

Potential Development of Nature-Based Curriculum for Preschool Children: A Preliminary Survey

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Abstract

Learning takes place in the environment of nature in nature-based curriculum education for young children. Children's learning and development in all areas, including social-emotional, physical, and cognitive, are enhanced by nature-based learning experiences. However, due to an increase in children being detached from nature in their daily lives, there is a need for a nature-based curriculum to strengthen children's ties to nature while also utilizing its educational benefits. This research explores the potential development of nature-based curriculum for preschool children. The current study seeks to analyse the potential of this curriculum that is based on nature for the preschool children in Kuala Lumpur. For that purpose, interviews were conducted with 12 individuals who are government and private preschool teachers, local university lecturers, Educational Planning and Research Division Officers of the Ministry of Education and also the parents. The findings indicated that the development of nature-based curriculum is needed to provide a nature play-based and cognitively rich curriculum that encourages creativity. Also, the development of this curriculum will help preschool children in regards to their social-emotional and nature appreciation. Nature based curriculum is believed to offer a plethora of chances for exploration, creativity, problem-solving, and STEM learning. Children can learn by doing and experimenting with concepts when they connect with natural environments.

Keywords: *Early Childhood Education, Nature-Based Curriculum, Environment Education*

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Introduction

Early childhood education is the start of formal education for children, and it allows them to build a strong foundation of abilities and attitudes on which all later learning will be built. Early childhood education is an excellent place to start cultivating a sustainable culture. There are many different forms of curriculum such as Montessori, Reggio Emilia, Head Start and more. Likewise, nature-based curriculum is one of the trends in early childhood education nowadays. Even though it is not practised by most of the preschools, it is dominant to integrate nature-based curriculum into the preschool context. Nature-based curriculum is where nature is included into every area of the classroom and is used to attain learning objectives. Nature-based curriculum incorporates Education for Sustainability through activities and experiences, reflections, and materials that help children to examine and engage in the natural environment around them in the early childhood setting. Children are capable learners who have control over their own education and enable curiosity to lead their development. Through play and exploration in nature-based curriculum, children can develop socially, physically, emotionally, and cognitively.

Children's positive growth is enhanced by connecting them with nature. Children and families nowadays, on the other hand, typically have limited opportunity to interact with the natural environment around them. Research shows that children nowadays can be seen spending their time less in the outdoors (Larson, Green, & Cordell, 2011) as they are immersed or being tied up with their technological devices. Due to parental dread of outside threats and crime, children are growing up with fewer natural environments to play and explore. The less time spent outside is causing "nature-deficit disorder," a theory proposed by Richard Louv (2005), author of *Last Child in the Woods*, to explain why children of this generation are disconnected from nature.

The emphasis on nature-based curriculum is to enable children to explore and experience their natural environment, as well as to foster a sense of wonder and belonging. Along with math, science, art, and reading, children develop social emotional skills such as perseverance and confidence. Interaction with the natural environment without bounds may help to relieve psychological stress in daily lives. According to Natural England (2012), children will perform better than usual after participating in activities in green environments, and the "greener" a child's play place is, the less severe his or her attention deficit symptoms will be. Nature-based curriculum can be both applied in indoor and outdoor classrooms where formal learning takes place in the classroom, whereas informal learning takes place outside.

Problem Statement

This study focused in depth due to the Malaysian curriculum context. According to the Malaysian preschool context (KSPK, 2017), it can be seen that there is less emphasis on outdoor or nature-based curriculum to be implemented in the preschools and still practice direct teaching instead of student-centred and explorative learning (Abdullah, Nor, Damaety, Chee, 2017). The nature-based curriculum was not being cultivated into the education system. The evidence was proven by past researchers regarding nature-based curriculum is not sustainable and cultivated due to the perceptions of our community (Gautheron, 2014). It has been stated and identified from past studies that preschool educators and parents are sceptical about this particular curriculum (Ginsburg, Audley, 2019). Both parents and educators stated that it will affect the classroom time, resulting in a lack of classroom time and content knowledge. Not only that, they would also prefer their children or students to follow the syllabus by the book.

Young children must learn how to cope with challenging emotions, regulate frustrations in the context of social conflict or challenges in their surroundings, and appreciate another child's point of view in order to be successful in the preschool classroom. Most of the preschool settings in Malaysia are built for indoor activities and limit children's opportunities to be engaged in outdoor environments. Children can practice taking another person's perspective by acting out genuine circumstances in a play context. It is extremely crucial for children to spend time outside and have access to open-ended materials in order to encourage creativity (Kiewra & Veselack, 2016). In a study conducted by past researchers, natural settings encourage social interactions and stress reduction through exercise or dialogue, as well as providing a relaxing environment (Hashim & Denan, 2014). Pretend play, behavioral and emotional self-regulation have

significant implications for future school success and good peer relationships. Past studies have shown that early environmental experiences have a significant impact on long-term views, values, and relationships with the natural environment, and children who do not form an emotional interaction with the natural environment early in life are at danger (Tilbury, 1994; Wilson, 1994). As a result, assessing these skills and capabilities that define the preschool developmental stage is critical when evaluating the effectiveness of a preschool curriculum.

Next, it has been mentioned that children's screen time has caused a great concern towards parents nowadays especially in the modernization era (Skar, Wold, Gundersen & O'Brien, 2016). There are many parents who would often see their children indulged in technological gadgets, and are less likely to spend time being exposed to nature. According to the statistics depicted by past researchers, approximately 53% of children seldom get exposed to natural space (Skar, Wold, Gundersen & O'Brien, 2016). Not only are children losing their sense of appreciation towards nature, however, they also lack natural knowledge and are not aware of their surrounding environment. This is due to the fact that they were staying indoors, facing screens most of the time. Children are getting less exposure and engaged in nature and this would result in the impact towards children's development and connectedness with nature (Omidvar, Wright, Beazley & Seguin, 2019).

Purpose of Study

This study aims to analyse the potential development of nature-based curriculum for preschool children. Specifically, this study answers the following research questions:

“What is the potential development of a nature-based curriculum for preschool children?”

Research Design

This study was conducted through the interview method, namely focus group interview and In-depth interview. The sampling technique used is purposive sampling. The data collection process began by interviewing 12 individuals who are government and private preschool teachers, local university lecturers, Educational Planning and Research Division Officers of the Ministry of Education and also the parents. The communication process took place based on the question structure of the interview questions for this study. Interviews were conducted via google meet sessions involving two-way communication. The participants interviewed in this study were required to answer questions related to the design of nature-based curriculum for preschool children.

Findings and Discussions

Feedbacks obtained from the interview process (In depth Interview and Focus Group Interview) on the potential development of a nature-based curriculum for preschool children is based on the following research question:

‘What is the potential development of a nature-based curriculum for preschool children?’

The interview findings show the potential development of a nature-based curriculum for preschool children is needed to provide a nature play-based and cognitively rich curriculum that encourages creativity. Also, the development of this curriculum will help preschool children in regards to their social-emotional and nature appreciation.

Nature play-based curriculum

The foregoing evidence that suggests nature-based curriculum is a potential curriculum development for preschool children shows the perception of preschool educator towards nature-based curriculum. The participant indicated that nature-based curriculum brings positive impact towards children in terms of their creativity, understanding and cognitive development. The views are well articulated in the following interview verbatim:

“As a teacher, I believe that a nature-based curriculum would help children and bring a lot of benefits. Children would develop creativity and enhance their interest or understanding in terms of learning. In the meantime, nature-based curriculum can also stimulate children’s thinking.” (Participant 1)

“Can guide them to learn and provide knowledge and most important is to let them explore the nature around them.” (Participant 2)

From the findings of the interview, participants gave positive viewpoints on the nature-based curriculum towards children. The findings stated that children with the exposure of nature-based curriculum would have their creativity development enhanced. On the other hand, they would be able to stimulate their thinking, make them a better decision maker and allow them to explore the nature surrounding them. It also helps them to develop inquisitive minds.

Social-emotional

In the interview that has been conducted with participants, nature-based curriculum could also bring influence towards children’s social emotions. The participants involved in this interview session have mentioned that children’s social-emotions would also be enhanced with the exposure of nature-based curriculum. The evidence of the findings is analysed from the following verbatim:

“I think nature-based is on the whole pretty good for children. It will give a chance to the kids to develop their social interactions relating to the activities and lesson plans. In the meantime, they could also learn to regulate their emotions. They would feel calm, or peaceful when they’re exposed to the greens. When they grow up in the future, they could develop good communication skills”. (Participant 3)

Based on the interview analysis, Participant 3 mentioned that a nature-based curriculum would develop and further improve children’s social skills and also regulate their emotions. It makes learning less sterile and grounds the knowledge that they obtain in tangible phenomena instead of just learning the abstract concepts which will make the children easily feel disinterested.

Nature Appreciation

The interview conducted also brings out the positive viewpoints regarding the development of nature-based curriculum. In the interview session conducted, the participant involved gave a solid explanation:

“In order to create children who, love nature, we need to expose them towards the natural environment. By then, they would learn to protect and love their surrounding environment or nature. They can learn about nature even when they are sitting in the classroom. They can decorate their classrooms with green leaves and flowers and teach them how to plant the seedlings and grow them into a plant. Through this, children would learn to protect their plants and develop care for nature.” (Participant 4)

From the findings, it is mentioned that children would develop love and feel connected to nature only when they were being exposed or engaged to nature. Here, the point to get children to love nature is all about integrating nature-based curriculum into the lessons. Even the simplest activity would allow children to develop care and love towards nature. For example, as the participant has mentioned, giving children a task to protect and grow the plant would enable children to think critically, love and care for the plant that they grow.

Conclusion

In conclusion, this study is significant in order to bring changes towards the preschool curriculum. Traditional approach of learning is beneficial for children. However, children need to explore more about their environment and learn or discover new things that would arouse their interest in learning. Nature-based education is dynamic, providing a lot of new knowledge and schemas for children. It also provides rich opportunities for children to engage themselves in the seven scientific processes which are observing, questioning, predicting, experimenting, summarizing and identifying the results. Children’s holistic development can be enhanced when nature-based approach and environmental education is being integrated

into Malaysian preschool curriculum contexts. Nature-based curriculum is important for children in tandem to different aspects and their holistic development such as cognitive, social and emotional, physical, behaviour, awareness and more. It provides the balance of children getting engaged to the outside world or environment and educating children to love their nature ever since from a young age. Therefore, given the myriad benefits or positive outcomes of nature-based curriculum towards children's development, all children deserve to be given the opportunity to experience and learn in the natural settings.

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