

Assessment Approaches of Preschool Teachers: Input for an Enriched Module Framework in Kindergarten Education

Jelyn D. Sarmiento (MAEd)¹ & Olivia G. Dimalanta (EdD)²

¹DepEd-Northville 15 Integrated School, Angeles City, Philippines,

²College of Education, Pampanga State Agricultural University, Magalang,
Pampanga, Philippines

*jhelynsarmiento12@gmail.com*¹, *oliviadimalanta_pac@yahoo.com*²

Asia Pacific Journal of
Multidisciplinary
Research

Vol. 6 No.2, 92-100

May 2018

P-ISSN 2350-7756

E-ISSN 2350-8442

www.apjmr.com

Date Received: November 15, 2017; Date Revised: February 9, 2018

Abstract – *This study aimed to determine the assessment approaches used by preschool teachers which were used as inputs for an enriched module framework in kindergarten education. The respondents of the study were 26 preschool teachers in 13 public schools in the Division of City Schools Angeles, Pampanga, Philippines during the School Year 2015-2016. The study used a descriptive qualitative research design to achieve the objectives of the study. The main instruments used were the self-made interview guide which was validated by two experts in Kindergarten Education and the report cards or consolidated reports of the cards of respondents' pupils. Raw scores were averaged in order to interpret their effectiveness. The frequency was computed in order to identify the number of respondents who answered the same. Phases of Thematic Analysis by Braun & Clarke (2006) were used to analyze the gathered data from the responses. Findings of the study show that majority of the respondents were young aged 23-27 years old; were female; new in teaching mostly 0-5 years; with masteral degree units and with Teacher I academic rank. The respondents used different assessment approaches with variety of assessment activities in teaching. Based on the report cards of the respondents' pupils, results show that the assessment approaches used were all effective. Respondents also comply with the curriculum guide given by the Department of Education but based on the learners' ability and nature. The module framework can be of use if it will become a module in Kindergarten Education.*

Keywords – *Assessment approaches, Kindergarten education, Module framework, Preschool teachers.*

INTRODUCTION

In practice in Kindergarten Education, preschool teachers face the challenge of finding assessment approaches and strategies that serve multiple purposes across curricular orientations [1]. Early childhood researchers have provided a conceptual basis for understanding assessment approaches and practices by defining core tenets for early years or kindergarten assessment [2].

In the Philippines, Kindergarten has a curriculum guide given to all teachers as a guide in teaching their lessons. Included in the curriculum guide were different assessment approaches and activities that could be used in teaching. With the variety of assessment approaches present in the curriculum guide, the teacher is the one who has the freedom to choose or add the assessment approach and activity to use which will be based on the developmental stage of the child. However, the effectiveness of the assessment used without any proper guide will not be an assurance in measuring the development of the child. As mentioned

by Roach et.al, "Assessment has focused on upper years learning, mainly because the accountability and standard-based movement in education has only begun to impact kindergarten learning" (p.25) [3].

In terms of assessment approaches in Kindergarten Education, Pyle & Deluca have drawn three profile descriptions based on each teacher's curricular stance and approach to assessment, namely: developmental assessment approach, blended assessment approach, and assessment for learning approach [4].

According to The Kindergarten Assessment Process Planning Report of the SRI International (2008) presented a possible implementation plan for developing and conducting a pilot of the kindergarten assessment process and supporting the use of the process in a voluntary use phase. The implementation plan and timeline depended on a variety of factors, including the success of gathering sufficient input from representatives across the state, the selected assessment purpose(s), and available funding. The recommended implementation plan included two phases aligned with

two biennial legislative sessions. The first phase, *Planning and Pilot Phase (2009 – 2011 Biennial Legislative Session)*, was used for additional planning and stakeholder decision making and for conducting a pilot. The second phase, *Voluntary Use Phase (July 2011 – June 2013 Biennial Legislative Session)*, will be used to provide support to districts that chose to implement the kindergarten assessment process [5].

“Kindergarten Education refers to one year of preparatory education for children at least five years old as a prerequisite for Grade I” [6]. “The Philippines recognizes kindergarten education as vital to the academic and technical development of the Filipino child for it is the period when the young mind’s absorptive capacity for learning is at its sharpest. It is also the policy of the State to make education learner-oriented and responsive to the needs, cognitive and cultural capacities, the circumstances and diversity of learners, schools and communities through the appropriate languages of teaching and learning” [6].

In this study, a module framework was used as an outline in making a module in kindergarten which consists of the rationale, table of contents, the different assessment approaches, and assessment tools and materials used in kindergarten education.

This study can be of significant to preschool teachers to discover the different assessment approaches which were appropriate and effective to every kindergarten pupil.

OBJECTIVES OF THE STUDY

The researcher has chosen this study to investigate what assessment approaches are appropriate to the different developmental stages of the child and to contribute to the development of kindergarten education by helping new teachers in identifying different assessment approaches that they can use in teaching their kindergarten pupils. Assessment approaches used by preschool teachers which served as an input for the development of an enriched module framework in kindergarten education.

The objective of the study seeks to identify the demographic profile of the preschool teachers in terms of age, sex, highest educational attainment, years in teaching and academic rank; determine the assessment approaches used by preschool teachers based on the activities conducted by the respondents; describe the effectiveness of their assessment approaches; describe the compliance of the respondents with the curriculum guide as prescribed by the Department of Education;

develop an enriched module framework based on the findings of the study.

MATERIALS AND METHODS

This study employed the Descriptive Qualitative Research Method which is described as a “comprehensive summarization, in everyday terms, of specific events experienced by individuals or groups of individuals” [7]. This method was used because it described the assessment approaches used by preschool teachers. The method suits the study because the data gathered from the respondents were analyzed thematically.

Respondents of the Study

The respondents of the study were 26 preschool teachers in 13 selected public schools in the City Schools Division of Angeles. The schools were chosen using Stratified Technique while the teachers were chosen using Random Sampling. The respondents were all preschool teachers and were teaching in Public School. The teachers were from the 4 District of the City Schools Division of Angeles.

Research Instrument and Data Collection

A self-made interview guide was utilized in gathering needed data. Prior to its use, it was validated by two experts in the field of Kindergarten Education: the Education Program Supervisor and a seasoned teacher in kindergarten.

Approval was first sought from the Superintendent of the City Schools Division of Angeles to conduct the study. An in-depth interview was done using the interview guide. Copies of the report cards or consolidated reports of the cards of the pupils of the respondents were requested to measure effectiveness. After all the data were collected, all the answers were transcribed. The data were extracted to get the codes of the data and the frequency of the responses in each code varied. After getting the codes, these were categorized in order to get the themes of the data and also counted the frequency of the respondents in each theme. And then, the themes were categorized in their respective assessment approach. After it, the researcher was able to analyze all the data and come up with the enriched module framework in kindergarten education. In compliance to the code of ethics, ethical considerations were properly observed in this particular research undertaking. In this particular research undertaking, the following ethical considerations were strictly observed: (1) Humbly seek permission to conduct the study to the Schools Division Superintendent, (2) Seek informed consent from the teacher-respondents, (3) Explanation

of the main purpose of the study, (4) Explain to the respondents that their participation is voluntary and no monetary cooperation, (5) Their identity and results were treated with utmost respect and utmost confidentiality, and (6) They can withdraw anytime they wish without feeling any remorse.

The researcher used frequency and percentage to determine the profile of the respondents while, Braun and Clarke’s Phases of Thematic Analysis were observed to analyzed the gathered data [8]. As such, the following steps were observed: (1) familiarizing oneself with the data, (2) generating codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report.

RESULTS AND DISCUSSION

Table 1. Profile of the teacher respondents

	Profile	Frequency	Percentage
Age:	23-27	10	38.5
	28-32	8	30.8
	33-37	1	3.8
	38-42	4	15.4
	43-47	1	3.8
	48-52	1	3.8
	53-57	1	3.8
Sex	Male	3	11.5
	Female	23	88.5
Educational Attainment			
	BEEd Graduate	4	15.4
	BSEd Graduate	6	23.1
	With Masteral Units	13	50.0
	With Doctoral Units	2	7.7
	Masteral Graduate	1	3.8
Number of years in teaching			
	0-5	19	73.1
	6-10	2	7.7
	11-15	2	7.7
	16-20	1	3.8
	21-25	1	3.8
	26-30	1	3.8
Academic Rank			
	Teacher I	20	76.9
	Teacher II	2	7.7
	Teacher III	4	15.4
		N=26	100.00

Table 1 presents the profile of the respondents, frequency and percentage distribution of the teacher respondents. In terms of age, 10 or 38.5% of the respondents fell under the range of 23-27 years old,

which was the highest percentage within the age bracket.

Data about the sex of the respondents show that there were 23 or 88.5 % female respondents while three or 11.5% were male respondents. The result implies that Kindergarten teachers are mostly female because they can be a mother figure for their pupils.

Data on highest educational attainment of the respondents reveal that thirteen or 50% of the respondents have master’s degree units. The results indicate that respondents were pursuing their master’s degrees while some already finished their degrees and others were pursuing their doctoral degrees. This can be a manifestation that respondents were pursuing their graduate studies to grow professionally and to acquire knowledge that can be applied in teaching.

Years in teaching of the respondents showed nineteen or 73.1% have spent 0-5 years in teaching. This implies that majority of the respondents teaching in Kindergarten were new teachers.

Data about the academic rank of the respondents reveal that twenty or 76.9% were Teacher I while two or 7.7% were Teacher II. This implies that respondents were still in the process of attaining their qualifications to be promoted.

Assessment approaches based on the assessment activities conducted by the respondents were categorized from the study of Pyle & DeLuca [4]. These categories were Developmental Assessment Approach, Blended Assessment Approach and Assessment for Learning Approach.

Developmental Assessment Approach

Table 2 shows the themes on developmental assessment approach. The results show that the most used theme was **independence** with 12 respondents which means that 14 other respondents chose to use another activity in the developmental assessment approach while the least used theme was giving simple instructions and following series of instructions which was used by only one respondent. For example, Respondent No. 23 stated that:

“More on independent, I’m observing if they can do things on their own. For example, if they can open their snack or if they can tie their shoelaces.”

The results imply that different activities are done by teachers in order to assess the cognitive and social developmental skills of the child and that they focus on the readiness of the child. This supports the idea of Pyle & DeLuca that “developmental assessment approach is

prioritizing cognitive and social developmental stages. Also it is constructivist and child-centered approaches which is based on the readiness of the child” [4].

Table 2. Themes on Developmental Assessment Approach

Code	Theme	Frequency
Doing things on their own, self-feeding, eating by themselves, cleaning themselves, opening own snacks, preparing own food and being independent	Independence	12
Numeracy, Wh Questions, identification, classification, and recognition	Identification, Classification & Recognition	10
Actual observation and taking down notes	Observation of what they can do	10
Adjusting in their environment, socializing with others and observation	Socialization with Observation	8
Playing games, participating in educational field trips and indoor and outdoor activities	Indoor and Outdoor Activities for Social-Emotional	8
Using Blackboard assessment, board games and drills	Board Games Assessment	7
Role playing, joining in dramatic play and individual and group activities	Individual and Group Activities for Self-Help	7
Interviewing, storytelling, sharing with things they have and expressing themselves	Sharing and Expressing Self and Experiences	5
Dramatization and role playing	Dramatization	5
Buttoning shirts, lacing their shoelaces, washing hands, and cleaning their tables	Real-Life Situations	4
Matching letters and numbers	Matching Type Assessment	4
Giving simple instructions, and following series of instructions	Following and Giving Instructions for Self-Help	1

Blended Assessment Approach

Table 3 shows the themes on blended assessment approach. Results show that the most used theme in blended assessment approach was **pencil and paper assessment** with 13 respondents which means that 13 other respondents were using other activities for this particular approach. The least used theme was different activities used by only three respondents. For example, Respondent No. 12 stated that:

“For cognitive we do the assessment, through paper and pencil assessment, aside from the blackboard assessment.”

The results imply that respondents have variety of activities used for assessing their pupils’ social and academic development. Respondents also have the freedom to achieve or teach the expected curriculum given to them. Respondents teach based on different levels or abilities of the child. This supports the definition of Pyle & DeLuca about blended assessment approach that there should be “equal emphasis on social and academic development of a child”. And also there is “pedagogical freedom to teach mandated curricular expectations, and teaching should be based on students’ strengths and needs” [4].

Table 3 Themes on Blended Assessment Approach

Code	Theme	Frequency
Worksheets, activity sheets, seat works, paper works, test papers and paper and pencil assessment	Pencil and Paper Assessment	13
Group work, cooperative learning, peer group activities, group activities and free play	Individual and Group Activities for Social-Emotional	12
Clay molding, block play, shoe lacing, manipulative works, puzzles, putting/buttoning clothes and snapping	Manipulative Activities	10
Use real objects, use of flashcards, charts, video clips and counters	Use of Real Objects	6
Rhymes, poems and literacy activities	Literacy Assessment	4
Different activities	Different Activities	3

Assessment for Learning Approach

Results show that the most used theme were **physical fitness activities** and **writing activities** with 20 respondents which means that only 6 respondents are using other activities in the assessment for learning approach. The least used theme was asking questions and answering questions with only three teachers giving this response. For example, Respondent No. 12 mentioned that:

“Gross motor, are physical fitness activities, usually it is during Friday. We have games, free play, and group play activities.”

The results imply that teachers used different activities in assessing their pupils which prioritizes the achievement of the curriculum standards. Activities are also standardized and follow the curriculum daily. This supports the meaning of assessment for learning

approach of Pyle & DeLuca that it refers to “prioritizing achievement of curriculum standards”. It also “integrates developmental approaches in timing and sequencing of academic standards” [4].

Table 4. Themes on Assessment for Learning Approach

Code	Theme	Frequency
Singing, dancing, nursery rhymes with action, exercise, manipulatives, physical fitness activities, walking, hopping, running, standing in one leg and body movements	Physical Fitness Activities	20
Activity sheets, writing, tracing, coloring, board activities and worksheets	Writing Activities	20
Indoor music, real objects, playing games, indoor activities, outdoor activities, group games, board games, free play, ball catching, and throwing ball	Indoor and Outdoor Activities for Gross Motor	16
Storytelling, retelling a story, and poems	Storytelling and Poems	15
Answering questions, oral recitation, question and answer, home recitation and asking questions	Question and Answer for Expressive Language	12
Arts and crafts, figure painting, coloring, mosaic and drawing	Art Activities	12
Cutting, paper folding, paper tearing and pasting	Cutting and Pasting, Tearing and Folding Activities	11
Observation, following directions, pointing body parts and familiar things	Giving and Following Directions with Observation for Receptive Language	10
Role playing, singing, dancing, music, poem reciting, and nursery rhymes	Literacy and Literary Activities	10
Dramatization and role playing	Dramatization for Expressive Language	5
Watching films, storytelling and story listening	Storytelling and Listening	5
Telling own experiences, telling something about the picture, show and tell, and character profile	Expressing Ideas, Thoughts and Experiences	4
Asking questions and answering questions	Question and Answer for Receptive Language	3

Table 5 shows the effectiveness of the assessment approach used by the respondents. The data were gathered from the report cards of the pupils of the respondents. The raw scores of the pupils’ report card were averaged. The mean of the scores achieved the 50% or more than 50% of the perfect scores. It only shows that the assessment approaches used by the respondents in all of the categories in the report card were all effective.

In the Kindergarten Assessment Planning Process Report of SRI International, it stated in their report the characteristic of a kindergarten assessment that “it may have a single or multiple purposes and audiences; it may focus on one or several areas of children’s skills and development; it may include a variety of methods to gather information about children’s abilities; it may use information collected from a variety of sources, including kindergarten teachers, caregivers, parents, and assessors; and results may be shared with a variety of stakeholders in a variety of formats” [5]. This statement was in accordance with the results of the study the assessment approaches have categories and that they are effectively used in schools.

Table 5. Effectiveness of assessment approach used

Category	Mean	Description
Cognitive Domain	19.32	Effective
Self-Help Domain	24.7	Effective
Gross Motor Domain	12.54	Effective
Fine Motor Domain	10.11	Effective
Receptive Language Domain	4.6	Effective
Expressive Language Domain	7.22	Effective
Social-Emotional Domain	21.18	Effective

Legend:
Cognitive: 0-10(Not Effective), 11-21(Effective)
Self-help: 0-13(Not Effective), 14-27(Effective)
Gross Motor: 0-7(Not Effective), 8-13(Effective)
Fine Motor: 0-5(Not Effective), 6-11(Effective)
Receptive Language: 0-2(Not Effective), 3-5(Effective)
Expressive Language: 0-4(Not Effective), 5-8(Effective)
Social-Emotional: 0-12(Not Effective), 13-24(Effective)

Table 6 shows the themes on the compliance of the respondents with the curriculum guide given by the Department of Education. The respondents answered either “yes” or “no” and explained their reason for compliance or non-compliance with the curriculum guide. The theme which got the greater number of respondents who answered the question if they followed the curriculum guide given by the Department

of Education was “Yes, because it is suited to the age of the learners.” For example, Respondent No. 9 stated:

“Yes ma’am, why because they can, it depends upon the needs of the learners. And the curriculum is suited to the five year old child and their activities are suited for them.”

The results imply that the respondents comply with the curriculum guide given by the Department of Education. But sometimes they tend to add or choose the assessment approach that they will use based on the level of understanding, needs and abilities of learners.

This contrasts the idea of Gullo that “some teachers “teach to the test”- meaning that they focus only on those areas in which children will be tested. Others rely on drill and practices to ensure that children’s performance on tests meet predetermined standards, whether appropriate or not. However, in this study, the respondents focus on the level of understanding, needs and abilities of learners and not on only on areas that will be assessed or tested” [2].

Table 6. Responses on the compliance of the respondents with the curriculum guide given by the Department of Education

Response	Rank
Yes, because, it is suited for the age of learners.	1
Yes, because, it has appropriate variety of activities.	2.5
Yes, but there are difficult activities.	2.5
Yes, because, it is needed and necessary.	4
Yes, but it depends about the needs and differences of learners.	5.5
Yes, but sometimes I add more.	5.5
It depends upon the nature of learners.	7
Maybe because of enough materials.	8

Proposed Enriched Module Framework in Kindergarten Education

Based on the results of the study, an enriched module framework was prepared by the researcher and is hereby proposed for trial utilization. The rationale and contents of said framework are presented as follows.

Rationale

This module framework aims to: recognize different themes and activities that are under the three assessment approaches based on the results of the study; create a module framework as a basis for a future module in Kindergarten Education; and value and inculcate in mind the themes and activities that are suitable for learners.

Contents

- Developmental Assessment Approach
- Activities under Developmental Assessment Approach
- Blended Assessment Approach
- Activities under Blended Assessment Approach
- Assessment for Learning Approach
- Activities under Assessment for Learning Approach

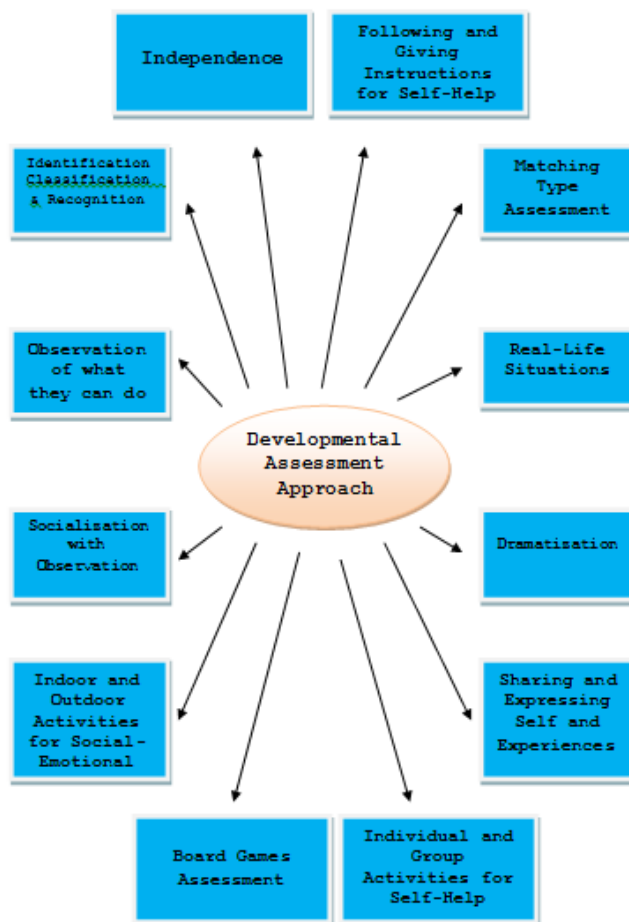


Figure 1. Developmental Assessment Approach
This figure shows the assessment approaches of the teachers which were under the Developmental Assessment Approach category. These includes:

Independence, Identification, Classification, and Recognition, Observation of what they can do, Socialization with Observation, Indoor and Outdoor Activities for Social-Emotional, Board Games Assessment, Individual and Group Activities for Self-Help, Sharing and Expressing Self and Experience, Dramatization, Real-Life Experience, Matching Type Assessment and Following and Giving Instructions for Self-Help.

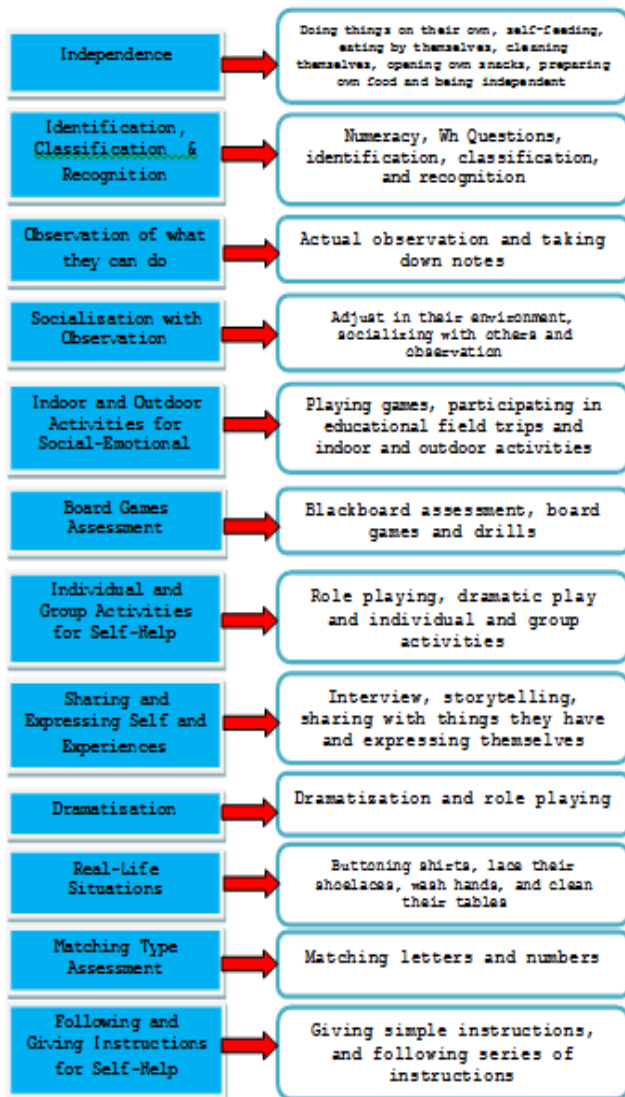


Figure 2. Activities under Developmental Assessment Approach

This figure shows the different activities under each assessment approaches in Developmental Assessment Approach. Each assessment approaches contains different activities that the teachers used in order to assess their kinder pupils.

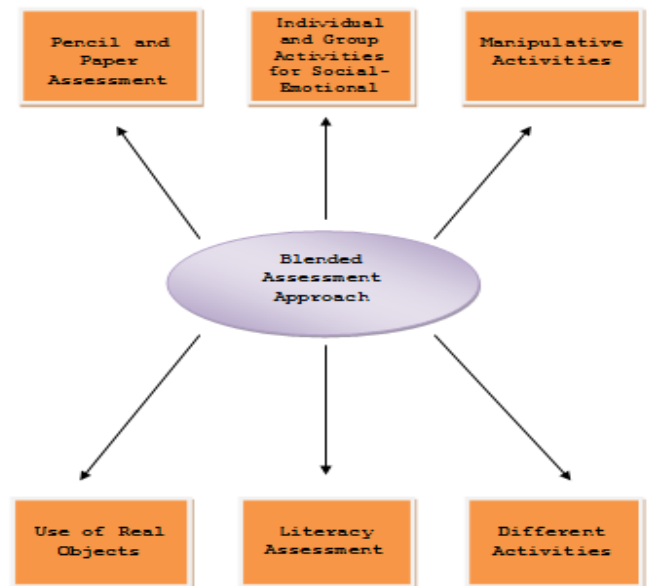


Figure 3. Blended Assessment Approach

Figure 3 shows the assessment approaches of the teachers which were under the Blended Assessment Approach category. These includes: Pencil and Paper Assessment, Individual and Group Activities for Social-Emotional, Manipulative Activities, Use of Real Objects, Literacy Assessment, and Different Activities.

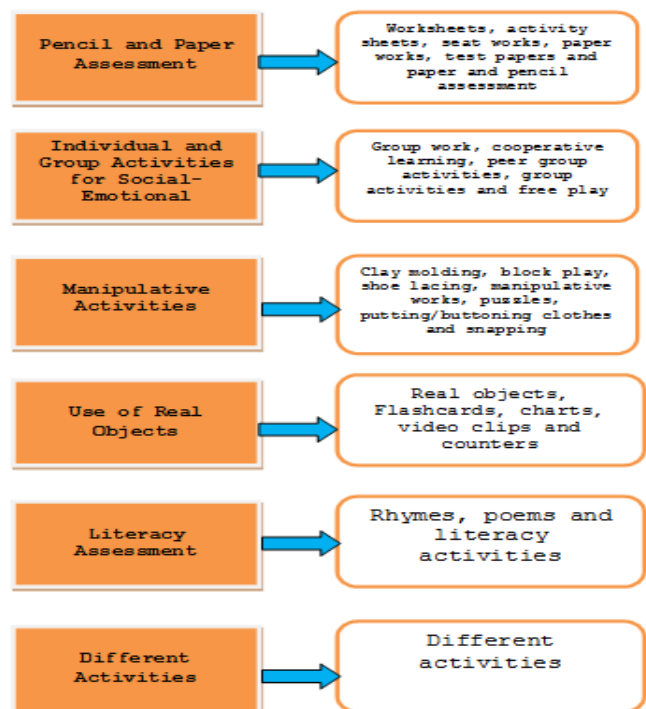


Figure 4. Activities under Blended Assessment Approach

Figure 4 shows the different activities under each assessment approaches in Blended Assessment Approach. Each assessment approaches contains different activities that the teachers used in order to assess their kinder pupils.

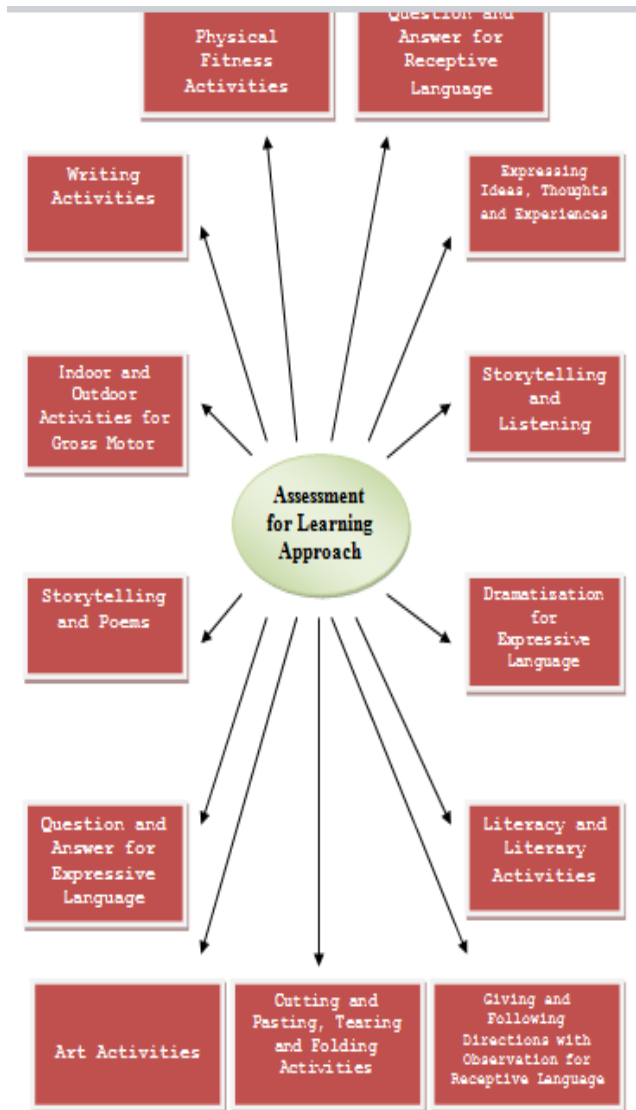


Figure 5. Assessment for Learning Approach

This figure shows the assessment approaches of the teachers which were under the Assessment for Learning Approach category. These includes: Physical Fitness Activities, Writing Activities, Indoor and Outdoor Activities for Gross Motor, Storytelling and Poems, Question and Answer for Expressive Language, Art Activities, Cutting and Pasting, Tearing and Folding Activities, Giving and Following Directions with Observation for Receptive Language, Literacy and Literary Activities, Dramatization for

Expressive Language, Storytelling and Listening, Expressing Ideas, Thoughts and Experiences, Question and Answer for Receptive Language.

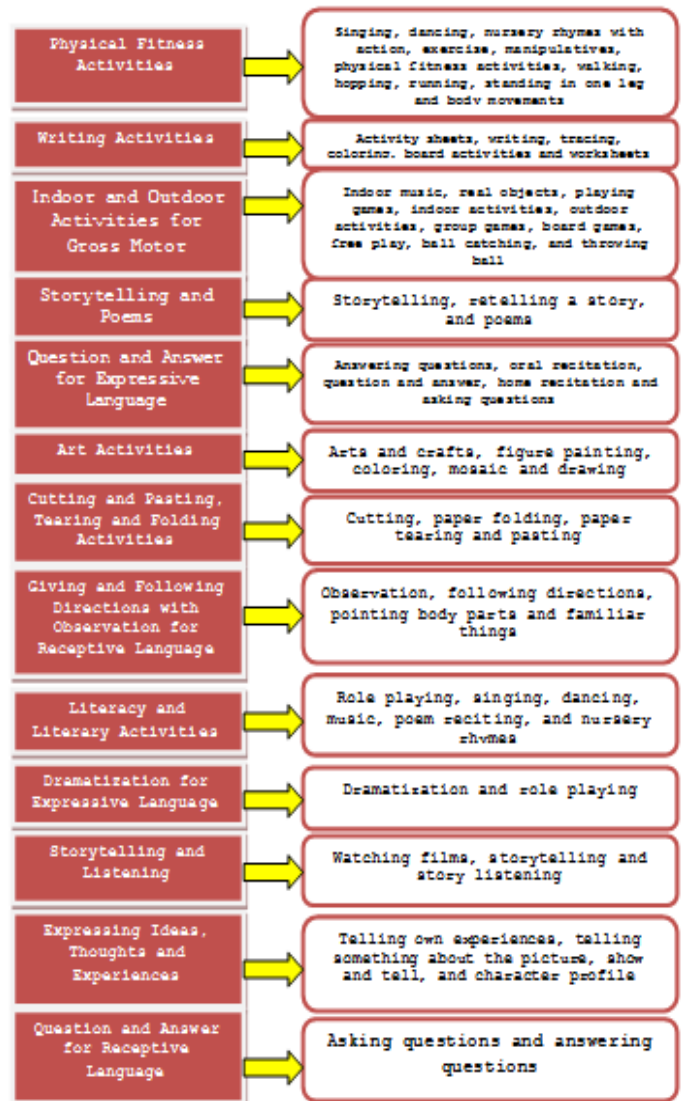


Figure 6. Activities under Assessment for Learning Approach

Figure 6 shows the different activities under each assessment approaches in Assessment for Learning Approach. Each assessment approaches contains different activities that the teachers used in order to assess their kinder pupils.

CONCLUSION AND RECOMMENDATION

As a conclusion of the study, the three assessment profiles of Pyle & De Luca as: (a) developmental assessment approach, (b) blended assessment approach and (c) assessment for learning approach, were affirmed to be in use in Kindergarten Assessment by

the respondents. The assessment activities of the respondents were all categorized by the three profiles of assessment approaches. Also, preschool teachers vary in assessment approaches used because they considered the developmental stages of their learners. And it was evident from the results that the categories of assessment approaches that the teachers had chosen were effective in assessing learners. Another result showed that the teachers still follow the curriculum guide given to them by the Department of Education but still they add more or create another way of assessment approach in order to do the assessment effectively. They consider their kinder pupils in choosing the most effective way of assessment. In kindergarten, the pupils were sometimes grouped and each group have different activities. The groups are based on their level of development and then the next day they exchange activities with the other group, this is called Round Robin in kindergarten. The module framework can be used by the Department of Education as an alternative way of categorizing different assessment approaches in teaching Kindergarten. They may include these module frameworks in the curriculum guide so it can help the teachers in choosing an assessment approach in the classroom.

After analyzing the results of the study the researcher come up to the following recommendations:

- The respondents should pursue their plans for professional growth and finish their master's degree.
- The respondents should use the different assessment approaches and variety of assessment activities based on the nature and ability of the learners.
- The respondents should continue the use of the assessment approaches based on the categories on the report card to have a well-developed learner.
- The respondents should maintain their compliance with the curriculum guide given by the Department of Education. They may also add or choose the appropriate assessment approach and activity for the learners.
- Other researchers may use the enriched module framework in creating activities suited for their learners.
- For the limitation of the study, this research was conducted in 1 Schools Division only. Future researchers can further widen the scope of the study in a national level in order to find out the assessment approaches and assessment activities used by preschool teachers in the Philippine context. After finding out the assessment approaches in the national level, they can

finally make these frameworks into a module in Kindergarten.

REFERENCES

- [1] McNair, S., Bhargava, A., Adams, L., Edgerton, S., & Kypros, B. (2003). *Teachers speak out on assessment practices*. *Early Childhood Education Journal*, 31(1), 23-31.
- [2] Gullo, D. F. (2006). *Assessment in kindergarten*. In D. F. Gullo (Ed), *K today: Teaching and learning in the Kindergarten year* (pp. 138-150). Washington, DC: NAEYC.
- [3] Roach, A. T., Wixson, C., & Talapatra, D. (2010). *Aligning an early childhood assessment to state kindergarten content standards: Application of a nationally recognized alignment framework*. *Educational Measurement: Issues and Practice*, 29(1), 25-37.
- [4] Pyle, A., & Deluca, C. (2013). *Assessment in the kindergarten classroom: An empirical study of teachers' assessment approaches*. *Early Childhood Education Journal*, 41(5), 373-380. doi:<http://dx.doi.org/10.1007/s10643-012-0573->
- [5] Golan, S., Peterson, D., & Spiker, D. (2008). *Kindergarten assessment process planning report*. SRI International Project. <https://goo.gl/DQqUL1>
- [6] Republic Act 10157 of 2011 "An Act Institutionalizing The Kindergarten Education Into The Basic Education System And Appropriating Funds". Official Gazette of the Republic of the Philippines. <https://goo.gl/mvGuQp>
- [7] Lambert, V. A., & Lambert, C. E. (2012). *Qualitative Descriptive Research: An Acceptable Design*. *Pacific Rim International Journal of Nursing Research*, 16(4), 255- 256.
- [8] Braun, V., & Clarke, V. (2006). *Using thematic analysis in psychology*. *Qualitative Research in Psychology*, 3(2), 77-11. <http://dx.doi.org/10.1191/1478088706qp063oa>

COPYRIGHTS

Copyright of this article is retained by the author/s, with first publication rights granted to APJMR. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4>).