

Teacher's Readiness, Competencies and Performance of Kindergarten Pupils in Modular Distance Learning Modality

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Abstract — The study aimed to determine the significant relationship between teachers' readiness and competencies and the performance of Kindergarten pupils on modular distance learning modality. Utilizing the descriptive-correlational research design for an in-depth analysis of the study, the researcher utilized the researcher-made survey to measure teachers' readiness on modular distance learning modality, Monitoring and supervision tools distributed DepEd Region VIII to 2 Kindergarten teachers and the PECD Mid Report of the 48 Kindergarten pupils. Simple Percentage, Weighted mean and Chi-Square were the statistical tools used. The researcher found out that the extent of technical and pedagogical readiness of teachers on modular distance learning modality is high while the performance of teachers is outstanding and the performance of Kindergarten pupils is outstanding. Likewise, it was found out in the study that there is a significant relationship between the extent of technical and pedagogical readiness of teachers and their performance. Moreover, the study also revealed that there is a significant relationship between the teachers' and pupils' performance on modular distance learning modality. Therefore, readiness of teachers affects their performance and that of the pupils. Thus, to attain success in implementing modular distance learning modality especially to Kindergarten pupils, teachers should be ready technically and pedagogically.

Keywords — *Teachers' Readiness, Teachers' Competencies, Performance of Kindergarten Pupils, Modular Distance Learning Modality*

I. Introduction

The newly identified β -coronavirus was first named the 2019-novel coronavirus first occurred at Wuhan, China, in December 2019. This pandemic is not just causing health crises around the world, but it is also affecting all spheres of life, including the field of education. As time goes by, the spread of the virus is not yet contained. There are still people infected and education sector have to make resolutions and innovations in order to continue the quest for learning among pupils. Teachers and other school personnel have to undergo training in order for them to be equipped with knowledge on adopting the distance learning modality.

Adjusting the learning competencies for each subject and grade level must be done to suit the prescribed learning modality. Modules had to be crafted so that pupils will still learn while they are at home for face-to-face interaction or classes still possible as this virus threatened the humanity. Contextualizing the modules were performed by curriculum writers and other teachers in order to make learning easier while with their learning facilitator because according to Sec. Leonor M. Briones, “education must continue” (2). Teachers and other school personnel had to undergone training in order for them to be equipped with the knowledge in teaching in the new normal. Schools had to craft their Basic Education (BE) Learning Continuity Plan (LCP) or Roadmap as a guide in the implementation of distance learning education.

DepEd had to revisit the K to 12 Curriculum to suit the learners' needs during this time of pandemic. They modify the competences and compressed it so that essential competencies will be learned by the pupils using the distance learning modality. They take out the Most Essential Learning Competencies (MELC) and crafted modules for the pupils to accomplish while learning at home with their learning facilitators. Since face-to-face interaction is impossible, teachers had to craft innovative materials to make learning easy and accessible to all (2). Some constructed Learning Activity Sheets or Self-Learning Kits to supplement learning. Other had created audio/video lessons for the pupils with access to internet and cable TV connections. All of these were done by DepEd personnel just to give the quality learning that the learners should have achieved during this new normal education.

Moreover, to be ready for this shift, teachers need to have all the competencies that will help them adopt this change successfully. These teachers' competencies include skills and knowledge in the use of digital tools in all curriculum domains and making students' learning extend beyond the classroom (1). In order to be ready to integrate technology in the curriculum, teachers must be provided with a solid foundation of knowledge and skills in digital media and develop new understandings, new approaches, new roles, new forms of professional development, and new attitudes about technology integration (4,5). Teachers need to make a paradigm shift in their conception of curriculum and move from printed traditional curriculum to digital curriculum.

The successful implementation of distance learning modality relies heavily on teachers' readiness and willingness to adopt technology (6,7). Teachers can integrate digital technology to supplement and support the curriculum, facilitate teachers' work, and encourage student-centered learning (3). To meet the new demands, teachers need to know more than core subjects. They need to acquire all the technical and pedagogical skills that enable them to integrate digital technology effectively and efficiently into the curriculum.

With this, teachers and other school personnel were challenged to make themselves ready as they embarked and adopt the new normal way of teaching and learning. In the two months of implementation on distance learning modality using the modules, the researcher still contemplates whether teacher's readiness and their performance will result to positive learning outcomes among pupils most specially in the kindergarten. With this premise, the researcher decided to conduct this

study in order to determine the significant relationship between the readiness and performance of teachers and performance of Kindergarten pupils in Libongao Elementary School, Kananga II District, Leyte Division. Findings of the study were the bases in formulating an intervention plan. Further, it sought to answer the following sub-problems:

1. What is the extent of readiness of teachers on modular distance learning modality in terms of the following:
 - 1.1 Technical readiness; and
 - 1.2 Pedagogical readiness?
2. What is the level of teachers' performance on the following areas on modular distance learning modality:
 - 2.1 content knowledge and pedagogy;
 - 2.2 learning environment and diversity of learners;
 - 2.3 curriculum and planning;
 - 2.4 assessment and reporting; and
 - 2.5 plus factor?
3. What is the academic performance of the Kindergarten pupils?
4. Is there a significant relationship between teachers' performance and readiness of teachers on the following:
 - 4.1 technical readiness; and
 - 4.2 pedagogical readiness?
5. Is there a significant relationship between teachers' performance and academic performance of the Kindergarten pupils on modular distance learning modality?
6. Is there a significant relationship between the school readiness and the implementation of self-learning modules among the Grade III pupils?
7. What intervention plan can be proposed based on the findings of the study?

II. Methodology

Design. This study employed the descriptive-correlational research design to determine the extent of the relationship between teachers' readiness in terms of technical and pedagogical and their performance and performance of teachers and Kindergarten pupils on modular distance learning modality. Libongao Elementary School, Kananga II District, Leyte Division is the main locale of the study. The two (2) Kindergarten teachers and 48 Kindergarten pupils enrolled in the current school year are the respondents of the study and survey questionnaire were utilized to gather the data. This research is mainly to gather data on: The extent of teachers' technical and pedagogical readiness; The level of teachers' performance and Academic Performance of Kindergarten pupils on modular distance learning modality; The relationship between the dependent and independent variables; Proposed Intervention Plan based on findings of the study.

Sampling. There are 2 Kindergarten teachers and 48 Kindergarten pupils included in the study. The primary means of reach is through face-to-face interaction with approved request from the Local IATF and following the prescribed Health Protocols amidst pandemic. Complete enumeration was employed in choosing the respondents of the study.

Research Procedure. The researcher prepared the research design and tools to be utilized in the study. Approval from the Schools Division Superintendent, Public School District Supervisor, and School Principal was sought. Thesis proposal was submitted and approved by the panel of examiners of the school. Upon the approval, the researcher proceeded on data gathering. A permit from the respondents was sought. An orientation was conducted and tools were clearly explained. Answering of the survey was done. Different tools were utilized to gather the data needed. To gather the data on the extent of teachers' readiness, a researcher-made survey is used while to measure the performance of teachers a Monitoring and Supervision Tool formulated by DepEd Region VIII was used. Finally, for the academic performance the researcher gathers the result of the modules for the 2nd quarter. This survey was submitted to the District and School Head for approval and it was pre-tested to other schools. After accomplishing the tool, retrieval, tallying and treatment of data was done. Analysis and interpretation of data. Making of Proposed Intervention Plan.

Ethical Issues. The right to conduct the study was strictly adhered through the principal's approval, approval of the Superintendent of the Division and approval of the District office under BERF guidelines. Orientation of the respondents, the parents, teachers and learners were done separately and by batch. A written permission was sought to the respondents' confidentiality and anonymity was discussed requiring them not to write their names on the tools. For Qualitative and Quantitative data.

Treatment of Data. The Extent of teacher's readiness in terms of technical and pedagogical, teachers' performance and performance of Kindergarten pupils was presented through the Simple Percentage and Weighted Mean. The Chi-Square was used to determine the relationship between the variables.

III. Results and Discussion

Table 1

Extent of Teachers' Technical Readiness on Modular Distance Learning Modality (N=2)

STATEMENTS	Weighted Mean	Description	Interpretation
1. I am using my laptop or desktop with internet connectivity at home.	5.00	Strongly Agree	Very High
2. I have laptop or desktop at home but no internet connectivity.	1.00	Strongly Disagree	Very Low
3. I am using my laptop or desktop but no internet signal in the area.	5.00	Strongly Agree	Very High
4. I do not have laptop or desktop.	1.00	Strongly Disagree	Very Low
5. I have with me a mobile device connected to the internet.	5.00	Strongly Agree	Very High
6. I have with me mobile device but no internet connectivity.	1.00	Strongly Disagree	Very Low
7. I do not have mobile phone.	1.00	Strongly Disagree	Very Low
8. I have smart or LED TV at home with cable access.	5.00	Strongly Agree	Very High
9. I have smart or LED TV at home without cable access.	1.00	Strongly Disagree	Very Low
10. I have attended trainings on Distance Learning.	5.00	Strongly Agree	Very High
11. I am competent using email	5.00	Strongly Agree	Very High
12. I am competent in using word processing software.	1.00	Strongly Disagree	Very Low

13. I am able to download files from the internet and upload files.	5.00	Strongly Agree	Very High
14. I am familiar with blog.	5.00	Strongly Agree	Very High
15. I can create a blog.	1.00	Strongly Disagree	Very Low
16. I am familiar with wikis or Webpages.	5.00	Strongly Agree	Very High
17. I can create wikis or Webpages.	1.00	Strongly Disagree	Very Low
18. I can use social media to communicate with my learners.	5.00	Strongly Agree	Very High
19. I am familiar with any of the following learning management systems: google classrooms, Edmodo, Blackboard Learn, Moodle, Canvas, Talent LMS, Showbie and Brightspace)	5.00	Strongly Agree	Very High
20. I am able to use any of the following learning management systems: google classrooms, Edmodo, Blackboard Learn, Moodle, Canvas, Talent LMS, Showbie and Brightspace)	5.00	Strongly Agree	Very High
21. I am able to convert the printed content and activities in the curriculum to the digital form.	1.00	Strongly Disagree	Very Low
22. I am able to design online assessment tools.	5.00	Strongly Agree	Very High
23. I am able to facilitate online activities like chatting and forum.	5.00	Strongly Agree	Very High

24. I am able to share my lessons and classroom activities on the web.	5.00	Strongly Agree	Very High
25. I can develop electronic learning activities.	5.00	Strongly Agree	Very High
GRAND MEAN	3.56	AGREE	High

Table 1 presents the extent of teachers' technical readiness on modular distance learning modality. It was revealed on the table that the extent of teachers' technical readiness has a grand mean of 3.56 which is interpreted as high. This means that teachers agree that they are ready in the implementation of modular distance learning modality. This implies that with the teachers' training on distance learning, the ICT equipment that they acquire, the knowledge and skills in the crafting of the self-learning modules, learning activity sheets and other learning resources are manifestations that they are technically ready to implement modular distance learning modality. The indicators with very low extent express that teachers still lack the knowledge on online teaching and how to engage on digital platforms. This means that modular distance learning is the best learning modality to be implemented in the school with the low internet connectivity of the area. On the other hand, the indicator with a very high extent expresses the teachers' technical know-how in using the laptop, mobile phones, and other gadgets as form of communication.

Table 2

Extent of Teachers' Pedagogical Readiness on Modular Distance Learning Modality (N=2)

STATEMENTS	Weighted Mean	Description	Interpretation
1. I can use technology to support my teaching.	5.00	Strongly Agree	Very High
2. I am familiar with the ways of integrating technology into curriculum.	5.00	Strongly Agree	Very High
3. I believe that digital curriculum is as rigorous as printed curriculum.	5.00	Strongly Agree	Very High
4. I believe that high quality learning experiences can occur	1.00	Strongly Disagree	Very Low

even without interacting with students face-to-face.			
5. I support the interaction and collaboration among learners as a means of teaching and learning.	2.50	Neutral	Moderate
6. I recognize that parental involvement and community engagement are important components of digital curriculum.	5.00	Strongly Agree	Very High
7. I encourage my learners to share life experiences into the classroom and create activities based on those experiences.	5.00	Strongly Agree	Very High
8. I feel comfortable communicating online and feel that I am able to convey my message.	5.00	Strongly Agree	Very High
9. I am able to manage my time well in a technology enriched classroom.	5.00	Strongly Agree	Very High
10. I can identify appropriate digital platforms.	5.00	Strongly Agree	Very High
GRAND MEAN	4.35	AGREE	High

Table 2 presents the extent of pedagogical readiness of teachers on modular distance learning modality. It was revealed on the table that the extent of pedagogical readiness of teachers has a grand mean of 4.35 which is interpreted as high. This means that teachers agree that they are equipped with the teaching strategies to address the pupils' multiple learning styles and recognize their differences by providing a learner-centered activity where they can manipulate the materials presented to them. This implies that activities presented to the pupils in the modules would be able to convey their knowledge and skills in ways that they can understand, remember and apply it in their day-to-day life. Moreover, the indicator with very low extent shows that teachers believe that high quality learning experiences can occur even without interacting with students face-to-face. This implies that Kindergarten teachers are doubtful that pupils will not be able to learn the lessons presented to them and assisted and guided by their learning facilitators. Not all learning facilitators had the capacity to assist their children in accomplishing the task given or stipulated in the modules. Furthermore, the indicator with moderate extent of teachers' pedagogical readiness

shows that teachers support the interaction and collaboration among learners as a means of teaching and learning. This means that with the learning modules they are using at home to learn, it shows that teachers are collaborating with the learners. This implies that teachers had to conduct home visitation to the pupils and observe how the learning facilitators assist the child so they can give appropriate technical assistance to them.

Table 3

Teachers' Performance on Modular Distance Learning Modality (N=2)

Statement	Weighted Mean	Description	Interpretation
A. CONTENT KNOWLEDGE AND PEDAGOGY (Applies knowledge of content within and across curriculum teaching areas and Uses modular-based instruction to enhance learner achievement in literacy and numeracy skills)	5.00	Highly Evident	Outstanding
A. LEARNING ENVIRONMENT AND DIVERSITY OF LEARNERS (Manages learners' behavior constructively by applying positive and non-violent discipline to ensure learning-focused environments)	4.50	Highly Evident	Outstanding
B. CURRICULUM AND PLANNING (Plans, manages and implements developmentally sequenced teaching and learning processes to meet curriculum requirements and varied teaching contexts)	5.00	Highly Evident	Outstanding
D. ASSESSMENT AND REPORTING (Designs, selects, organizes and uses diagnostic, formative and summative assessment strategies consistent with curriculum requirements)	5.00	Highly Evident	Outstanding

E. PLUS FACTOR (Performs various related works/activities that contribute to the teaching-learning process)	4.60	Highly Evident	Outstanding
GRAND MEAN	4.82	Highly Evident	Outstanding

Table 3 presents the level of performance of teachers on modular distance learning modality. It was revealed on the table that the level of performance of teachers on modular distance learning modality has a grand mean of 4.82 which is interpreted as outstanding. This means that all indicators are highly evident among the Kindergarten teachers. This implies that teachers show mastery of the lesson and that activities in the modules are congruent with the lesson's competencies. They see to it that learning environment of the pupils are conducive to learn. They give appropriate assessment based on the activities done by the pupils using their modules and they can give feedback to the parents regarding pupils' performance.

Table 4

Academic Performance of Kindergarten Pupils on Modular Distance Learning Modality (N=48)

Academic Performance		Interpretation
No. of Pupils	48	Outstanding
No. of Items	20	
Total Score	865	
Mean	18	
MPS	90%	

Table 4 presents the academic performance of the Kindergarten pupils on modular distance learning modality. It was revealed on the table that the mean percentage score of the pupils is 90% which is interpreted as outstanding. This means that the Kindergarten pupils are performing despite of the new normal modality of learning. This implies that learning facilitators can assist and guide their children in accomplishing the task stipulated in the module and that teachers are able to present the activities suited to their level of learning. The assessment given to the pupils are congruent to the lesson objectives.

Table 5
Test of Relationship Between Readiness of Teachers and Their Performance

Variables Correlated	r	Computed value or t	Table Value @.05	Decision on Ho	Interpretation
TEACHERS' TECHNICAL READINESS AND PERFORMANCE	0.28	1.22	1.063	Reject Ho	Significant Relationship <i>(Moderate Relationship)</i>
TEACHERS' PEDAGOGICAL READINESS AND PERFORMANCE	0.32	1.31	1.063	Reject Ho	Significant Relationship <i>(Moderate Relationship)</i>

Table 5 presents the relationship between the extent of technical readiness of teachers and the performance of Kindergarten teachers on modular distance learning modality. It was revealed on the table that the computed value of t of 1.22 is greater than the tabular value of 1.063 at .05 level of significance so null hypothesis is rejected. This means that the extent of technical readiness of teachers and their performance on modular distance learning modality has moderate relationship. The r value of 0.28 revealed that the high extent of teachers' technical readiness results in an outstanding performance in the implementation of modular distance learning modality. This implies that with the teacher's technical preparations in adopting the modular distance learning modality, implementation of self-learning modules is successful and that positive learning outcomes are attained.

Moreover, this table also presents the test of the relationship between the extent of teachers' pedagogical readiness and their performance in the implementation of modular distance learning modality. It was revealed on the table that the computed value of t of 1.31 is greater than the tabular value of 1.063 at .05 level of significance, so null hypothesis is rejected. This means that the extent of pedagogical readiness of teachers and their performance in the implementation of modular distance learning modality has moderate relationship. The r value of 0.32 revealed that the high extent of pedagogical readiness of teachers results to an outstanding performance in the implementation of modular distance learning modality. This implies that teachers knowledge and competency in the implementation of modular distance learning modality and their technological advancement will help them improve their performance.

Table 6
Test of Relationship Between Teachers and Kindergarten Pupils' Performance

Variables Correlated	r	Computed value or t	Table Value @.05	Decision on Ho	Interpretation
TEACHERS' PERFORMANCE AND PUPILS' PERFORMANCE	0.76	3.64	0.033	Reject Ho	Significant Relationship <i>(Very Strong Relationship)</i>

Table 6 presents the test of relationship between the level of teachers' performance and academic performance of Kindergarten pupils on modular distance learning modality. It was revealed on the table that the computed value of t of 3.64 is greater than the tabular value of 0.033 at .05 level of significance, so null hypothesis is rejected. This means that the level of teachers' performance and academic performance of Kindergarten pupils on modular distance learning modality shows a very strong relationship. The r value of 0.76 revealed that the outstanding teachers' performance would create Kindergarten pupils' outstanding academic performance on modular distance learning modality. This implies that outstanding teachers' performance greatly affects the Kindergarten pupils' performance on modular distance learning modality.

IV. Conclusion

This study revealed a significant relationship between the technical and pedagogical readiness of teachers and their performance in the implementation of modular distance learning modality. Likewise, kindergarten pupils' performance and academic performance on modular distance learning modality correlates with each other. Thus, effective implementation of modular distance learning modality depends on teachers' technical and pedagogical readiness, which results in an outstanding performance of teachers and pupils.

V. Recommendations

1. The proposed intervention plan formulated should be utilized;
2. Teachers should be equipped with the necessary knowledge, skills and attitudes in the implementation of modular distance learning modality;
3. Teachers and School Heads should see to it that all stakeholders of the school is ready to adopt the new learning modality;

4. School Heads should review the activities presented in the module and congruence to the competencies must be observed;
5. Teachers should encourage parents to support their children through their guidance and assistance in accomplishing the modules;
6. Teachers and School Heads should conduct home visitation for feedback giving and consultation;
7. School Heads should closely monitor the teachers for the successful implementation of modular distance learning modality; and
8. Future researchers should replicate this study to include different locale, and include different variables aside from what is mentioned in this study.

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