

Levels of competence in the learning domains of kindergarten entrants

Leticia N. Aquino¹, Nordin Mamat², Mazlina Che Mustafa³

Philippine Normal University, North Luzon, Philippines¹,
Faculty of Human Development, Sultan Idris Education University,
Tanjong Malim, Perak, Malaysia^{2&3}

aquino.ln@pnu.edu.ph¹, nordin@fpm.upsi.edu.my², mazlina.cm@fpm.upsi.edu.my³

DOI: <https://doi.org/10.37134/saecj.vol8.no1.5.2019>

Received: 04 April 2019; Accepted: 15 June 2019; Published: 25 June 2019

ABSTRACT

Nursery is a preparation for kindergarten education. This paper deals with the gained competence of the nursery as they move up to the kindergarten program of the K-12 Curriculum in the Philippines. This study reveals that there are similarities and differences in the curriculum programs of nursery and kindergarten; that the nursery children performed very satisfactory in the learning domains on Social and Emotional; Self-Management; Perceptual and Motor; Early Math; Early Literacy; Receptive Language; and Expressive Language; and that sex is not related to the children's ability to learn and develop the skills needed of their age. This is a quantitative-descriptive method that investigated 568 nursery children from the 29 National Child Development Centers or Day-Care Centers in the Philippines. Using documentary analysis, Levene's test, and T-test, the study revealed the similarities and difference in the 2 programs and the levels of competence of the nursery children in the different domains of learning offered by the program showing their ability and the skills which help them move up to kindergarten. This study recommends that there should be a good transition of children from nursery to kindergarten and this can only be achieved if there is congruency of the curriculum offered by the two programs. The skills mastered by the children in nursery program should be enhanced more in the kindergarten program. Since kindergarten is an important developmental milestone for young children, it should offer children an experience to develop their skills, competence and potentials to the fullest and that a balance and holistic development of the children should be ensured.

Key Words: K-12 Program. Early Childhood Education. Preschool Curriculum. Kindergarten. Nursery. Learning Domains and competencies.

INTRODUCTION

Philippines is committed to the challenges imposed by EFA and Work Plan on Education 2016-2020, particularly on Sustainable Development Goal (SDG) target 4.2: "By 2030 ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education." (EFA Report Philippines, 2015).

The recent K-12 program is Philippines' response to the world's challenge on early childhood education. Through Republic Act 10157, known as the "Kindergarten Education Act", the program mandates the compulsory offering of Kindergarten education for all 5 year-old Filipino children. Since its implementation of mandatory kindergarten in 2011, Philippines had obtained great achievement in its aim to provide universal access to early childhood education in the country (K to 12 Toolkit, 2012). The transition to kindergarten is an important developmental milestone for young children. There is an assumption that children's access to ECE is best viewed as an investment for the future and economic driver for the well-being of the nation (Parker, Atchison &

Workman, 2016; Britto, Engle & Cuper, 2013; Sims, 2013; Heckman, 2011). It also makes learning outcomes more equitable, reduces poverty, and improves intergenerational social mobility (OECD, 2012). Sims and Waniganayake (2015) expressed that ECE provides a foundation upon which schooling builds in order to create employable, compliant and responsible citizens of the nation.

Quality ECE prepares children for school. Benefits include school readiness: promoting school achievement and lifelong well-being. Studies show that early childhood education reveals significant achievement differences both in reading and math, long-lasting academic impact on child development, and positive long-term academic effects for students (Cortázar, 2015). Preschool enrollees demonstrated higher scores on literacy, vocabulary, mathematics, or quantitative reasoning than non-attenders (Global Child Development Group, 2011). The more time children spend in preschool, the better their performance in primary school. Attending a high quality preschool lays the foundations for learning and helps children make a smooth transition to primary school (UNESCO, 2012). The lasting effect of early childhood education and care improves children's cognitive abilities and helps create a foundation for lifelong learning (Phillips & Meloy, 2012).

School readiness has several aspects: how prepared a child is to transition from the home or pre-primary environment to the formal primary school classroom, how well the family has been able to support the child's learning from birth and how ready schools are to help the child with a smooth transition.

The readiness of the child is perhaps the most important aspect of school readiness. Children should have basic behaviours and abilities, including pre-literacy and numeracy, the ability to follow directions, and the ability to focus on a particular learning activity for a given period. They also need a level of socio-emotional development which allows them to regulate their behaviour and emotions. It is the role of the pre-primary school, as well as the family, to ensure that children are ready to make the transition to school.

Due to a lack of coordinated planning across the primary and pre-primary levels, many programmes focus on readying children for primary school rather than providing and supporting a smooth transition between the two levels. Curricula and pedagogy should be jointly designed to eliminate disjuncture between the levels, with education planners cognizant of the definition of early childhood as lasting until age 8, meaning that early childhood pedagogy and curriculum approaches should be used in the first one to three years of primary school, depending on the start age for the primary level. While it may be accepted that more play-focused and learning throughdoing techniques are appropriate for pre-primary classrooms, when children enter the first grade classroom they are often expected immediately to sit at a desk and behave in a more constrained and formal manner (UNESCO, 2014c).

Before the introduction of K-12 curriculum in the country, kindergarten was under the supervision of DSWD through the jurisdiction of Local Government Units (LGUs). Nursery was also being offered both in public and private schools. Since Kindergarten was made mandatory in the enhanced basic education, policies and curriculum were put in place to offer quality early education among children. The curriculum spelled out the learning domains children must develop in this stage of learning. Likewise, learning domains in the nursery schooling are in place to obtain smooth transition from nursery to kindergarten.

The purpose of this study was to examine the level of competence of the kindergarten entrants in selected National Child Development Centers in Isabela for SY 2016-2017. It sought to answer the following questions: 1) What point of similarity and difference is found in the curricular programs of nursery and kindergarten? 2) What is the level of competence of the kindergarten entrants in terms of the following learning domains: A. Social and Emotional, B. Self-Management, C. Perceptual and Motor, D. Early Mathematics, E. Early Literacy, F. Receptive Language, and G. Expressive Language; and 3) Is there a significant difference on the domains of learning when grouped according to sex of the respondents?

METHODOLOGY

The study employed Quantitative-Descriptive type of research. It used documentary analysis to answer question number 1 on the similarity and difference of nursery and kindergarten programs. Likewise, it also utilized questionnaire, in a form of rating scale, to find out how competent are the children in the domains of learning namely Social and Emotional; Self-Management; Perceptual and Motor; Early Math; Early Literacy; Receptive Language; and Expressive Language.

The respondents consist of 568 nursery children who were rated by 29 teachers. The children are aged 4 from 29 National Child Development Centers in the province of Isabela, Philippines who were enrolled in SY 2016-2017. The males consist of 51% while female respondents consist of 49%.

The instrument used was Early Learning Observation & Rating Scale (ELORS) to measure the levels of competence of the kindergarten entrants in terms of the different domains of learning namely: Social and Emotional; Self-Management; Perceptual and Motor; Early Math; Early Literacy; Receptive Language; and Expressive Language. This instrument is owned by the National Center for Learning Disabilities with copyright 1999-2019 and can be used by researchers for free. The instrument consists of 1) The Social and Emotional domain includes social interactions, friendships and play, turn-taking, reciprocal play, self-expression and emotions, interpreting emotions of others, cooperation, and participating in group activities; 2) The Self-Management domain includes self-regulation skills, delayed gratification, impulsivity, understanding consequences of actions, self-help skills, remembering routines, seeking help when appropriate, attentive behaviors, work habits, and response to learning situations; 3) Perceptual and Motor Domain includes fine and gross motor skills, coordination, integrating motor skills and vision, sensory integration, visual memory, and tactile defensiveness; 4) The Early Math domain includes quantity comparison, one-to-one correspondence, concept of attribute, recognition of simple patterns and sequences, spatial orientation, concept of time, counting, concept of number, number recognition, and number naming; 5) The Early Literacy domain includes emergent literacy skills related to awareness of letter sounds, syllables and rhymes, alphabet knowledge, interest in and knowledge of books and print, pre-writing skills, decoding, and word recognition; 6) The Receptive Language domain includes skills in hearing and understanding sounds, listening comprehension, recognizing and discriminating environmental sounds, completing sound patterns, shifting auditory attention, and auditory sequencing tasks; and 7) The Expressive Language domain includes skills in talking and conversation including vocabulary, syntax, pragmatics, articulation, verbal memory, word retrieval, and spoken communication.

The 29 nursery teachers rated the children based on their performance in the class as observed by the teacher in his/her daily and regular meetings and teaching sessions with the children and as manifested by the children themselves using a Likert scale of 1-4, 1 being “outstanding” and 4 being “poor”. Likewise, documentary analysis on the curricular programs of nursery and kindergarten curriculum was employed like the Philippine Early Childhood Care and Development Checklist and kindergarten progress report to identify and countercheck the competencies and skills expected of the children to master and develop. Statistical Tests were used in the study such as Levene’s test, Standard Deviation, T-test and ANOVA.

Over a 2 month period in 2016, data were gathered through the actual conduct of the instrument to 14 National Child Development Centers in Isabela. The researcher asked permission for its conduct through a formal letter addressed to the Barangay Captains of the respective municipalities and the nursery teachers concerned.

Table 1 below presents the distribution of the 568 nursery respondents from the National Child Development Centers in the different municipalities in Isabela.

Table 1. Respondents of the study from the selected municipalities of Isabela, Philippines

Municipalities	Number of Day Care Centers and Teachers	Number of Nursery Children
Alicia, Isabela	5	95
Angadanan, Isabela	3	62
Aurora, Isabela	2	39
Cauayan City	2	40
Echague, Isabela	2	40
Gamu, Isabela	2	40
Iligan City	3	59
Naguilian, Isabela	2	40
Roxas, Isabela	1	20
San Agustin, Isabela	1	20
San Isidro, Isabela	2	33
San Mateo, Isabela	1	20
Santiago City	2	40
San Guillermo, Isabela	1	20
Total 14	29	568

RESULTS AND DISCUSSION

This study examines the level of competence in the learning domains of the kindergarten entrants in selected National Child Development Centers in Isabela for SY 2016-2017. Specifically this study sought to answer the following questions:

1. What point of similarity and difference is found in the curricular programs of nursery and kindergarten?
2. What is the level of competence of the kindergarten entrants in terms of the following learning domains?
 - A. Social and Emotional
 - B. Self-Management
 - C. Perceptual and Motor
 - D. Early Mathematics
 - E. Early Literacy
 - F. Receptive Language
 - G. Expressive Language

3. Is there a significant difference on the domains of learning when grouped according to sex of the respondents?

The curricular programs of nursery and kindergarten

Results of the study revealed the following learning domains offered in the nursery program of the National Child Development Centers nationwide. They are as follows: 1) Gross motor (Malaking kalamnan); 2) Fine motor (Pinong Kalamnan); 3) Self-help (Paggabay sa Sarili); 4) Dressing domain; 5) Toilet training domain; 6) Receptive language domain (Kakayahan sa Pandinig); 7) Expressive language domain (Kakayahan sa Pananalita); 8) Cognitive domain (Kakayahan ng Pag-iisip); and 9) Socio-emotional domain (Pansarili at Panlipunang Damdamin).

On the other hand, the following are the learning domains for kindergarten in the country under the K-12 curriculum: 1) Physical Health and Motor Development; 2) Aesthetic Development (Sining); 3) Mathematics; 4) Physical and Natural Environment (Pisikal at Likas na kapaligiran); 5) Values Development (Kagandahang-asal); 6) Socio-emotional Development (Sosyo-emosyunal at kakayahang makipamuhay); and 7) Language, Literacy and Communication.

Table 2. Comparison of the Learning Domains in Nursery and Kindergarten Curriculum

Nursery Curriculum	Kindergarten Curriculum
Gross (Malaking Kalamnan) and Fine Motor (Pinong kalamnan)	Physical Health and Motor Development
Self-help (paggabay sa sarili)	Aesthetic Development (Sining)
Dressing domain	
Toilet training domain	
Bathing domain	
Receptive language domain (kakayahan sa pandinig)	Mathematics
Expressive language domain (kakayahan sa pananalita)	Physical and Natural Environment (Pisikal at Likas na kapaligiran)
Cognitive domain (kakayahan ng pag-iisip)	Values Development (Kagandahang-asal)
Socio-emotional domain (pansarili at panlipunang damdamin)	Socio-emotional Development (Sosyo-emosyunal at kakayahang makipamuhay)
	Language, Literacy and Communication
Total = 6 domains	Total = 7 domains

It was noted therefore that the 2 programs: nursery and kindergarten have similarity on learning domains being developed among children except for 1) values development and 2) aesthetic development. The domains are present in the domains of the kinder program but not in the nursery program. These two domains are just integrated in the other domains in the nursery, but in the kindergarten curriculum, values and aesthetic were given emphasis in the curriculum.

Coordination of preschool and kindergarten curriculum has been identified as another vehicle by which to improve the continuity between settings, thus supporting children's transition (Goldstein, Warde, & Peluso, 2013). The discussions that arose around curriculum in both settings were eye-opening. Kindergarten teachers found that many of the early childhood programs did, in fact, have a well-defined curriculum that linked to the K-12 standards. The early childhood teachers found that kindergarten teachers were, for the most part, more concerned with children's social and behavioral development at the start of kindergarten than with academic preparation (Love et al.1992)

Learning domains of the kindergarten entrants

The following learning domains of the nursery children were rated by their teachers in terms of A) Perceptual and Motor, B) Self-Management, C) Social and Emotional, D) Early Mathematics, E) Early Literacy, F) Receptive Language, and G) Expressive Language

As regards the level of competence of the learning domains of the nursery children, the following tables are hereby presented for the discussion.

Table 3. Summary of the Learning Levels of the Kindergarten Entrants in All Domains

Domains of Learning	Mean	Standard Deviation (SD)
Perceptual and Motor	2.06	0.83 - Very Satisfactory
Self-Management	2.21	0.70 - Very Satisfactory
Social and Emotional	2.05	0.81 - Very Satisfactory
Early Math	2.12	0.83 - Very Satisfactory
Early Literacy	2.20	0.81 - Very Satisfactory
Receptive Language	2.28	0.71 - Very Satisfactory
Expressive Language	2.27	0.73 - Very Satisfactory
TOTAL	2.17	0.68 - Very satisfactory

Table 3 shows the different competencies learned by the nursery. They are all rated as ‘very satisfactory’ which are ranked according to highest level of competence learned and developed by the children: 1) Receptive Language; 2) Expressive Language; 3) Self Management; 4) Early Literacy; 5) Early Math; 6) Perceptual and Motor; and 7) Social and Emotional. Apparently, the children have obtained a highest level of competence in the Receptive Language domain which includes skills in hearing and understanding sounds, listening comprehension, recognizing and discriminating environmental sounds, completing sound patterns, shifting auditory attention, and auditory sequencing tasks. It was followed by the Expressive Language domain which includes skills in talking and conversation including vocabulary, syntax, pragmatics, articulation, verbal memory, word retrieval, and spoken communication. On the other hand, children have obtained very satisfactory but in the lowest level in the domains of Social and Emotional. Meaning, the nursery have least developed yet their social interactions, friendships and play, turn-taking, reciprocal play, self-expression and emotions, interpreting emotions of others, cooperation, and participating in group activities. Likewise, they also least developed, among the learning domains, skills on Perceptual and Motor which includes fine and gross motor skills, coordination, integrating motor skills and vision, sensory integration, visual memory, and tactile defensiveness.

Sex is not a factor in learning the domains

Table 4 presents the domains of learning when children are grouped according to sex.

Table 4. Domains of Learning of Kindergarten entrants when grouped according to Sex

Independent Samples Test											
		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	Df	Sig. (2tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
Perceptual and Motor	Equal variances assumed	.564	.453	1.784	566	.075	.12480	.06993	-.01257	.26216	
Self-Management	Equal variances assumed	1.746	.187	1.661	566	.097	.09692	.05835	-.01769	.21154	
Social and Emotional	Equal variances assumed	.173	.678	1.719	566	.086	.11603	.06749	-.01654	.24859	
Early Math	Equal variances assumed	.098	.754	1.227	566	.220	.08580	.06991	-.05151	.22310	
Early Literacy	Equal variances assumed	.420	.517	.748	566	.455	.05087	.06805	-.08279	.18453	
Receptive Language	Equal variances assumed	3.389	.066	1.665	566	.096	.09920	.05958	-.01782	.21622	
Expressive Language	Equal variances assumed	.000	.988	.642	566	.521	.03912	.06092	-.08053	.15877	
Domains of Learning	Equal variances assumed	.161	.688	1.539	566	.124	.08753	.05687	-.02418	.19924	

The data presented by the table reveal that there is no significant difference on the domains of learning when grouped according to sex of the respondents.

CONCLUSIONS AND RECOMMENDATIONS

The study revealed that the nursery children are ready to enter the kindergarten program since they acquired very satisfactory competence in the 7 learning domains. Moreover, the curriculum being implemented in the nursery centers is similar in terms of the domains included in the kindergarten curriculum. Indeed, children, in order to succeed in the kindergarten phase should master or develop the basic learning domains in the nursery level. This study shed light into the kind of curriculum children need in order to enhance the skills required in their early years of education. Curriculum has a vital role to play to achieve better transition from nursery to kindergarten.

A future study can be conducted delving deeper on the actual teaching-learning process being implemented by the teacher in class. It is equally and even more important to know the strategies employed by the teachers such as the conduct of play and Developmentally Appropriate Practices (DAP) to achieve an enjoyable, productive and meaningful learning among children. Likewise, a study on assessing the materials, facilities, parental-involvement and supervision may also be conducted to achieve quality service on early childhood education programs such as those in the National Child Development Centers and kindergartens.

REFERENCES

- Britto, P.R., Engle, P.L., & Cuper, C.M. (2013). Handbook of early childhood development research and its impact on global policy. London: Oxford University Press. <http://dx.doi.org/10.1093/acprof:oso/9780199922994.001.0001>.
- Cortázar, A. (2015). Long-term effects of public early childhood education on academic achievement in Chile. *Early Childhood Research Quarterly*, 32 (2015), 13-22. <http://www.sciencedirect.com>.
- Curriculum Development Division (2009). DepEd. Standards and Competencies for Five Year Filipino Children. Philippines: Department of Education.
- Early Childhood Care and Development (ECCD) Council. (2011). National Early Learning Framework. Philippines: ECCD.
- Early Childhood Care and Development (ECCD) Council. (2011). Early Learning and Development Standards, Philippines: ECCD, Kostelnik.
- Education for All (EFA) Global Education Monitoring Report. (2015). Education for all 2000-2015: Achievements and challenges. UNESCO Publishing 7, Place de Fontenoy, 75352 Paris 07 SP, France. ISBN 978-92-3100085-0.
- Education for All (EFA) National Review Report: Philippines. (2015). UNESCO. World Education Forum. efa2015reviews@unesco.org
- Early Learning Observation and Rating Scale (ELORS). <http://www.getreadytoread.org/news/101-elors-news>
- Global Child Development Group (2011). Child development series: Executive summary. The Lancet. Kingston: Global Child Development Group www.globalchilddevelopment.org
- Goldstein, P, Beverly Warde, & Paul Peluso. (2013) Children's Readiness Gains in Publically Funded, Community-Based Pre-kindergarten Programs for 4 Year Olds and Preschool for 3 Year Olds
- Heckman, J.J. (2011). The economics of inequality: The value of early childhood education. *American Educator*, 35(1), 31-35, 47.
- K to 12 Toolkit. (2012). SEAMEO-INNOTECH. Resource guide for teacher educators, school administrators and teachers

Love, J. M., Logue, M. E., Trudeau, J. V., & Thayer, K. (1992). *Transitions to kindergarten in American schools*. Portsmouth, NH: U.S. Department of Education.

Organization for Economic Cooperation and Development OECD. (2012). *Starting strong III: A quality toolbox for early childhood education and care*. OECD Publishing. Retrieved <http://www.oecd.org/edu/school/qualitytoolboxforearlychildhoodeducationandcare.htm#2> [startingstrong](#)

Parker, E., Atchison, B., & Workman, E. (2016). State pre-k funding for 2015-16 fiscal year: National trends in state preschool funding. Education Commission of the States 50-State Review. Retrieved from http://www.ecs.org/ec-content/uploads/01252016_Prek-K_Funding_report4.pdf.

Phillips, D. A., & Meloy, M. E. (2012). High-quality school-based pre-k can boost early learning for children with special needs. *Exceptional Children*, 78(4), 471-490.

Sims, M. & Waniganayake, M. (2015). The performance of compliance in early childhood: Neoliberalism and nice ladies. *Global Studies in Early Childhood*, 5(3), 333-345. <https://doi.org/10.1177/2043610615597154>.

UNESCO. (2012). *Expanding equitable early childhood care and education is an urgent need*. EFA GMR Policy Paper, Paris.

UNESCO 2014c. *EFA Global Monitoring Report 2013/14: Teaching and Learning*. Paris, UNESCO.