

The Importance of Children's First 1000 Days



ECEY 4005

WING YI, CHU



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(Source:Ausnutria Nutrition Institute,no date)

What is the first 1000 days? Why is it important?



The first 1000 days of a baby's life refer to the period from conception (when a woman becomes pregnant) to the child's second birthday. This time frame is widely recognized as a window of significant and rapid development, during which nutrition, healthcare, and supportive environmental factors play a crucial role in shaping and having a lasting impact on a child's future health and well-being (Mikhail et. al., 2020).

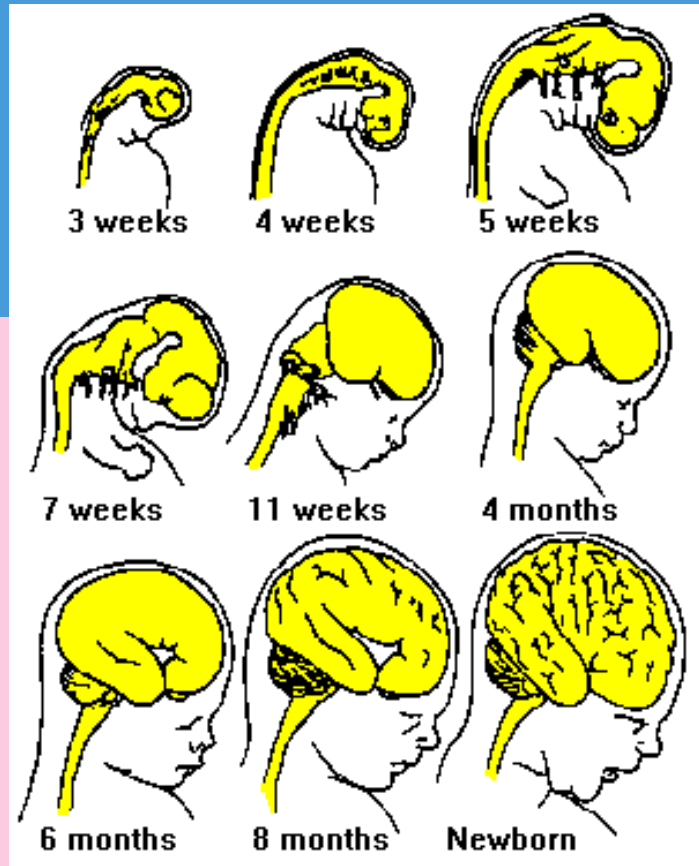
This discourse aims to delve into key facets of a baby's development during the first 1000 days and elucidate the critical importance attached to this phase:

Prenatal Period (Conception to Birth):

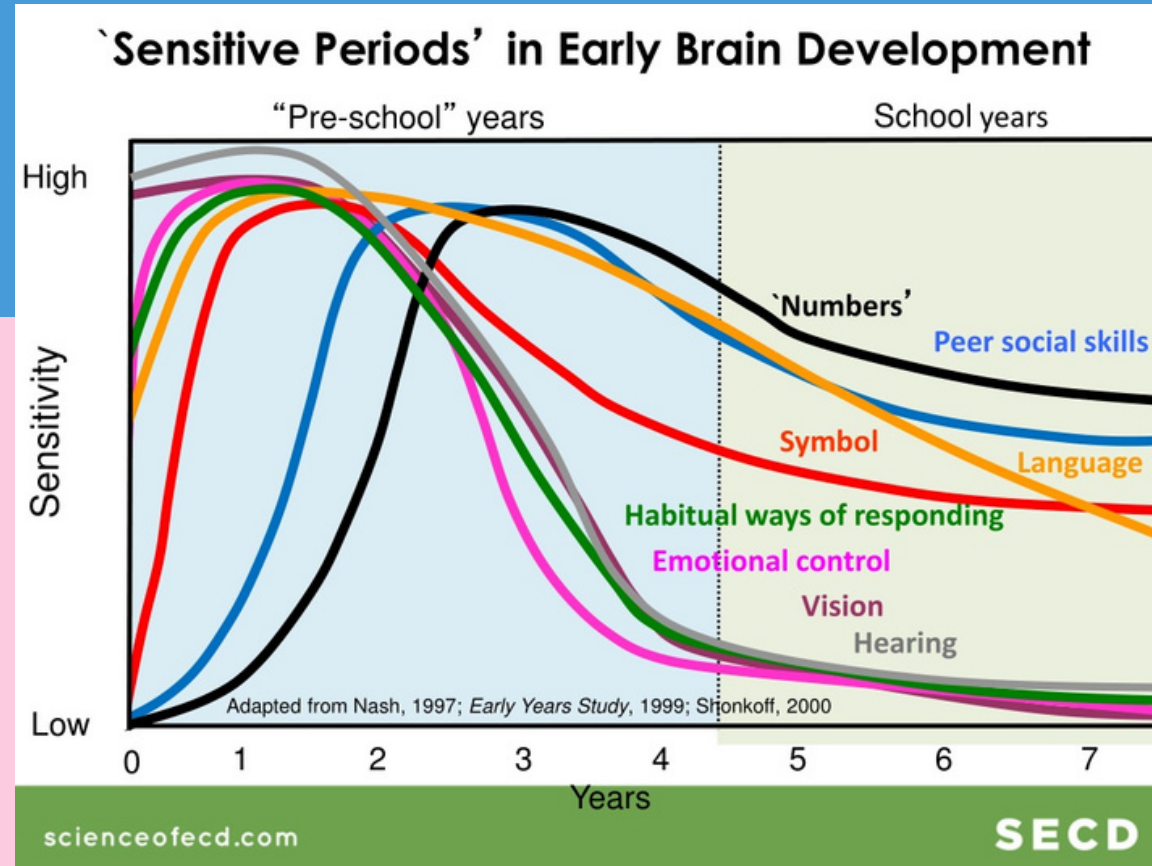
During pregnancy, maternal health and nutrition intricately influence fetal development. Essential prenatal care, proper nutrition, and avoidance of harmful substances are imperative. Keep healthy on your daily diet, don't smoke, sleep well, and do some exercise for prenatal. Inadequate nutrition during pregnancy. For instance, can lead to low birth weight and subsequent health risks (Brown et al., 2017).

Infancy (Birth to 2 Years):

The first two years of a child's life are marked by rapid growth and brain development. Proper nutrition, including breastfeeding or appropriate formula feeding, is crucial for the baby's growth and brain development during this time. Also, regular health check-ups and vaccinations are essential to prevent and manage potential health issues. Early experiences and exposures during the first 1000 days can influence the formation of lifelong habits. For instance, introducing a variety of nutritious foods during the transition to solid foods can shape the baby's taste preferences and dietary habits, promoting a healthy diet throughout life (Brown et al., 2017).



(Source: University of Washington, no date)



(Source: Karakoram International University,2018)

Rapid Brain Development:

The early years are a sensitive period for brain development. Proper stimulation, interaction, caregiving, and a nurturing environment contribute to healthy cognitive, emotional, and social development. The brain undergoes rapid and crucial development during the first 1000 days, laying the foundation for cognitive abilities and emotional well-being later in life (Black et al. 2017).

Foundational Nutrition:

Adequate and appropriate balanced nutrition is vital during pregnancy and infancy to support growth and development. Breastfeeding, when possible is recommended during the first six months which provides essential nutrients and antibodies, contributing to the baby's immune system development and protecting against infections and diseases. Appropriate formula feeding followed by the introduction of nutritious solid foods at the right time is also important. Adequate nutrition during this period is vital for the development of organs and tissues, influencing physical and mental health throughout life (Victora et al., 2010).



(Source:Parenting Blog, no date)

Immunization:

The immune system undergoes critical development during the early years. Vaccinations during infancy protect children from various infectious diseases and play a crucial role in preventing illness and promoting an overall healthy start to life. Proper nutrition and health interventions contribute (timely vaccination protection) to a robust immune system (Daelmans et al., 2017).

Importance of immunisation



Diseases protected against	Vaccine	Diseases protected against	Vaccine	Diseases protected against	Vaccine	Diseases protected against	Vaccine	Diseases protected against	Vaccine
1st dose of 5 in 1 Diphtheria, tetanus, pertussis (whooping cough), polio and Haemophilus influenzae type b (Hib)	DTaP/IPV/Hib	2nd dose of 5 in 1 Diphtheria, tetanus, pertussis, polio and Hib	DTaP/IPV/Hib	3rd dose of 5 in 1 Diphtheria, tetanus, pertussis, polio and Hib	DTaP/IPV/Hib	Hib and MenC	Hib/MenC booster	Influenza (each year from September from age 2 to 6)	Live attenuated influenza vaccine LAIV unless contraindicated
1st dose of Pneumococcal conjugate vaccine (PCV)	Pneumococcal conjugate vaccine (PCV)	Meningococcal group C (MenC)	MenC	2nd dose of MenB	MenB	Booster dose of Pneumococcal (13 serotypes)	PCV booster		
1st dose of Meningococcal group B (MenB)	MENB					1st dose of Measles, mumps and rubella (German measles)	MMR		
1st dose Rotavirus gastroenteritis	Rotavirus	2nd dose of Rotavirus	Rotavirus	2nd dose of Pneumococcal (13 serotypes)	PCV	Booster dose of MenB	MenB booster		

(Source: Public Health England, 2016)



Grazed knee.
Sore throat.
Cough.
Stock your
medicine cabinet.

Self-care



Unwell?
Unsure?
GP surgery closed?
Need help?

NHS 111



Diarrhoea.
Runny nose.
Painful cough.
Headache.

Pharmacy



Vomiting.
Ear pain.
Stomach ache.
Back ache.

GP surgery



Choking.
Chest pain.
Blacking out.
Blood loss.

A&E or 999
Emergencies only



BOOK AN APPOINTMENT
What can we help
you with?

Search Symptoms and conditions

- Acne
- Asthma
- Covid-19 (Corona)



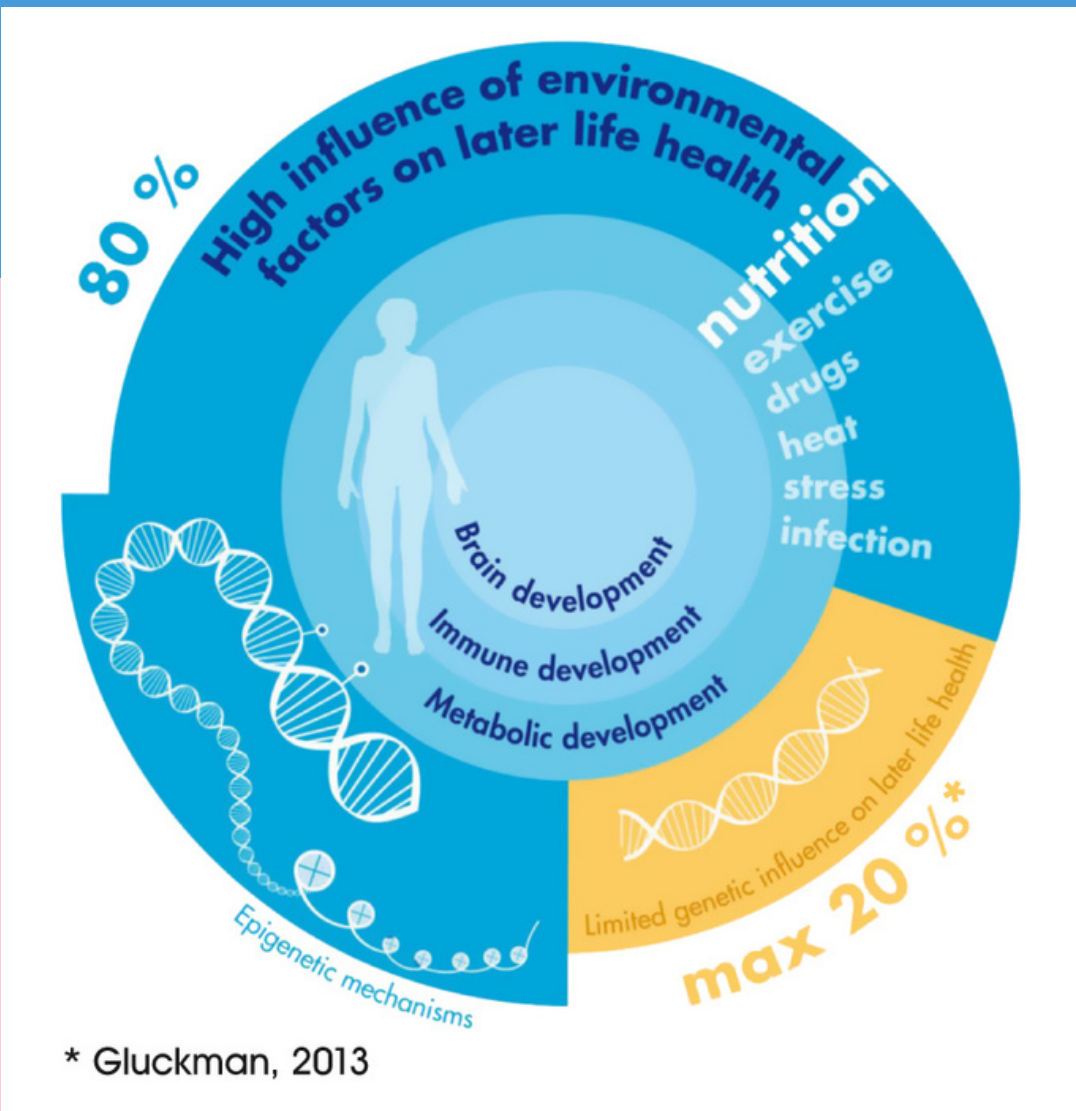
(Source: livi, no date)

Healthcare:

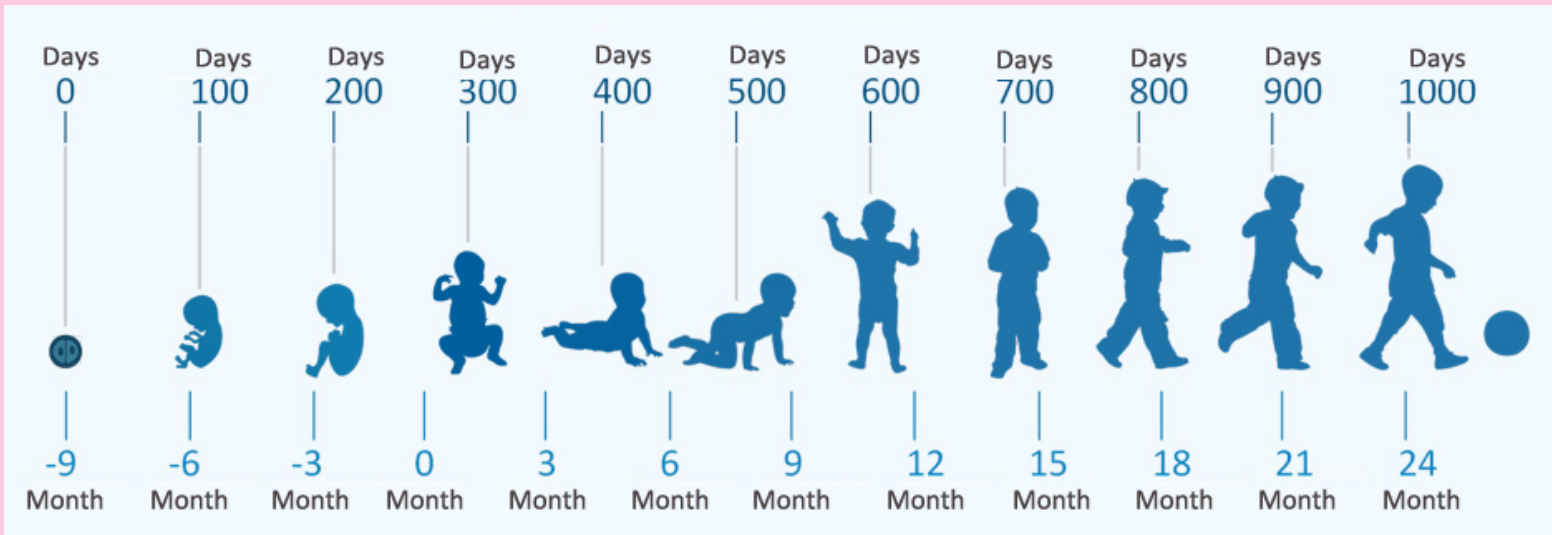
Regular health check-ups and monitoring of developmental milestones are important for identifying and addressing any health concerns early on. Exposures to malnutrition, infections, and other adverse conditions during the first 1000 days can increase the risk of chronic health conditions such as obesity, diabetes; and cardiovascular diseases later in life (Barker, 2007).

Environmental Factors:

A supportive and nurturing environment that supports and raises, including active parental participation, significantly affects the formation of lifelong habits related to diet, physical exercise, and overall well-being (World Health Organization, 2018). Within the initial 1,000 days, investing in children's health and well-being has greater social interests, which has led to a healthier population and improved economic results. Social and economic conditions in obtaining medical care can contribute to children's emotional and social development (Hoddinott et al., 2013).



(Source: Danone nutricia research, no date)



(Source: IDS Medical System, 2019)

All of these key aspects will provide essential support and resources during these formative years and have a lasting impact on children's growth and learning to support their future health and development. It highlights the need for strategic intervention and comprehensive care within the first 1000 days to ensure optimal outcomes and lay the foundation for a prosperous future (Mikhail et. al., 2020).

Definition of Exceptional Care for Early-Year Children:

Exceptional care for early-year children refers to a specialized and high-quality approach to meeting the unique needs of young children (usually from birth to five years of age). This type of care is characterized by a comprehensive and holistic approach that addresses all aspects of a child's well-being, including physical, emotional, social, and cognitive development, through play activities and experiences, providing an atmosphere in which children can freely investigate, independently explore and understand the world. Care plans are customized to meet each child's specific needs, abilities, and preferences. Consider the holistic development of a child's well-being, including physical, emotional, social, and cognitive development. Emphasis on early identification and resolution of potential challenges or development issues. It involves providing timely and appropriate support to help children overcome barriers in the early years to maximize positive outcomes. Follow the safeguarding policy in practice to ensure a safe and nurturing environment for children. Provide a safe and supportive atmosphere that promotes healthy physical and emotional growth. Provide age-appropriate educational activities, expose rich experiences, and encourage curiosity and creativity. It is designed to support children's cognitive development and love of learning. Families play a vital role in special care. Involving families in the care process promotes a collaborative relationship between caregivers and families to ensure a consistent and supportive approach to the child's well-being. Prioritize children's health through regular health check-ups, and vaccinations, and promote a balanced diet supporting physical growth and development, involving agency if needed. Understanding the pivotal role that early years play in shaping children's futures is central to this approach (Rutanen et. al., 2013)



(Source: Exceptional Learning Academy, no date)



Importance of Exceptional Care for Early-Year Children:



Zigler et. al., 2005 explain that exceptional care helps children achieve optimal brain development during the critical early years and supports cognitive development, laying the foundation for future learning and setting the stage for success in all aspects of life. It shapes lifelong habits. Exceptional care promotes healthy behaviors including nutrition, physical activity, and positive social interactions. It plays a vital role in maintaining and promoting children's overall health and well-being and proactively addressing health issues.



(Source: Adam & Mila, no date)



A nurturing environment and responsive caregiving contribute to emotional support and a child's sense of security, fostering healthy emotional well-being and positive mental health. Allows for the identification and early intervention in cases of developmental delays or health concerns issues, reducing the impact of potential challenges. The exceptional care received during childhood forms the foundation for future success, impacting educational attainment, social relationship skills, and emotional resilience (Arace et. al., 2021).

(Source: Christine Carter, no date)



Pikler Theory

The Pikler approach, developed by Dr. Emmi Pikler emphasizes a respectful and child-centered approach to caregiving, focusing on building a secure and enabling environment for infants and young children. This approach is often associated with early years setting to enhance children's well-being and development (Ari, 2022).



(Source: my baby nursery, no date)

Enabling Environment – Respect for Individual Pace
In a Pikler-inspired early-year care setting, caregivers might create a safe and comfortable space where children are allowed to explore and move freely. An example would be providing a low, padded area where babies can practice rolling and crawling at their own pace (Ari, 2022)



(Source: Care for kid, 2019)

Inclusive Practice – Individualised Attention
In an inclusive Pikler-inspired early year care setting, caregivers might adapt caregiving routines to meet the unique needs of each child. For instance, if a child has mobility challenges, partitioners could create a modified space to support the child's exploration and participation in activities alongside their peers (Ari, 2022).

Role of an early years practitioner in supporting children and families in first 1000 days

The role of Early Years Practitioners is crucial in supporting children and families during the first 1000 days, recognizing the significant impact this period has on a child's development.

Build strong and positive relationships with children and their families. Attachment theory emphasizes the importance of secure relationships in early childhood (Bowlby, 1969). A 2004 study by the National Scientific Council on Child Development noted that practitioners provide individualized care to meet each child's unique needs and provide developmental support so that responsive interactions have a positive impact on child development. Practitioners create a stimulating environment that promotes cognitive and social development. High-quality early childhood education programs contribute to improved cognitive and social outcomes (Heckman, 2006). Monitoring children's health, promoting regular check-ups and promoting healthy habits, early health intervention, and preventive measures contribute to better long-term health outcomes (Committee on Integration Primary Care and Public Health, 2012). Support programs that provide guidance and support to families and recognize their role in child development are associated with positive child outcomes (Olds et al., 2014). Identify and address developmental delays through early intervention. These can significantly improve outcomes for children with developmental delays (Dunst & Trivette, 2009). Adequate nutrition in the first 1000 days is associated with better health outcomes, and practitioners can provide information and support for appropriate nutrition during pregnancy and early childhood (Victora et al., 2008).



(Source: Gov.UK, 2018)

Bronfenbrenner's ecological systems theory can be used to emphasize the importance of early practitioners working together effectively. The theory emphasizes the interconnections between different systems that influence child development, and effective collaboration is essential to ensure a holistic and supportive environment. While specific evidence and references related to this application may be limited, you can draw on the fundamentals of the theory and related research early in development (Sadownik, 2023).

The application of Bronfenbrenner’s Ecological Systems Theory:

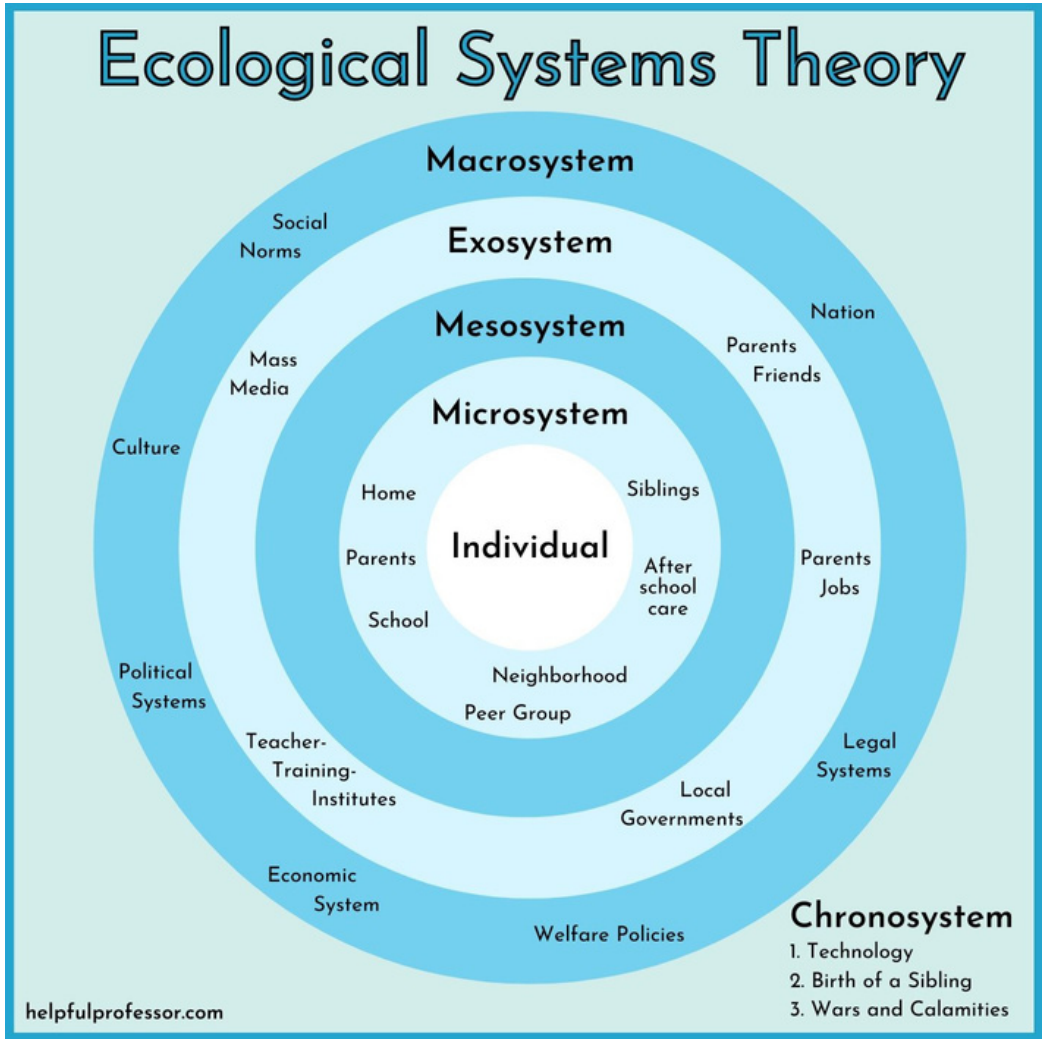
Microsystem: Effective partnership working (sharing information) with families to ensure a consistent and supportive environment for the child both at home and in early-year settings (Bronfenbrenner, 1979).

Mesosystem: Collaboration between different components of the mesosystem, such as between home and early-year settings, observing and supporting the children. Contributes to a seamless and positive experience for the child (Bronfenbrenner, 1994).

Exosystem: Effective partnership working (communicate with multi-agency) with external systems, like community resources or social services, enhances the overall support available for the child (Bronfenbrenner and Morris, 1998).

Macrosystem: Recognition and respect for cultural diversity within the macrosystem contribute to creating inclusive and culturally competent early-year environments (Bronfenbrenner and Morris, 2006).

The Importance of Effective Partnership Working



(Source: HelpfulProfessor.com, 2023)

Consistent Support: Consistent support across different environments reduces stress and promotes positive development for the child (Bronfenbrenner, 1979)

Holistic Understanding: Collaboration with families provides a more comprehensive understanding of a child’s unique needs and challenges (Bronfenbrenner, 1994)

Maternal Factors Impacting Development and Support Strategies



(Source: kknews, 2017)

Maternal Mental Health:

A study by Grace et al., 2003 highlights the impact of maternal mental health on child development and the importance of early intervention and support.

Maternal mental health significantly influences a child's emotional and cognitive development. Early years practitioners can provide resources and information on maternal mental health, offer emotional support, and collaborate with mental health professionals when needed.

Maternal Socioeconomic Status:

A longitudinal study by Duncan et. al., (2010) demonstrates the lasting impact of socioeconomic status on children's cognitive development. Socioeconomic factors can affect access to resources, education, and quality childcare, influencing a child's development. Early years practitioners can advocate for resources, provide information on available support programs and create an inclusive environment for children from diverse socioeconomic backgrounds.

Maternal Education and Parenting Practices:

Maternal education levels and parenting practices play a crucial role in a child's cognitive and social development. Early years practitioners can offer parenting workshops, share educational resources and create a supportive community where parents can exchange knowledge and experiences (Davis-Kean, 2005).

What are the challenges in providing high-quality care?

Providing high-quality early education care settings faces a variety of challenges that educators and policymakers need to address, particularly in the implementation of an enabling environment and inclusive practices. Addressing these challenges requires a comprehensive approach that includes policy changes, increased investment in early education, ongoing professional development for educators, and a commitment to providing equitable, inclusive, and equitable learning experiences for all children. As the education landscape continues to evolve, addressing these challenges is critical to the well-being and development of young learners (Robertson et. al., 2014).



Workforce Qualifications and Professional Development

A study by Whitebook et. al., (2016) found that a well-educated and trained workforce is critical for delivering high-quality early-year education. Insufficient qualifications and professional development opportunities for early years educators. Limited access to ongoing training and education for them. Insufficient knowledge about diverse learning needs and inclusive teaching strategies (UNESCO, 2017).



Funding and Resource Constraints

Limited funding and resources hinder the creation of enriching and stimulating learning environments for early years education settings. Insufficient funds to provide adequate learning materials, facilities, and qualified staff and insufficient access to developmentally appropriate materials and play spaces. (Bowne et. al., 2019).



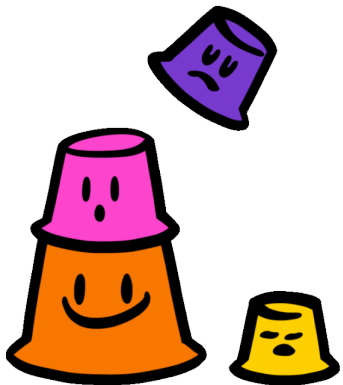
Inequities in Access and Quality

Magnuson et. al., (2004) discuss the unequal distribution of high-quality early years education opportunities, particularly for disadvantaged communities—limited availability of quality programs in low-income neighbourhoods.



Support for Diverse Learning Needs

Barriers to implementing inclusive practices that cater to diverse abilities and backgrounds. Lack of resources and training to support children with special needs or multi-language learners (Buysse et. al., 2018).



(Source: Yummy Mummy Club, 2012)

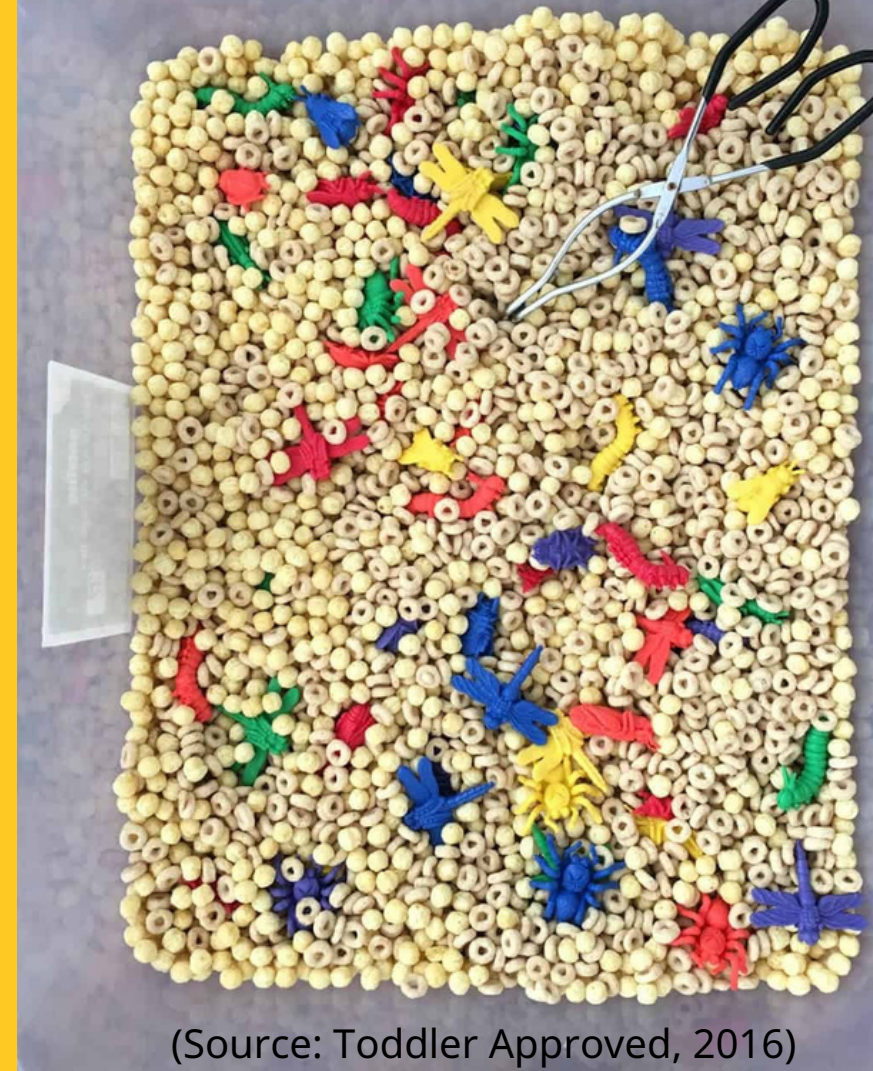


Suitable for babies, reach out for the objects as co-ordination develops and develop like and dislike feelings, try a wider range of textures. Hand the objects from one hand to the other or drop them to support their physical development (Department for Education, 2020).



(Source: Notmsl life MOM, 2019)

Sensory bins promote sensory integration, help children develop sensory processing skills, and improve fine motor skills through play (Case-Smit & Bryan, 1999).



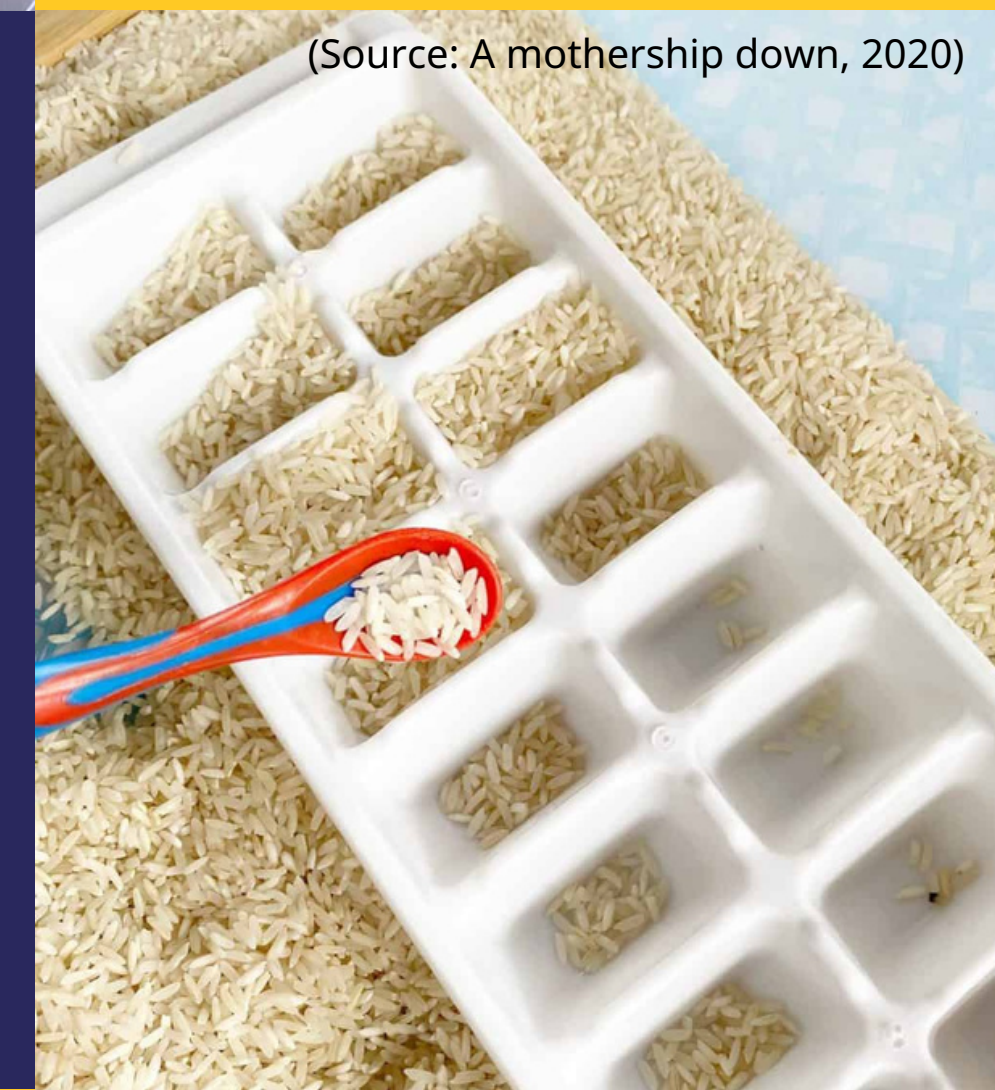
(Source: Toddler Approved, 2016)

SENSORY BIN

LOOSE PARTS ACTIVITIES

Fill bins with materials such as rice, beans, sand, or water. Add loose parts such as measuring cups, spoons, funnels, and small containers. To provide children with a valuable learning experience, let them scoop, pour, and explore different sensations (Case-Smit & Bryan, 1999).

(Source: A mothership down, 2020)



WATER PLAY

LOOSE PARTS ACTITIES



(Source: Simply sweet days, no date)



(Source: Crazy life with littles, no date)

Set up a water table or basin. Include loose parts like sponges, funnels, and water-safe toys. Might mix some safe printing colors to make an attractive water play experience for children. Children can explore water dynamics and experiment with floating and sinking. Improve their communication skills and emotional development by playing with peers and enhance their problem-solving skills and abilities (Dunn, 2001).

Suitable for 1-2 years old children, play with one or more other children to extend elaborating play ideas and development friendships with other children (Department for Education, 2020).



(Source: The Children's Programs, no date)



(Source: Kyuubs, 2015)

Water play promotes sensory exploration, develops hand-eye coordination, and enhances cognitive skills (Vygotsky, 1978).

(Source: ANI, 2017)



(Source: Adventures in storytime, no date)



(Source: Soheresmylife, 2014)



STORY TELLING

LOOSE PARTS ACTITIES

Use loose parts like finger puppets, blocks, or wooden cars to represent characters or elements in a story.

To Encourage children to understand the story or the concept using the loose parts as props. Making different voice tones to concentrate their interest. Storytelling promotes language development and emotional development with careers (Weitzman et. al., 2002).

For children from birth to 3 years old, turn to familiar sounds. Pinpoint the source of a familiar person's voice. Mimic facial expressions and movements make longer eye contact (Department for Education,2020).

Imaginative play and storytelling support language development, cognitive skills, and social competence (Lillard et al., 2013).

Meaningful play under SAFE

It's important to adapt activities based on individual children's needs and preferences, and supervision is crucial to ensure a safe and positive play experience. Loose parts are materials that can be moved, combined, and manipulated in various ways which might cause a choking hazard. Remember to always consider safety when providing loose parts for sensory play, especially for younger children who may put items in their mouths. Additionally, supervision and age-appropriate materials are essential for a safe and enjoyable sensory play experience (American Academy of Pediatrics, 2019).



(Source: Jenna, 2021)

What is the theory of the Montessori method?

The Montessori method was developed by an Italian physician and educator - Maria Montessori more than a century ago. This is an educational approach that emphasizes child-centered and allows each child to choose activities suited to their interests, needs, and developmental level through that to get a holistic learning experience. Key principles include a prepared environment, self-directed learning, multi-age classrooms, trust in children's innate ability to learn, and teaching based on observation. A Montessori classroom allows for movement and collaboration using unique learning materials that are easy for children to access. Montessori education values development focused on fostering a child's natural curiosity and love for learning (Issaacs, 2013).



(Source: AIUTAMI A FARE DA ME, no date)



(Source: Trillium Montessori , 2018)

How does Montessori education benefit early-year children?

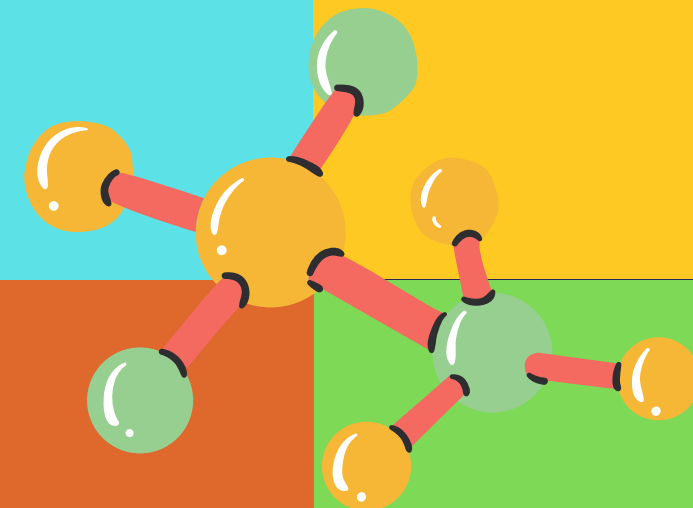
Montessori education is known for its holistic approach to child development, fostering independence, self-discipline, and a love for learning. While each approach has unique characteristics, the common goal is to support children's development. Educators may choose an approach based on the child's philosophies, the cultural context, and the specific needs of the child and their community. A comprehensive understanding of each approach can contribute to creating enriching educational environments for early-year children (Issaacs, 2013).

Support Holistic Development

Social and Emotional Development

Independence and Self-Discipline

Child-Centered Learning



Support Holistic Development

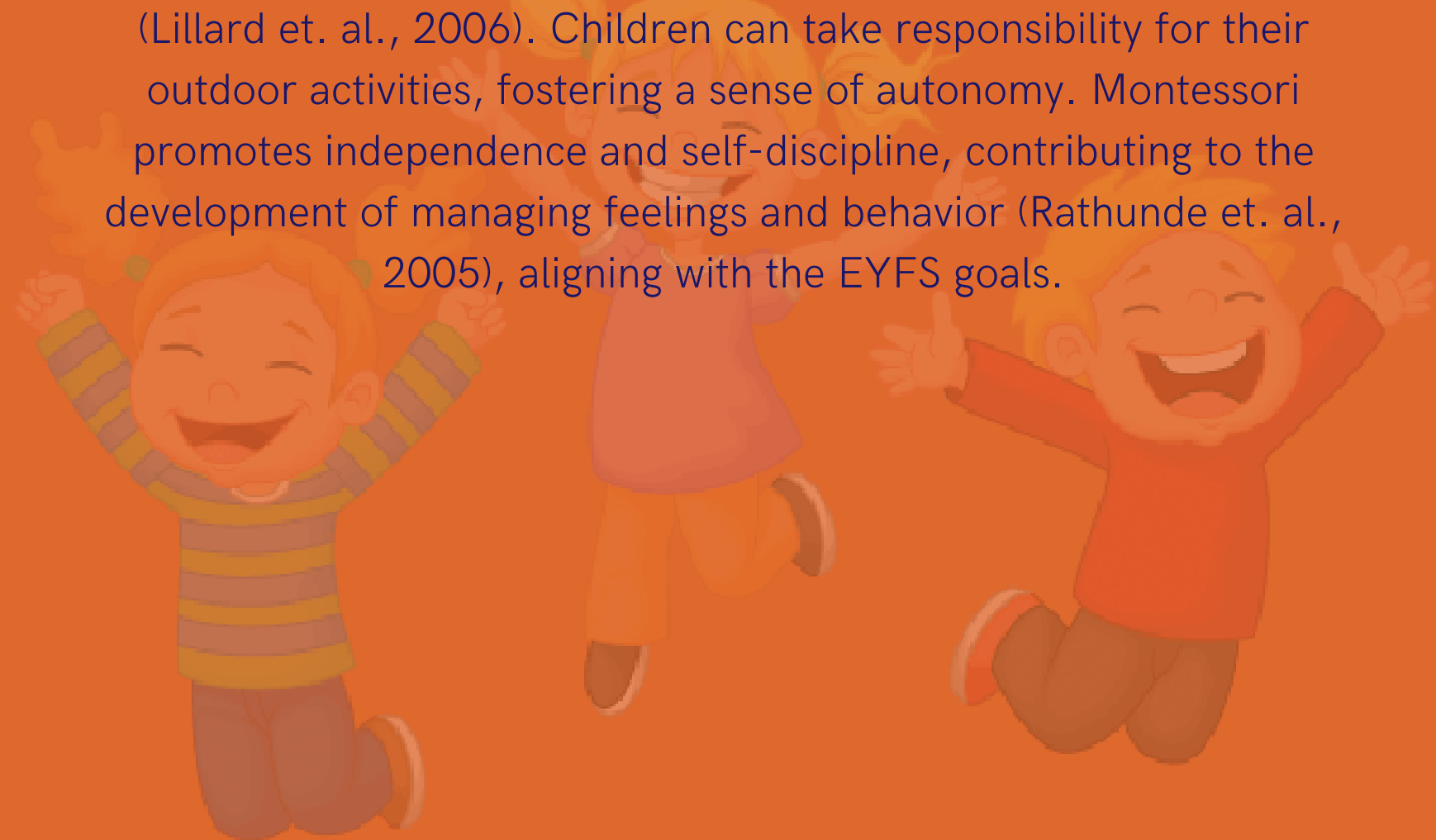
Montessori materials especially sensorial activities like textured fabrics, are designed to enhance tactile experiences. These spaces are organized to stimulate exploration and engage children in activities that enhance their overall development (Lillard et. al., 2017). Educators designed well-play spaces that incorporate various learning materials to stimulate sensory and motor development for children (Lillard et. al., 2006). Outdoor play areas are designed for exploration, physical activity, and connection with nature. Incorporate nature walks, gardening activities, and outdoor play equipment. Children engage in activities that promote both physical and emotional well-being (Dohrmann et. al., 2007a). These activities provide support for the claim that Montessori activities contribute to the holistic development of children, aligning with the EYFS focus on physical, social, emotional, and cognitive aspects.

Child-Centered Learning

Individualised learning materials that cater to each child's developmental level and interests. The materials are designed to provide a hands-on, self-directed learning experience (Lillard, 2012) Children choose activities in play spaces, allowing them to explore based on personal interests including activity corners with sensorial material, language materials (books, puzzles), and practical life activities. In outdoor activities, are often child-led, encouraging exploration and play. Children have the opportunity to direct their outdoor experience, fostering curiosity and self-directed learning (Lillard et. al., 2017). These provide support for the claim that Montessori's child-centered approach, reflected in activities aligns with the EYFS emphasis on recognizing each child as an individual learner.

Independence and Self-Discipline

Practical life materials such as pouring activities that promote independence and fine motor skills. These activities allow children to engage in purposeful tasks, fostering a sense of accomplishment (Rathunde et. al., 2005). Structured play areas allow children to independently choose activities and engage in self-directed play (Lillard et. al., 2006). Children can take responsibility for their outdoor activities, fostering a sense of autonomy. Montessori promotes independence and self-discipline, contributing to the development of managing feelings and behavior (Rathunde et. al., 2005), aligning with the EYFS goals.



Social and Emotional Development

Montessori materials are chosen and presented in a way that encourages empathy and cooperation. For example, sharing activities where children work together with limited resources or take turns together (Lillard et. al., 2017). Multi-age classrooms and group play areas provide opportunities for children to engage in activities together and learn from observation with other children (Lillard, 2012). Group games and collaborative projects, provide opportunities for teamwork and communication. Children engage in activities that require coordination and mutual understanding (Rathunde et. al., 2005). These all align with the EYFS goals in personal, social, and emotional development.



Montessori vs Waldorf

Montessori vs. Waldorf is often a comparison we often see regarding alternative educational approaches. Both are proven educational methods that have been around for decades. They focus on respecting child development, stimulating curiosity, and engaging in hands-on learning. Both educational philosophies center on the overall development of the child. The types of early education and learning materials they use are key similarities and differences (Montessori, 2014) (Steiner, 1997).



SIMILARITIES

Holistic

Hands-on Learning

Natural materials

Limited Technology

Respect for the child

Love of Learn

(Montessori, 2014) (Steiner, 1997)

DIFFERENCES

Montessori

Follow the child

Child-centered with teaching a guide

Focus on independence, self-sufficiency, and freedom within limits

Self-directed and self-paced learning

Realistic images and books

Minimum 3 years gap

Waldorf

Head, Heart, and Hand

Play-based

Focus on creativity and integration of the art

Students create their learning material

Emphasis on storytelling and fantasy

Same age group

Compared with Other International Approaches



philosophical approach

Montessori (Montessori, 2014)		
Philosophy: Child-centered approach, emphasizing individualized learning and self-directed activities.	Characteristics: The prepared environment, hands-on materials, multi-age classrooms.	Advantage: Fosters independence and a love for learning.

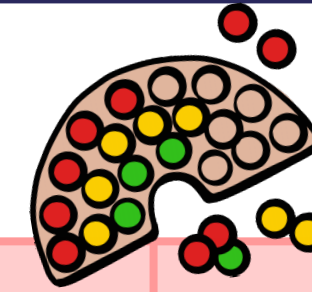
Waldorf (Nicol et. al., 2012)		
Philosophy: Holistic development, artistic expression, and nurturing imagination.	Characteristics: Focus on arts, storytelling, and play-based learning.	Advantage: Encourages creativity and a connection to nature.

Froebel (Smedley et. al., 2020)		
Philosophy: Play-based learning, with an emphasis on the interconnectedness of all knowledge.	Characteristic: Use of gifts and occupations to promote creativity and understanding.	Advantage: Inclusive of the child’s personality and the overall education context.

Te Whāriki(New Zealand) (Griffiths, 2014)		
Philosophy: Socio-cultural approach, recognizing the importance of relationship and cultural context.	Characteristics: Holistic development, focus on family and community involvement.	Advantage: Emphasizes cultural diversity collaboration and responsive caregiving.



learning environment



Montessori	Waldorf	Frobel	Te Whāriki(New Zealand)
Structured, orderly, and prepared indoor environments with specific, hands-on learning materials for individualised exploration. That promotes concentration, order, and self-directed learning. (Lillard, 2008)	Emphasis on warm, homely classrooms with natural materials. Materials are open-ended, natural materials for imaginative play. These fosters creativity, imagination, and a sense of beauty. (Wilson, 2013)	The interconnectedness of play, creativity, and structured learning experiences to foster the holistic development of children. That provides a nurturing and stimulating space where children can learn through active exploration and play. (Smedley et. al., 2020)	Emphasis on culturally responsive inclusive indoor and outdoor spaces. Varied materials reflect cultural diversity and inclusivity that supports cultural identity, belonging, and holistic development. (Griffiths, 2014)

(Source: Endeavor montessori school, no date)



(Source: ANN, 2016)

(Source: Wardle, 2021)



(Source: Nazia's blog,no date)



education methods

Montessori	Waldorf	Frobel	Te Whāriki(New Zealand)
Individualised, self-paced learning, with a focus on practical life skills. Teacher guides an observes, facilitating rather than directing. Cand develops in independence, concentration and a sense of responsibility. (Montessori, 2014)	Emphasis on artistic activities, storytelling and play. Teacher guides imaginative play, nurturing and storytelling to encourages creativity, social skills and emotional well-being. (Nicol et. al., 2012)	Play-based learning, gifts, and occupations to encourage creativity and understanding. Teacher supports with facilitator of play and exploration. (Smedley et. al., 2020)	Socio-cultural learning, collaborative and responsive teaching. Teacher support with facilitator, collanorator and responsive caregiver role to supports cultural competence, collaboration and holistic development. (Carr et. al., 2012)



(Source: Montessori Academy of Carrollwood, no date)

(Source:Real Red Riding Hoods, 2020)



(Source:María, 2022)

(Source: Eduplay Childcare, 2022)





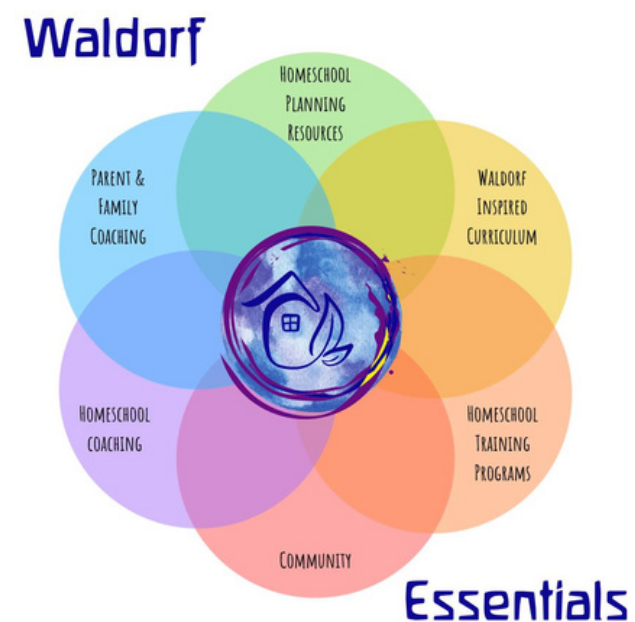
target results

Montessori	Waldorf	Frobel	Te Whāriki(New Zealand)
Independent, self-motivated learners with strong foundational skills which focuses on academic and practical skills, independence and social development. (Dohrmann et.al., 2007b)	Creatively engaged, socially harmonious individuals with a love for learning. (Wilson, 2013)	Well-rounded individuals with a holistic understanding of the interconnectedness of knowledge. (Brehony et. al., 2001)	Culturally competent, socially aware individuals who value collaboration and diversity. (Griffiths, 2014)

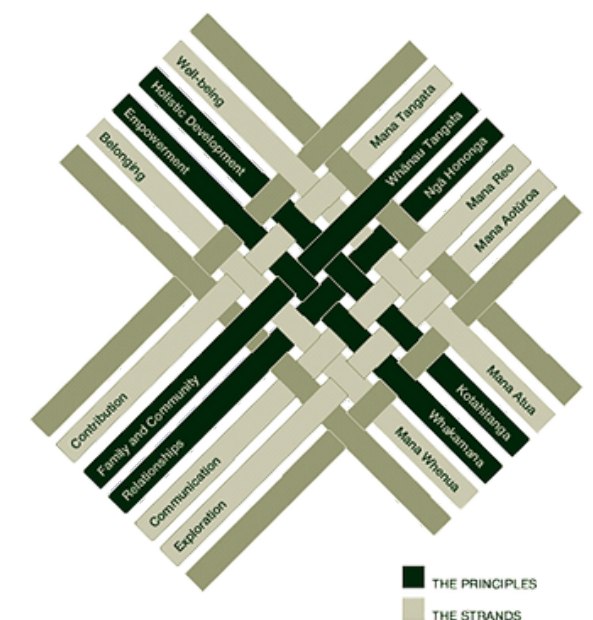


(Source: Kids Play Ltd., no date)

(Source: Waldorf Essentials,no date)



(Source: Frobel Play School,no date)



(Source: Nazia's blog,no date)

Reference List

A mothership down (2020). SENSORY BINS ARE GREAT FOR MANY REASONS. Available at: <https://amothershipdown.com/rice-sensory-bin-for-toddlers/> [Accessed 17 Jan. 2024].

Adam & Mila (n.d.). Cognitive development in early childhood. Available at: <https://www.adam-mila.com/milestones/cognitive-development/> [Accessed 14 Jan. 2024].

Adventures in story time (n.d.). Pre-Covid Preschool Storytime Plan. Available at: <http://www.adventuresinstorytime.com/p/by-time-i-started-doing-storytime-at.html> [Accessed 17 Jan. 2024].

AIUTAMI A FARE DA ME (n.d.). L'APPARECCHIATURA MONTESSORIANA. Available at: <http://www.aiutamiafare dame.it/lapparecchiatura-montessoriana/> [Accessed 17 Jan. 2024].

American Academy of Pediatrics (2019). Supervision in School and Child Care Settings. *Pediatrics*, 144(1).

ANI (2017). Study says get their stuffed toys involved. Available at: <https://www.hindustantimes.com/health-and-fitness/want-to-hook-your-kids-to-reading-study-says-get-their-stuffed-toys-involved/story-3KSDq1cyOtIAsIFc3acJTM.html> [Accessed 17 Jan. 2024].

ANN WHITE (2016). Handwork class with Ms. Theresa at the Waldorf School of St. Louis. Available at: <https://www.stlmag.com/family/education/waldorf-montessori/> [Accessed 17 Jan. 2024].

Arace, A., Prino, L.E. and Scarzello, D. (2021). Emotional Competence of Early Childhood Educators and Child Socio-Emotional Wellbeing. *International Journal of Environmental Research and Public Health*, 18(14), p.7633.

Ari, A. (2022). *Student-Friendly Teaching Approaches*. S.L.: Cambridge Scholars Publis.

Ausnutria Nutrition Institute (n.d.). Gentle nutrition for natural growth and development of infants. Available at: ausnutria-nutrition-institute.com/knowledge-base/gentle-nutrition [Accessed 13 Jan. 2034].

Barker, D.J.P. (2007). The origins of the developmental origins theory. *Journal of Internal Medicine*, 261(5), pp.412-417. doi:<https://doi.org/10.1111/j.1365-2796.2007.01809.x>.

Black, M.M., Walker, S.P., Fernald, L.C.H., Andersen, C.T., DiGirolamo, A.M., Lu, C., McCoy, D.C., Fink, G., Shawar, Y.R., Shiffman, J., Devercelli, A.E., Wodon, Q.T., Vargas-Barón, E. and Grantham-McGregor, S. (2017). Early childhood development coming of age: science through the life course. *The Lancet*, [online] 389(10064), pp.77-90. doi:[https://doi.org/10.1016/s0140-6736\(16\)31389-7](https://doi.org/10.1016/s0140-6736(16)31389-7).

Bowlby, J. (1969). *Attachment and loss*. 2nd ed. New York: Basic Books.

Bowne, J.B. and Scafidi, B.P. (2018). *The Early Childhood Workforce Index 2018*. Center for the Study of Child Care Employment.

Reference List

Brehony, K.J. and Fröbel, F. (2001). The origins of nursery education : Friedrich Froebel and the English system. London ; New York: Routledge.

Bronfenbrenner (1994). Ecological models of human development. In T. Husen & T. N. Postlethwaite (Eds.). International Encyclopedia of Education, 3(2), pp.1643-1647.

Bronfenbrenner, U. (1979). The Ecology of Human Development: Experiments by Nature and Design. Cambridge: Harvard University Press.

Bronfenbrenner, U. and Morris, P.A. (1998). Theoretical models of human development. Handbook of child psychology, 1(5), pp.993-1028.

Bronfenbrenner, U. and Morris, P.A. (n.d.). Theoretical models of human development. Handbook of child psychology, 1(6), pp.793-828.

Brown, J.V., Emblazon, N.D. and Harding, J.E. (2017). Investigating the early-life determinants of illness in a preterm cohort. Journal of Developmental Origins of Health and Disease, 8(4), pp.456-463.

Buyse, V., Wesley, P.W., Snyder, P. and Winton, P. (2018). Practices for Promoting Inclusion in Early Childhood Settings Oregon State University Extension. Oregon State University Extension.

Caen Medical Centre (n.d.). NHS Choices – When Not To Go To Your GP. Available at: <https://www.caenmedicalcentre.nhs.uk/2017/12/19/when-not-to-go-to-your-gp/> [Accessed 14 Jan. 2024].

Care for kid (2019). The Pikler Approach to Optimal Early Childhood Development. Available at: <https://www.careforkids.co.nz/child-care-provider-articles/article/247/the-pikler-approach-to-optimal-early-childhood-development> [Accessed 16 Jan. 2024].

Carr, M. and Lee, W. (2012). Learning stories : constructing learner identities in early education. London: Sage.

Case-Smith, J. and Bryan, T. (1999). The Effects of Occupational Therapy With Sensory Integration Emphasis on Preschool-Age Children With Autism. American Journal of Occupational Therapy, 53(5), pp.489-497. doi:<https://doi.org/10.5014/ajot.53.5.489>.

Center on the Developing Child at Harvard University (2007). A science-based framework for early childhood policy : using evidence to improve outcomes in learning, behavior, and health for vulnerable children. Cambridge, Ma: Center On The Developing Child, Harvard University.

Christine Carter (n.d.). Nature VS. Nurture. Available at: <https://www.christinecarter.com/nature-vs-nurture/> [Accessed 14 Jan. 2024].

Committee On Integrating Primary Care And Public Health (2012). Primary care and public health: Exploring integration to improve population health. National Academies Press.

Reference List

Crazy life with littles (n.d.). Gone Fishin' Sensory Bin. Available at: <https://crazylifewithlittles.com/6-summer-water-play-activities-for-toddlers/> [Accessed 17 Jan. 2024].

Daelmans, B., Darmstadt, G.L., Lombardi, J., Black, M.M., Britto, P.R., Lye, S., Dua, T., Bhutta, Z.A. and Richter, L.M. (2017). Early childhood development: the foundation of sustainable development. *The Lancet*, [online] 389(10064), pp.9–11. doi:[https://doi.org/10.1016/s0140-6736\(16\)31659-2](https://doi.org/10.1016/s0140-6736(16)31659-2).

Danone nutricia research (n.d.). Environment factors have much more impact on helth in later life then genetics. Available at: <https://www.danoneresearch.com/nutrition-for-life/early-life-nutrition/the-first-1000-days-a-unique-window-of-opportunity-to-shape-lifelong-health/> [Accessed 14 Jan. 2024].

Department for Education (2020). Development Matters . [education.gov.uk](https://www.gov.uk/education.gov.uk).

Dohrmann, K.R., Nishida, T.K., Gartner, A., Lipsky, D.K. and Grimm, K.J. (2007a). High School Outcomes for Students in a Public Montessori Program. *Journal of Research in Childhood Education*, [online] 22(2), pp.205–217. doi:<https://doi.org/10.1080/02568540709594622>.

Dohrmann, K.R., Nishida, T.K., Gartner, A., Lipsky, D.K. and Grimm, K.J. (2007b). High School Outcomes for Students in a Public Montessori Program. *Journal of Research in Childhood Education*, 22(2).

Duncan, G.J., Magnuson, K. and Votruba-Drzal, E. (2010). Boosting Family Income to Promote Child Development. *The Future of Children*, 20(1), pp.113–138.

Dunn, W. (2001). The Sensations of Everyday Life: Empirical, Theoretical, and Pragmatic Considerations. *American Journal of Occupational Therapy*, 55(6), pp.608–620. doi:<https://doi.org/10.5014/ajot.55.6.608>.

Dunst, C.J. and Trivette, C.M. (2009). Capacity-Building Family-Systems Intervention Practices. *Journal of Family Social Work*, 12(2), pp.119–143. doi:<https://doi.org/10.1080/10522150802713322>.

Eduplay Childcare (2020). Te Whāriki | The NZ Early Childhood Curriculum. Available at: <https://www.westgatechildcare.co.nz/post/te-wh%C4%81riki-the-nz-early-childhood-curriculum-in-eduplay-childcare-westgate> [Accessed 18 Jan. 2024].

ENDEAVOR MONTESSORI SCHOOL (n.d.). What's the difference between Montessori and Waldorf? Available at: <https://www.endeavormontessori.com/montessori-vs-waldorf/> [Accessed 17 Jan. 2024].

Exceptional Learning Academy (n.d.). Gallery. Available at: <https://www.exceptionallearningacademy.org> [Accessed Jan. 2024].

Reference List

Frobel Play School (n.d.). Available at: <https://frobels.com/admissions/> [Accessed 18 Jan. 2024].

Gov.UK (2018). Ofsted Early Years Pedagogy and Practice Forum members announced. Available at: <https://www.gov.uk/government/news/ofsted-early-years-pedagogy-and-practice-forum-members-announced> [Accessed 17 Jan. 2024].

Grace, S.L., Evindar, A. and Stewart, D.E. (2003). The effect of postpartum depression on child cognitive development and behavior: A review and critical analysis of the literature. *Archives of Women's Mental Health*, 6(4), pp.263-274. doi:<https://doi.org/10.1007/s00737-003-0024-6>.

Griffiths, J. (2014). Weaving Te Whāriki Aotearoa - New Zealand's early childhood curriculum document in theory and practice (2nd edition). *Early Years*, 34(3), pp.320-321.

Heckman, J.J. (2006). Skill Formation and the Economics of Investing in Disadvantaged Children. *Science*, 312(5782), pp.1900-1902. doi:<https://doi.org/10.1126/science.1128898>.

HelpfulProfessor.com (2023). 5 Mesosystem Examples & A Simple Definition (Bronfenbrenner). Available at: <https://helpfulprofessor.com/mesosystem-examples/> [Accessed 17 Jan. 2024].

Hoddinott, J., Alderman, H., Behrman, J.R., Haddad, L. and Horton, S. (2013). The economic rationale for investing in stunting reduction. *Maternal & Child Nutrition*, [online] 9(S2), pp.69-82. doi:<https://doi.org/10.1111/mcn.12080>.

IDS Medical System (2019). A CHILD'S FIRST 1,000 DAYS ARE CRITICAL. Available at: <https://www.idsmc.com/news/what-is-the-first-1000-days-of-life/462.html> [Accessed 16 Jan. 2024].

Isaacs, B. (2013). *Understanding the Montessori Approach*. Routledge.

Jenna (2021). An Extensive list of Taste-Safe Sensory Bin Fillers and How to Use Sensory Bins in Speech Therapy. Available at: <https://thespeechroomnews.com/2021/08/an-extensive-list-of-taste-safe-sensory-bin-fillers-and-how-to-use-sensory-bins-in-speech-therapy.html> [Accessed 17 Jan. 2024].

Jeynes, W.H. (2015). A Meta-Analysis: The Relationship between Parental Involvement and Academic Achievement of Urban School Children. *Urban Education*, 50(4), pp.387-423.

Karakoram International University (2018). First 1000 Days of Life - Window of Opportunity for Brain Development. Available at: <https://www.slideserve.com/dcoughlan/first-1000-days-of-life-window-of-opportunity-for-brain-development-powerpoint-ppt-presentation> [Accessed 13 Jan. 2024].

Kids Play Ltd. (n.d.). Supporting Children's Independence. Available at: <https://www.kidsplaychildcare.co.uk/nurseries/2020/12/09/children-independence/> [Accessed 18 Jan. 2024].

Reference List

kknews (2017). Available at: <https://kknews.cc/baby/gz3jo68.html> [Accessed 17 Jan. 2024].

Kyuubs (2015). toddler-water-play. Available at: <https://fitmomma.com/toddler-water-play-2/> [Accessed 17 Jan. 2024].

Lillard, A. (2008). Montessori: the science behind the genius(9780195369366). Oxford University Press, Usa.

Lillard, A. and Else-Quest, N. (2006). THE EARLY YEARS: Evaluating Montessori Education. Science, [online] 313(5795), pp.1893–1894. doi:<https://doi.org/10.1126/science.1132362>.

Lillard, A.S. (2012). Preschool children’s development in classic Montessori, supplemented Montessori, and conventional programs. Journal of School Psychology, 50(3), pp.379–401. doi:<https://doi.org/10.1016/j.jsp.2012.01.001>.

Lillard, A.S., Heise, M.J., Richey, E.M., Tong, X., Hart, A. and Bray, P.M. (2017). Montessori Preschool Elevates and Equalizes Child Outcomes: A Longitudinal Study. Frontiers in Psychology, 8(1783). doi:<https://doi.org/10.3389/fpsyg.2017.01783>.

Lillard, A.S., Lerner, M.D., Hopkins, E.J., Dore, R.A., Smith, E.D. and Palmquist, C.M. (2013). The impact of pretend play on children’s development: A review of the evidence. Psychological Bulletin, 139(1), pp.1–34.

livi (n.d.). See a GP by video. Available at: <https://www.livi.co.uk/see-a-gp/> [Accessed 14 Jan. 2024].

Magnuson, K.A., Meyers, M.K., Ruhm, C.J. and Waldfogel, J. (2004). Inequality in Preschool Education and School Readiness. American Educational Research Journal, 41(1), pp.115–157. doi:<https://doi.org/10.3102/00028312041001115>.

María Matilde (2022). El kindergarten de Federico Froebel. Available at: <https://eresmama.com/el-kindergarten-de-federico-froebel/> [Accessed 17 Jan. 2024].

Mikhail Gradovski, Elin Eriksen Ødegaard, Niina Rutanen, Sumsion, J., Mika, C. and E. Jayne White (2020). The First 1000 Days of Early Childhood. Springer Nature.

Montessori Academy of Carrollwood (n.d.). Practical Life. Available at: <https://www.montessori4success.com/curriculum/practical-life/> [Accessed 17 Jan. 2024].

Montessori, M. (2014). The Montessori method. New Brunswick (U.S.A.): Transaction Publishers.

my baby nursery (n.d.). EMBRACING EMMI PIKLER’S BRILLIANCE. Available at: <https://mybabynursery.com.au/what-is-the-pikler-approach/> [Accessed 17 Jan. 2024].

Reference List

National Scientific Council On The Developing Child (2004). Young children develop in an environment of relationships. Waltham, Ma: National Scientific Council On The Developing Child, A Project Of The Heller School For Social Policy And Management At Brandeis University.

Nazia's blog (n.d.). Te Whariki. Available at: <http://p140122.blogspot.com/p/context-4.html> [Accessed 17 Jan. 2024].

Nicol, J. and Tina, J. (2012). Understanding the Steiner Waldorf approach : early years education in practice. London Routledge.

Normal life MOM (2019). Water Bead Color Sorting. Available at: <https://normallifemom.com/indoor-sensory-box-activities-for-toddlers/> [Accessed 17 Jan. 2024].

Olds, D.L., Kitzman, H., Knudtson, M.D., Anson, E., Smith, J.A. and Cole, R. (2014). Effect of Home Visiting by Nurses on Maternal and Child Mortality. JAMA pediatrics, [online] 168(9), pp.800-806. doi:<https://doi.org/10.1001/jamapediatrics.2014.472>.

ParentingBlog (n.d.). Ensuring Their Future: Nutrition for the First 1000 Days. Available at: <https://welovesupermom.com/my/blog/nutrition-for-the-first-1000-days/> [Accessed 13 Jan. 2024].

Pianta, R.C., La, K.M. and Hamre, B.K. (2011). Classroom assessment scoring system (CLASS) Dimensions guide PRE-K. Charlottesville, Va. Teachstone Training.

Public Health England (2016). Health matters: giving every child the best start in life. Available at: <https://www.gov.uk/government/publications/health-matters-giving-every-child-the-best-start-in-life/health-matters-giving-every-child-the-best-start-in-life> [Accessed 13 Jan. 2024].

Rathunde, K. and Csikszentmihalyi, M. (2005). Middle School Students' Motivation and Quality of Experience: A Comparison of Montessori and Traditional School Environments. American Journal of Education, 111(3), pp.341-371. doi:<https://doi.org/10.1086/428885>.

Real Red Riding Hoods (2020). Our Waldorf Watercoloring Classes. Available at: <http://www.realredridinghoods.com/waldorf-watercoloring-classes/> [Accessed 17 Jan. 2024].

Robertson, C. and Messenger, W. (2014). Early Childhood Intervention in the UK: Family, needs, standards and challenges. International Journal of Early Childhood Special Education, 2(8652). doi:<https://doi.org/10.20489/intjecse.107967>.

Rutanen, N., de Souza Amorim, K., Colus, K.M. and Piattoeva, N. (2013). What is Best for the Child? Early Childhood Education and Care for Children under 3 Years of Age in Brazil and in Finland. International Journal of Early Childhood, 46(2), pp.123-141. doi:<https://doi.org/10.1007/s13158-013-0095-0>.

Sadownik, A.R. and Adrijana Višnjić Jevtić (2023). (Re)theorising More-than-parental Involvement in Early Childhood Education and Care. Springer Nature, pp.83-95.

Reference List

Simply sweet days (n.d.). ERE'S THE CREATIVE WATER TABLE PLAY IDEAS WE'VE TRIED. Available at: <https://www.simplysweetdays.com/water-table-play-ideas/> [Accessed 17 Jan. 2024].

Smedley, S. and Hoskins, K. (2020). Finding a place for Froebel's theories: early years practitioners' understanding and enactment of learning through play. *Early Child Development and Care*, 190(8), pp.1-13.

soberesmylife (2014). SILLY SHAPES FINGER PUPPETS. Available at: <https://funfamilycrafts.com/silly-shapes-finger-puppets/> [Accessed 17 Jan. 2024].

Steiner, R., Lathe, R.F. and Nancy Parsons Whittaker (1997). *Education as a force for social change*. Hudson, Ny: Anthroposophic Press.

The Children's Programs (n.d.). The Benefits of Loose Parts Play. Available at: <https://childrensprogramms.whittlesea.ymca.org.au/understanding-loose-parts-play/> [Accessed 17 Jan. 2024].

Toddler Approved (2020). Awesome Quick to Make Bug Sensory Bin for Kids. Available at: <https://toddlerapproved.com/awesome-quick-to-make-bug-sensory-bin/> [Accessed 17 Jan. 2024].

Trillium Montessori (2018). A Tour of Erin's Montessori Classroom. Available at: <http://www.trilliummontessori.org/a-tour-of-erins-montessori-classroom/> [Accessed 17 Jan. 2024].

UNESCO (2017). *Teachers and the Teaching Profession*. Policy Paper 24.

University of Washington (n.d.). Neuroscience For Kids. Available at: <https://faculty.washington.edu/chudler/dev.html> [Accessed 13 Jan. 2024].

Victora, C.G., Adair, L., Fall, C., Hallal, P.C., Martorell, R., Richter, L. and Sachdev, H.S. (2008). Maternal and child undernutrition: consequences for adult health and human capital. *The Lancet*, 371(9609), pp.340-357. doi:[https://doi.org/10.1016/s0140-6736\(07\)61692-4](https://doi.org/10.1016/s0140-6736(07)61692-4).

Vygotsky, L. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge: Harvard University Press.

Waldorf Essentials (n.d.). Waldorf Essentials. Available at: <https://www.waldorfessentials.com> [Accessed 18 Jan. 2024].

Wardle, F. (2021). The importance of creativity. Available at: <https://www.communityplaythings.com/resources/articles/what-we-can-learn-from-froebels-kindergartens> [Accessed 17 Jan. 2024].

Weitzman, E. and Greenberg, J. (2002). *Learning language and loving it : a guide to promoting children's social, language and literacy development in early childhood settings*. 2nd ed. Toronto: Hanen Centre.

Reference List

Whitebook, M., McLean, C. and Lea J.E. Austin (2016). Early Childhood Workforce Index, 2016. Center for the Study of Child Care Employment.

Wilson, M.A.F. (2013). CONSTRUCTING CHILDHOOD AND TEACHER AUTHORITY IN A WALDORF DAYCARE. *Critical Discourse Studies*, 11(2), pp.211-229.
doi:<https://doi.org/10.1080/17405904.2013.852984>.

World Health Organisation (2018). Nurturing care for early childhood development: a framework for helping children survive and thrive to transform health and human potential.

Yummy Mummy Club (2012). Cereal Sensory Bin. Available at: <https://www.yummymummyclub.ca/blogs/keeping-em-out-of-trouble/20121123/how-to-create-a-sensory-bin-for-your-baby> [Accessed 17 Jan. 2024].

Zigler, E., Matia Finn-Stevenson and Nancy Wilson Hall (2004). *The first three years and beyond : brain development and social policy*. New Haven, Conn. ; London: Yale University Press.