

The Importance of the First 1000 Days.

Conception to 2 years old.

Introduction - What are the first 1000 days?



www.astartemedical.com

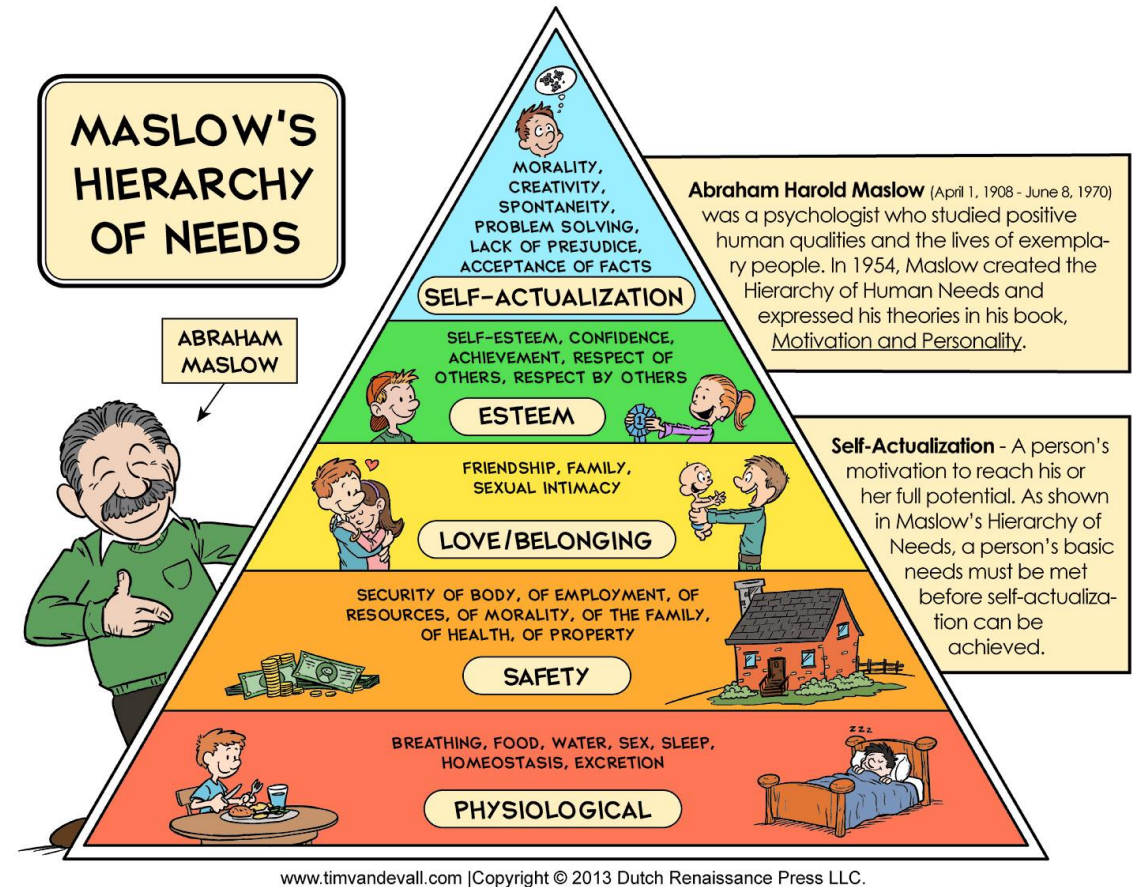
The first 1000 days of life, from conception to the child's second birthday, (Center on the Developing Child, Harvard University, 2016) are crucial for the growth and development of a child's brain, body, and immune system including the physical and psychological health of the child. It is worth noting that a mother's health, nutrition, and stress levels during pregnancy can significantly impact the child's future and inadequate nutrition may cause irreversible harm, as indicated by Bhaskar (2022).

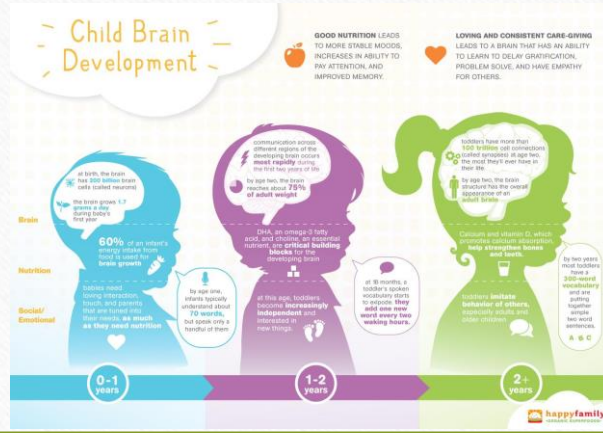
During the prenatal or "before birth" stage, there are approximately 270 days of physical development. This phase is divided into three major phases: the conceptual or germinal phase, which starts with the fertilisation of the egg and ends when the pregnancy is established. The embryonic period begins in the second week and ends at the end of the eighth week, after which the foetal period starts. The foetal period ends when the newborn is delivered. (UNICEF, 2013).

Prenatal development is susceptible to several factors, including teratogens such as alcohol, smoking, prescription or recreational drugs. These factors can lead to adverse development to the foetus within the womb. As suggested by Marmot (2010), cited in (First 1000 days – Developing a Public Health Approach to Supporting Parents) these health issues can include low birth weight, poor long-term health and lower educational outcomes in future years.

The fundamental requirements of food, warmth, sleep, love, and security are emphasized by Maslow's hierarchy of needs; without them, development and growth would be hindered. (Maslow, 1947). Besides the physical and psychological effects on the child, environmental factors can also impact the family. Poverty, inadequate housing, and insufficient benefits can delay a child's development, as can a lack of support from extended family or caregivers.

Blatchford et al (2012) agree that the child is an individual and their socioeconomic culture impacts their early experiences and health outcomes. The Healthy Child Wales Programme (HCWP, 2016) offers a range of services including health checks, advice on nutrition and physical activity, and breastfeeding support. It also provides guidance on child development and parenting, as well as support for families experiencing difficulties. By offering these services, the HCWP aims to provide children with a positive start in life and help reduce the risk of long-term health and social concerns. The human brain undergoes a series of complex and fascinating changes and developments throughout life. These developments are most rapid and pronounced during the final trimester of pregnancy and the first two years of life. The brain grows rapidly after birth, altering in structure and rising in size and volume including language processing areas and the prefrontal cortex. These higher cognitive functions are vital for future success, according to Cusick and Georgieff (2013).





Child Brain Development www.smallpocketlibrary.com

The growth of the brain quadruples from infancy to preschool. Certain brain networks are reinforced while other connections are reduced in children as they learn and encounter new things (Cherry, 2023).

During the first six months, infants are exclusively fed milk, either through formula or breastfeeding. However, some healthcare professionals suggest that 'breast is best' for these first 6 months of life (Likhar and Patil, 2022). Infancy requires the highest relative energy and food requirements for body size due to rapid growth. Adequate nourishment, particularly essential nutrients like vitamins and minerals, is vital for optimal brain development when solid food is introduced after 6 months. The quality of nourishment and care provided by caregivers significantly impacts the child's ability to develop, learn, and thrive, as pointed out by Cusick and Georgieff (2013).

Childcare practitioners can enhance brain development in young children (6-24 months) by engaging them in stimulating activities. Reading books, listening to music, dancing, fine and gross motor skill development, and 'serve and return' (Harvard, N.D.) conversations can all promote neural connections, cognitive, and emotional development. Practitioners who incorporate these activities into their daily routines can set children up for success in the future (Pacey, 2016).



Caregiving and Exceptional Care.

The period from conception to birth and beyond is a significant time in a child's life and requires exceptional care to ensure the health and well-being of both the mother and child. As stated by Pikler, a healthy relationship between mother and child is based on a harmonious relationship. The mother maintains a routine or set of activities whilst fulfilling the needs of the baby. This includes feeding, bathing and changing processes. (Kallo, 2016), as agreed by Maslow in his Hierarchy of Needs. Pilker emphasized active participation in childcare, allowing babies to move independently without assistance, such as allowing them to roll over when ready. (Pilker 1971, 91). This theory inspired her to invent the Pikler Triangle and other equipment.

Bowlby's Attachment Theory suggests that breaking the mother and baby bond within the first six months can cause irreparable damage. Children can form attachments with more than one caregiver, but the bond with the people who have provided close care from early infancy is the most important (Bowlby, 1997). Bowlby suggests that when the caregiver is consistent and responsive to an infant's needs, the child develops a sense of security (Li, 2023) The caregiving practitioner should serve as a positive role model for all children in their setting, demonstrating appropriate communication, actions, and respect, whilst following policies and procedures to ensure enhanced care of each child is at the core of their focus and is inclusive of their individual needs (Early Years Practitioner, 2023).



During the first 1000 days, caregiving professionals, including the General Practitioner, midwife, antenatal team and health visitor provide exceptional care to both mother and baby, providing regular health and developmental checks and vaccinations when milestones arrive and assessments are required (NHS Wales, 2023).



This Photo by Unknown Author is licensed under CC BY-SA

In Wales, the HCWP (2016) offers a comprehensive and universal service that promotes prevention and early intervention to ensure a strong start in life. This means that the program aims to identify families and children who require support and provide them with timely and appropriate interventions. Overall, the HCWP offers a comprehensive and progressive service that is centered on preventive and early intervention and aims to ensure a strong start in life for all children in Wales. Equal opportunity and experience are essential elements of inclusive policies, which aim to satisfy a variety of needs in unique ways. Children should be treated with dignity, respect, and positive regard since they are all people from different origins with unique abilities, beliefs, and cultures included in the United Nations Convention on the Rights of the Child (1989) (Page, Clare and Nutbrown, 2013).



This Photo by Unknown Author is licensed under CC BY



This Photo by Unknown Author is licensed under CC BY

Professional Partnerships and Relationships.

During the first 1000 days, which is considered a critical period in a child's development, various professional partnerships and relationships play a significant role (First 1000 days of life, 2019). These relationships may include those with healthcare professionals, educators, caregivers, and family members. Building strong bonds with these individuals can provide a supportive and nurturing environment that can positively impact a child's growth and development. (Frosch and Schoppe-Sullivan, 2021).



HCWP

Flying Start

Children Act

UNCRC

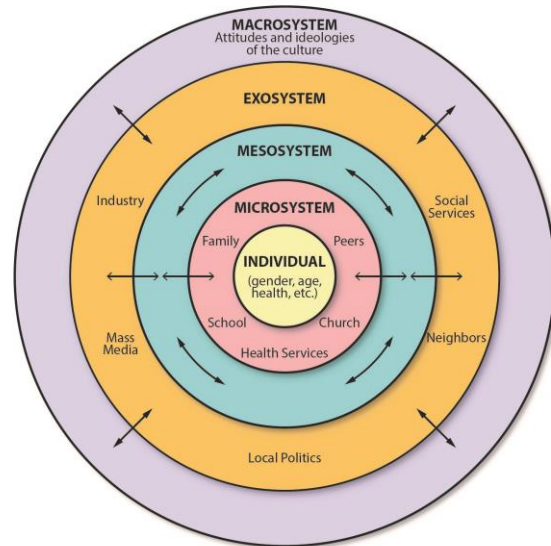
SSWBA

Welsh Government

The goals of the Healthy Child Wales Programme (2016) are to reduce inequality, encourage healthy living, strengthen family and community bonds, and provide more possibilities for families. This service reflects the rights of the child and ensures that the child as well as its wants and needs are at the centre of the cause. (UNCRC, 1989). Other professional legislation essential to practitioners is the Children Act (2004), Social Service and Well-being Act (SSWBA 2014), Wales Safeguarding Procedures, and other relevant legislation. Another partnership is Flying Start:

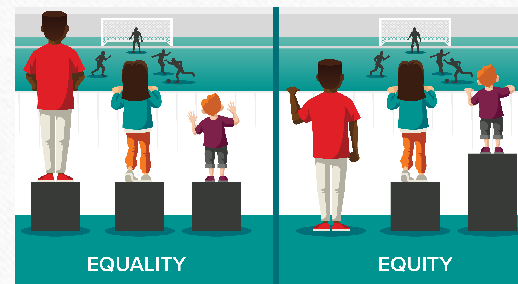
This is an Early Years project run by the Welsh Government and is aimed at families with children under four and is the Welsh government's pledge to lessen inequalities in children's and families' economic, educational, and health outcomes that may occur whilst living in low-income homes. The Flying Start project is aimed at certain geographic areas within each local authority where the largest proportion of families receive financial assistance. Families may find it easier to access developmental programmes related to communication, speech, and language through this process. In addition, support services for physical, mental, and emotional development are offered. This initiative also offers excellent, part-time childcare for infants aged two to three, as well as parent coaching (gov.wales, 2023).

The family and community are just two of the numerous environmental factors that have an impact on human development, according to Bronfenbrenner's ecological systems theory. These indirect influences have a significant impact on an individual's actions and opinions.



[This Photo](#) by Unknown Author is licensed under [CC BY-NC](#)

Moreover, Bronfenbrenner believed that factors outside of the immediate environment, such as the economic and political climate, can also have a significant impact on children's learning and development. For instance, a family living in an economically depressed area might struggle to provide their children with the resources necessary for optimal development, such as good nutrition or access to quality education. Similarly, political factors such as discrimination or social inequality can also have an adverse effect. (Crawford, 2020).



[This Photo](#) by Unknown Author is licensed under [CC BY-SA-NC](#)



[This Photo](#) by Unknown Author is licensed under [CC BY-NC-ND](#)

Montessori believed in involving parents in both the education and care of their children. A main feature of Montessori was "the union of the family and school" (Montessori, 1964: 63). Today, this belief is still prevalent in current practices where parents are considered partners and play a fundamental role in their children's education.

Challenges.

There are many challenges during the first 1000 days of life.

The shortage of highly skilled practitioners is becoming a problem for early years providers. To tackle this problem, several providers have turned to specialised education and online training, which includes instructional methods that enhance speech and language development. Due to the lack of appropriately qualified practitioners, the ability to provide the quality of care needed is being compromised through a lack of experience, knowledge and time to learn. Due to being underpaid and undervalued, practitioners are leaving the profession for lesser-skilled, higher-paid positions. Recruitment issues and lack of funding are challenges in themselves (Local Government UK, 2023).



The COVID-19 pandemic posed serious difficulties for the early years sector in addition to having a detrimental effect on children and professionals. The consequences of the epidemic included delays in children's speech and language development. Individuals from disadvantaged backgrounds have been severely impacted by the cost-of-living crisis and extended wait times for specialist care including special educational needs and disabilities. To facilitate learning in a language-rich setting, educators are now focusing on speech and vocabulary development for children. The effects of the COVID-19 pandemic still include delays in children's development in social skills, communication and literacy. (Ofsted, 2023).



To provide children with access to adequate, high-quality childcare, local authorities must devote a substantial amount of time and resources to this sector. Given the benefits that early childhood educators may offer to newborns and young children, local government would need to work with these educators to develop an effective workforce plan that prioritises hiring new professionals and supporting their ongoing professional development and funding. (Local Government UK, 2023).



Engaging Experiences and Activity Ideas.



This Photo by Unknown
Author is licensed under [CC BY-NC](#)



This Photo by Unknown
Author is licensed under [CC BY-SA-NC](#)

The provision of engaging experiences in early childcare settings is often linked to different activity ideas depending on the age and ability of the child. Sensory, purposeful, and hands-on practical experiences are considered essential during the first 1000 days of a child's life to enable them to learn, explore and embed new experiences (UNICEF, 2018). Examples of such experiences include gross and fine motor skills, sensory play, baby massage, story time and heuristic play.

Heuristic play is a free and independent play that enables children to observe the characteristics of various items and discover their features, uses, connections, and relationships. This type of play is often facilitated using treasure baskets and objects collected in bags or baskets, which the child can investigate in a variety of ways. Bruce (2011, quoted in Bilewicz-Kuznia, 2017, p198) suggests that heuristic play can be structured using everyday objects collected in large quantities and placed in single-colour bags that are tied with ribbons and tagged with images to help the child comprehend what should be included within the bag. Goldschmeid was an early childhood educator whose ideas and pedagogy were influenced by and evolved from the Froebelian traditions that stressed the value of "cultivating creativity" and "play as the highest form of learning in childhood". For babies aged 5 to 10 months, the Treasure Basket is a sensory play set with a variety of natural, every day, and repurposed items. It encourages curiosity and cognitive growth by encouraging sensory investigation. Due to its independent nature, the play needs a caregiver on hand for reassurance. When adults react responsively, babies may remain engaged for up to an hour. (Frobel Trust, N.D).



Sensory play involves the use of games, materials, and sensory equipment to help children better understand colours, textures, tastes, noises, and scents. These items, such as various sized pine cones, leaves, pebbles and conkers could have been collected by the children in the garden or on a nature walk to use within the setting.

The Montessori senses exploration, forms the foundation of the early years curriculum, through which young children can enhance their manipulative abilities and hand-eye coordination by engaging in practical life and sensory activities. These activities are believed to help develop analytical and problem-solving abilities, which are essential for both creative thought and academic work (Saha and Adhikari, 2023).

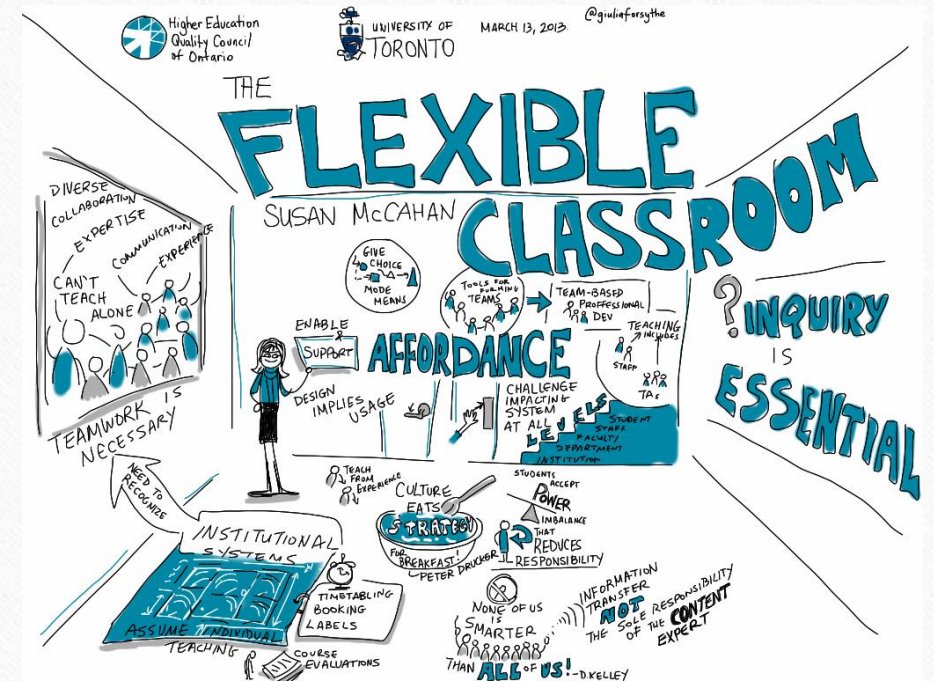
Enabling Environment.



It is essential for practitioners working with young children to be knowledgeable of the physical environment and resources that are available at their disposal. A carefully planned setting may greatly improve children's capacity to learn multisensory skills while providing high-quality experiences, which can boost children's sense of self-worth and general development. (Conkbayir, 2017)



Cognitive theorists such as Piaget, Bruner, and Vygotsky have been at the forefront of emphasizing the importance of using the environment to facilitate children's holistic growth. For instance, Piaget believed that the physical environment and its items greatly influenced a child's cognitive development. However, Bruner argued that the environment ought to be planned to promote inquiry and learning (Zhou, 2020).





This Photo by Unknown Author is licensed under [CC BY-NC-ND](#)



Malaguzzi, whilst shaping the Reggio Emilia approach to education, defined the environment as the third teacher, after parents and educational practitioners as first and second teachers (Gandini, 2011). This is a flexible environment, responsive to the need for teachers and children to create learning together. The environment should be changed and altered by practitioners following observations of their children to respond to their changing needs and interests as babies and children thrive within an environment that supports and promotes their active learning and development (Wilcock, 2007)

Montessori emphasised the significance of the "prepared environment," which she created based on her observations of children and which was made to let children take charge of their own education by providing them with materials that were centrally resourced and always available. She also suggested that "experiences should respond to their children's individual needs" and emphasised the need for strong parent-teacher partnerships. By incorporating ideas from different theories, practitioners can develop a stimulating, interesting environment for young children, educators can help them develop their cognitive, social, emotional, and physical skills. This may be accomplished by carefully designing, picking, and setting up the environment's elements and ensuring that they are engaging, safe, and inclusive to all individuals need (Strong-Wilson and Ellis, 2007).

Furthermore, the environment should promote active learning, encourage exploration, and provide opportunities for hands-on experiences. This approach can advance children's natural curiosity and motivate them to explore their surroundings, thereby developing their problem-solving and critical-thinking skills. Creating an ideal learning environment is crucial for young children's holistic development (Gov.wales, 2023).

International Approaches.

The Reggio Emilia philosophy focuses on the education of newborns, toddlers, and preschool-aged children, emphasizing play-based learning, investigative learning, interdependence, and sociocultural learning. This approach balances self-guided learning and learning led by peers or adults. This approach is based on Piaget's theory of the Sensorimotor stage, where children learn best when actively exploring a stimulating and challenging environment (Kurt, 2023).



According to Vygotsky, play-based learning supports the development of essential skills and knowledge (Aubrey and Riley, 2019).

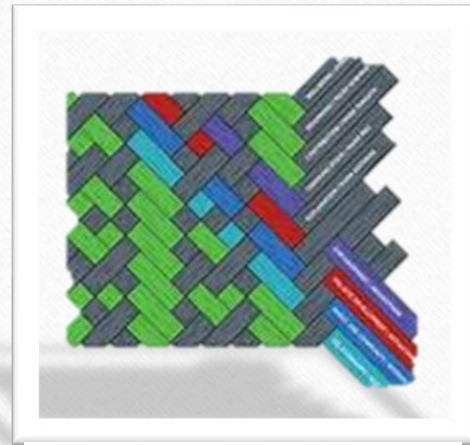
The Montessori educational philosophy is widely used in early years and primary schools, and it also bases its teaching strategies on play. Self-guided learning is a fundamental aspect of Montessori education, in which children receive direction and are encouraged to learn through play, which is considered their "work." (Issacs, 2018).

This Photo by Unknown Author is licensed under [CC BY-SA](#)

Teachers in the Reggio Emilia approach use a flexible teaching style, while also planning their lessons ahead of time. This allows them to focus on what inspires each child, by observing and listening to their interests. Teachers collaborate with students to select subjects that stimulate their interest and facilitate their learning. Children are grouped according to age and taught accordingly. Unlike Montessori classrooms, where children of different ages are mixed, this approach allows children to learn at their skill level. Younger children benefit from watching the older ones, while older students look out for their younger classmates in the classroom (Nido, N.D). The Montessori method goes beyond imparting knowledge and emphasizes the overall development of the child. It aims to educate them in various aspects of life, including practical skills such as cooking and classroom maintenance. The method also focuses on building a sense of community and fostering compassion and kindness towards others.

The use of age-appropriate resources and active encouragement of hands-on learning are both commonplace. (Nido, N.D). Social interaction is one of the cutting-edge approaches to early childhood education that emphasises a curriculum based on rights, according to the Reggio Emilia approach. The significance of living a moral life, respecting the UN Convention on the Rights of the Child, and being a good person is established by the building blocks of this approach (Reggio Emilia Approach, 2022).

"Te Whāriki" is a New Zealand early childhood education curriculum that was first introduced in 1996. It is a framework for providing quality care and education for children from birth to the age of five. This is a Māori term meaning "woven mat." The process of learning and development may be understood as including basic concepts, goals, and strands. New Zealand prioritises social and cultural development, as well as fostering relationships for young children, from the time of birth until school age. Although relationships with people have historically been at the core of "relationships," this teaching approach also highlights relationships with places and objects (Ministry of Education, 2017)

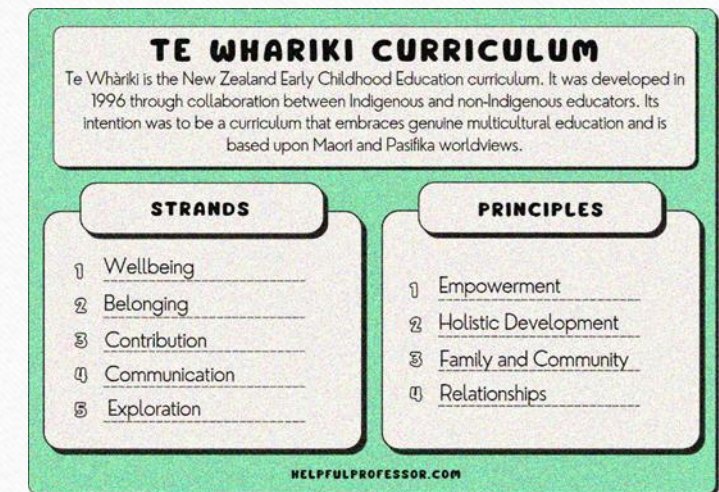


Sourced: <https://blog.storypark.com/2018/02/new-t1>

In response to the UNCROC, New Zealand uses Bronfenbrenners' theory to protect and promote children's rights, interests, and perspectives from the earliest stages of life (Ministry of Education, 2017).

Most early years teaching and practice in New Zealand are guided by the Te Whariki curriculum, which is based on the belief that children should be "Competent and confident learners and communicators, healthy in mind, body and spirit, secure in their sense of belonging and in the knowledge that they make a valued contribution to society" (Early Child Curriculum, New Zealand Ministry of Education. 2013)

The interactions and complex structures within a child's family, community, and wider local, national, and global influences all have an impact on their learning. The ecological systems model developed by Bronfenbrenner illustrates a well-aligned system that supports children's development and well-being while also promoting learning (Bronfenbrenner, 1979).



Reference List.

A Guide to Serve and Return: How Your Interaction with Children Can Build Brains, N.D.

<https://developingchild.harvard.edu>

Aubrey, K. and Riley, A. (2019). Understanding and Using Educational Theories. London: SAGE Publications Ltd.

Bhaskar, S. 2020. First 1000 days of life; importance of maternal and child nutrition during pregnancy and up to two years of age (Sept 2022).

Bilewicz-Kuznia, Barbara (2017). The Experimental Approaches and Creative Mindsets of Children in Heuristic Play. AGATHOS, Volume 8, Issue 2 (15): 197-211

Blatchford et al, (2012). Final Early Years Thematic Briefing Paper. Children in Wales. Wales UNCRC Monitoring Group.

Bronfenbrenner, U. (1979). The Ecology of Human Development. Cambridge, MA: Harvard University Press.

Bruce, Tina (2011). Learning through Play for Babies, Toddlers and Young Children. Hodder Education Hachette UK Company.

Center on the Developing Child, Harvard University. (2016). From Best Practices to Break Through Impacts: A science-based approach to building a more promising future for young children and families.

<http://www.developingchild.harvard.edu>.

Cherry, K. (2023). <https://www.verywellmind.com/stages-of-prenatal-development-2795073>

Conkbayir, M. (2017) Early Childhood and Neuroscience; Theory, Research and Implications for Practice. London: Bloomsbury Academic

Crawford, M. (2020). Ecological Systems Theory: Exploring the Development of the Theoretical Framework as Conceived by Bronfenbrenner Article Details.

[https://www.researchgate.net/publication/354193756 Ecological Systems Theory Exploring the Development of the Theoretical Framework as Concieved by Bronfenbrenner Article Details](https://www.researchgate.net/publication/354193756_Ecological_Systems_Theory_Exploring_the_Development_of_the_Theoretical_Framework_as_Concieved_by_Bronfenbrenner_Article_Details)

Cusick, S. and Georgieff, M.K. (2013). The first 1000 days of life: The brain's window of opportunity.

Drew, Chris. 2023. Te Whàriki Curriculum: Strands And Principles

First 1000 days of life 2019. Available at:

<https://publications.parliament.uk/pa/cm201719/cmselect/cmhealth/1496/1496.pdf> (Accessed: 17 January 2024).

Frosch, C. A., & Schoppe-Sullivan, S. J. (2021). Parenting and Child Development: A Relational Health Perspective. American Journal of Lifestyle Medicine, 15(1), 45-59. <https://doi.org/10.1177/1559827619849028>

<https://blog.storypark.com/2018/02>

<https://eatingrichly.com/sensory-activities-for-toddlers-and-preschoolers/>

<https://nido.edu.au/news/reggio-emilia-vs-montessori/>

<https://online-learning-college.com/knowledge-hub/early-years/what-is-an-early-years-practitioner/> (2023).

<https://theimaginationtree.com/baby-treasure-basket-12-months/>

<https://www.froebel.org.uk/training-and-resources/elinor-goldschmied-treasure-baskets>

<https://www.gov.uk/government/publications/best-start-in-life-a-research-review-for-early-years/best-start-in-life-part-2>

<https://www.gov.wales/flying-start-childcare-guidance-html>

<https://www.local.gov.uk/publications/early-education-and-childcare-changes-and-challenges-future>

<https://www.naeyc.org/resources/pubs/yc/nov2015/immergent-curriculum>

<https://www.nhs.uk/pregnancy/your-pregnancy-care/antenatal-support-meet-the-team/>

<https://www.reggiochildren.it/en/reggio-emilia-approach/loris-malaguzzi/>

https://www.researchgate.net/publication/371172660_The_Montessori_Method_of_Education_of_the_Senses_The_Case_of_the_Children%27s_Houses The Montessori Method of Education of the Senses: The Case of Children's Houses

Issacs, B. (2018). Understanding the Montessori Approach – Early Years Education and Practice. London. Rutledge

Kallo, E. (2016). “Sobre la Unidad de Los Cuidados y la Educacion, Una Vez Mas.” Monografico Pikler-Loczy 5 (3):15-20

Kurt, S. (2023). Piaget's Sensorimotor Stage of Cognitive Development. <https://educationlibrary.org/piaget's-sensorimotor-stage-of-cognitive-development/>

Li, Y. (2023). How Does Attachment Style Influence Early Childhood Development. Journal of Education, Humanities and Social Sciences. Vol 8. (2023) EPHHR 2022.

Likhar, A. and Patil, M. (2022) Importance of Maternal Nutrition in the First 1000 Days of Life and Its Effects on Child Development: A Narrative Review. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9640361/#REF26>

Marmot, M. (2010). Fair Society, Healthy Lives, Strategic Review of Health Inequalities in England post 2010. London: Department of Health.

Montessori, M. (1964) The Montessori Method (Reprint 2008). Blacksburg, VA: Earth Angel Books.

Page, J. Clare, A. and Nutbrown, C. (2013). Working with Babies and Children From Birth to Three. London. Sage Publications Ltd.

Pikler, E. (1971). Learning of Motor Skills on the Basis of Self-Induced Movements. In Exceptional Infant. Vol 2. Ed. J. Helmuth: 54-8: New York: Bruner/Mazel.

Professional Association for Childcare and Early Years, (2016). Physical Care Routines. <https://www.pacey.org.uk>

Reggio Emilia Approach. (2022)

Saha, B and Adhikari, A. (2023) The Montessori Method: A Constructivist Approach?
https://www.researchgate.net/publication/371470966_The_Montessori_Method_A_Constructivist_Approach.

Strong-Wilson, T. and Ellis, J. (2007). Children and Place: Reggio Emilia's Environment as Third Teacher.

Te Whariki – Early childhood curriculum. (2017) Ministry of Education. New Zealand
UNCRC (1989)

UNICEF. (2018) <https://www.unicef.org/sites/default/files/2018-12/UNICEF-Lego-Foundation-Learning-Through-Play.PDF>

UNICEF. <https://www.unicef-irc.org/>

Wilcock, J. (2007) The Early Years Foundation Stage in Practice. London: Step Forward Publishing Limited.

Zhou, J. (2020). A Critical Discussion of Vygotsky and Bruner's Theory and Their Contribution to Understanding of the Way Students Learn.

https://www.researchgate.net/publication/346706486_A_Critical_Discussion_of_Vygotsky_and_Bruner's_Theory_and_Their_Contribution_to_Understanding_of_The_Way_Students_Learn