to effective early learning environments:

- Real intellectual challenge
- Children having a significant amount of control over their education (Brodie,

The New Curriculum incorporates four key goals:

- ambitious, capable learners who are open to lifelong learning.
- individuals with initiative and creativity who are prepared to participate fully in life and work.
- ethical, informed individuals in Wales and around the world
- healthy, self-assured individuals ready to live fulfilled lives as respected members of society

(Welsh Government, 2020)

Settings are now adopting the new curriculum so that the children can have fun learning experiences via play both inside and outside.

Welsh Government (2016) advises practitioners to make sure the learning environment accommodates each child's unique requirements and enables them to explore and put their knowledge to use in real-world situations.

A child's future health, development, and opportunities in life are all greatly influenced by their family, especially their parents, their home, the neighbourhood they reside in, settings they attend, and the larger society they are a part of.

The physical environment of a setting should be adapted to the vast different stages of a baby's development (Brodie, 2018), as well as being mindful of health and safety, such as trips and choking hazards.

Children should have as much room as they can to move around and explore. Children's independence and exploration are encouraged when they are given the flexibility to move about a space. Clare (2012) states that rooms should:

- have reflective areas that are quiet to prevent overstimulation.
- provide for developmental needs.
- have challenges.
- encourage children to speak by taking language development into account.

Given the continuously changing needs of infants and young children, observation, assessment, and planning are crucial components of creating an enabling environment (Hutchin, 2012). Subtle changes to an environment should be routinely made to enhance development as 'familiar' is just as important as new and exciting. Small adjustments, like placing crinkly paper on the floor of the crawling tunnel to give a different tactile and auditory experience, can sometimes dramatically improve the environment. These changes can be made routinely within the planning of activities for the children.

The outdoor environment is just as important as the indoors. White (2008) lists numerous benefits for taking babies and young children outdoors, from having fresh air to an environment that stimulates all the senses, and social interactions. As these happen simultaneously children receive a holistic environment for learning simply by going outside.

White (2008) 'there are six ingredients for a full menu of rich and satisfying outdoor provision for young children each offering a highly holistic learning experience':

1. Natural materials outdoors
2. Experiencing the living world outdoors
3. Playing with sand and water
4. Physical play and movement
5. Imaginative and creative
6. Construction and dens

Practitioners must be sensitive to children's fascinations and interests and understand that taking young children outside is just as vital as doing so with older children (Clare, 2012).

Both an active and soothing environment, the outdoors can be beneficial for children with autism, according to study (Natural England, 2013).

Activities



Brodie (2018) states that children require a learning-rich environment for the development of their cognitive, physical, and emotional development. All children require natural materials for their touch, smell, and visual value. This is critical for babies because it stimulates all their senses from birth. This includes very basic environmental alterations, such as giving them a variety of different surface types to crawl and lie on as they grow.

Practitioners can bring the outdoors indoors which will still give the children some of the experiences, such as:

- Snow on a tray, bringing it inside and allowing the children to explore and play with it.
- Bringing autumn leaves inside for the children to crunch and observe all the different shapes and colours.

Sensory play







Planning for sensory experiences is important it ensures that all areas of the curriculum can be met through purposeful play experiences.

Children instinctively investigate their surroundings with their senses. There are more senses that are internal, such as balance, position, and movement, in addition to the five external senses.

Play that emphasises the senses makes it different from other types of play since it makes the activity more meaningful. Any activity that stimulates one or more senses is considered sensory play, and all forms of play have the capacity to do so.

To be effective and to develop the whole variety of skills and understanding that babies will need, the senses must be integrated (Bodison et al, 2008).

Benefits of sensory play:

- educating children about how their choices affect the world around them.
- supporting brain development, improving problem-solving, difficult tasks, and memory.
- through tactile play, fine motor abilities can be developed (useful when child is ready to hold a pen or use scissors).
- supporting the growth of language, communication, and social abilities.
- improving recall and observational abilities.

- promoting original and independent thought.
- by having a soothing influence on children's angry or nervous feelings, emotional regulation is achieved.

(Action for children, 2022).

Ages, requirements, and abilities can all be catered for in sensory activities. For example, practitioners can quickly modify a straightforward sensory exercise like blowing bubbles for various children at various stages and abilities: Perhaps the popping of the bubbles on a baby's skin will delight them. Bubbles can be chased after by toddlers, who can then pop them on their bodies, the ground, and other surfaces.

Messy play is a wonderful method to expose children to a variety of sensations and aids in the development of hand and finger coordination. Some messy play ideas could include:

Play dough

Shaving foam

Dry and wet sand

Finger paints

Mushy peas

Cornflour and water

Custard

Mash potato

Food squishing, smearing, and tasting can promote play. This enables children to get used to a range of flavours and textures.

According to Jean Piaget's theory of cognitive development, learning occurs in four stages for children. His idea focuses on understanding the nature of intelligence as well as how children gain knowledge. The first Piaget stage is:

Sensorimotor stage: Birth to 2 years

Preoperational stage: Ages 2 to 7

Concrete operational stage: Ages 7 to 11

Formal operational stage: Ages 12 and up

During the sensorimotor stage infants and toddlers learn of cognitive development through sensory encounters and handling objects. In the earliest stages of this stage, a child's whole experience is controlled by fundamental reflexes, perceptions, and motor responses.

Piaget thought that children actively participate in their education, functioning somewhat like young scientists as they conduct experiments, record observations, and gain knowledge of the outside

world. Children constantly add to their knowledge, expand upon it, and modify their preconceived notions in light of new information as they interact with the world around them (Cherry, 2022).



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Reference List



Maslow, A. H. (1962) *Toward a psychology of being*. Princeton: D. Van Nostrand Company

Action for children (2022) *What is sensory play and why is it important?* Available at: <https://www.actionforchildren.org.uk/blog/what-is-sensory-play-and-why-is-it-important/> (Accessed on: 14th January 2023)

Bodison, S et al. (2008) *Frequently asked questions about Ayres sensory integration*. Bethesda, MD: American Occupational Therapy Association

Brodie, K. (2018) *The holistic care and development of children from birth to three: An essential guide for students and practitioners*. Oxford: Routledge

Cherry (2022) *Piaget's 4 Stages of Cognitive Development Explained. Background and Key Concepts of Piaget's Theory*. Available at: <https://www.verywellmind.com/piagets-stages-of-cognitive-development-2795457> (Accessed on: 14Th January 2023)

Clare, A. (2012) *Learning environments for babies and toddlers*. London: SAGE

Coram Family and Childcare. (2022) *The impact of COVID on early childhood education and care and opportunities to strengthen the system*. Available at: www.familyandchildcaretrust.org/covid-childcare-research-blog (Accessed on: 7th January 2023)

Drew (2023) *Te Whāriki Curriculum: Strands And Principles*. Available at: <https://helpfulprofessor.com/te-whariki-curriculum-in-new-zealand/> (Accessed on: 6th January 2023)

Guy-Evans, O (2020). 'Bronfenbrenner's Ecological Systems Theory'. Simply Psychology. Available at: Bronfenbrenner's Ecological Systems Theory (simplypsychology.org) (Accessed on: 28th December 2022)

Guy-Evans, O. (2021) *What Does the Brain's Cerebral Cortex Do?* Available at: www.simplypsychology.org/what-is-the-cerebral-cortex.html Accessed on: (10th January 2023)

House of Commons Health and Social Care Committee (2019) *First 1000 days of life*. Available at: <https://publications.parliament.uk/pa/cm201719/cmselect/cmhealth/1496/1496.pdf> (Accessed on: 8th January 2023)

Hutchin, V. (2012) *The EYFS: A practical guide for students and professionals*. Abingdon: Hodder Education

Lindon, J. Brodie, K. (2012) *Understanding child development 0-8 years*, 3rd edn. London: Hodder Education

Maslow, A. H. (1970a) *Motivation and personality*. New York: Harper and Row

National Childbirth Trust (2018) 'Which Vitamins to take during Pregnancy'. Available at: <https://www.nct.org.uk/pregnancy/food-and-nutrition/which-vitamins-take-during-pregnancy#:~:text=Which%20vitamins%20should%20I%20take%20in%20pregnancy%3F%20When,a nd%2010mcg%20of%20vitamin%20D%20from%20your%20supplements> (Accessed on: 8th January 2023)

Natural England (2013) *Engaging children on the autistic spectrum with the natural environment: Teacher insight study and evidence review*. Commissioned report NECR116. Available at: www.naturalengland.org.uk (Accessed on: 7th January 2023)

Nelinger, A et al. (2021) *Their challenges are our challenges*. Available at: their-challenges-are-our-challenges-survey-report.pdf (annafreud.org) (Accessed: 6th January 2023)

NHS Inform (2020) *Your mental health and wellbeing in pregnancy*. Available at: <https://www.nhsinform.scot/ready-steady-baby/pregnancy/relationships-and-wellbeing-in-pregnancy/your-mental-health-and-wellbeing-in-pregnancy#:~:text=As%20many%20as%201%20in,to%20feel%20like%20yourself%20again> (Accessed on: 28th December 2022)

NHS Wales, Cwm Taf Health Board (2011) *The First 1000 Days: Foundations for life*. Available at: <https://phw.nhs.wales/services-and-teams/local-public-health1/cwm-taf-morgannwg-public-health-team/cwm-taf-morgannwg-public-health-document> (Accessed on: 6th January 2023)

Rice, S. (2022) 'Nutrition in the 1000-day window'. Available at: [Nutrition in the 1000-Day Window: Biden–Harris Administration Setting the Foundation for the Health of Our Nation | AJPH | Vol. 112 Issue S8 \(aphapublications.org\)](https://aphapublications.org) (Accessed on: 10th January 2023)

TES (2019) *Pedagogy Focus: Maslow's Hierarchy of Needs*. Available at: <https://www.tes.com/news/pedagogy-maslows-hierarchy-needs> (Accessed: 6th January 2023)

The first 1000 days. (2022) in *Pregnancy, birth and baby*. Available at: www.pregnancybirthbaby.org.au/the-first-1000-days (Accessed: 8th January 2023)

White, J. (2008) *Playing and learning outdoors*. Abingdon: Routledge