

Child to Child Pedagogy and Transition Readiness from Home Based Centres to Primary One

Adela Rucecerwa

National Curriculum Development Centre

Abstract

The purpose of this study was to see how Child to Child pedagogy can be efficiently used so as to support transition readiness of preschool children from Home based centers to primary one through an innovative and cost-effective play way. Child to child pedagogy is an education practice about how children build knowledge as they relate with one another. In this pedagogy, older children from the locality known as young facilitators, take preschool children through interactive learning games over a period of one year to prepare them for early grades of primary school. Objectives of the study were: To establish whether child to child pedagogy could be used to enhance transition readiness in Early Childhood Education; To identify child to child activities that could be used to enhance transition readiness in Early Childhood Education. The study used cross sectional design, In-depth interviews, participant observation, focus group discussions with parents, document analysis and participant narratives supported triangulation. The overarching research question was: How can an effective child to child pedagogy be adopted and scaled up to improve transition readiness from pre-primary to early grades of primary school. Data was collected by the use of Questionnaires interviews and Observation method. The collected data was analysed by use of descriptive methods of data analysis. Results indicated that the advocated for methodology prepares children to be able to transit smoothly. In conclusion, from the findings of the study, use of child-to-child pedagogy enables children to get ready for transition through engaging in useful play with other community members with whom they may go to the same school when they transit. The researcher thus recommends that stakeholders should embrace child to child pedagogy so as to enable children's transition readiness.

Keywords: child to child; home based centres; pedagogy; readiness; transition

Background

Children start preschool learning from home with basic skills such as self-care, communication, socialization and mobility. These extend throughout life as critical stepping stones for transition from home-based centres to early grades of primary (Ernst et.al 2021). Davis, & Elliott (2014) urge practitioners to recognize the competences of young children as "thinkers, problem-solvers, and agents of change. They need to be prepared for challenges ahead of them by equipping them with the foundational knowledge, skills, attitudes, and values to understand and respond to these challenges. Development of environmental values, attitudes, skills, and behaviours begins in childhood. Constructing understanding about environmental and sustainability content, as well as developing the skills for meeting the needs of future generations by peacefully living in the environment is another vital aspect in early childhood. This is done best when children are given opportunity to attend pre-primary and later transit to primary. Transition from pre-primary to primary school is one of the major steps that each child has to take in the education continuum.

Transition to the first year of primary school is very important for the child's future physical, emotional and intellectual development according to research. For example, OECD, (2017) asserts that managing this transition well is important for children's well-being and to help them achieve their potential at school. O'Connor (2018) agrees that a child's first transition into compulsory schooling is usually a positive experience, enabling them to settle into new routines, expectations and environments. Much as it may be simple for some children who have gone through pre-primary to transit, there are some who need longer to settle in and make the transition successful (Kinkead-Clark 2015).

Such learners need to be given extra help so as to grasp the concepts they missed out on. This can be done through enhancing child play and considering it to be key in childhood education because it strengthens learning outcomes while enhancing children's mastery of academic concepts and builds motivation to learn (UNICEF 2013).

Preschool transition into first grade has been internationally recognised as an important process not only in children's personal but also academic life (Perry, Dockett & Petriwskyj, 2014). It enhances children's discovery of knowledge hence preparing them for early grades of primary school (UNICEF, 2014). (Grieshaber, 2009; Petriwskyi, 2010; 2013) (Mascareño, 2014; Lau, 2014). For transition to be successful, there must be transition readiness.

There has been effort to define the concept 'Transition readiness'. For example, Sandilos (2017) defines it as the ability to succeed academically, while Morgan (2016) considers it to be the ability to socialise with others. In this study, children's transition readiness was conceptualised as children's acquisition of the emotion regulation skill (Goodrich et al. 2015) which enables them to not only socialise with others (Harper 2015; Morgan 2016) but also to succeed in school academically (Sandilos 2017; Shala 2013). Transition readiness must not be taken lightly due to the role it plays. For example, Mascareño (2014) believes transition readiness from preschool to first grade is a developmental milestone in children's lives while Lau (2014) contends that, transition readiness is very important for children and should be given great attention because of the drastic change of contexts, identities, roles and social interactions to be encountered at a later stage.

As contended by Mariano, Santos-Junior, Lima, Perisinotto, Brandão, Surkan, & Caetano, (2019) aspects of school readiness such as early reading and math skills, social skills, attention, internalizing and externalizing behaviour predict both future math and reading skills. Enhancing children's transition readiness skills is really crucial for recently, Thomson et al. (2019) examined a population cohort of 34,552 children and found that children exhibiting poor social emotional functioning at school entry had at least two times the odds of a subsequent mental health condition by age 14, including depression, conduct disorder, anxiety and attention-deficit/hyperactivity disorder (ADHD) integrated development of children. Transition readiness offers young children an alternative means of expressing their needs and desires as well as an additional tool for regulating their behaviour in the form of self-talk and other strategies (Woodward et al., 2016).

Different countries promote transition readiness in different ways. In Sierra Leone, it's done through the child-to-child model and findings indicate an increased access, retention and performance in primary education (UNICEF, 2014). In Yemen, children are helped to get ready to transit through the child-to-child programme and they show significantly higher rates of on time enrolment (83% vs 34%), better social and emotional development, and higher academic performance in literacy than their peers not involved in the programme (American Institutes for Research, 2013). In Malawi, they have established community-based child care centers that draw strength from child-to-child approach so that children are prepared to go to primary school (Shalwon, 2013).

In Uganda, LABE's Home Learning Centres (HLCs) and UNICEF's integrated Early Childhood Development Centre (iECD) in Mirambo use the child-to-child approaches to support literacy development (UNICEF, 2017). They support parents to; provide an oral rich language and home literate environment and appreciate their role in preparing and supporting their pre-school children (LABE, 2020). Learning is based on the preschool education curriculum with pedagogy built on traditional child-care practices facilitated by parent educators and young facilitators from the community for at least 3 hours a day, 3 days a week (LABE, 2020). Children's learning experiences need to be stimulated through play activities that can better be developed through child-to-child approach to ease transition readiness (UNICEF, 2018).



However, in many countries in Africa, pre-primary education does not adequately prepare children to transit to primary school. Children are viewed by teachers as recipients of knowledge who cannot actively participate in their own learning (Gray, 2016). In all the G20 countries, children are helped to get ready to transit through the use of child-to-child pedagogy.

Child to child pedagogy began as a movement to improve the health of children and their communities through teaching children in primary schools to pass on health messages. There has been effort to explain the meaning of "child to child pedagogy" For example, on their part, (Inalhan 2017; Feder 2019; Vaslou et al. 2021; Yamada 2019) say that it is a way of teaching which places children and their rights at the core of a design process to elevate their voice, (Inalhan 2017); psychologically and physically empower them (Vaslou et al. 2021) and uncover their unmet requirements and desires (Yamada 2019). While Hadem (2018) asserts that it is the kind of teaching where children are guided to use a variety of formal and informal activities to teach peers through the use of games. Abhiyan (2022) considers it to be the involvement of children already in primary school (Young Facilitators) in planning how to use transition activities to actively engage with preprimary children (Young Learners) in their community in a play way. Child to child (2023) defines it as the involvement of children in activities that interest, challenge and empower them. In this study, child to child approach means guiding children on how they can use a variety of formal and informal activities to teach peers Hadem (2018) by involving the children in planning how to use these transition activities to actively engage with pre-primary children (Abhiyan 2022) so as to enable them to actively participate in their own learning (Bahay 2022).

Using this child-to-child pedagogy, enhances children's discovery of knowledge hence preparing them for early grades of primary school (UNICEF, 2014). The proposed child-to-child pedagogy has received significant results in different places where it is used. According to Jung (2021), in the child-to-child approach, young facilitators in Botswana, take through preschool children interactive learning games over a period of one year to prepare them for early grades of primary school. In Sierra Leone, the child-to-child pedagogy has been adopted and findings indicate an increased access, retention and performance in primary education (UNICEF, 2014). The use of home based learning helps to increase access and engage parents more in education of children but lacks in quality (Brookes,et al,2006; Wagner & Clayton,1999). To cover for quality, play based curriculum implemented in home learning centres is used to enhance children's school readiness (Jung, 2021). However, the child-to-child model that supports learning through play needs to be scaled to improve the quality of early childhood education.

Problem Statement

Child to child pedagogy enhances transition readiness (UNICEF, 2018) by allowing children to learn through play. Wong (2019) contends that while playing, children not only acquire knowledge, skills and the rules of polite behavior but also learn to be patient, share, respect others and create a positive self-image which prepares them for transition.

However, in Ugandan primary schools, children's time for play is limited, the curriculum is different, there are new rules which they need to obey and relationships with classmates and adults in school are different (Wong & Power, 2019). If children are not fully prepared for this, there's a likelihood they will fail to cope up and even those who can, do so with a lot of difficulty.

Children in Kalaki District where the study is to take place are taught following this academic oriented curriculum, so there is no good transition of children from Home Based Centers to primary one thus, action must be taken to help teachers use this pedagogy.

Objectives of the Study

- 1. To understand whether child to child pedagogy can be used to enhance transition readiness from home-based centres to lower primary.
- 2. To identify child to child activities that can be used to enhance transition readiness from home-based centres to lower primary

Research Questions

- 1. Can child to child pedagogy be used to enhance transition readiness from home-based centres to lower primary?
- 2. Which child to child activities can be used to enhance transition readiness from home-based centres to lower primary?

Literature Review

The child-to-child pedagogy is an education methodology about how children build knowledge as they relate with one another. Different scholars have defined it too. (Bahay 2022; Abhiyan 2022) For example, Bahay (2022) advances that it is the guiding of children to actively participate in their own learning through the use of practical activities while Abhiyan (2022) considers it to be the involvement of children already in primary school (Young Facilitators) in planning how to use transition activities to actively engage with pre-primary children (Young Learners) in their community in a play way so as to enhance a smooth transition to lower primary.

In Malawi, community-based child care centres that draw strength from child-to-child approach have been established so that children are prepared to go to primary school (Shalwon 2013). Children from different backgrounds, ethnicities, religious and those with disabilities are taught in these centres. The challenge however, is that the pedagogy is localised to specific NGO areas.

In Ethiopia, the child-to-child pedagogy is organized by the Regional Education sectors, starting with a pilot in 2008 and now implemented in all regions as of 2009 (Mundy et al., 2014). It involves older children of grade 5 to 8 as facilitators to help young children (age 4-6 years) to acquire school readiness skills, literacy and social skills (Ministry of Education, 2010. The facilitators (old children) are guided and supervised by teachers. It aims to improve children's transition readiness in educational development in communities where formal preschools are unavailable (Ministry of Education, 2010). The duration of the program is 36 weeks that is conducted in children's villages, near their home, under a tree, in the shade of home, or in a child's home (Mundy et al., 2014).

In Uganda, LABE's Home Learning Centres (HLCs) and UNICEF's integrated Early Childhood Development Centre (iECD) in Mirambo are home-based preschool centres that use the child to child approaches to support literacy development (UNICEF, 2017). They support parents to; provide an oral rich language and home literate environment and appreciate their role in preparing and supporting their pre-school children (LABE, 2020). Learning is based on the preschool education curriculum with pedagogy built on traditional child-care practices facilitated by parent educators and young facilitators from the community for at least 3 hours a day, 3 days a week (LABE, 2020). The challenge however is that the children of Primary one and two may associate with children in home-based centres better than those in upper classes which are the classes LABE uses.

From the literature, we note that although learning through play foster's children's increased readiness for primary school, its use is still limited. This demonstrates the added value of the child-to-child approach, rather than a home-based model alone. This study demonstrated evidence of the effectiveness and innovative use of the home-based play child to child model in increasing transition of young children from pre-primary to early grades of primary school.



Methods

This study adopted the cross-sectional research design under the qualitative approach. For the action research, in-depth interviews, participant observation, focus group discussions with parents, case study, document analysis and participant narratives were used to support triangulation (Patton, 1999). Quantitative methods, such as surveys, checklists, , and report cards were used to provide another perspective, and particularly when doing impact evaluation. A total of 1,400 children participated in this study. While the centres were purposively selected, 25 children were randomly selected from each of the four centres.

Results/Findings

Responses from the Children

Based on the responses provided, it seems that football is the most commonly mentioned game that can be taught. Additionally, skipping and bolingo also received multiple mentions. Other games mentioned include netball, counting games, rolling bicycle wheels and tires, and recitation and singing games. It's worth noting that some responses were unclear or not specific enough to determine which game was being referred to. Also, one response mentioned cooking using clay or plastic containers, which is not a game but an activity. Overall, it appears that football, skipping, and bolingo are the most popular games that people feel confident teaching.

Based on the responses provided, it seems that many of the strategies for teaching involve demonstration or modelling of the activity. This includes demonstrating with hands, drawing, playing with the children, singing or clapping, and rolling objects to show how to do it. Other strategies mentioned include dividing the children into groups, using counting sticks or other props to show how to count, and using the rote method (repetition and memorization). Some responses also mentioned the importance of following the children's lead and asking questions to understand their level of knowledge and skill. It's worth noting that a few responses did not provide a specific strategy for teaching, or simply stated that the person will play with the children or demonstrate first before asking them to do it. Overall, it appears that demonstration and modelling are key strategies for teaching in this context, along with engaging the children through play and song.

Based on the responses provided, there are several ways to tell whether the children have learned what has been taught. Some of these include observing their behaviour, seeing their work (such as clean plates or a clean compound), checking whether they can count, and asking them to demonstrate what they have learned (such as singing a song or playing a game). Other responses mentioned listening to the children (such as when they are singing or playing), marking their work or exercises, and watching them jump or handle each other. A few responses did not provide a specific way to tell whether the children have learned, or simply stated that the person will see them or listen to them to determine whether they have learned. Overall, it seems that observation and assessment of the children's performance are key ways to tell whether they have learned what has been taught.

The qualitative findings from the interviews with the community members indicate that there is a need for more education and support for the children in the community. The majority of the community members expressed a desire for the children to have access to educational materials, such as books, pencils, chalk, and chalkboards. They also expressed a need for play materials, particularly balls, and materials for music, such as drums and shakers. Many community members also expressed a need for support in teaching the children. Some requested assistance in developing teaching skills, while others requested specific materials or tools, such as counting sticks or skipping ropes. A few community members expressed a desire for financial support to cover school fees or to purchase materials for themselves or their children. Overall, it is clear that there is a need for more resources and support for education and play in the community.

Providing access to educational materials, play materials, and support for teaching skills could help to improve the educational opportunities and outcomes for children in the community.

Responses from parents

Children have the ability to be teachers and guides for other children in a variety of ways. For example, they can lead activities in the centre, play together, and use the knowledge and skills they have acquired to teach other children. Younger children can learn from older children who still have a childlike mentality, making it easier for them to interact well and learn from each other. Children can also teach modelling, create materials using local resources, and teach local languages. They can teach younger children about sanitation and home activities, like bathing and washing utensils. They can also look after domestic animals and teach counting and drawing to young ones.

In addition to these practical skills, children can also teach manners, direct play activities, and support physical exercises. By freely mixing with each other, they can learn from their peers and share ideas. Children can teach names of things and ask children to repeat, teaching young children about their environment.

Children can also teach new languages, draw and model play materials, and play games like skipping. By teaching each other, they can develop a sense of responsibility and leadership. It is important to recognize the unique skills and knowledge that children possess and to encourage them to share and teach these to their peers in a safe and supportive environment. Children have a lot to offer each other and can learn from each other in meaningful ways.

After analysing the responses of the participants, it was found that children can engage in a variety of activities that can be used to teach other children. These activities range from playing football, modelling, singing, washing plates together, to playing in the form of cooking and sweeping the centre. Children can also build their playing houses, practice leadership, parenting, and teach each other as they play.

In terms of teaching academic skills, children can teach their peers how to sing the alphabet, interact with others, write and speak English, and play local games. They can also teach them how to write letters and numbers, draw pictures, and learn numeracy and writing skills. In addition, children can share ideas, write stories, and play different games to enhance their skills and knowledge.

The children can also engage in role-playing activities like cooking, counting numbers, and sharing how to write. They can be taught how to read and write small words, letters, and numbers. Additionally, they can model and draw play materials, sing songs, and engage in drama, riddles, and news activities. Children can also play different games and practice physical activities such as jumping ropes, swinging, playing football, and skipping.

It was also observed that children are happy and enthusiastic when being taught by their peers, with some even referring to them as "teacher." Overall, it is essential to recognize the value of peer-to-peer learning and encourage children to share their knowledge and skills with their peers in a supportive and safe environment. Through these activities, children can develop their leadership and teaching skills while enhancing their academic and social abilities.

The respondents provided various ways to support children in their teaching roles. One way is to encourage them to come to the learning centre whenever they are scheduled to teach, and to motivate them by thanking them for their efforts. Additionally, parents and guardians can advise children not to be harsh to other children and to make friends with the young learners.

Parents and guardians can also guide their children by advising them to do exactly what they have been asked to do and to dress in uniform.



They can also encourage children to use English so that younger learners can also learn the language. It is essential to advise children to have respect for younger children and concentrate on studying rather than playing. Providing scholastic materials, supporting youth facilitators (YF) to encourage ECD children to attend school, and providing food rations can also be helpful.

Guidance and support for YF can also be beneficial. Parents and guardians can guide and support YF in locating and collecting local resources for making resources and provide scholastic materials like textbooks to support young learners. They can also train YF in basic teaching skills, morals, and children management skills.

Another way to support children is by providing playing materials and buying them scholastic materials. Parents and guardians can also encourage and tell the child they are now a teacher, which will motivate the child. Giving ideas and a token of appreciation can also encourage children to continue teaching.

Parents and guardians can also guide their children on how to relate to others and teach new songs and alphabets. Additionally, they can advise children to handle other children with care and provide them with the necessary support to continue their teaching role, such as buying them scholastic materials or giving them money to boost their morale.

The participants were asked how they would like their children to be supported in their education. One of the common suggestions was to teach the children how to teach others, which would improve their leadership and communication skills. Some also suggested visiting and observing their children's progress in school and designing activities specifically for them. Others recommended giving simple gifts like sweets, books, and pencils to appreciate their effort in learning.

Many participants emphasised the importance of providing basic scholastic materials such as books, pens, and mathematical sets. Some suggested buying the children uniforms to make them feel proud and more confident in school. Others recommended paying school fees up to a certain level depending on the one sponsoring the child.

The idea of providing scholastic materials and paying school fees was popular among the participants. Some suggested educating the child and supporting the young learner to continue their education. The participants also recommended giving guidance and counseling to the children, which would help them to have a clear direction in their studies.

Participants also suggested offering rewards and incentives to motivate the children. Some recommended giving money or edibles to make the child feel good about their efforts. Others recommended buying a cake or soda to celebrate their achievements. Overall, the participants showed a strong desire to support their children's education in any way they could.

Response from teachers

"We haven't collaborated with any other schools yet, but we do have a good system for bringing children to our school for learning. However, we are open to exploring exchange visits and sharing learning materials with other schools in the future."

"There are various types of collaboration that we can engage in to improve the learning experience of our children. We can have joint activities such as sharing meals, attending the same liturgy, and holding events that make them get used to each other. We can also have exchange visits, introduce lower primary school teachers to the young children and take children from the centre to visit the children in the primary school. Additionally, we can continuously assess the children's progress and share learning materials such as games, music, and drama competition. It's important to involve parents and mobilize them to enrol their children for ECD to ensure a smooth transition.

Ultimately, both the teachers and children from both the nursery and primary schools need to associate and interact with each other to promote effective learning. We follow the pre-primary syllabus and pupils are encouraged to come and share with others, teach each other games and songs, and learn how to read and write."

"There are several child-to-child activities that we encourage to promote socialization, creativity, and learning among our children. For play activities, we encourage playing together, sorting games, shading pictures, and teaching each other in doing household chores. Children can engage in free modelling, free drawing, use of charts on their own, and making toys. We also have modelling and playing, sand and water play, gardening that involves watering and caring for plants, and playing games, some lessons such as health habits and knowing the environment. In terms of learning activities, children can engage in story-telling, news, constructing using play materials such as bottle tops, and activities that involve singing, reading, writing, sharing, and counting. We provide play/learning materials and encourage football for boys, rolling wheels, and playing with dolls. Additionally, we have group work in class, grouping in Art and craft according to ability, and good readers helping the time takers. We also encourage role-playing, demonstration, and drama/role playing to enhance the children's communication skills and creativity."

"Parents can provide various forms of support to enhance their children's learning experience. They can contribute playing materials and learning materials such as crayons and other writing materials. They can also talk to their children, provide scholastic materials, and feed the children. Parents can come and talk to the children during assembly to provide encouragement and motivation. In addition, parents can teach their children weaving, stories, making dolls, riddles, and singing. They can also allow their fellow elder children to associate with children in the center, escort children to and from school, and convince their children to help each other. Parents can provide firewood, porridge, and time to assist in the children's learning process. Furthermore, parents can provide readers and materials to use at school. They can teach their children rhymes, riddles, and stories and help them to scribble to enhance their writing skills. Ultimately, parental support is crucial in promoting effective learning and development of their children."

"As a teacher or educator, there are various roles that I can play to promote effective learning and development of children. I can supervise the children as they do the activity, encourage their participation, teach them how to socialize in the centre, and provide them with the necessary materials to do the activities. I can also mobilize primary school children and identify primary children to support HLCS. Additionally, I can guide and counsel the children on the benefits of education through role-playing. Furthermore, I can teach sharing, playing together, and storytelling. To promote a conducive learning environment, I can welcome other children to the centre, encourage bright learners to help slow learners, and ask children with skills such as making brooms, pots, and weaving to teach other children who do not know. I can also encourage parents to avoid absenteeism of their children. Moreover, I can give materials, provide activities, and make materials available to the children. Using a child-to-child approach, I can create an activity and involve the children, demonstrate games to them, and illustrate how to write to enhance their learning experience."

"We can work together to ensure that children receive the necessary support for their education. This includes providing enough play and learning materials at the centre, mobilising parents to enrol their children in ECD centres and primary schools, sensitizing parents on the importance of education, and ensuring that children have access to learning materials. We can also work together to encourage child-to-child learning and to monitor children's attendance and progress in school. By supporting each other, we can create a better future for our children."

Conclusion: From the findings of the study, use of child-to-child pedagogy enables children to get ready for transition through engaging in useful play with other community members with whom they may go to the same school when they transit.

Recommendations: Stakeholders should embrace child to child pedagogy so as to enable children's transition readiness.

References

Can E, İnalhan G. Having a voice, having a choice: children's participation in educational space design. Design J. 2017;20(sup1): S3238–S3251.

Choy, M. Y., Karuppiah, N. (2016). Preparing kindergarten two children for primary one in Singapore: Perceptions and practices of parents, kindergarten teachers and primary schoolteachers. Early Child Development and Care, 186(3), 453–465.

Cummings, C. L. (2018). Cross-sectional design. *The SAGE Encyclopedia of Communication Research Methods. Thousand Oaks: SAGE Publications Inc. Retrieved*.

Davis, J.; Elliott, S. Editors' Review of Research in Early Childhood Education for Sustainability: International Perspectives and Provocations; Routledge: Abingdon-on-Thames, UK, 2014.

Durston.S, Lansdown G, Woznica C, Walker H (2020) Child to Child - "A Tiger by the Tail"

Ernst, J.; McAllister, K.; Siklander, P.; Storli, R. Contributions to Sustainability through Young Children's Nature Play: A Systematic Review. Sustainability 2021, 13, 7443. https://doi.org/10.3390/su13137443

Feder K. Exploring a child-centred design approach [PhD Thesis]. Denmark: Designskolen Kolding. Kolding; 2019.

Jarrett, R. L., & Coba-Rodriguez, S. (2019). "Whatever i can imagine, we did it": home-based parental involvement among low-income african-American mothers with preschoolers enrolled in head start. *Journal of Research in Childhood Education*, 33(4), 538-557.

Jimenez ME, Hudson SV, Lima D, Crabtree BF. Engaging a Community Leader to Enhance Preparation for In-Depth Interviews With Community Members. Qualitative Health Research. 2019;29(2):270-278. doi:10.1177/1049732318792848

Kinkead-Clark, Z. 2015. "Ready for big School': Making the Transition to Primary School – a Jamaican Perspective." International Journal of Early Years Education 23 (1): 67–82.

Lau, E. Y. H. (2014). Chinese parents' perceptions and practices of parental involvement during school transition. Early Child Development and Care, 184(3), 403-415.

Mariano, M., Santos-Junior, A., Lima, J. L., Perisinotto, J., Brandão, C., Surkan, P. J., ... & Caetano, S. C. (2019). Ready for school? A systematic review of school readiness and later achievement. *Global Journal of Human-Social Science Research*, 19(10), 56-64.

Mascareño, M., Doolaard, S., & Bosker, R. J. (2014). Profiles of Child Developmental Dimensions in Kindergarten and the Prediction of Achievement in the First and Second Grades of Primary School. Early Education and Development, 25(5), 703-722

O'Connor, A. 2018. Understanding Transitions in the Early Years: Supporting Change Through Attachment and Resilience. London: Routledge

OECD (2017), Starting Strong V: Transitions from Early Childhood Education and Care to Primary Education, Starting Strong, OECD Publishing, Paris, https://doi.org/10.1787/9789264276253-en.

Perry, B., Dockett, S., & Petriwskyj, A. (2014). Transitions to School-International Research, Policy and Practice. Dordrecht: Springer Netherlands.

Brooker, L., Blaise, M., & Edwards, S. (2014). *The Sage handbook of play and learning in early childhood*. Los Angeles, CA: Sage.10.4135/9781473907850

Wood, E., & Hedges, H. (2016). Curriculum in early childhood education: Critical questions about content, coherence, and control. *The Curriculum Journal*, *27*(3), 387–405. doi:10.1080/09585176.20 15.1129981

Szczurowski, K., and Smith, M. (2017). "Measuring presence: hypothetical quantitative framework," in 23rd International Conference on Virtual System & Multimedia (VSMM) (Dublin: IEEE), 1–8. doi: 10.1109/VSMM.2017.8346261

Shuey et al., (2019) Curriculum alignment and progression between early childhood and care and primary school: A brief review andcase studies", OECD Education Working Papers, No. 193, OECD Publishing, Paris, https://dx.doi.org/10.1787/d2821a65-en.

Thondhlana, G., & *Belluigi*, D. Z. (2014). Group work as 'terrains of learning' for students in South African higher education.

UNESCO (2014) United Nations Educational, Scientific, and Cultural Organization; Institute for Statistics. Available on: http://data.worldbank.org/topic/education

UNESCO (2014). Teaching and Learning: Achieving Quality for All. Paris: UNESCO.

Vasalou A, Ibrahim S, Clarke M, et al. On power and participation: reflections from design with developmentally diverse children. Int J Child-Comput Interact. 2021; 27:100241.

Xia, X., Hackett, R. K., & Webster, L. (2020). Chinese parental involvement and children's school readiness: The moderating role of parenting style. *Early Education and Development*, 31(2), 250-268.

Yamada-rice D. Including children in the design of the internet of toys. In: Mascheroni G, Holloway D, editors. The internet of toys. Studies in childhood and you

Mian Yee Choy & Nirmala Karuppiah (2016) Preparing Kindergarten Two children for Primary One in Singapore: perceptions and practices of parents, kindergarten teachers and primary schoolteachers, Early Child Development and Care, 186:3, 453-465, DOI: 10.1080/03004430.2015.1040989