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## K-3 Teachers' Competencies Addressing Learners' Literacy and Numeracy Gaps in the Global South

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### ABSTRACT

Patterned after the Learning and Development Needs Assessment, this sequential explanatory design mixed method research was conducted to identify the competency gaps or priority learning needs and compelling reasons of the K-3 public school teachers in Eastern Visayas. The approach of this study was group needs assessment using functional competency models. A total of 6,428 K-3 teachers responded to this study. Results demonstrated that crafting action research that focuses on literacy and numeracy was highly prioritized learning need. Others were on recommending learners with difficulty in reading to be enrolled in special reading program, encouraging students to learn Math using technology, and performing interventions for learners who have difficulty in reading and at risk of dropping out. Further, it also found out that the compelling reasons of having such priority learning needs were insufficient knowledge in performing tasks, lack of resources, school-related activities as hindrance, and lack of parental support. This suggests that a Learning and Development Planning be conducted in order to identify interventions and their implementation requirements to address identified priority learning needs of K-3 teachers with regards to competencies on literacy and numeracy.

### INTRODUCTION

Low literacy and numeracy rates of learners have been a worldwide issue. Many people in the educational system and beyond care avidly about making sure that children at a young age master the skills of literacy and numeracy. Children who do not learn to read, write and communicate effectively at primary level are more likely to leave school, be unemployed or work in low-skilled jobs, have inferior mental and physical well-being, and are more likely to end up in poverty.

The UNESCO Institute of Lifelong Learning (UIL) and Organization for Economic Co-operation and Development (OECD) has developed measurement frameworks to monitor progress towards literacy and numeracy. Over the past five years, they reported an increase on the literacy and numeracy rate of Western Countries. However, the rates of poor countries such as those in Africa and some in Asia have been below the OECD standards.

The Philippines recently faced a great challenge in addressing the low performance of learners on literacy and numeracy after knowing the results of the 2018 Program for International Student Assessment (PISA). Based on the result, Filipino learners obtained an average score of 340 points in Overall Reading Literacy, which was significantly lower than the OECD average of 487 points. Only 1 out of 5 Filipino learners (19.4%) achieved at least the minimum proficiency level (Level 2) in Overall Reading Literacy. On the other hand, Filipino learners achieved an average of 353 points in Mathematics Literacy, which was significantly lower than the OECD average of 489 points. This means that only 1 out of 5 Filipino learners attained at least the minimum proficiency level (Level 2) in Mathematics Literacy. Specifically, learners from Region

VIII who participated in the 2018 PISA achieved a mean score of 349 in Reading Literacy and 346 in Mathematics Literacy. Both results are far below the OECD averages (San Antonio, 2019).

While there is a great focus on the PISA results, there were other assessments on literacy and numeracy which were coherent with its results. One of which is the Early Language Literacy and Numeracy Assessment (ELNA). The result of this assessment during the school year 2017-2018 shows that the K-3 Pupils of Region VIII have a literacy rate of 65.65% and a numeracy rate of 51.12%. These are below the minimum target rate for all learners at any grade level.

It is said that addressing the low performance on literacy and numeracy must begin at the primary school. Early childhood educators should understand that in early childhood education settings, young children learn important skills that can provide them with the cornerstones needed for the development of later academic skills. Research confirms that patterns of learning in preschool are closely linked to later achievement, that is children who develop more skills in the preschool years perform better in the primary grades (National Institute for Literacy, 2009).

Among the factors that affect the performance of learners, the teacher factor plays a crucial role in enhancing the quality of teaching and learning process. Effective teachers are imperative to raising learners' achievement (RPMS Manual, 2018). Thus, the level of learners' achievement, particularly in literacy and numeracy, greatly depends on the competency level of the teachers.

Being a teacher entails a substantial degree of knowledge, skills and attitude towards the teaching and learning process. With the major shift to K to 12 Basic Education

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Curriculum, the Department of Education aims to endow itself quality teachers in order to develop holistic learners (Enhanced Basic Education Act, 2013). Hence, in order to become a competent teacher, one must continuously develop his/her skills through appropriate learning modalities depending on their identified developmental needs.

The conduct of this study is for the identification of priority learning needs of K to 3 teachers vis a vis their competency gaps which affects the performance not just of the teachers but more importantly of the learners. This further explains the occurrence of such gaps which will help early childhood administrator or professional development provider make important decisions about what learners need to learn and what teachers need to do to help learners achieve these learning goals.

This study therefore determined the competency level on numeracy and literacy of K to 3 teachers of public schools in Region VIII for School Year 2019-2020. Specifically, it sought answers to the following questions:

1. What is the demographic profile of the respondents in terms of:
  - 1.1 current position;
  - 1.2 grade level currently being taught;
  - 1.3 number of years as K-3 teacher; and
  - 1.4 number of trainings attended related to literacy and numeracy for the past three years.
2. What is the competency level of K-3 teachers on literacy and numeracy?
3. Is there a significant difference between the K-3 teachers' competency levels on literacy and numeracy?
4. What are the priority learning needs or competency gaps of K-3 teachers with regards to competencies on numeracy and literacy?
5. What are the compelling reasons of having such priority learning needs or competency gaps?
6. How would the K-3 teachers like to address their priority learning needs or competency gaps?

## LITERATURE REVIEW

Literacy is the capability, sureness and readiness to engage with language to obtain, create and convey value in all facets of our everyday life (Alberta Education, 2015). It is known as the aptitude of a person to read, write, and understand the reading passages. The inquisitiveness of educators in the field of literacy education started in the 1990s when they considered the huge disproportions regarding it (Cassidy & Ortlieb, 2011). Conversely, because of inadequate studies, and data required for the proliferation of literacy education, there were still unresolved issues and concerns. With this, literacy specialists suggested an idea of making a list of suitable and important matters involving the field to help them contextualize their academic plans and activities.

Numeracy on the other hand is the capability, sureness and preparedness to engage with quantitative or spatial information to make knowledgeable decisions in all aspects of everyday lives (Alberta Education, 2015).

It is the language of numbers and the ability to use Mathematics in daily life. Baroody (2008) found out in his study when the teachers should start the promoting number sense and put significant effort to raise data fluency. A progressive development draws the roots of numeracy back to the skills and concepts preschoolers must learn from the age of 2 years. This entails the need for educators to put emphasis on developing numeracy skills primarily at the Kindergarten level.

Literacy and numeracy skills are the foundations for learning which will play a significant role to a lifelong learning of the learners. As such, these skills must be developed as early as the first part of their formal education. A study was conducted to determine the level of implementation of Early Language Literacy and Numeracy Implementation of Kindergarten to Grade III teachers (Ayade et al., 2019). It was found out that teachers have actively participated to the program for their professional development and essentially applied what they have learned to their learners. It was supported by Eddy (2010) that the conceivable progress of the learners' mind is something to be realized with the support of the teachers' attributes. Since teachers are the vital piece in the learning process, it is important that they undergo continuous improvement in teaching through Learning and Development (L&D) modalities such as formal training, Job-embedded learning (JEL), and relationship and discussion-based learning (RDL) in order to apply appropriate strategies for their learners.

The teacher's role is expanding and turn out to be more demanding. Previous researches have corroborated the significant impacts the teachers have on their learners' academic and lifelong success (Blazar, 2016; Chetty et al., 2014; Jackson, 2012; Nye et al., 2004). Recent studies also have revealed some attributes of efficient classroom environments, including teachers' organizational skills and interactions with learners. Teachers are expected to use a wide variety of methods, tools and approaches and to tailor them to the learners' needs. They also need to improve their competencies needed to produce a positive learning atmosphere and work with partner stakeholders of the school in order to endow appropriate aid to learners. However, in order to leverage policy tools such as evaluation and professional development that seek to improve the quality of the teacher workforce, their level of competencies must be assessed and competency gaps must be identified.

## MATERIALS AND METHODS

This part of the study detailed various considerations involving the methodology of the study, basically providing a context to obtain answers to the research questions. This explained the various methods and procedures followed in the study to enable the researchers to answer the research problems. An in-depth description of the methods and procedures followed in carrying out the research is provided.

This study was a mixed method type of research,



particularly utilizing a sequential explanatory design. This was a two-phase mixed methods design. It commenced with the collection and analysis of quantitative data followed by the qualitative phase. The purpose used the qualitative results to further explain and interpret the findings from the quantitative phase.

In the quantitative phase, the data were collected through a survey method utilizing an online LDNA tool. They were treated using the Statistical Package for Social Sciences (SPSS) Software. After the analysis of quantitative data, a follow up online LDNA tool was administered to a proportional number of respondents. This part was the qualitative phase, where questions were asked based from the results of the quantitative phase. Cluster of themes were generated using the Colaizzi's method. This process was used in extracting, organizing, and exploring the qualitative data (Sanders, 2014). Interpretation of the data was conducted based on a quantitative to qualitative results.

The population considered by the researchers in this study were all public school teachers and master teachers coming from the thirteen Schools Divisions of Region VIII namely the Baybay City Division, Biliran Division, Borongan City Division, Calbayog City Division, Catbalogan City Division, Eastern Samar Division, Leyte Division, Maasin City Division, Northern Samar Division, Ormoc City Division, Samar Division, Southern Leyte Division, and Tacloban City Division.

This study utilized convenience sampling where the sample size depended on the number of teachers who have accomplished the online LDNA tool. This was recommended as it was deemed appropriate and feasible for a large group surveyed. Regional memorandum no. 864, series of 2019 was crafted and sent to the different Schools Division Offices, through the Schools Division Superintendents to ascertain the accomplishment of the

online tool. A total of 6,428 K-3 teachers accomplished the online form.

Conducted in Eastern Visayas, this study covered all Schools Divisions of Department of Education of the region. The crafting of the baseline data gathering tools was conducted at Hotel Alejandro, Tacloban City. The baseline data gathering was conducted in six schools namely Baybay 1 Central School, Baybay 2 Central School, La Paz Central School, Mapgap Elementary School, Cabalasan Elementary School and Isabel Central School. The data consolidation and analysis were done at the HRDD office, Deped Regional Office VIII Compound, Palo. The crafting of the LDNA tool, as well as the Alpha testing, were conducted at the BEST Office, Deped Regional Office VIII Compound, Palo. Finally, the creation of the online tool based from the Alpha tested LDNA tool was done at the HRDD office. It was Beta tested first before it was fully accomplished.

There were baseline data gathering tools used to gather the data needed. These tools were used as basis for crafting the LDNA tool. There were four (4) tools used to gather baseline data. These tools were the survey tools for teachers and instructional leaders and interview guides for teachers and instructional leaders.

Further, there was also survey tool for teachers utilized. This tool for teachers is divided into three parts. The first part is for the demographic profile of the teachers. The second part is the questionnaire for literacy and the last part is the questionnaire for numeracy.

The purpose of the questionnaires is to gather data on how teachers' employ different interventions in and out of the classroom and their involvement in the school's efforts in improving the literacy and numeracy rate of the learners. Another was an interview guide for teachers. This tool was used as a prompt to remind the interviewer the necessary topics to cover, questions to ask and areas to probe. It was further used to validate the results in the conduct of the survey. This tool is divided into two parts. The first part is the demographic profile of the instructional leader. The second part is the 15-item questionnaire. The aim of the questionnaire is to gather data on how instructional leaders perform their mandate in monitoring and evaluation as well as providing technical assistance to the teachers.

Then, an interview guide for instructional leaders was instituted. This tool was used as a prompt to remind the interviewer the necessary topics to cover, questions to ask and areas to probe. It is further used to validate the results in the conduct of the survey for the instructional leaders. Finally, the Learning and Development Needs Assessment (LDNA) tool. This tool was used to identify the competency level of K-3 teachers on literacy and numeracy. This was crafted based on the result of the baseline data gathering using the aforementioned tools. It has two parts: the demographic profile and the 4-point Likert scale survey questionnaire. It was alpha tested before creating online versions. There were three online versions: (1) for Beta testing, (2) for LDNA data gathering

**Table 1:** Distribution of Respondents per Schools Division

Schools Division	Number of Respondents	Percentage
Baybay City	159	2.5
Biliran	350	5.4
Borongan City	227	3.5
Calbayog City	300	4.7
Catbalogan City	75	1.2
Eastern Samar	915	14.2
Leyte	1,043	16.2
Maasin City	230	3.6
Northern Samar	1,233	19.2
Ormoc City	399	6.2
Samar	880	13.7
Southern Leyte	606	9.4
Tacloban City	11	0.2
Total	6,428	100%

and (3) for qualitative data gathering.

The researchers requested the expertise of master teachers, instructional leaders, education program specialists, education program supervisors and chief education supervisors in reviewing and content validating the draft of the instruments used in the conduct of the study. The LDNA tool used was alpha tested by the Regional L&D Team and was beta tested by three (3) teachers and three (3) master teachers per Schools Division. The beta tested LDNA tool was then used as basis for creating an online survey tool to identify the competency level and gaps of K-3 teachers on literacy and numeracy.

To further test the reliability or internal consistency of the LDNA survey tool, the Cronbach's alpha was utilized. This is to determine how accurate the designed LDNA survey tool measures the variable of interest (Tavakol and

**Table 2:** The Rule of Thumb for interpreting Cronbach's alpha

Cronbach's Alpha	Internal Consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Dennick, 2011). The rule of thumb for interpreting alpha for Likert scale questionnaires is shown in table 2.

Table 3 indicates the reliability of the 51-item survey questionnaire used in this research. Using SPSS, the Cronbach's alpha coefficient was calculated and had a

**Table 3:** Reliability Statistics of the survey questionnaire used in this study

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.984	.984	51

value of 0.984 which is interpreted as Excellent in its internal consistency.

Finally, the researcher utilized the following statistical tools via the Statistical Tool for Social Sciences (SPSS) software: Weighted mean was utilized in identifying the priority learning needs of the K-3 teachers; t-test for one sample. This test statistic was used to identify the K-3 teachers' competency level on literacy and numeracy, independently; t-test for two independent samples. This test statistic was used to find out if there was a significant difference between the K-3 teachers' competencies on literacy and numeracy.

In this study, it was highly essential to keep the information provided by the respondents involved in utmost security. The respondent's identity remained protected to respect and avoid any issues that may arise which may cause harm to the participants who willingly participated. This further followed a safe and ethical manner by using the right methods in obtaining the necessary data, as well as during the analysis phase, in which it did not violate

any rules or rights of the individuals involved. The researchers were firm on preventing biases and having predetermined ideas during the duration of the study. All themes and ideas gathered and formulated were based on the accumulated data from comprehensive research, as well as from the answers of respondents. Lastly, this study utilized inclusive and bias-free language, and adheres to DO 32, series of 2017 entitled "Gender-Responsive Basic Education Policy", and DO 51, series of 2014, entitled "Guidelines on the Conduct of Activities and Use of Materials Involving Aspects of Indigenous Peoples Culture."

## RESULTS AND DISCUSSION

In this part of the study, a detailed analysis of the collected data was highlighted by the researchers. Results from the analyzed quantitative data using statistical tools were presented in tables while emerging themes were detailed as a result from the analysis of the qualitative data. All results were interpreted and shown following the sequence of the specific research problems of the study.

### Demographic Profile of the Respondents

The respondents of this study were K to 3 Teachers and Master Teachers from the thirteen Schools Divisions of DepEd Region VIII. A total of 6,428 K-3 teachers accomplished the online tool through the link deped.in/k3ldna. As part of the gathering of profile of the involved individuals, the researcher specifically focused on collecting the current position, number of years as K-3 teacher, grade level currently being taught and number of trainings attended related to literacy and numeracy for the past three years.

The tables below show the distribution of the respondents per category on the specified profiles. Table 4 shows the distribution of the respondents according to their

**Table 4:** Distribution of the respondents of the study according to their current position

Position	Number of Respondents	Percentage
Teacher 1	3,242	50.4
Teacher 2	784	12.2
Teacher 3	1,944	30.2
Master Teacher 1	363	5.6
Master Teacher 2	86	1.3
Master Teacher 3	9	0.3
Total	6,428	100%

**Table 5:** Distribution of the respondents of the study according to the grade level currently being taught

Grade Level	Number of Respondents	Percentage
Kindergarten	1,300	20.2
Grade 1	1,784	27.8
Grade 2	1,599	24.9
Grade 3	1,745	27.1
Total	6,428	100%

current position. It can be observed that majority of the respondents are currently Teacher 1 with a total of 3,242 while there were only 9 respondents who are currently Master Teacher 3.

### Grade Level Currently Being Taught

As shown in table 5, there was a slight difference on the number of respondents in every grade level. There were less respondents from the Kindergarten level compared to other grade levels with 1,300 while more respondents

**Table 6:** Distribution of the respondents of the study according to the number of years as K-3 teacher

No of Years	Number of Respondents	Percentage
0 to 5	3,418	53.2
6 to 10	1,773	27.6
11 to 15	504	7.8
16 to 20	327	5.1
21 to 25	208	3.2
26 to 30	126	2.0
31 to 35	62	1.0
36 to 40	10	0.2
Total	6,428	100%

were Grade 1 teachers. Nonetheless, there was an almost even distribution of respondents per grade level.

### Number of Years as K-3 Teacher

Table 6 refers to the distribution of respondents according to the number of years as K-3 teacher. It indicates that the greatest number of respondents are those with 5 years or less experience as K-3 teacher. It

**Table 7:** Distribution of the respondents of the study according to the number of trainings on Literacy and Numeracy attended by K-3 teacher for the past three years

No of trainings attended	Number of Respondents	Percentage
None	2,319	36.1 %
1	2,975	46.3 %
2	756	11.8 %
3	246	3.8 %
4 and above	132	2.1 %
Total	6,428	100%

is also seen in the table that there was a decrease on the number of teacher respondents as the number of years as K-3 teacher increases.

As seen in table 7, the majority of the K-3 teachers only attended one training on literacy and numeracy for the past three years. It is 10.2 percent greater than those who were not able to attend a single training. Those who attended four (4) or more trainings got the least percentage of 2.1.

### Competency Level of K to 3 Teachers

One-sample t-test has been applied to measure the competency level of K-3 teachers on literacy and numeracy, independently. This test statistic was utilized by the researcher since the sample size considered were the mean scores of the respondents on the competencies on literacy and numeracy. On the other hand, t-test for independent sample was used to find out if there is a significant difference between the level of competency of K-3 teachers on literacy and numeracy.

**Table 8:** Descriptive statistics related to the K-3 Teachers' competency level on Literacy

N	Mean	SD	t	Critical Value at $\alpha=0.05$	p value	Significance
24	2.848	0.218	19.013	2.069	< 0.00001	Significant

Table 8 indicates that the mean score on Literacy is 2.848 which is above the assumed mean of 2.5. The assumed mean is calculated as  $AM = (\text{lowest possible score} + \text{highest possible score}) \div 2$ . The standard deviation is 0.218. This value tells us how well the mean represents the data and that on the average the data can deviate 0.218 from the mean value.

Moreover, the results in Table 7 revealed that there was a significant difference between the real mean and the assumed mean in the level of competency of K-3 teachers on literacy. This is proven by the test statistic value of 19.013, which is greater than the critical value of 2.069 at 0.05 alpha level. With the positive value of the test statistic, this further means that the level of competency of K-3 teachers on literacy is above average.

**Table 9:** Descriptive statistics related to the K-3 Teachers' competency level on Numeracy

N	Mean	SD	t	Critical Value at $\alpha=0.05$	p value	Significance
27	2.917	0.245	19.466	2.055	< 0.00001	Significant

Table 9 indicates that the mean score on Numeracy is 2.917 which is above the assumed mean of 2.5. The standard deviation is 0.245. This value tells us that the data was well represented by the mean and that on the average the data can deviate 0.245 from the mean value. In addition, it is shown in Table 8 that there was a significant difference between the real mean and the assumed mean in the level of competency of K-3 teachers on numeracy. This is manifested by the test statistic value of 19.466, which is greater than the critical value of 2.055 at 0.05 alpha level. With the positive value of the test statistic, this further means that the level of competency of K-3 teachers on numeracy is also above average.

Table 10. Descriptive statistics related to the difference of K-3 Teachers' competency level on Literacy and Numeracy

The results in Table 10 indicated that there was no significant difference of the K-3 teachers' competencies on literacy and numeracy as manifested by a negative

test statistic value of -1.0575, which is higher than the negative critical value of -1.6766 at 0.05 alpha level. This implies that the level of competencies of K-3 teachers are just identical for both literacy and numeracy.

Priority Learning Needs or Competency Gaps of K-3 Teachers

**Table 10:** Descriptive statistics related to the difference of K-3 Teachers' competency level on Literacy and Numeracy

Sample	Mean	SD	t-value	Critical Value at $\alpha=0.05$	p value	Significance
Literacy	2.848	0.218	- 1.0575	-1.6766	0.147729	Not significant
Numeracy	2.917	0.245				

**Table 11:** Summary of the mean scores of K-3 Teachers' competency level on Literacy

Competencies	Mean Scores
Craft action research that focuses on literacy	2.0096
Recommend learners with difficulty in reading to be enrolled in special reading pro-gram	2.6052
Perform data driven interventions that address learners' difficulty in reading	2.6291
Teach reading to more than one class each day	2.7234
Send learners to the library or learning hubs to read books and other learning material	2.7349
Collaborate with colleagues and other specialists who are interested in studies on lit-eracy.	2.7898
Encourage learners to access information at the library or learning hubs	2.7923
Enhance learners' interest in reading using digital texts	2.8004
Discuss to learners the importance of accessing information through library resources	2.8214
Appreciate relevance of facilitating reading to learners with special needs	2.8493
Model skimming or scanning strategies	2.8777
Design activities that would let learners describe the style or structure of the text they have read	2.8880
Enable learners to locate information within text	2.9177
Help pupils determine the author's perspective or intention	2.9205
Explain how to summarize the main ideas of what learners read	2.9471
Plan out individualized learning activities that will address absenteeism of learners	2.9619
Utilize school/district reading assessment	2.9815
Prepare post activities that will let the learners make generalization and draw infer-ences based on what they have read	2.9840
Develop contextualized formative assessment based on the diversity of learners.	2.9942
Integrate learners with reading difficulties into regular class through differentiation and/or explicit teaching	3.0048
Create same-ability group in reading	3.0096
Utilize contextualized learning materials to ease the learners' difficulty in reading comprehension	3.0222
Coordinate with co-teachers in administering the Phil-IRI and EGRA and analyzing the results	3.0434
Integrate topics/themes learners are keen on to boost their interest in reading	3.0434

As shown in Table 11 the top three (3) priority learning needs are on crafting of action research with a mean score of 2.0096, recommending learners with difficulty in reading to be enrolled in a special reading class with

a mean score of 2.6052, and performing data driven interventions that address learners' difficulty in reading with a mean score of 2.6291. Table 12 indicates that the top three (3) priority learning needs are on crafting of

**Table 12:** Summary of the mean scores of K-3 Teachers' competency level on Numeracy

Competencies	Mean Score
Craft action research that focuses on numeracy	2.0227
Encourage students to learn Math using ICT and materials from the LR Portal	2.6204
Design/create modules for learners at risk of dropping	2.6403
Perform data driven interventions that address learners' difficulty in numeracy	2.6882



Gather learners to take part on stakeholders' programs that would improve their numeracy status	2.7232
Organize and implement numeracy programs	2.7772
Facilitate teaching Math to learners with special needs	2.8097
Collaborate with colleagues and other specialists who are interested in studies on numeracy.	2.8100
Coordinate with co-teachers in administering the ECCD/EGMA and analyzing the results	2.9171
Identify learning styles of the learners as to gender and socio-cultural background	2.9189
Plan out learning activities that will address negative attitudes of learners towards Math	2.9256
Explain how to summarize the main ideas of what learners read	2.9442
Coordinate with the guidance counselor/direct supervisor in addressing factors affecting learners being at risk of dropping	2.9533
Use discovery approach in teaching Math	2.9588
Subtask mastery skills on difficult competencies in Math	2.9812
Utilize school/district numeracy assessment	2.9900
Prepare post activities that will let the learners make generalization and draw inferences based on what they have read	2.9904
Develop contextualized formative assessment based on the diversity of learners.	2.9919
Design activities that will utilize strategies appropriate to the learning styles of the learners	2.9969
Recommend learners with difficulty in Math to attend Remedial classes	3.0264
Encourage learners to participate in Math competitions	3.0643
Conduct home visitations	3.1106
Create instructional materials appropriate to the teaching strategies used	3.1347
Use differentiated activities to address learning needs of learners	3.1392
Engage learners in meaningful numeracy activities	3.1570
Engage students in learning Math through games	3.1893
Use manipulatives or concrete objects	3.2788

action research with a mean score of 2.0227, encouraging students to learn Math using ICT and materials from the LR Portal with a mean score of 2.6204, and designing/creating modules for learners at risk of dropping with a mean score of 2.6403.

### On the Qualitative Phase deciphering the Compelling Reasons on the Identified Priority Learning Needs

For the qualitative phase, the K to 3 teachers were asked on the compelling reasons on why the competencies were considered by the majority as the priority learning needs. The emerging themes per competency based on the interviews conducted were lack of knowledge on crafting and conducting action research, school-related works/activities as hindrance, lack of resources and negative perception on conducting research.

These findings affirmed the results of the previous studies that the themes were the issues and challenges of the teachers in the conduct of action research (Zhou, 2012; Fawzi & Al-Hattami, 2017; Tindowen et al., 2019). Further, other reasons factored in from the interviews were lack of support, financially incapable to enroll learners to special reading program from private institutions, only RRE is implemented in most schools and lack of expert teachers to conduct special reading program.

It was evident in the previously conducted studies that

the support of the parents was found to be very vital in addressing the need of their children with difficulty in reading to be enrolled in a special reading program (Katz & Carlisle, 2009; Thiruvengadam, 2013; Akyol et al., 2014; Ntekane, 2018). Parents, who support their children, send them to special reading programs from private entities. However, some due to financial constraints are not able to do so, as supported by earlier researches (Desforges, 2003; Pennington, 2017; Ntekane, 2018). Hence, they resolve to what program is available in school, primarily the RRE period in class.

Then, there were also compelling reasons on why performing data driven interventions that address learners' difficulty in reading is a priority learning need. Discussion on the bases for why some interventions are targeted for implementation over others is essential and these elements are the mere reasons why teachers implement non data-based interventions, affirming previously conducted studies (Joseph, 2002; Wanzek, et.al., 2010; Vaughn et al., 2012).

The first two themes confirm the previously conducted studies on factors that hinder the integration of ICT in the teaching-learning process (Belawati, 2004; Ramos, 2010; Tomaro, 2018). These led to the third theme which affirms studies on making a good portal for any learning area (Tucker, 2014; Whybrow, 2015; Mohammad & Malik, 2017).



As it is emphasized in the K-12 Basic Education Curriculum that there must be no child left behind, these elements hinder the teachers in creating modules or any intervention material that addresses learners at risk of dropping. These are affirmed by previous studies on teachers' response on learners at risk of dropping (Dela Cruz, 2009; SEAMEO INNOTECH, 2015; Carreon, 2018).

### Ways to Address K-3 Teachers' Priority Learning Needs

The K-3 teachers were asked on how they would like to address their priority learning needs and below were the emerging themes from their responses; attend formal trainings; coaching and mentoring from direct supervisors or experts; and discussion and workshop during School-level Learning Action Cell (SLAC)

These resulting themes affirms the previously conducted studies on preferred learning modalities of teachers in addressing their priority learning needs (Bicaj & Treska, 2014; Boston Consulting Group, 2014; Darling-Hammond, 2017; Gonong, 2018).

### CONCLUSIONS

Based on the findings of the study, it is concluded that majority of the public-school K-3 teachers in Eastern Visayas during SY 2019-2020 were Teacher 1, teaching grade 1 level, have been in DepEd for less than 5 years and have attended only one (1) training on literacy and numeracy. In addition, the K-3 teachers have the same competency level on literacy and numeracy. Both are above average. With these competency levels, gaps and strengths were identified, hence the priority learning needs on both competencies.

The priority learning needs of K-3 teachers with regards to competencies on literacy are on crafting action research that focuses on literacy, recommending learners with difficulty in reading to be enrolled in special reading program, and performing data driven interventions that address learners' difficulty in reading. The priority learning needs of K-3 teachers with regards to competencies on numeracy are on crafting action research that focuses on numeracy, encouraging students to learn Math using ICT and materials from the LR Portal, and designing/creating modules for learners at risk of dropping.

It is also concluded that the compelling reasons of having such priority learning needs or competency gaps are insufficient knowledge in performing tasks, lack of resources, school-related activities as hindrance, and lack of parental support. Finally, the preferences of K-3 teachers in addressing their priority learning needs are to attend formal trainings, to undergo coaching and mentoring from direct supervisors or experts, and to discuss and conduct workshops during SLAC.

### RECOMMENDATIONS

From the findings and conclusions of the study, it is recommended that an L&D Planning be conducted

for identifying and mapping L&D programs and their implementation requirements to address identified priority learning needs of K-3 teachers with regards to competencies on literacy and numeracy. It is further recommended that a similar study be conducted to refute or confirm the results of this study.

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